

# **Through the Eyes of a Child: Exploring, Explaining, and Exposing Risk Factors and Suicide Ideation Using the Youth Risk Behavior Surveys**

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and

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Data based on the 2009 CDC National, States, and Delaware Youth Risk  
Behavior Surveys

Presented at the GLS 2011 State/Tribal Grantee Meeting, Baltimore, MD February 17, 2011

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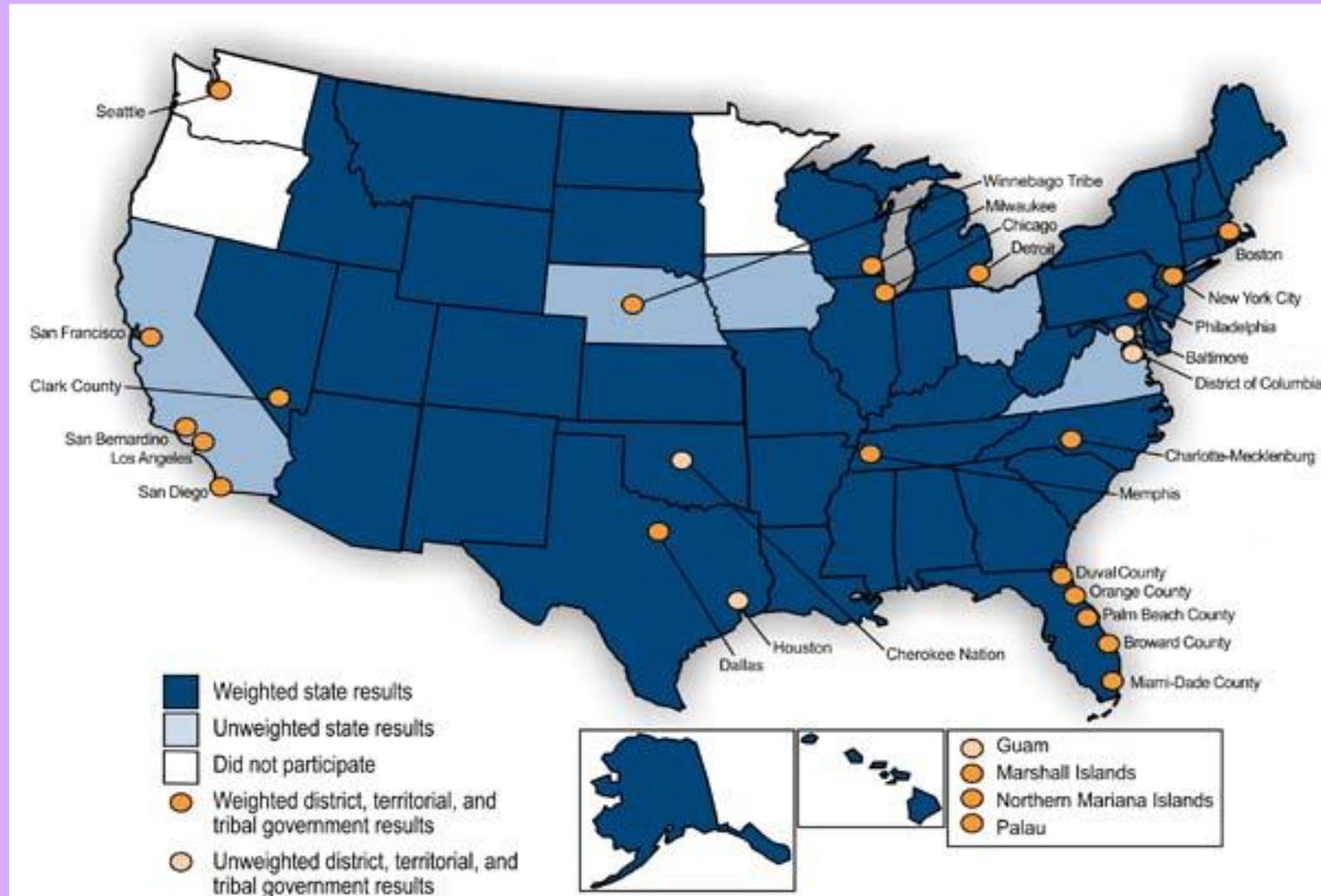
# What we want to accomplish in this workshop

1. Show you what data are available for states to use in the YRBS;
2. Show you some additional uses you can make of your state data by contacting your state's YRBS rep;
3. Show you how we have been using these data in Delaware for assessment, presentation, and evaluation; and
4. Most importantly, brainstorm on ways to better measure our efforts

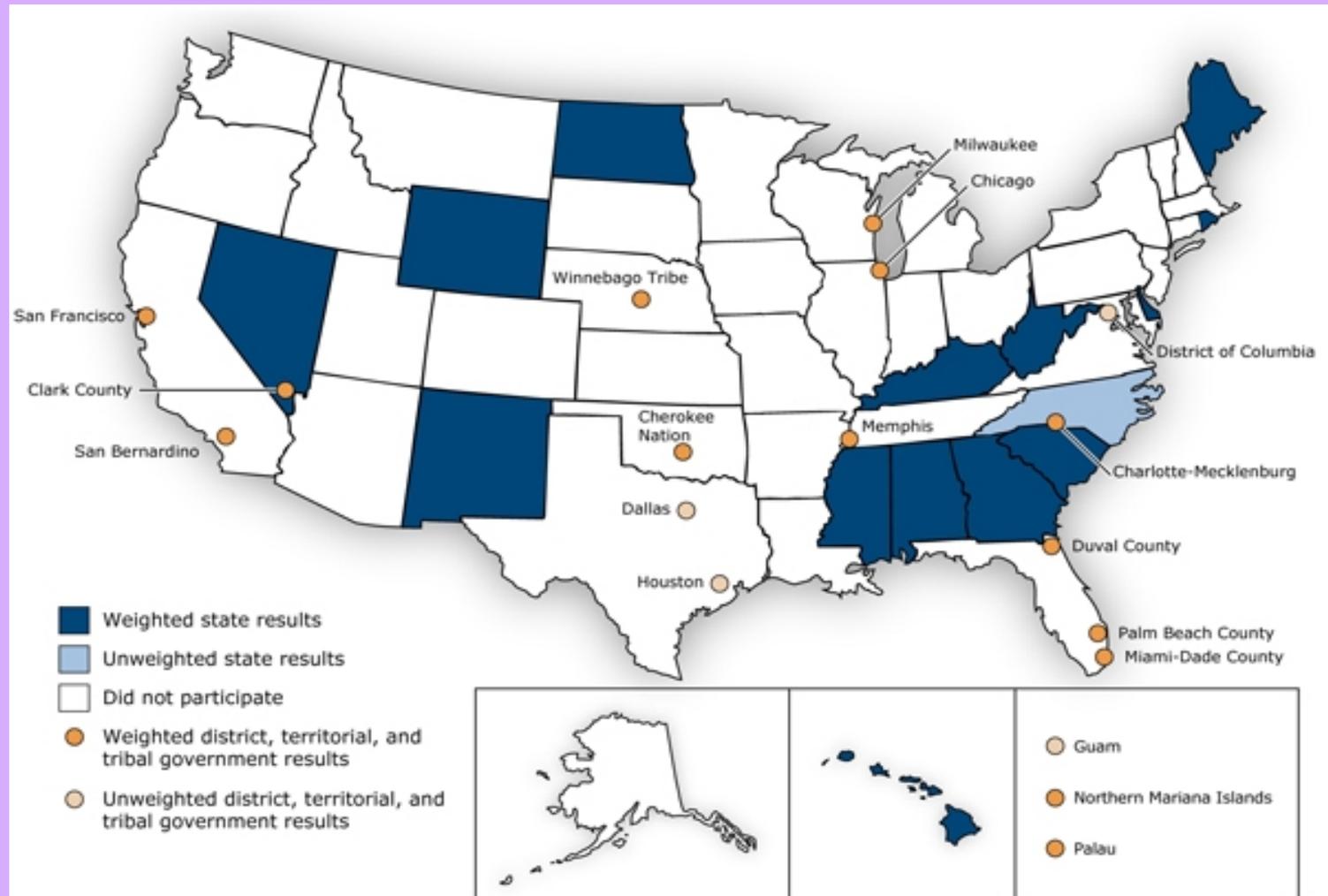
# What is the YRBS?

- The CDC's Youth Risk Behavior Survey is conducted in most states in odd numbered years and monitors 6 categories of health risk behaviors:
  - Injuries and violence including suicide thoughts and attempts;
  - Tobacco use;
  - Alcohol and other drug use;
  - Sexual behaviors contributing to pregnancy and STDs/HIV;
  - Unhealthy dietary behaviors;
  - Physical Activity

# YRBS High School Participants, 2009 (47 States, some territories, tribes, cities)

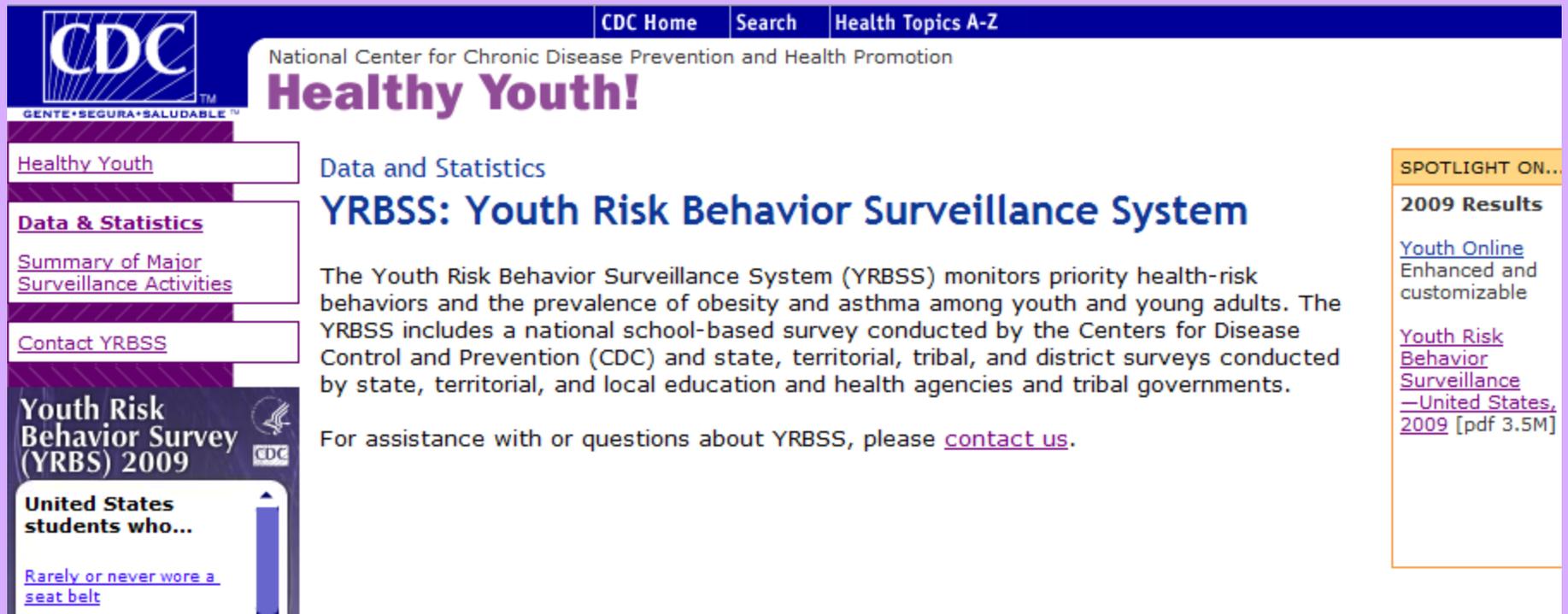


# YRBS Middle School Participants, 2009 (16 States, some territories, tribes, cities)



# Getting to the YRBS page

- Google “YRBS” and look for the Youth Risk Behavior Surveillance System
  - [www.cdc.gov/HealthyYouth/yrbs/index.htm](http://www.cdc.gov/HealthyYouth/yrbs/index.htm)



The screenshot shows the CDC Healthy Youth! website. At the top, there is a navigation bar with links for "CDC Home", "Search", and "Health Topics A-Z". Below this is the CDC logo and the text "National Center for Chronic Disease Prevention and Health Promotion". The main heading is "Healthy Youth!". On the left side, there is a vertical menu with links for "Healthy Youth", "Data & Statistics", "Summary of Major Surveillance Activities", and "Contact YRBS". The main content area features the heading "Data and Statistics" and "YRBS: Youth Risk Behavior Surveillance System". Below this, a paragraph describes the YRBS: "The Youth Risk Behavior Surveillance System (YRBS) monitors priority health-risk behaviors and the prevalence of obesity and asthma among youth and young adults. The YRBS includes a national school-based survey conducted by the Centers for Disease Control and Prevention (CDC) and state, territorial, tribal, and district surveys conducted by state, territorial, and local education and health agencies and tribal governments." A link for "contact us" is provided. On the right side, there is a "SPOTLIGHT ON..." section with a link for "2009 Results" and a sub-link for "Youth Online Enhanced and customizable". Below that, there is a link for "Youth Risk Behavior Surveillance - United States, 2009 [pdf 3.5M]". At the bottom left, there is a partial view of a chart titled "Youth Risk Behavior Survey (YRBS) 2009" and "United States students who..." with a link for "Rarely or never wore a seat belt".

**CDC**  
GENTE • SEGURA • SALUDABLE™

[CDC Home](#) | [Search](#) | [Health Topics A-Z](#)

National Center for Chronic Disease Prevention and Health Promotion

## Healthy Youth!

[Healthy Youth](#)

[Data & Statistics](#)

[Summary of Major Surveillance Activities](#)

[Contact YRBS](#)

### Youth Risk Behavior Survey (YRBS) 2009

United States students who...

[Rarely or never wore a seat belt](#)

### Data and Statistics

## YRBS: Youth Risk Behavior Surveillance System

The Youth Risk Behavior Surveillance System (YRBS) monitors priority health-risk behaviors and the prevalence of obesity and asthma among youth and young adults. The YRBS includes a national school-based survey conducted by the Centers for Disease Control and Prevention (CDC) and state, territorial, tribal, and district surveys conducted by state, territorial, and local education and health agencies and tribal governments.

For assistance with or questions about YRBS, please [contact us](#).

**SPOTLIGHT ON..**

**2009 Results**

[Youth Online Enhanced and customizable](#)

[Youth Risk Behavior Surveillance - United States, 2009 \[pdf 3.5M\]](#)



# Healthy Youth!

[Healthy Youth](#)

[Data & Statistics](#)

[Summary of Major Surveillance Activities](#)

[Contact YRBSS](#)

**Youth Risk Behavior Survey (YRBS) 2009**



**United States students who...**

[Rarely or never wore a seat belt](#)

[Rode with a driver who had been drinking](#)

[Carried a weapon](#)

[Attempted suicide](#)

[Currently used cigarettes](#)

[Currently used alcohol](#)

[Ever used marijuana](#)

[Ever used methamphetamines](#)

share

info

## Data and Statistics

# YRBSS: Youth Risk Behavior Surveillance System

The Youth Risk Behavior Surveillance System (YRBSS) monitors priority health-risk behaviors and the prevalence of obesity and asthma among youth and young adults. The YRBSS includes a national school-based survey conducted by the Centers for Disease Control and Prevention (CDC) and state, territorial, tribal, and district surveys conducted by state, territorial, and local education and health agencies and tribal governments.

For assistance with interpretation of YRBSS data, please [contact us](#).

This is the link you use to get to the YRBS tables

### SPOTLIGHT ON...

#### 2009 Results

[Youth Online](#)  
Enhanced and customizable

[Youth Risk Behavior Surveillance—United States, 2009](#) [pdf 3.5M]

## Fact Sheets

[National Results Overview](#) [pdf 173K]  
Selected national results

[National Trends in Risk Behaviors](#)  
Changes in risk behaviors over time, 1991–2009

[Sex Subgroups](#) [pdf 215k]  
Selected national results by sex

[Race/Ethnicity Subgroups](#) [pdf 223k]  
Selected national results by race/ethnicity

[Student Behaviors and School Policies and Practices](#)  
National, state, and large urban school district specific fact sheets on [childhood obesity](#), [HIV](#), [other STD](#), and [teen pregnancy prevention](#), and [tobacco use](#) that combine YRBS data with either 2006 School Health Policies and Programs Study (SHPPS) data or 2008 School Health Profiles data

[Comparisons Between State or District and National Results](#)  
Selected state and large urban school district results compared to national results

## Comprehensive Results

[Youth Risk Behavior Surveillance—United States, 2009](#) *MMWR* 2010;59(SS-5):1–142.

[Youth Online \(Improved\)](#)  
Analyze and create custom tables and graphs and perf tests on high school and middle school YRBS results from by site and health topic. Includes enhanced filtering, so customization.

[Participation Map 2009](#)  
Illustrates the states, large urban school districts, triba and territories that conducted a YRBS

[History of Participation and Data Quality 1991–2009](#)  
Participation status for states, large urban school distri governments, and territories including the quality of the

[Slides](#)  
2009 YRBS results and maps available as a PowerPoint



# Youth Online: High School YRBS

[Youth Risk Behavior Surveillance System \(YRBSS\)](#)

[Youth Online Home](#)

Youth Online lets you analyze national, state, and local Youth Risk Behavior Survey data. Data from high school and middle school surveys are included. You can filter and sort on the basis of state and territory, and graphs, and perform statistical tests by site and health topic. Please see [Youth Online capabilities](#).

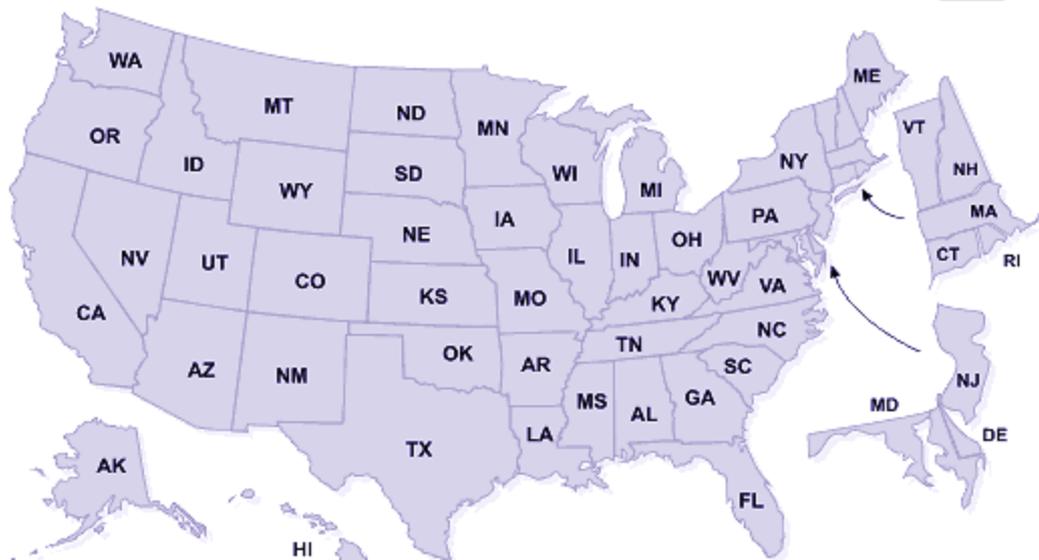
To get at your state's data:  
Select your location here.

9. Data from high school surveys are included. You can filter and sort on the basis of state and territory, and graphs, and perform statistical tests by site and health topic. Please see [Youth Online capabilities](#).

## View all responses for one location

View survey results for the United States, a state, a territory or selected location. To view U.S. data, click the View U.S. Data link. To choose a specific location, make a selection in the dropdown menu or click a location on the map.

[View U.S. Data](#) | **Select Location:**



## View one question for all locations

View results for one question for all states and locations that have data available. To choose a question, first select a Health Topic.

**Select a Health Topic:**



[Unintentional Injuries and Violence](#)



[Tobacco Use](#)



[Alcohol and Other Drug Use](#)



[Sexual Behaviors](#)



[Dietary Behaviors](#)



[Physical Activity](#)



[Asthma](#)

Select your question here...

[View 2 Locations](#)  
[View 2 Years for 1 Location](#)  
[View All Years](#)

**Question:**  **Location:**  **Year:**

... and year here.

**Table**

**Graph**

**FILTER DATA**

**Race/Ethnicity**

Include Only:

- American Indian or Alaska Native
- Asian
- Black or African American
- Hispanic or Latino
- Native Hawaiian or Other Pacific Islander
- White
- Multiple Race
- All Races/Ethnicities

**Grade**

Include Only:

- 9th
- 10th
- 11th
- 12th
- All Grades

[Remove All Filters](#)

**VIEW DATA BY DEMOGRAPHICS**

**Column Variable:**  **Row Variable 1:**  **Row Variable 2:**

[Get Link](#)  
[Print Table](#)

Filter the sample with these checkboxes.

Use these options to break the variables out by constituent groups.

**Seriously Considered Attempt (during the 12 months before the survey)**  
**Delaware, High School Youth Risk Behavior Survey, 2009**

*Find out if there is a statistical difference between females and males. Select them, then click the button.*

Year	Sex	Total	Female	Male
2009		13.5 (12.0–15.3) 2,363 <sup>†</sup>	17.2 (14.5–20.2) 1,117	9.8 (7.9–12.2) 1,227

**Footnotes**

<sup>†</sup> Percentage, confidence interval, cell size

**Race/Ethnicity**

Display Only:

- American Indian or Alaska Native
- Asian
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- Multiple Race
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**Grade**

Include Only:

- 9th
- 10th
- 11th
- 12th
- All Grades

[Remove All Filters](#)**Column Variable:**

Sex

**Row Variable 1:**

Race

**Row Variable 2:**

No Selection

**GO** [Print Table](#)[View Display Options](#)

**Seriously Considered Attempting Suicide**  
(during the 12 months before the survey)  
**Delaware, High School Youth Risk Behavior Survey, 2009**

*Find out if there is a statistical difference between females and males. Select them, then click the button.*

**COMPARE TWO >>**

Race	Sex	Total	Female	Male
Total		13.5 (12.0–15.3) 2,363 <sup>†</sup>	17.2 (14.5–20.2) 1,117	9.8 (7.9–12.2) 1,227
AI/AN <sup>‡</sup>		N/A 21	N/A 10	N/A 10
Asian <sup>§</sup>		N/A 51	N/A 19	N/A 32
Black <sup>§</sup>		11.2 (9.1–13.6) 570	13.0 (9.2–18.2) 278	9.3 (5.7–14.8) 291
Hispanic		21.9 (16.3–28.7) 257	26.7 (19.5–35.4) 131	14.0 (7.8–23.9) 123
NHOPI <sup>  </sup>		N/A 17	N/A 5	N/A 12
White <sup>§</sup>		12.8 (10.9–15.0) 1,220	16.9 (13.6–20.9) 572	9.1 (7.2–11.5) 645
Multiple Race <sup>§</sup>		16.9 (10.9–25.3) 142	N/A 79	N/A 63

**Footnotes**

†	Percentage, confidence interval, cell size
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# **What's Different about the Delaware Youth Risk Behavior Survey?**

- **Delaware does both a High School (n=2,416 in 2009) and a Middle School (n=3,852 in 2009) YRBS. In 2009 47 states did the High School YRBS, but only 16 did the Middle School YRBS**
- **Delaware identifies vulnerable populations**
  - **Sexual minorities**
  - **Physically disabled and learning disabled**
  - **Homeless**
  - **Children of active military and of incarcerated**

# **What else is different about the Delaware Youth Risk Behavior Survey? Delaware asks about:**

- **prescription drug abuse and use of herbal substances to get high**
- **abusive dating relationships**
- **cutting**
- **gambling**
- **sleep**
- **mental health attitudes and context (middle school survey)**
- **support from family and others**

Here is an example of how we have used the YRBS to look at suicide ideation in Delaware school youth—with an attempt to see it from the child's perspective:

Let's take a look at an average  
Delaware child . . .



This is Sophia.



Sophia just started  
Kindergarten. She lives in our  
most densely populated county,  
one of over 5,000 Delaware girls  
her age, one of over 10,000  
children her age.



Sophia, like half of all children born in Delaware, received WIC. Her mom, a single parent, works and takes classes at Del Tech so she can eventually better support her two girls.



Sophia has had health insurance through Medicaid and the Delaware Healthy Children Program, and attends day care with “Purchase of Care” payments. The State of Delaware has a **BIG** investment in her.



She is  
healthy,  
happy,  
smart, and  
secure.



Sophia  
cares for  
others,  
especially  
her active  
younger  
sister.



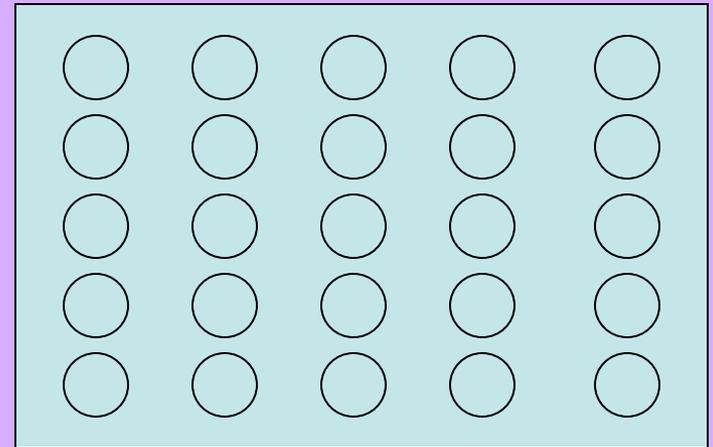


She is involved in the community,

and has  
dreams for  
the future.

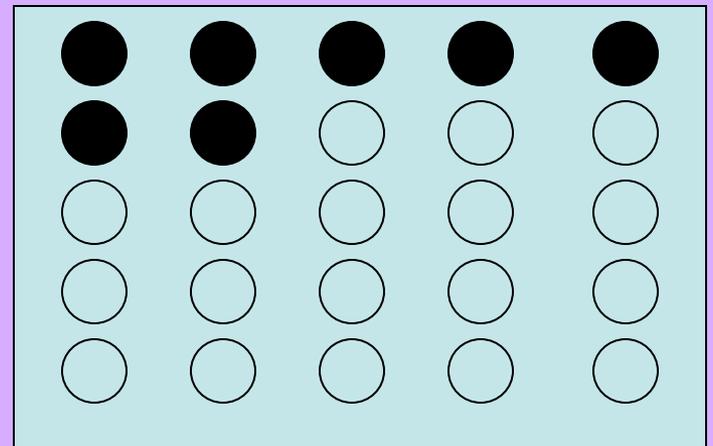


Soon, Sophia will be part of an average Delaware classroom of 25 students.



In Sophia's average 6<sup>th</sup> grade classroom:

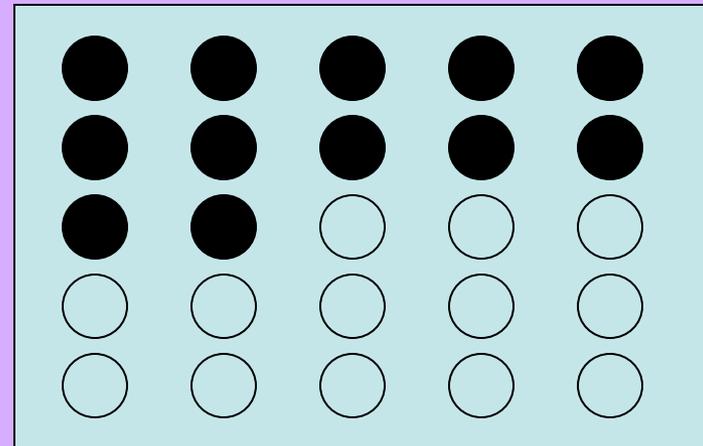
- **28% will have tried an alcoholic drink** (not just a sip) this represents about 7 children in Sophia's classroom



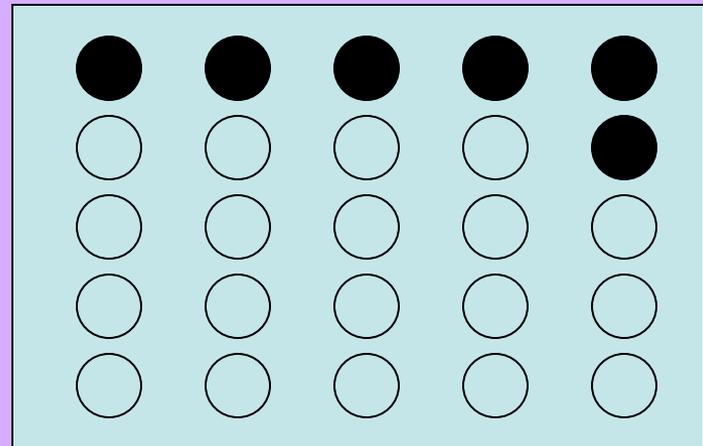
**By the time Sophia is in 8<sup>th</sup>  
grade:**



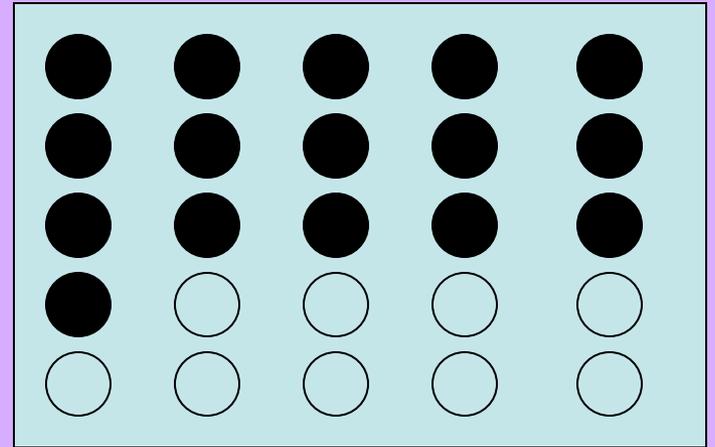
- 50% of Delaware 8<sup>th</sup> graders drank **alcohol**



- 22% of Delaware 8<sup>th</sup> graders have smoked **marijuana**. [From our other studies in Delaware we know that:
  - 2 in 3 do not see great risk in trying it
  - 1 in 3 know where to buy marijuana



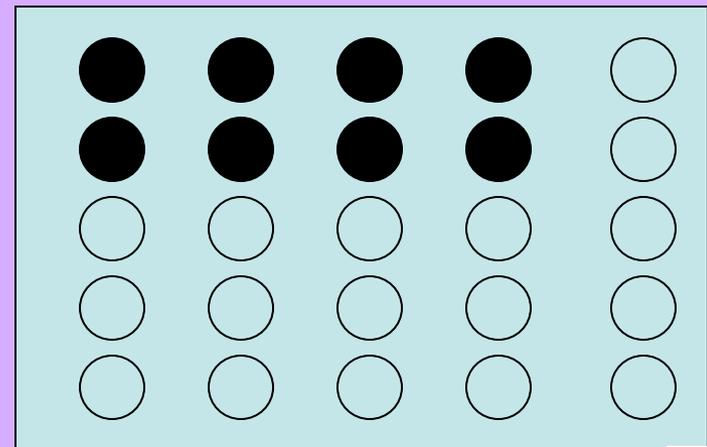
Almost two-thirds  
of Sophia's class  
have been in a  
physical fight in the  
past year.



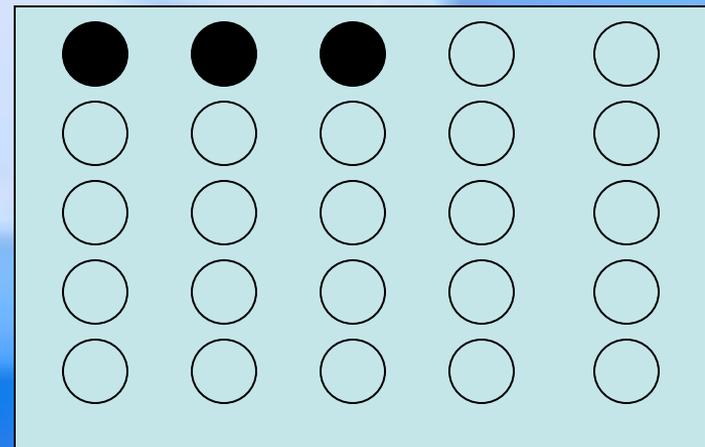
**And about 5 students in Sophia's  
average 8<sup>th</sup> grade class have carried a  
weapon.**

**31% of Delaware 8<sup>th</sup> graders  
report having had sexual  
intercourse**

**8 of Sophia's classmates are  
probably sexually active**

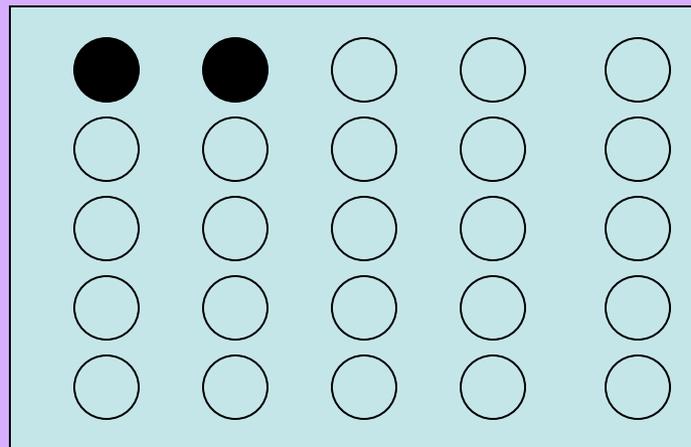


- **10% of Sophia's 8<sup>th</sup> grade classmates are medicated to help them concentrate better in school**
- **4% of her classmates are medicated for depression or anxiety**

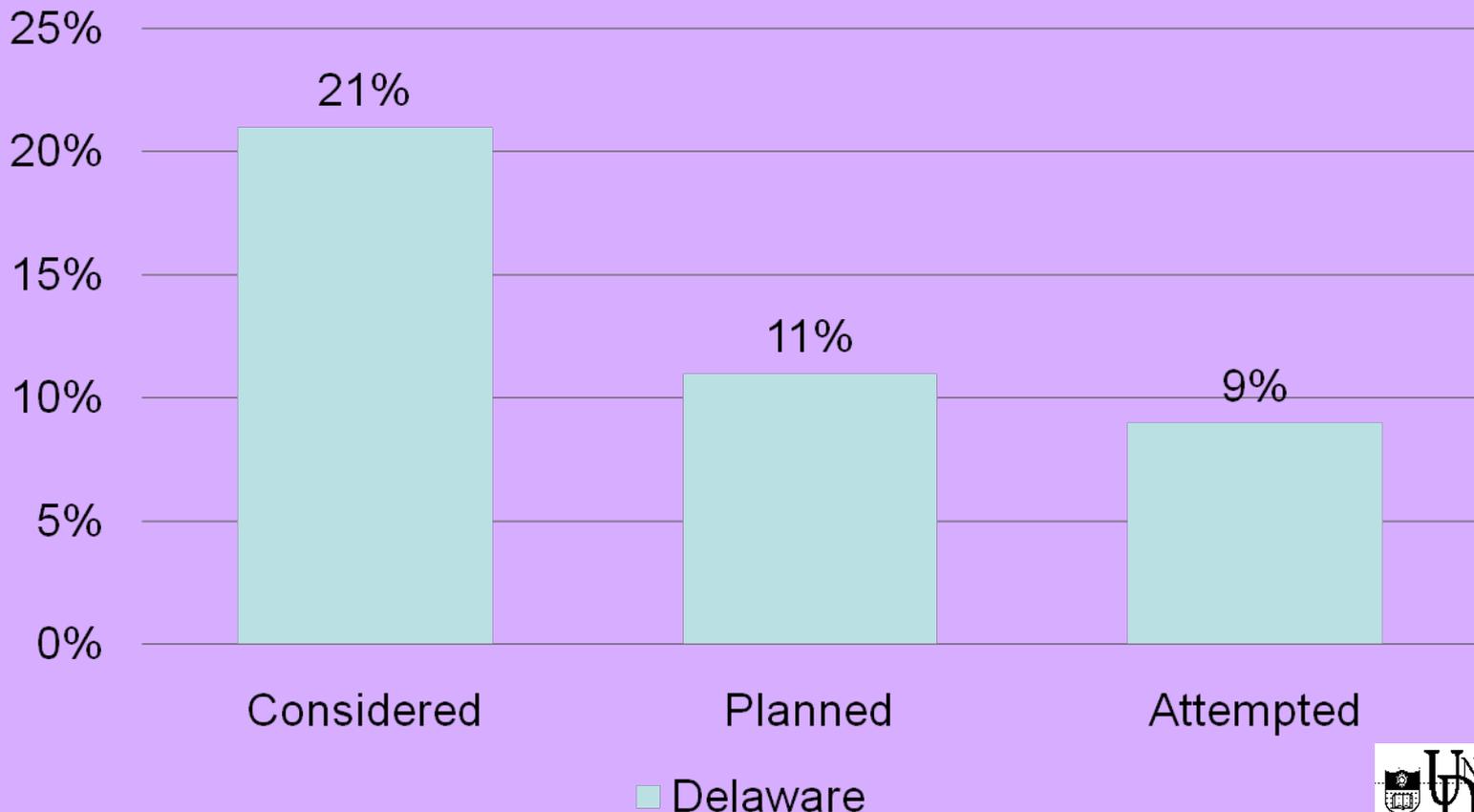




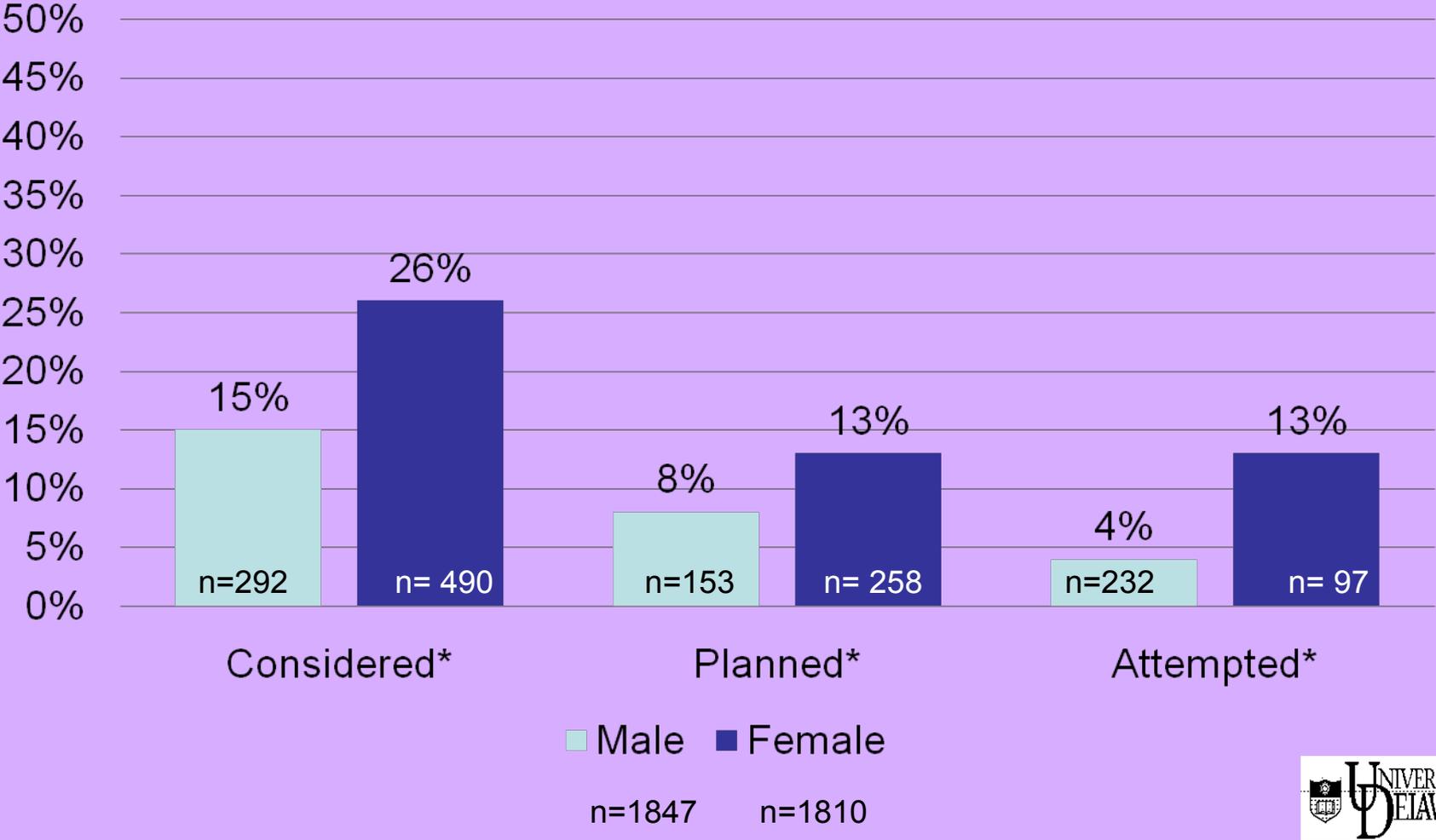
In 2009, two students in  
Sophia's average 8<sup>th</sup> grade  
Delaware classroom reported  
attempting suicide in the past  
year.



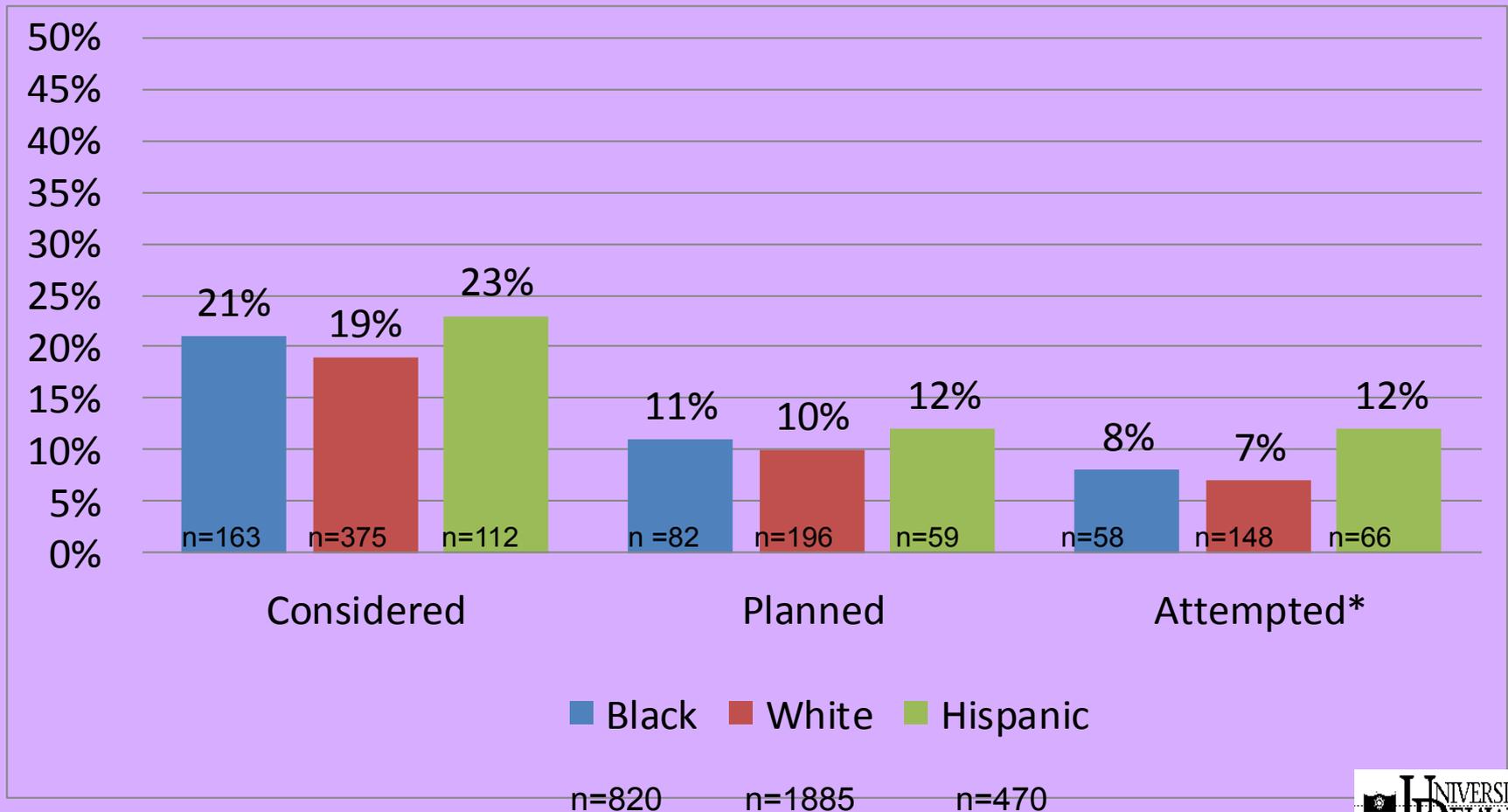
The numbers are more alarming when we see how many considered suicide. Among Delaware **middle school students** in 2009, 21% reported seriously considering attempting suicide during the past 12 months. That is 5 students in Sophia's average classroom.....



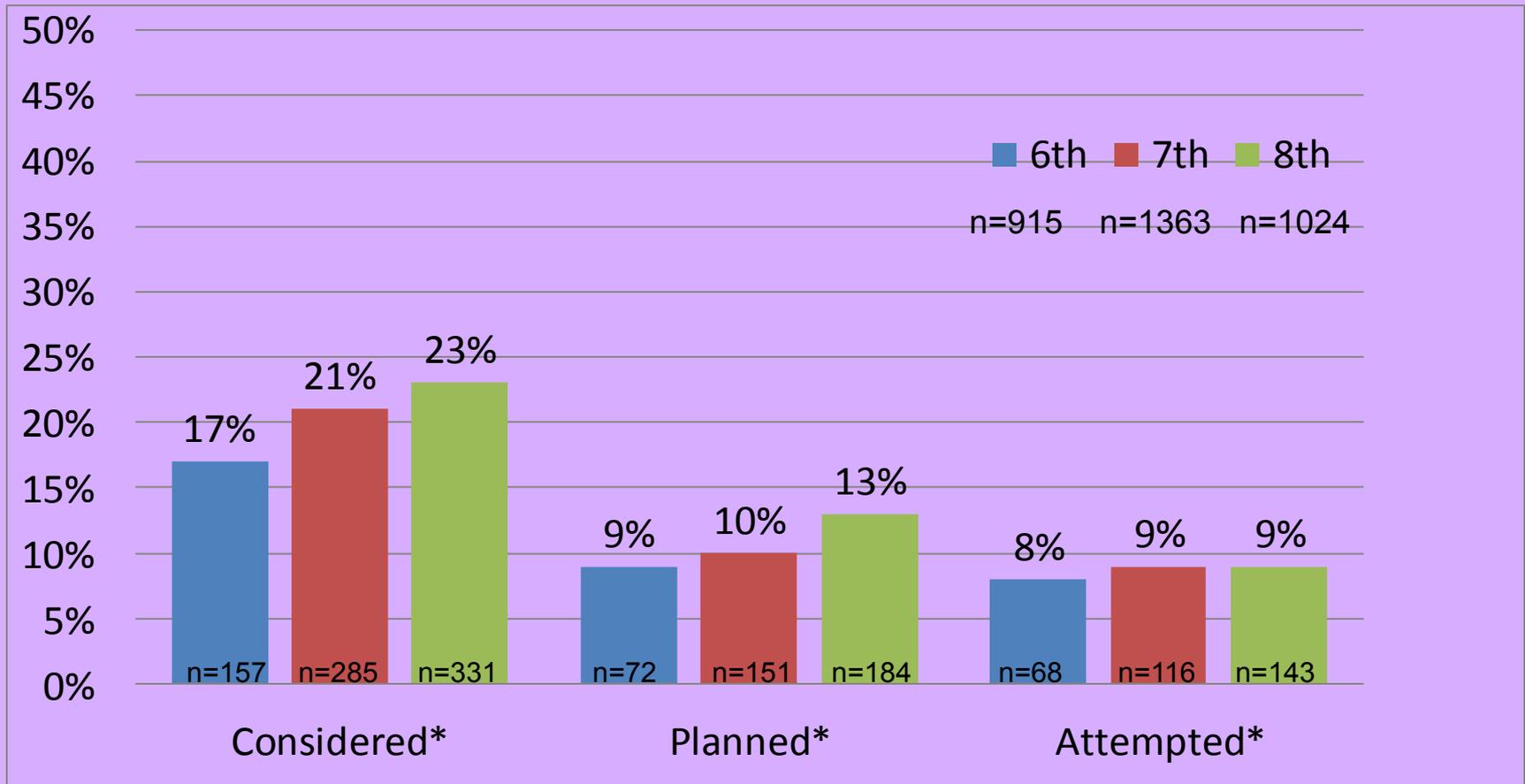
# Delaware Middle School Girls are more likely than Boys to report suicide is:



# Delaware MS Hispanics are more likely to report suicide than Whites or Blacks:



# There are not big differences by Grade for Delaware MS Students:

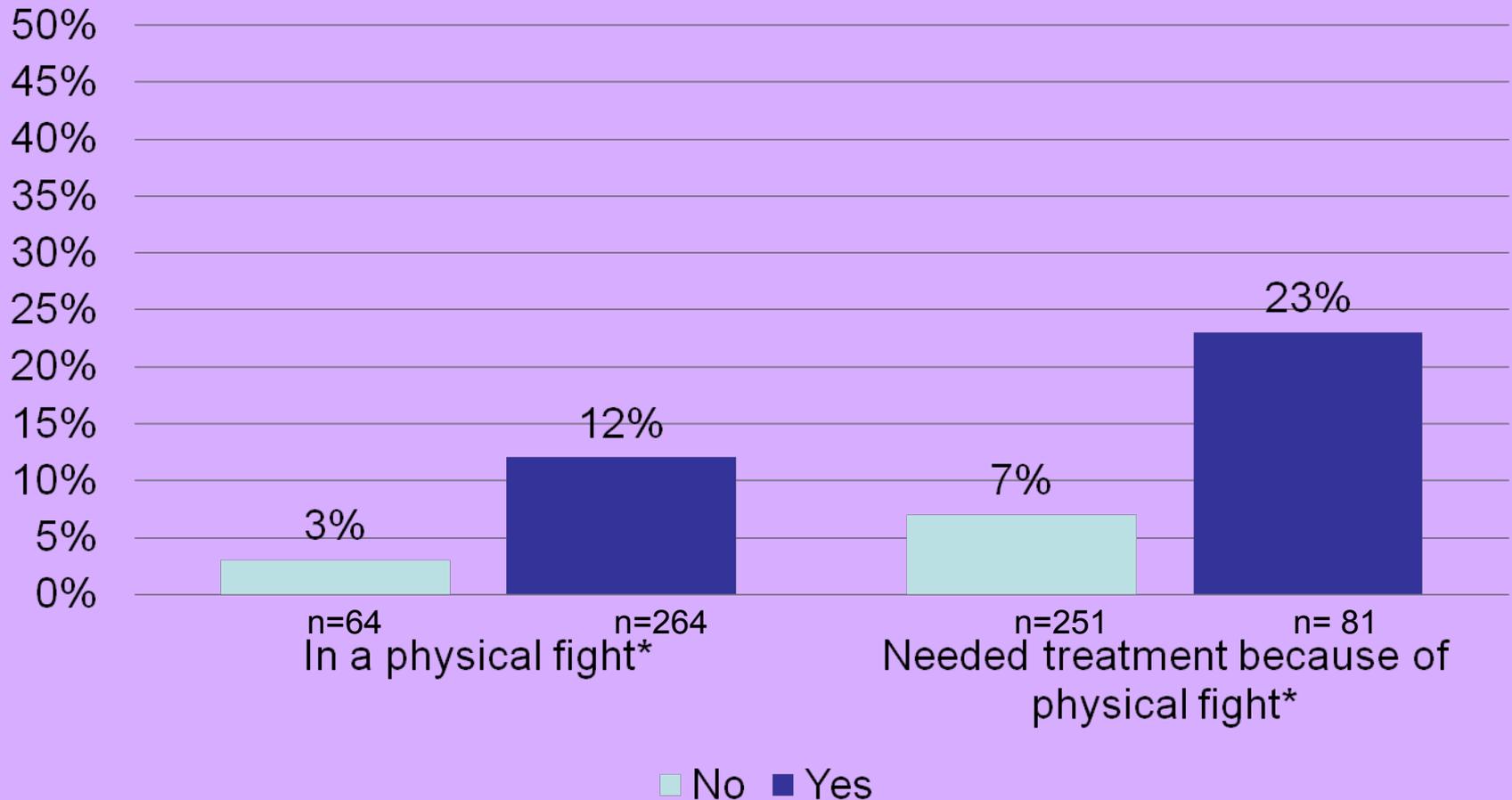


# Attempted Suicide

- There are significant differences by other risk factors—violence and victimization, substance abuse, sexual activity—that help identify the 9% of Middle School Students who reported attempting suicide

(patterns are similar for those who considered or planned)

# Attempted Suicide by Physical Fighting Past 12 Months Middle School

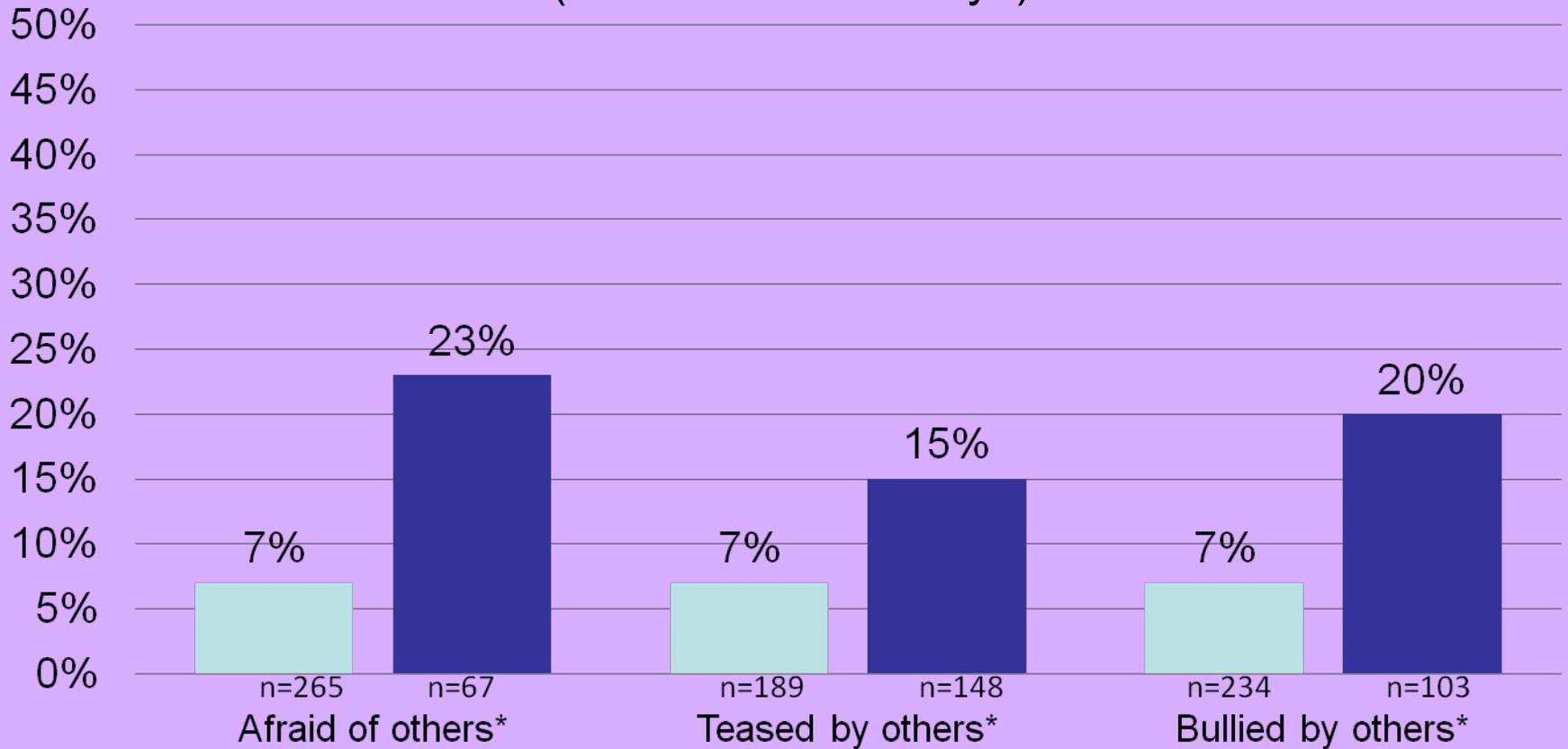


# Attempted Suicide by Victimization

## Past 4 Weeks

### Middle School

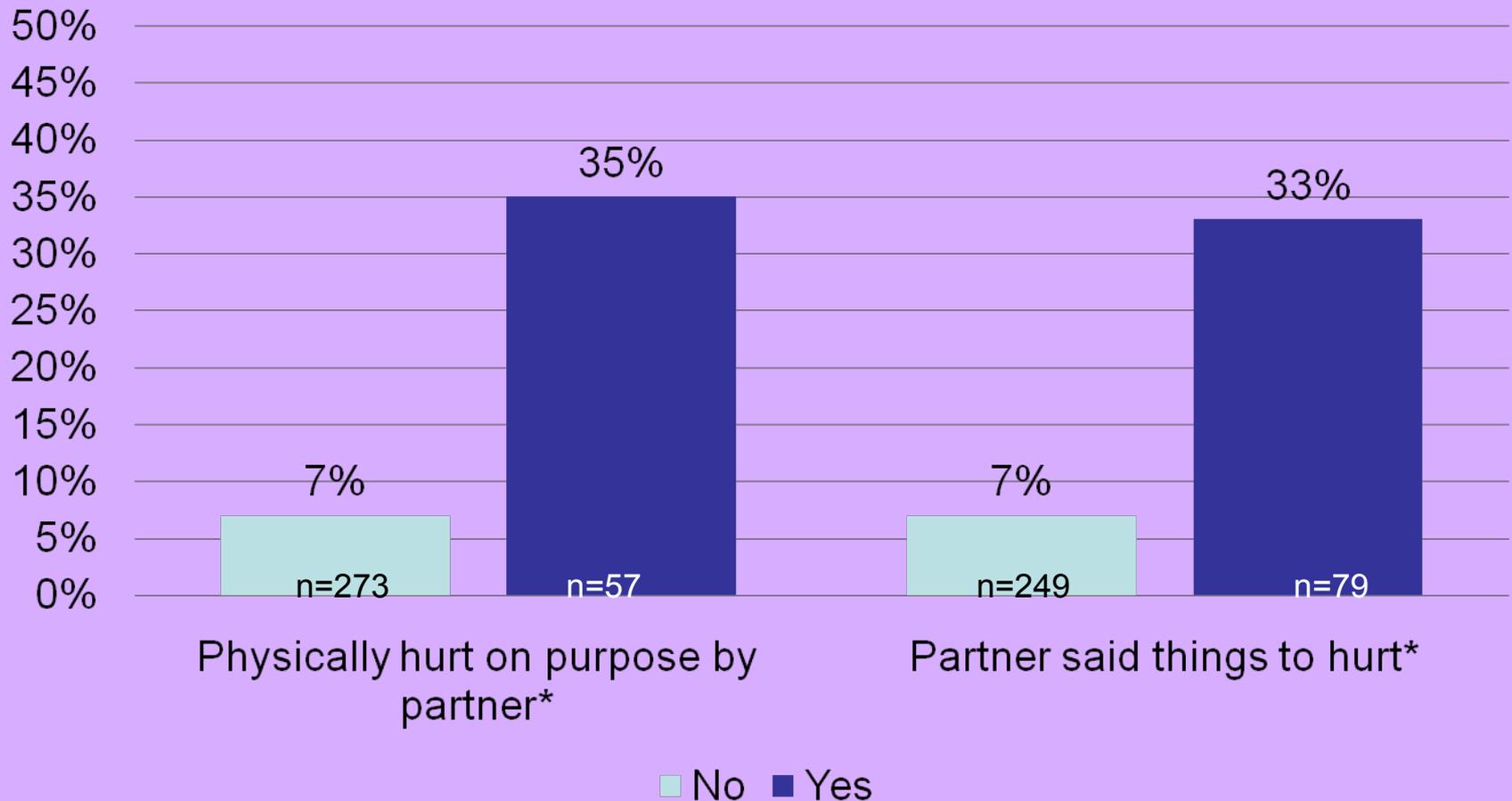
(sometimes to always)



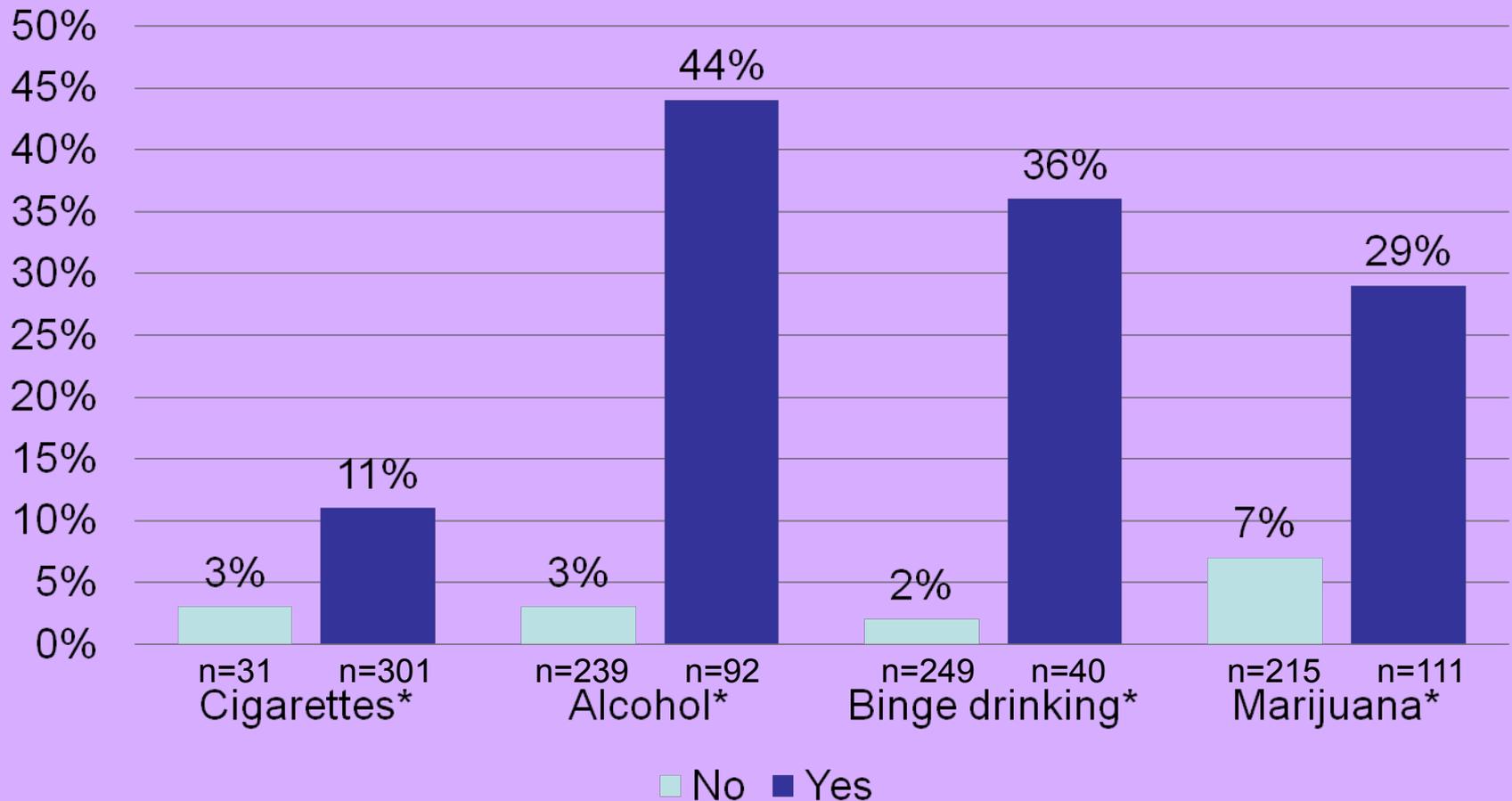
■ No ■ Yes



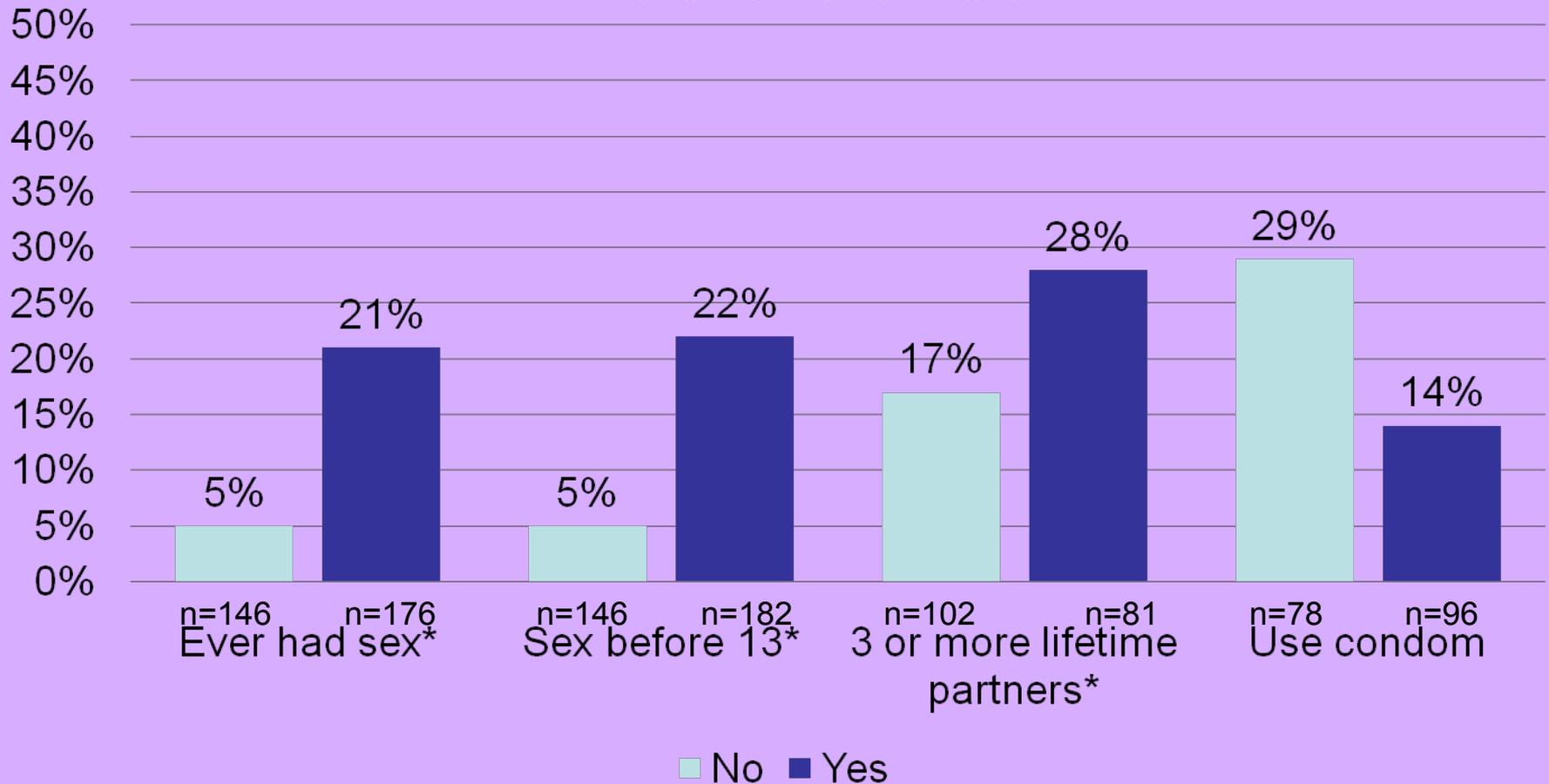
# Attempted Suicide by Dating Violence Past 12 Months Middle School



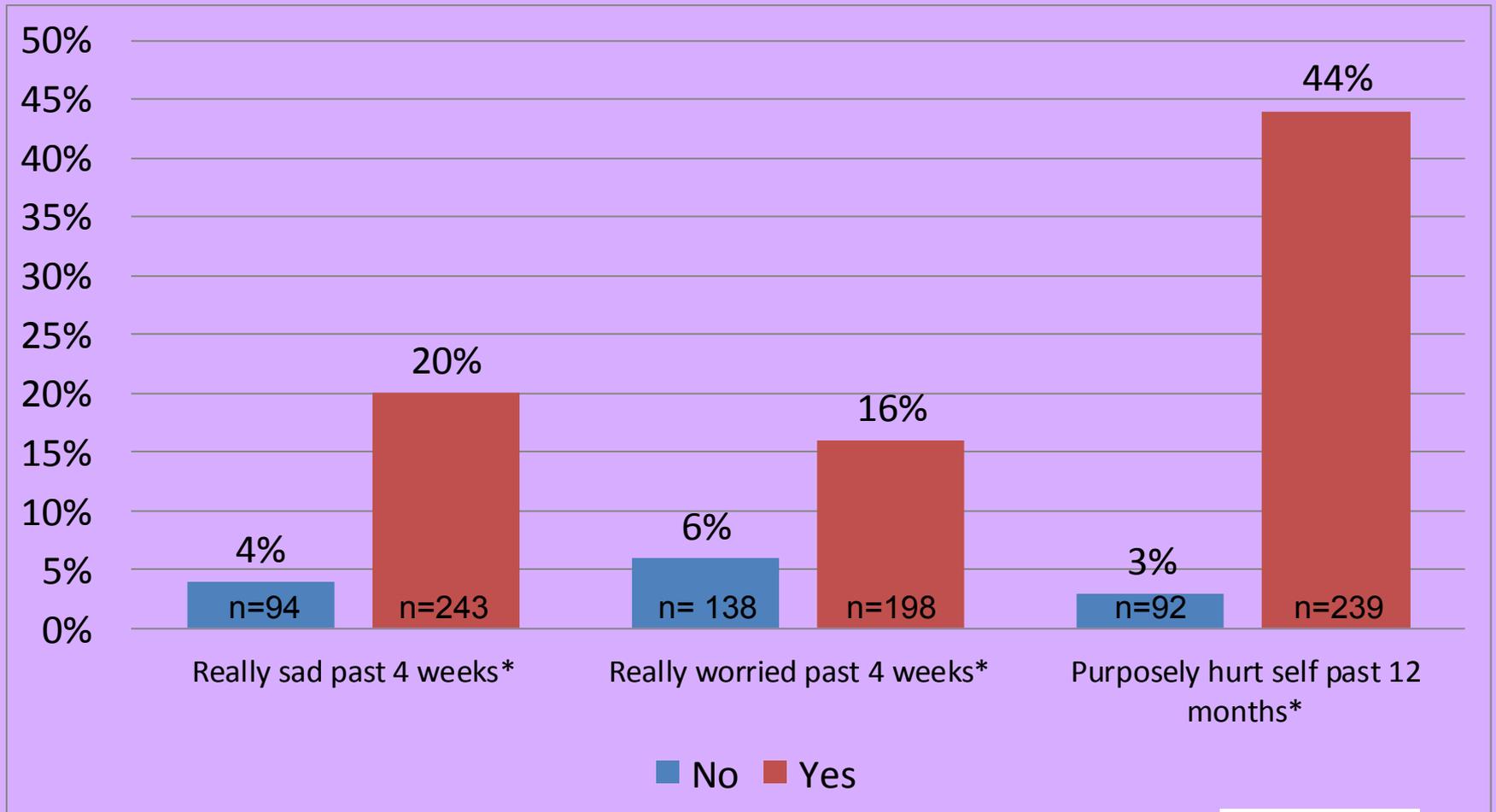
# Attempted Suicide by Substance Use Past 30 Days Middle School



# Attempted Suicide by Sexual Risk Taking Behaviors Middle School



# Attempted Suicide by Mental Health Middle School





These are the students who are still in school.  
Among middle school aged students in Delaware alternative schools and detention centers, 16% have attempted suicide, compared to 9% in public middle schools.

# And other risk factors:

Overall rate of attempted suicide among  
Delaware middle school students----- 9%

Among those who carried a weapon in the  
past 30 days----- 24%

Among those who never talk to parents about  
their plans or feelings----- 20%

Among those who are physically disabled----- 34%

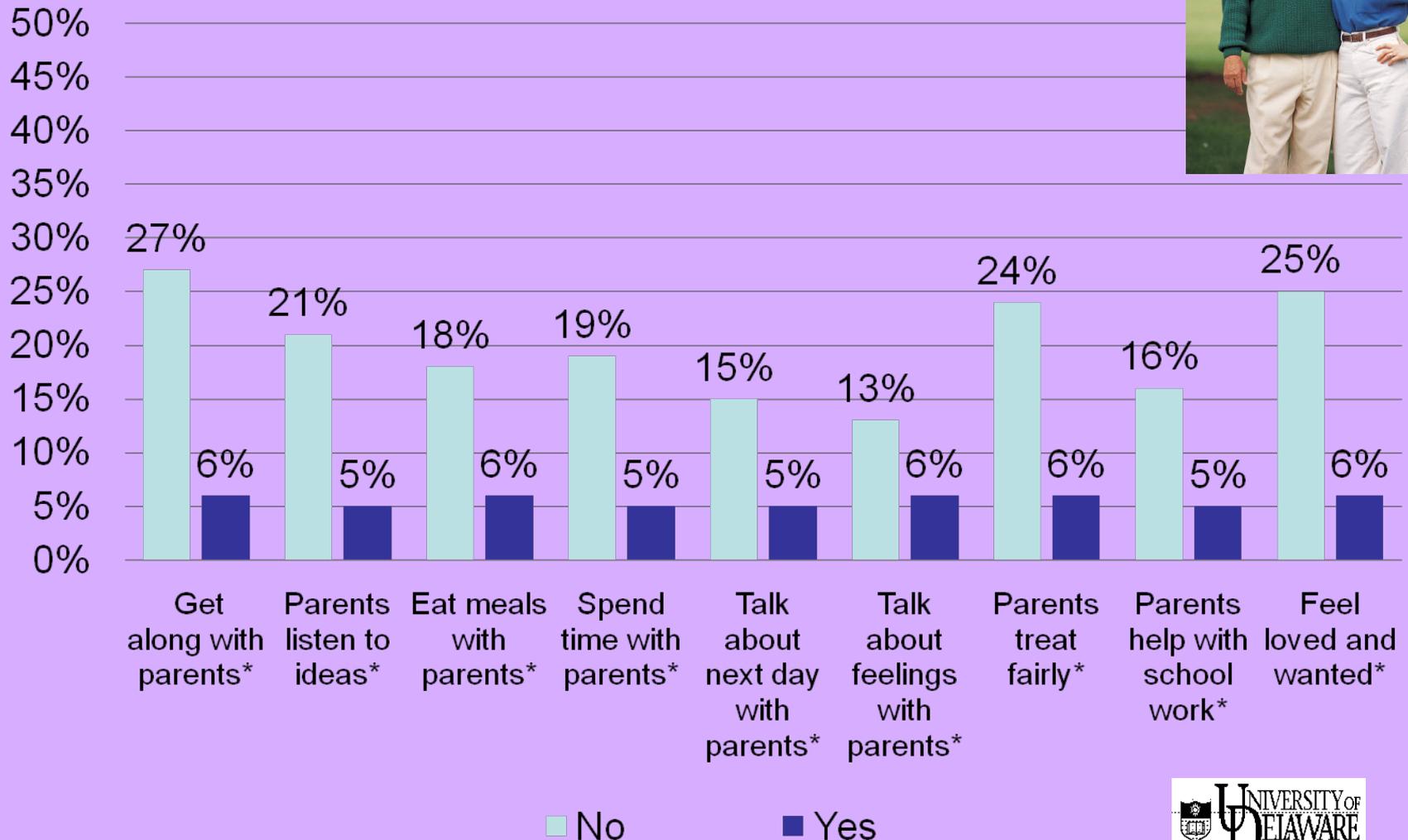
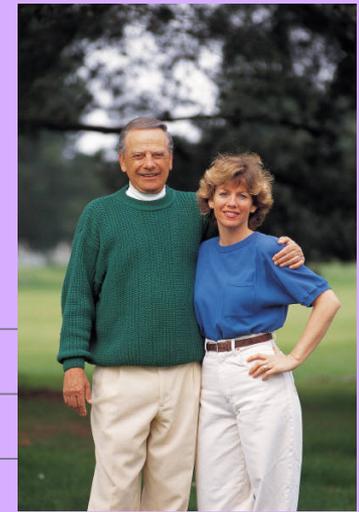
Among those who are learning disabled----- 30%

These  
are the  
“big  
kids”  
Sophia  
now  
looks  
up to.



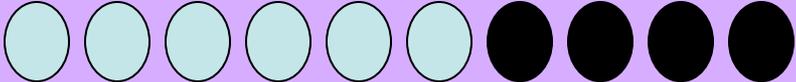
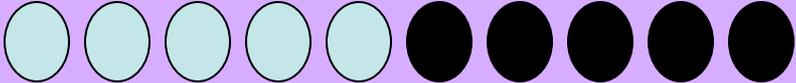
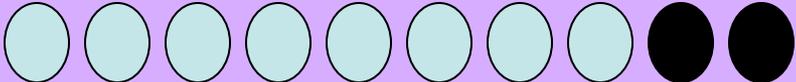
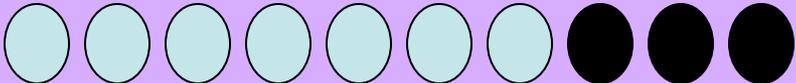
# But parents can have an impact.

Middle School



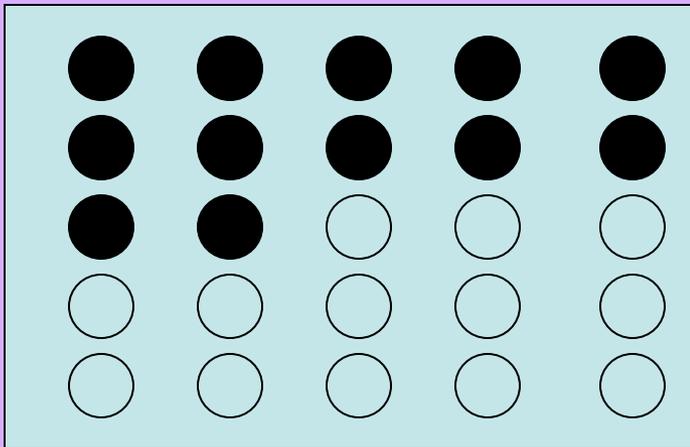
By the time Sophia reaches 11<sup>th</sup> grade, some of her former classmates, probably those most at risk, will have left school. Still, even among those who remain :

# Out of every ten 11<sup>th</sup> graders:

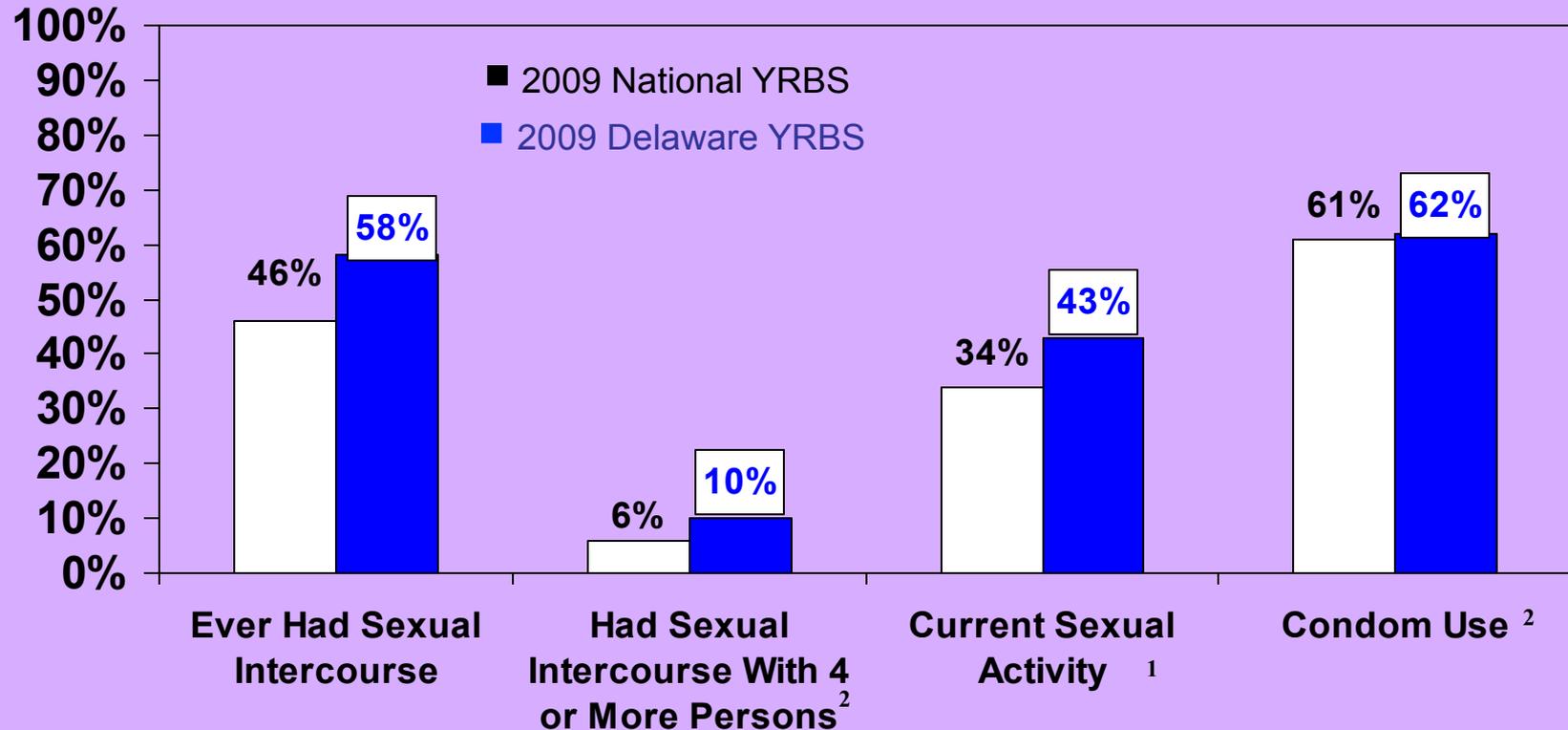
- 71% used Alcohol 
- 44% used Marijuana 
- 49% smoked Cigarettes 
- 20% misused Rx 
- 61% Sexually Active 
- 27% Binge Drank (30 days) 



In Sophia's average classroom, 49% have used alcohol, marijuana, or other illegal drugs in the past month.



# Delaware is consistently above National Norms on the Percentage of Students Who Reported Sexual Risk Behaviors, 2009



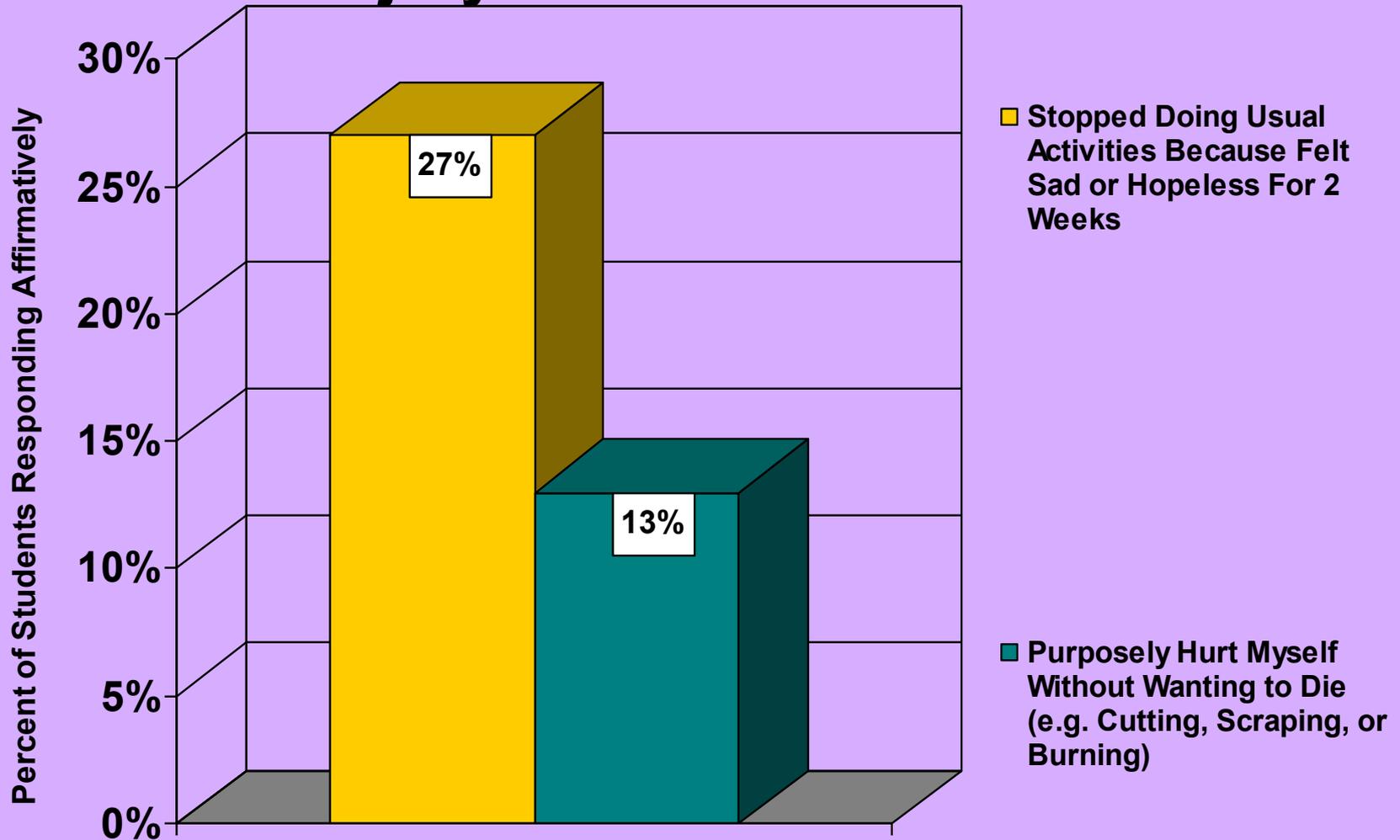
<sup>1</sup> Had sexual intercourse during the 3 months preceding the survey.

<sup>2</sup> Among students who were currently sexually active.

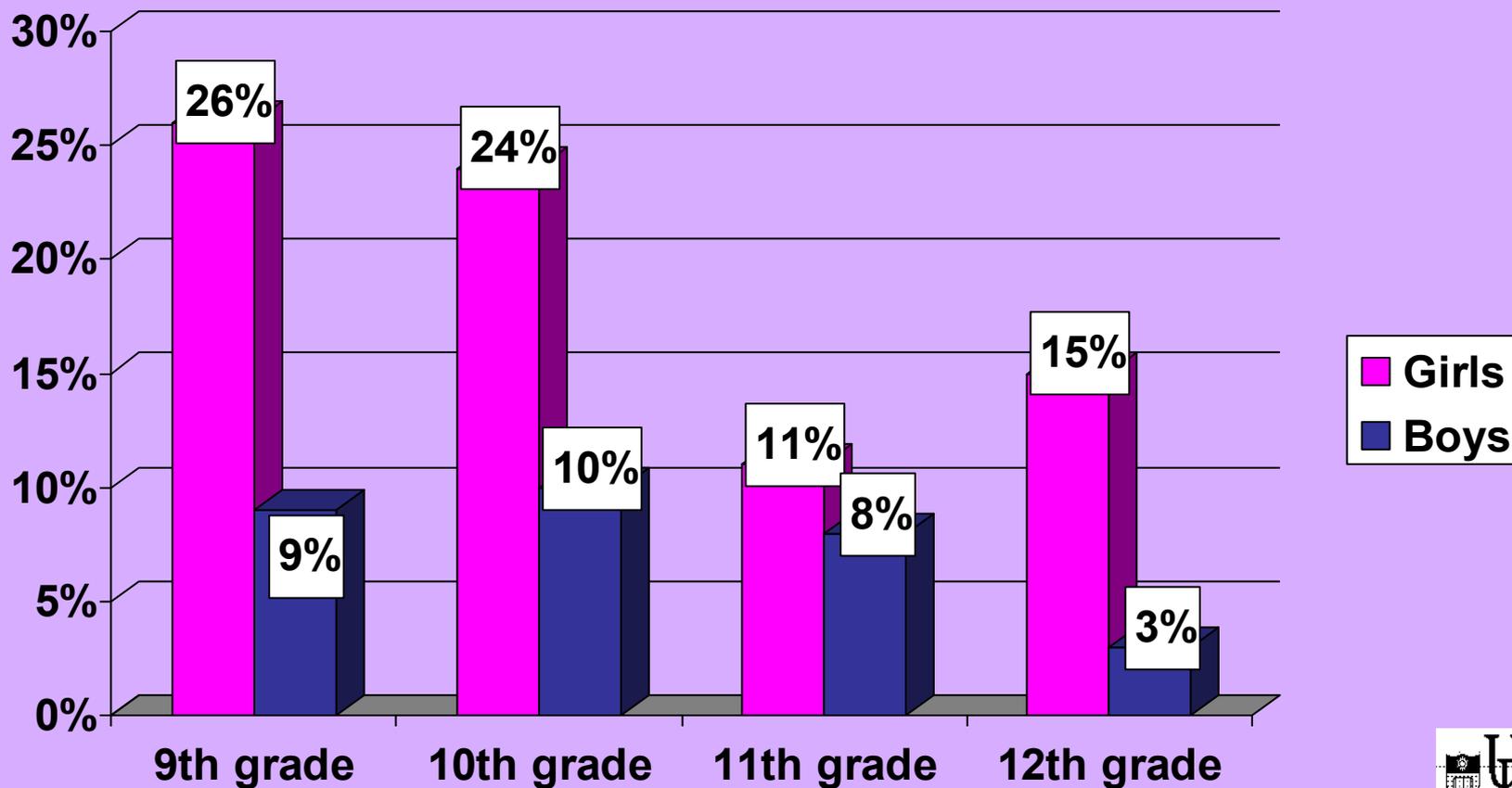


- 63% of 11<sup>th</sup> grade students reported they had given or received oral sex—41% of 9<sup>th</sup> graders have.
- 7% of 11<sup>th</sup> grade girls report having been pregnant at least once—6% of 9<sup>th</sup> grade girls.
- 2% of 11<sup>th</sup> grade students reported that they had been diagnosed with a sexually transmitted disease (STD)—3% of 9<sup>th</sup> graders have.
- Remember, these are the students still in school.

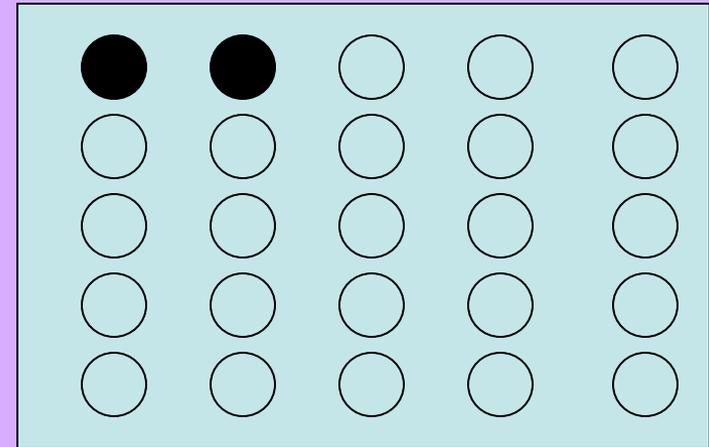
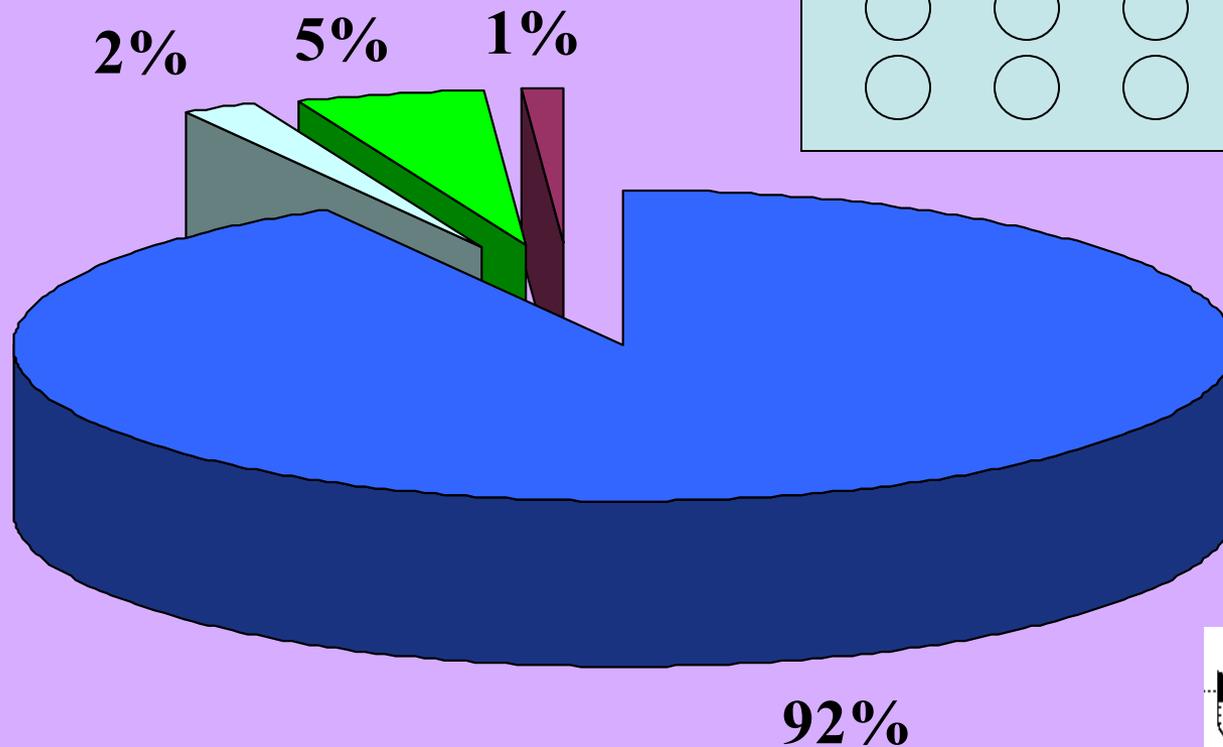
# Many students report feelings of sadness and experiment with self-injury.



# Girls are most likely to intentionally cut, scrape, or burn themselves.

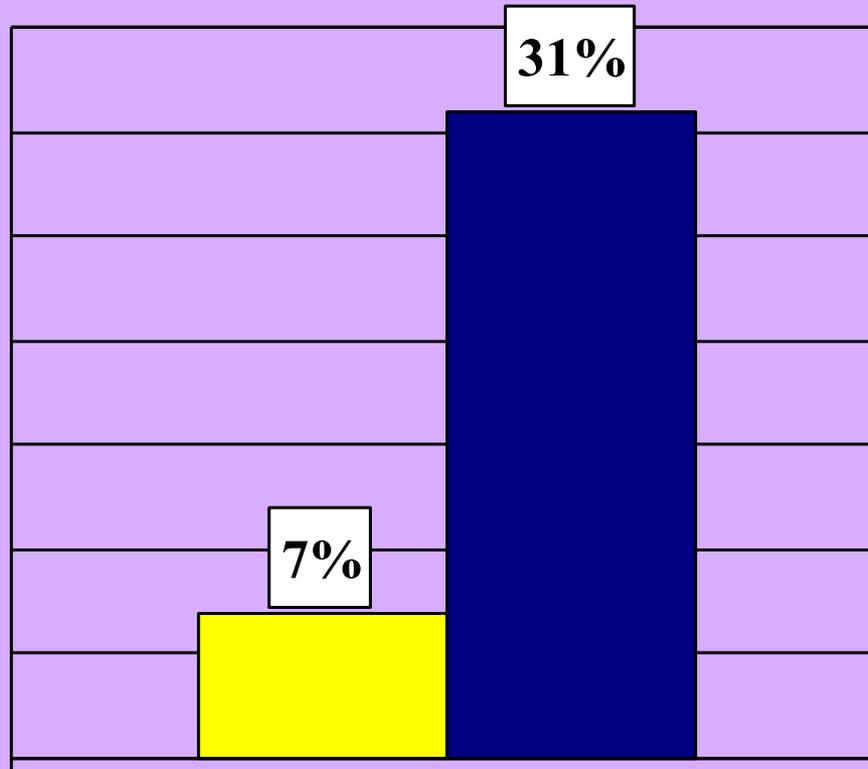


# Small Numbers of Delaware High School Youth Report Minority Sexual Orientation



**heterosexual**      **homosexual**      **bisexual**      **not sure**  
N=2135              N=35              N=114              N=33

**And they are more likely to report that within the past year they made a plan about how to attempt suicide.**



**■ Heterosexual ■ Sexual Minority**

Most of  
Sophia's  
classmates  
drink.

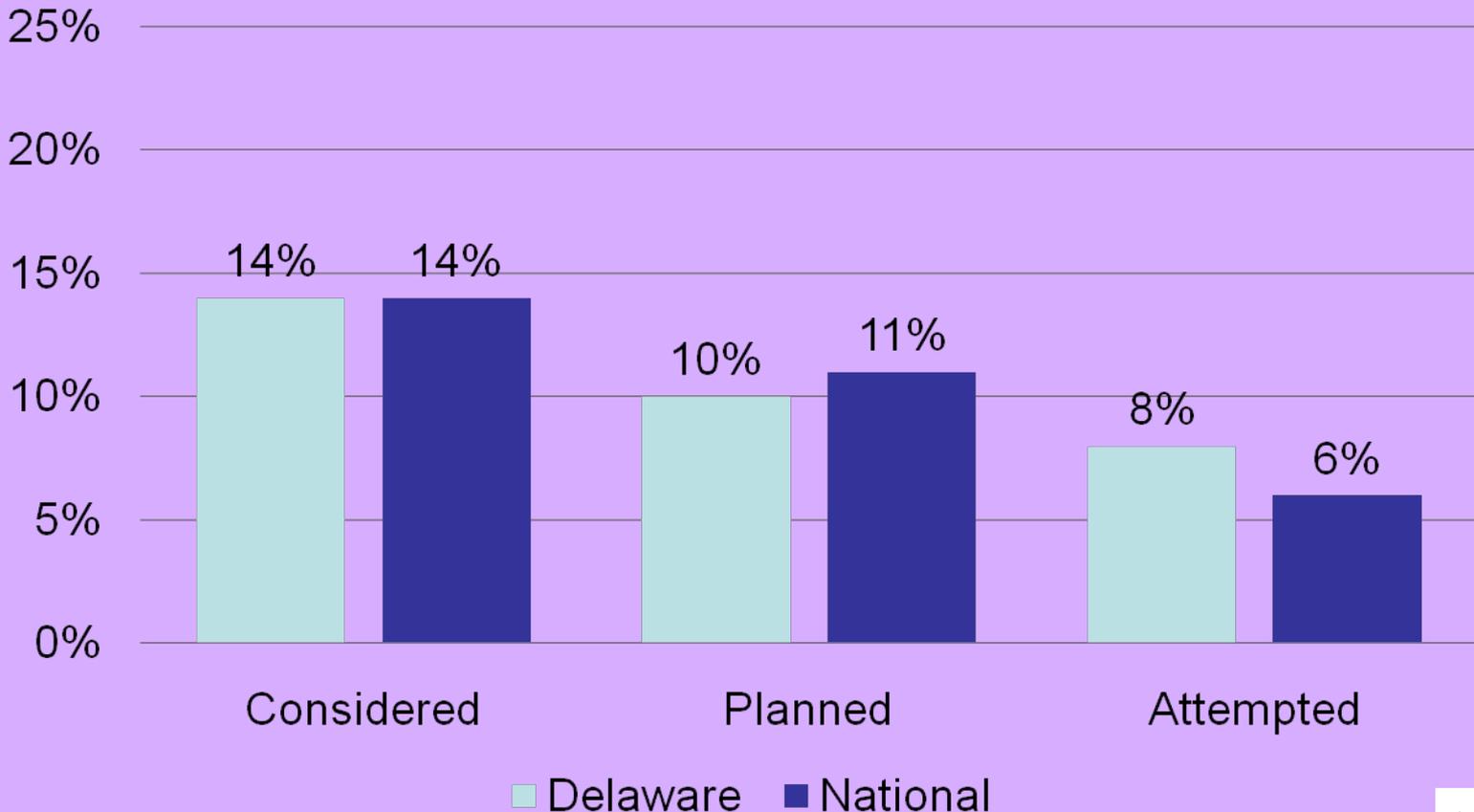
Most are  
sexually  
active.

Many use  
drugs.

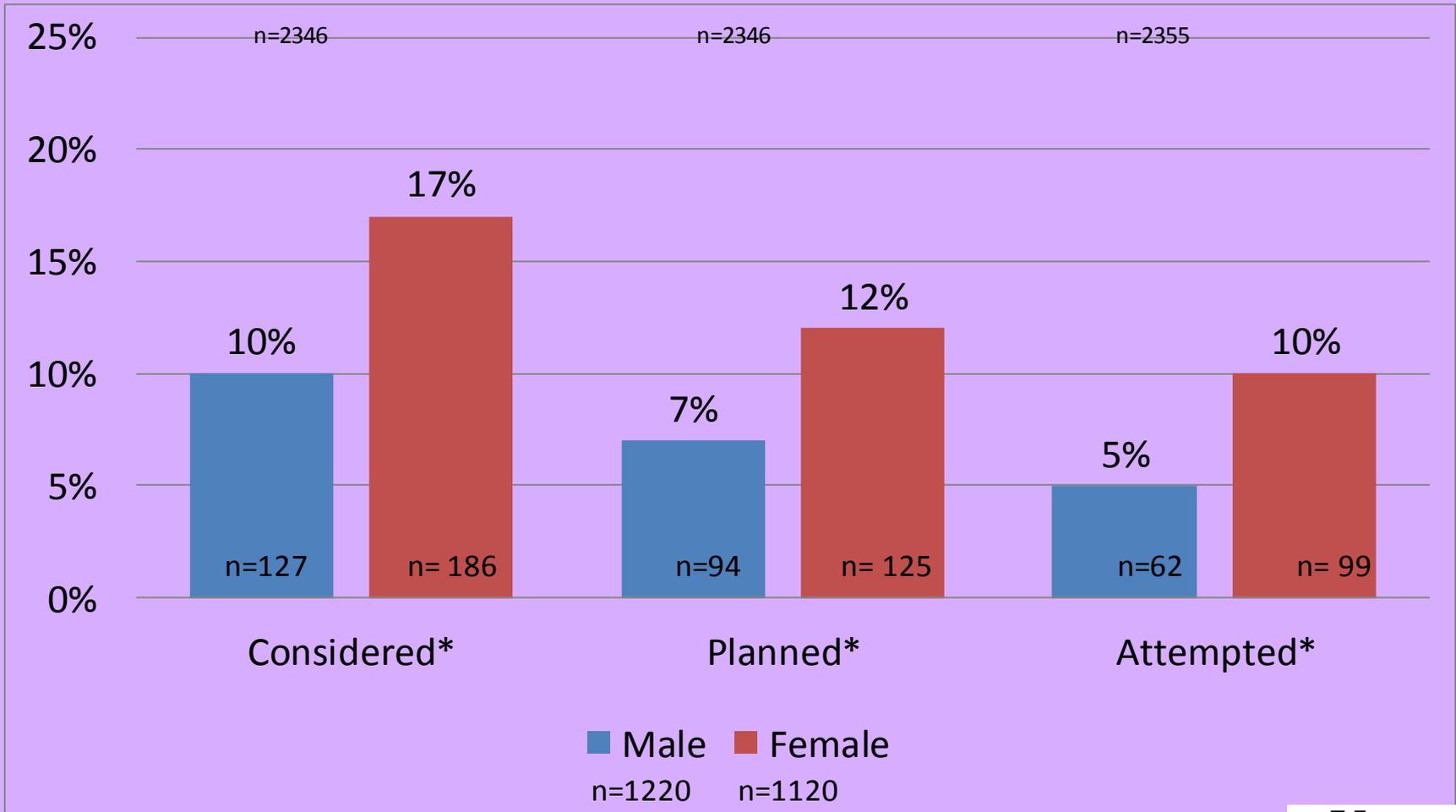
Many are  
depressed.



Among Delaware **high school students** in 2009, 14% reported seriously considering suicide during the past 12 months. That is about 4 students in a high school classroom. Delaware's numbers of considering, planning, and attempting are very near the national averages.



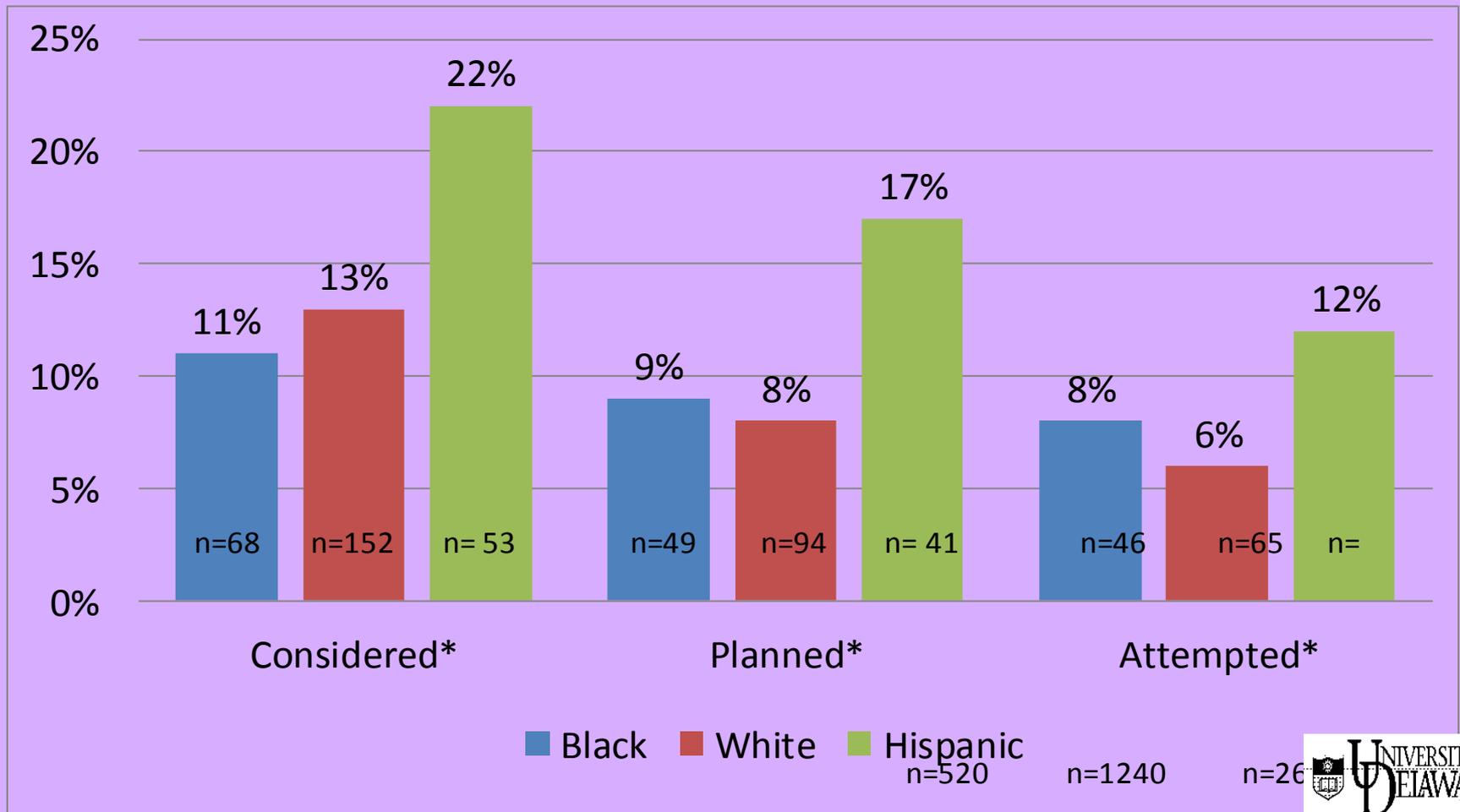
# Delaware High School girls are more likely to report:



Delaware data is consistent with national data, in which girls are more likely than boys to:

- Consider suicide – males **10%** females **17%**
- Plan suicide – males **9%** females **13%**
- Attempt suicide – males **5%** females **8%**

# Delaware Hispanic high school students are more likely to report suicide than Whites or Blacks.

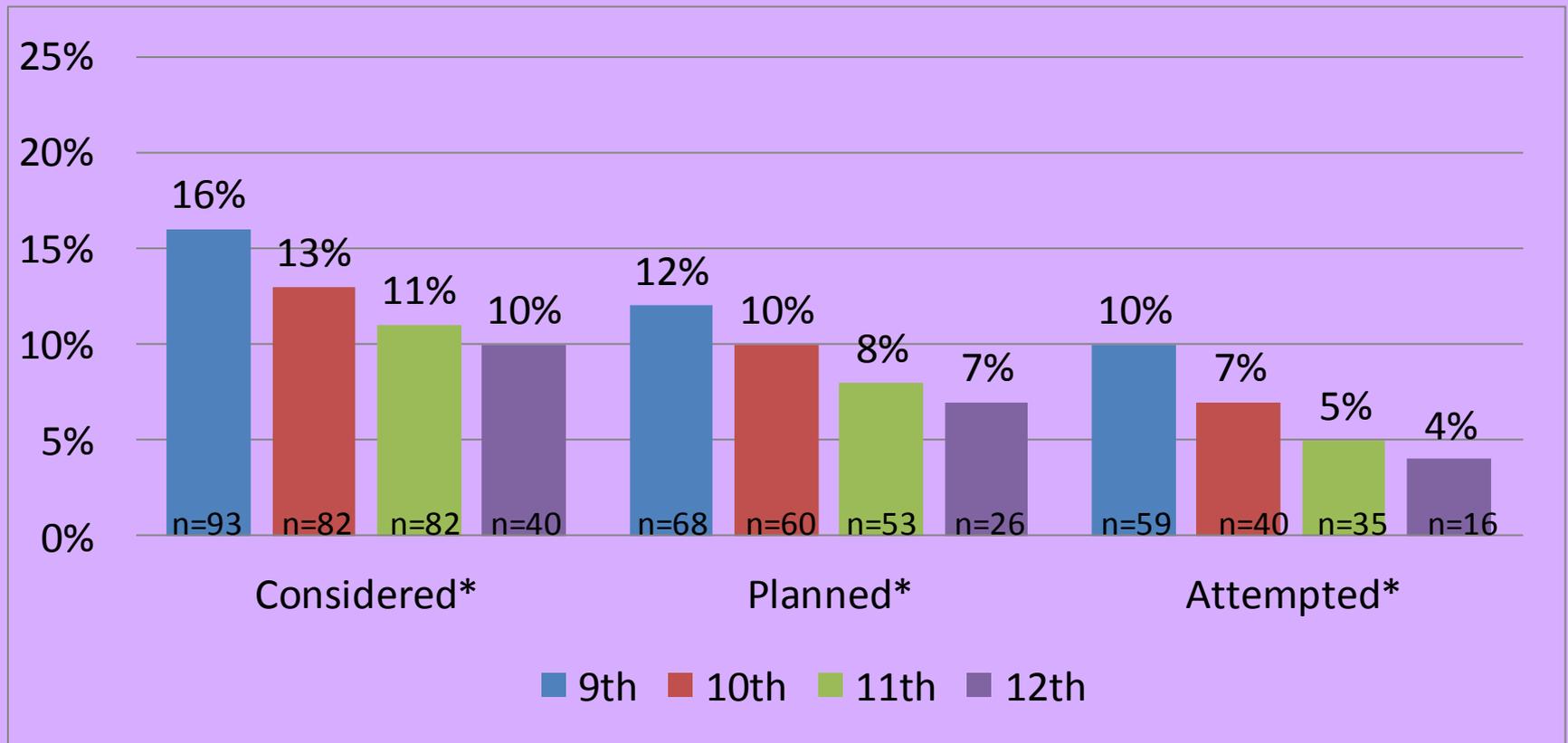


This is consistent with Delaware middle school students and also consistent with national data, where Hispanic students are more likely to report considering and attempting suicide:

- Consider - White **13%**, Black **13%**, Hispanic **15%**
- Attempt – White **5%**, Black **8%**, Hispanic **8%**

(no national data on planning suicide by race)

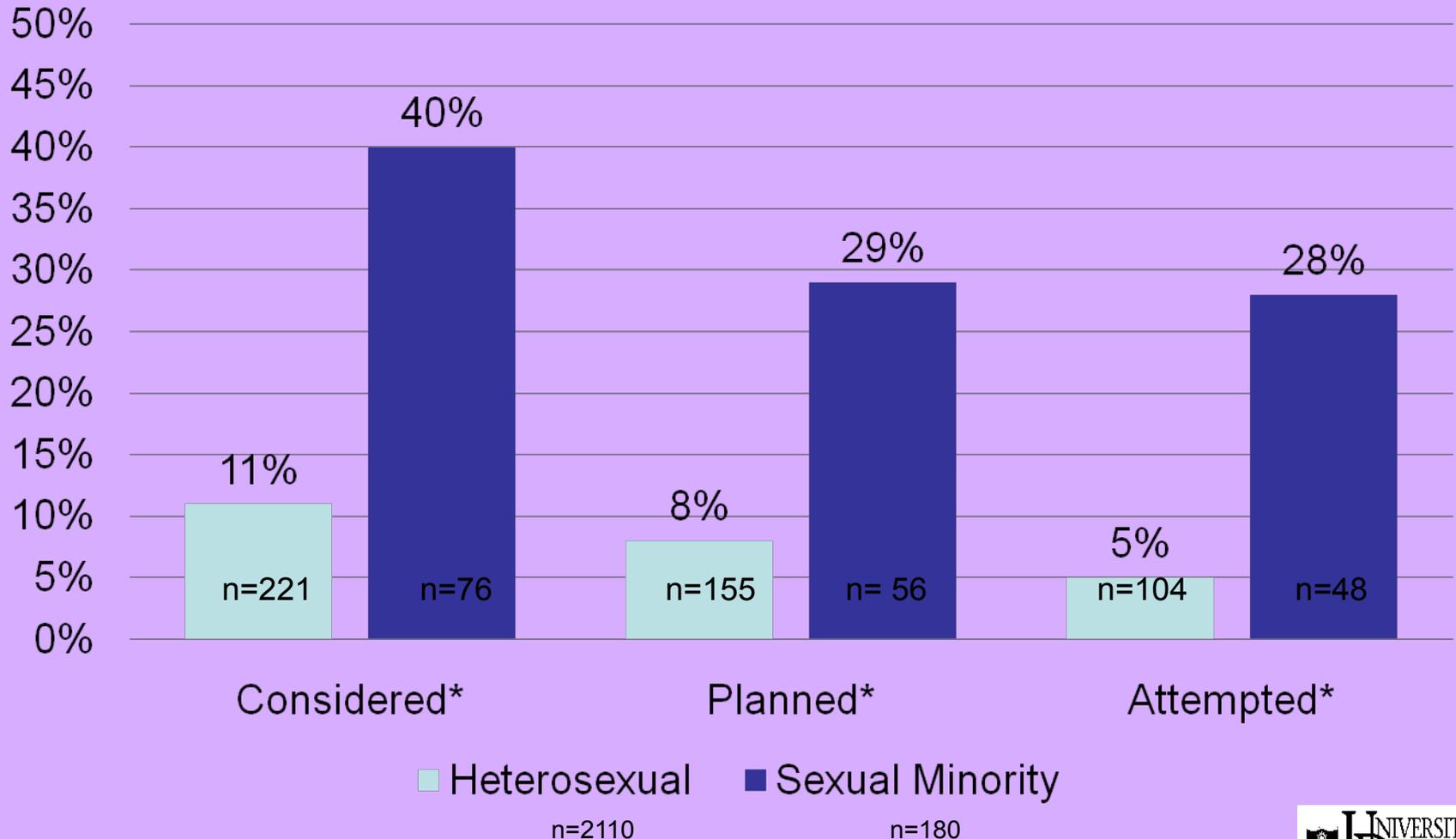
# Suicide ideation declines by grade in High School



n=595   n=595   n=710   n=355



# Suicide ideation by Sexual Orientation in High School

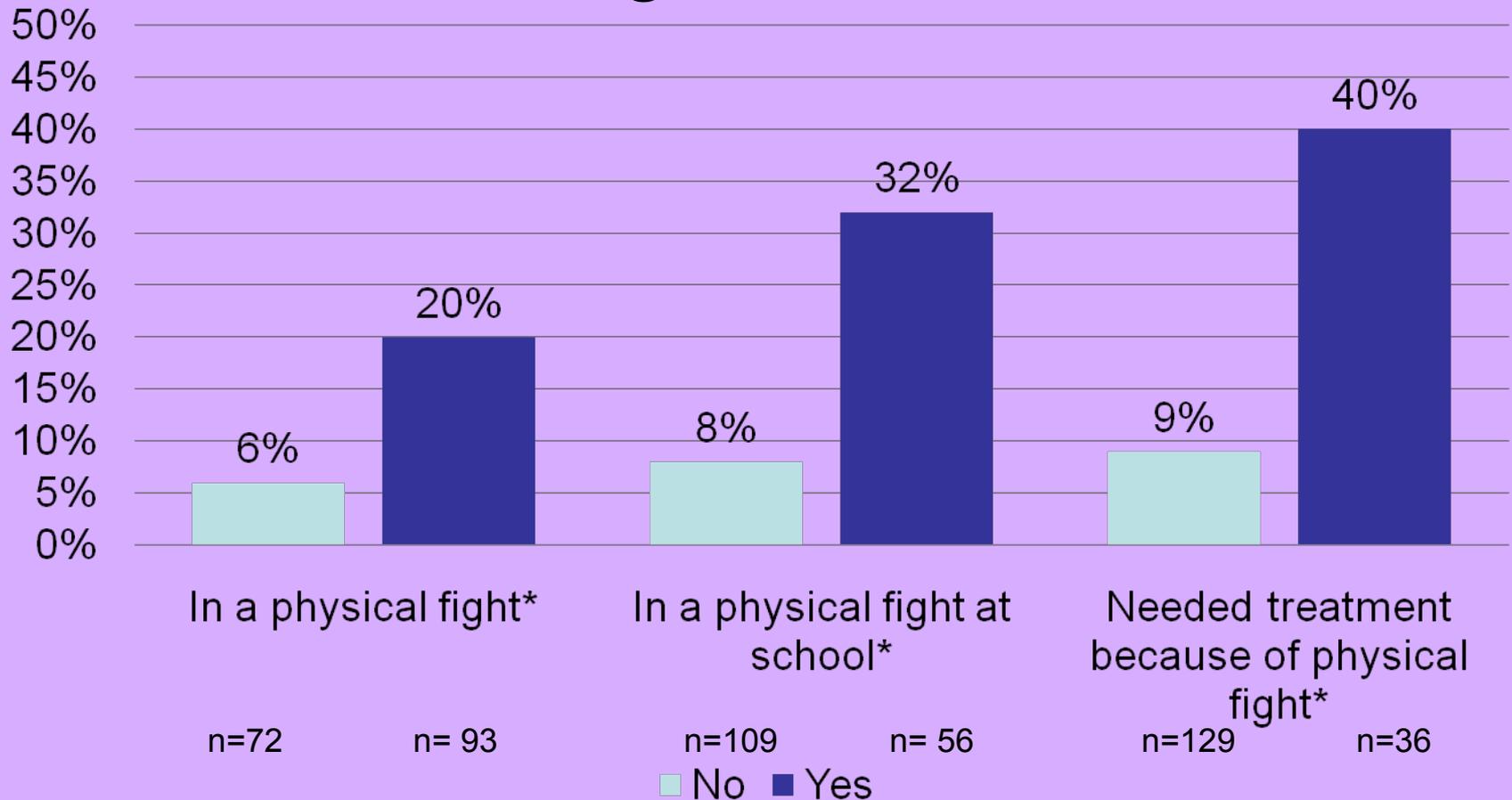


# Attempted Suicide

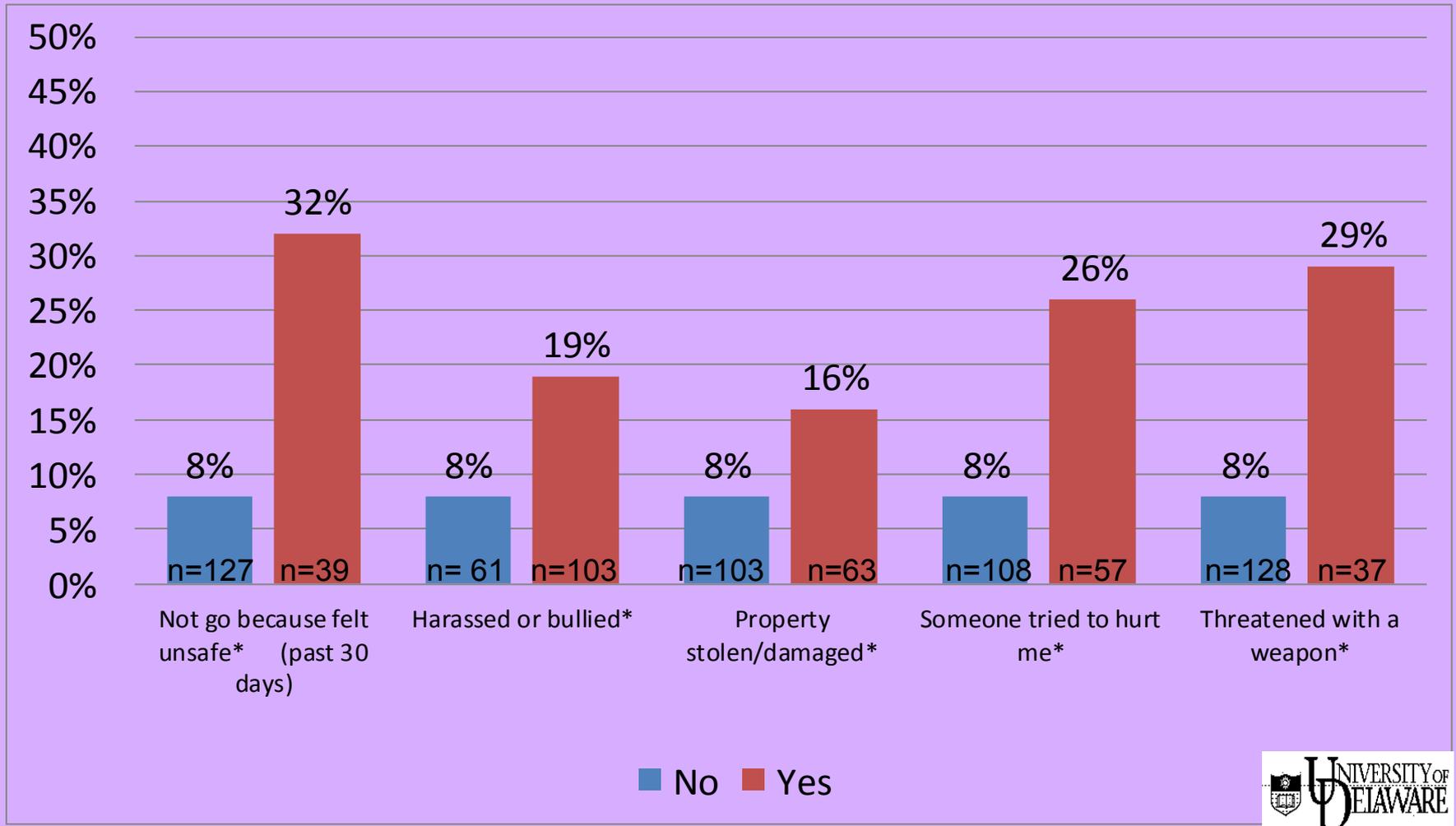
- There are significant differences by other risk factors—violence and victimization, substance abuse and sexual activity—that help identify the 8% of High School Students who reported attempting suicide

(patterns are similar for those who considered or planned)

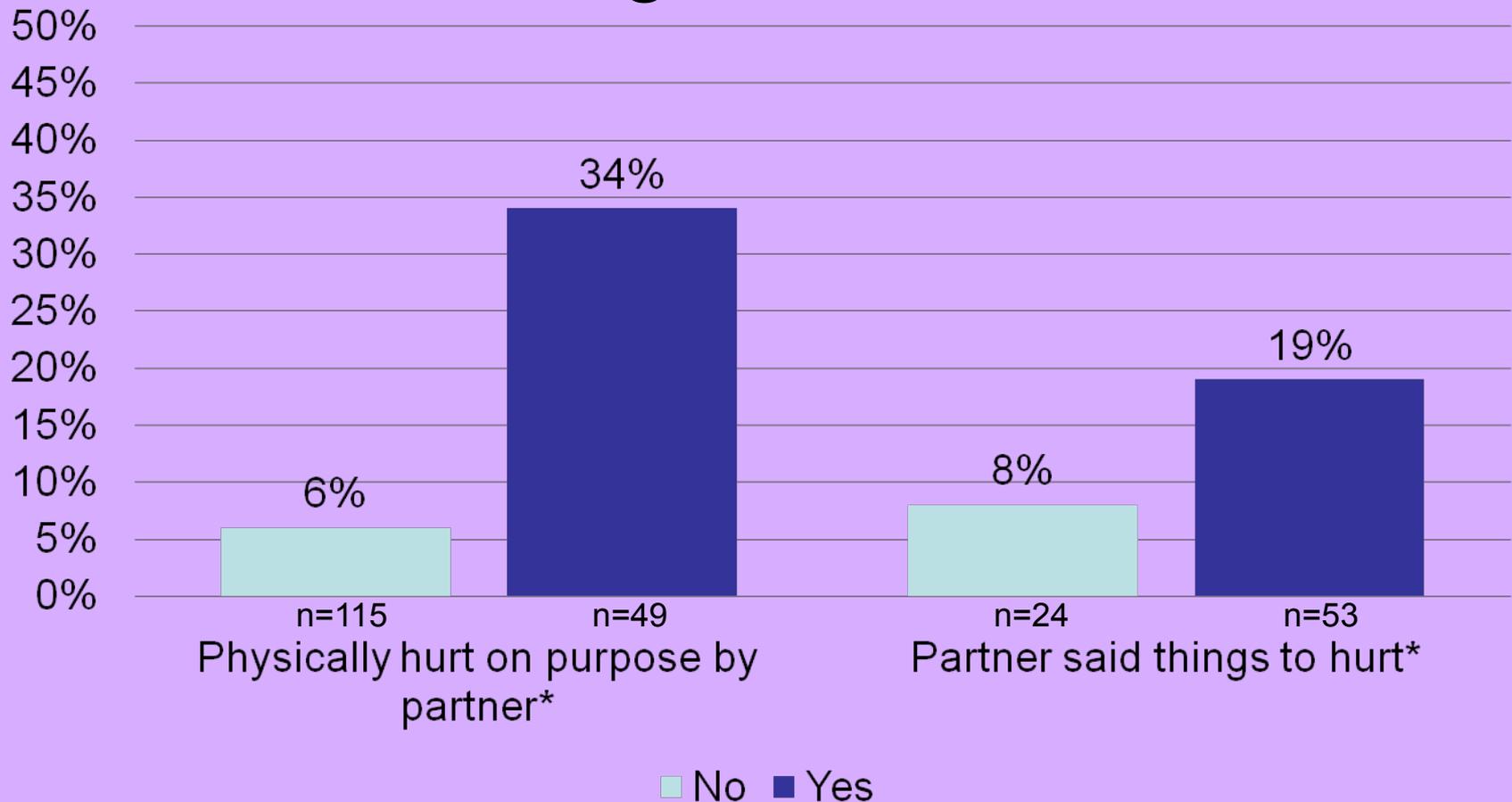
# Attempted Suicide by Physical Fighting Past 12 Months High School



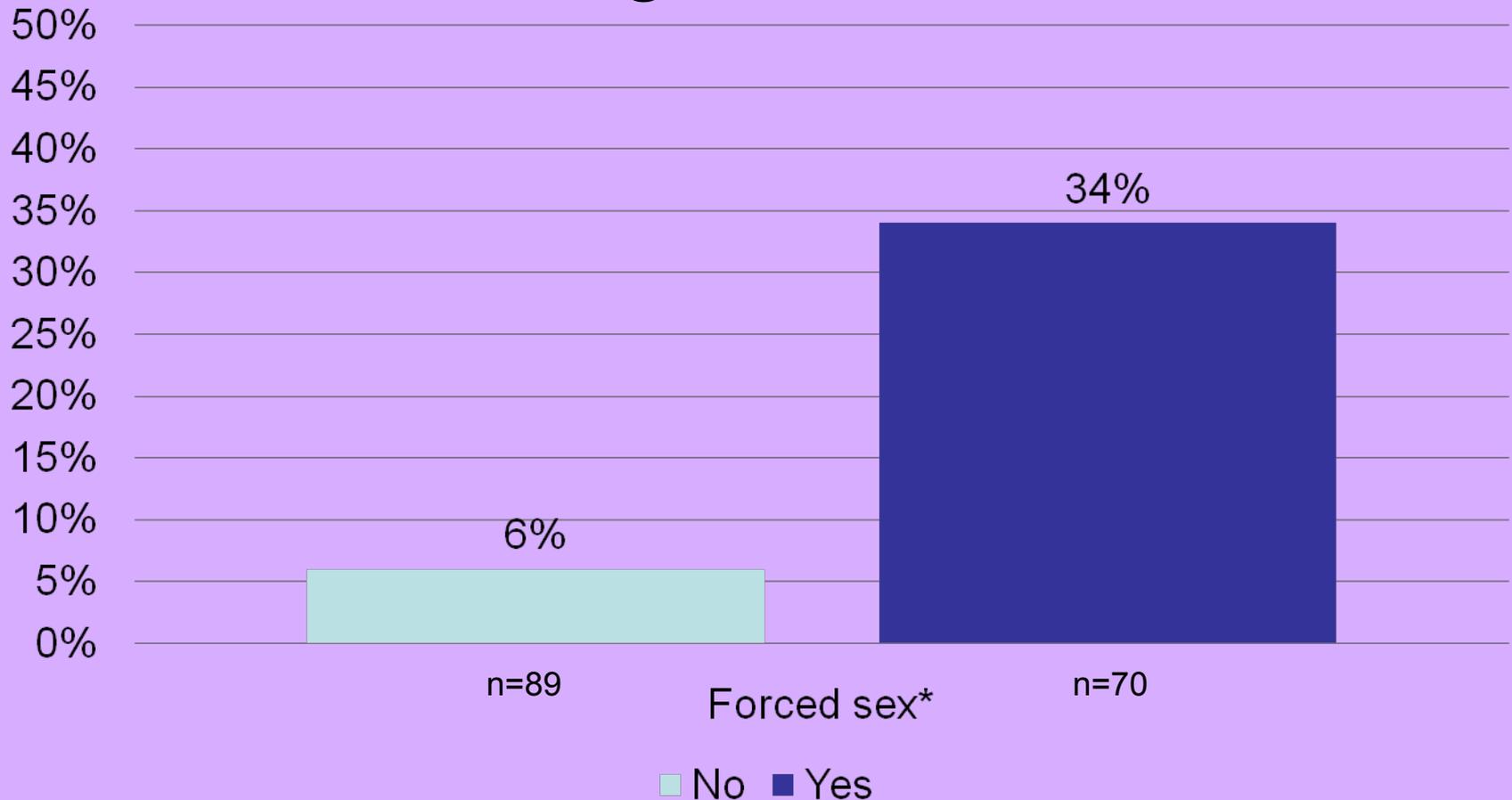
# Attempted Suicide by Victimization at School Past 12 Months High School



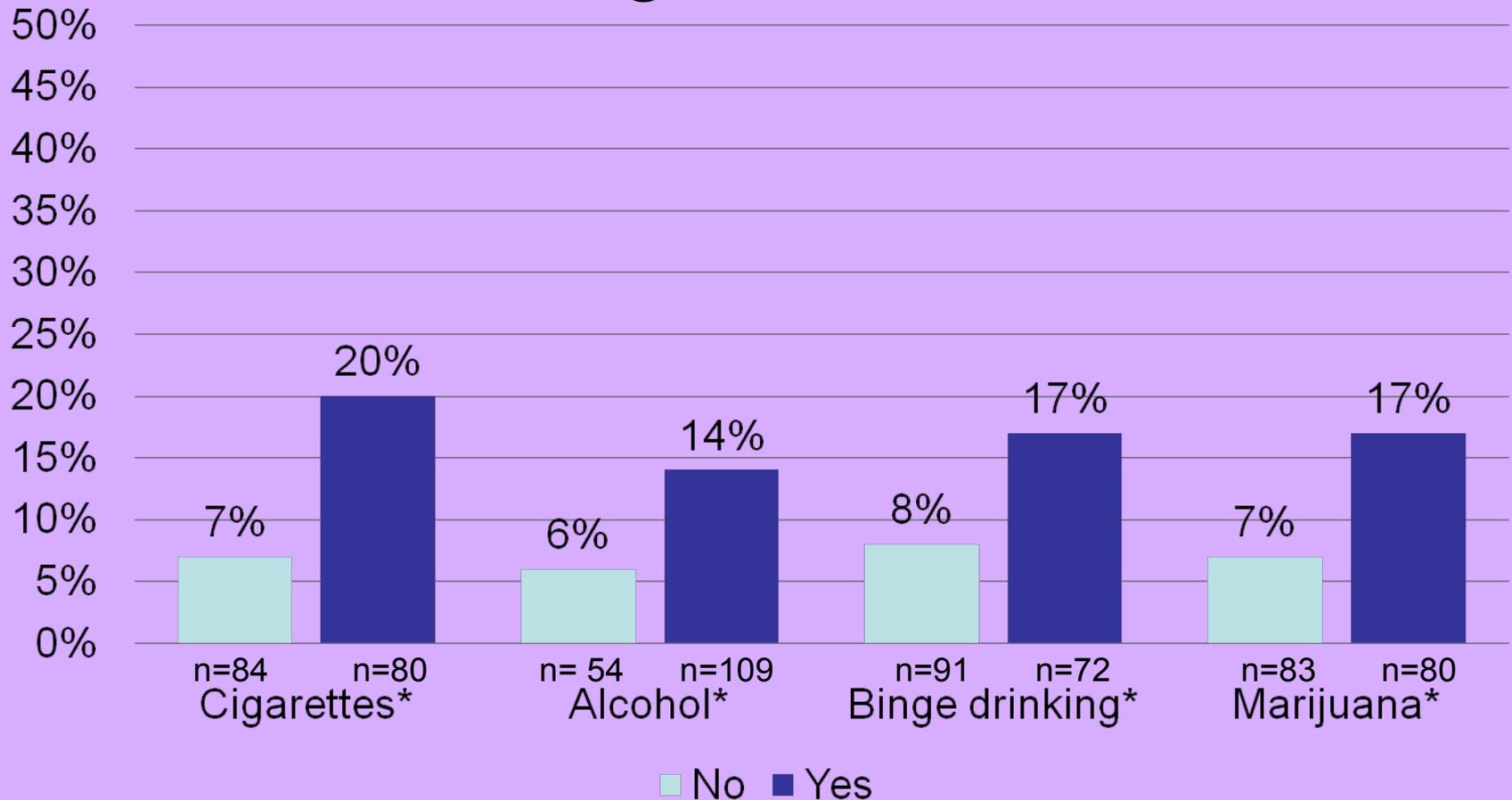
# Attempted Suicide by Dating Violence Past 12 Months High School



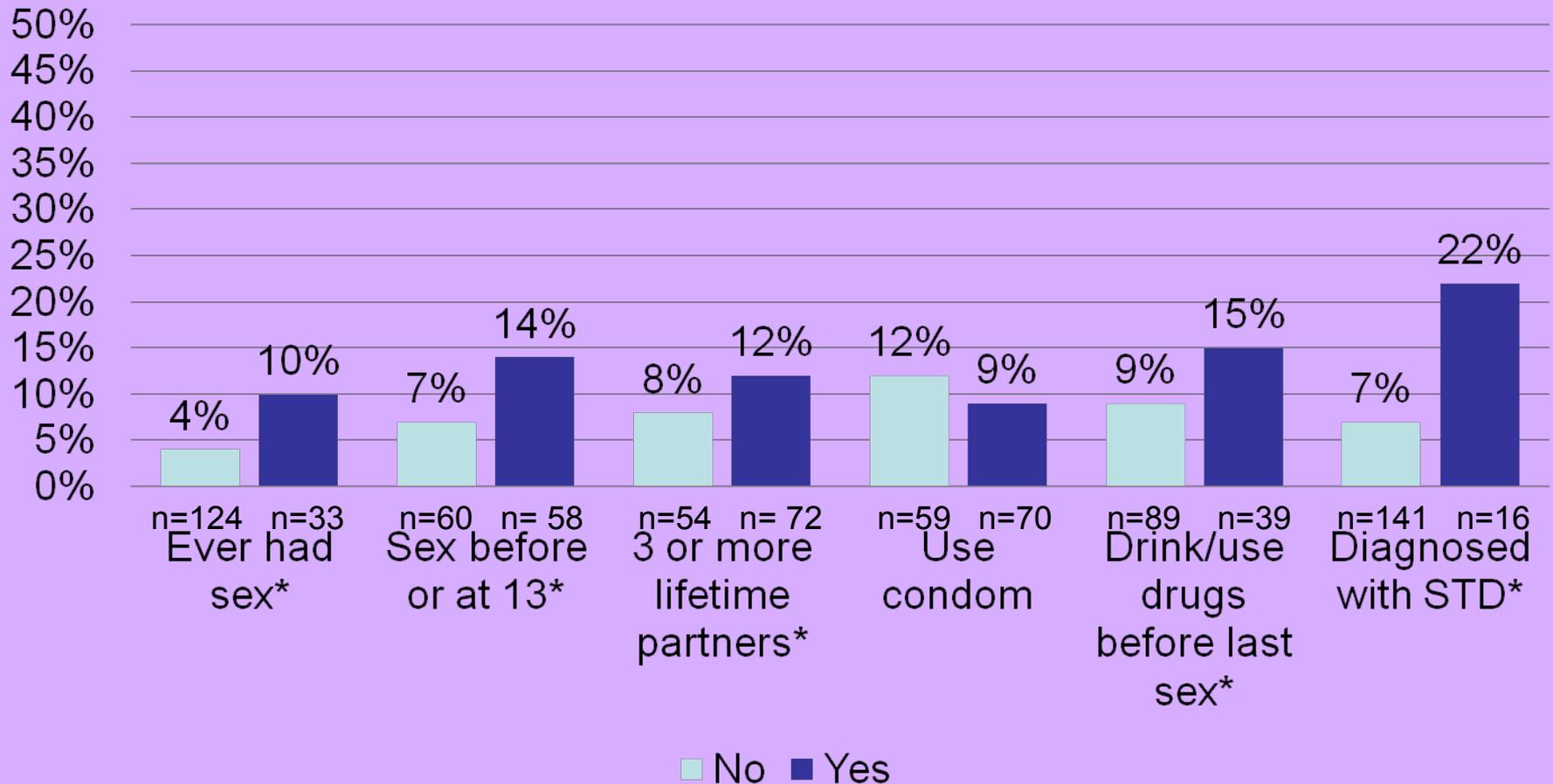
# Attempted Suicide by Life Time Sexual Victimization High School



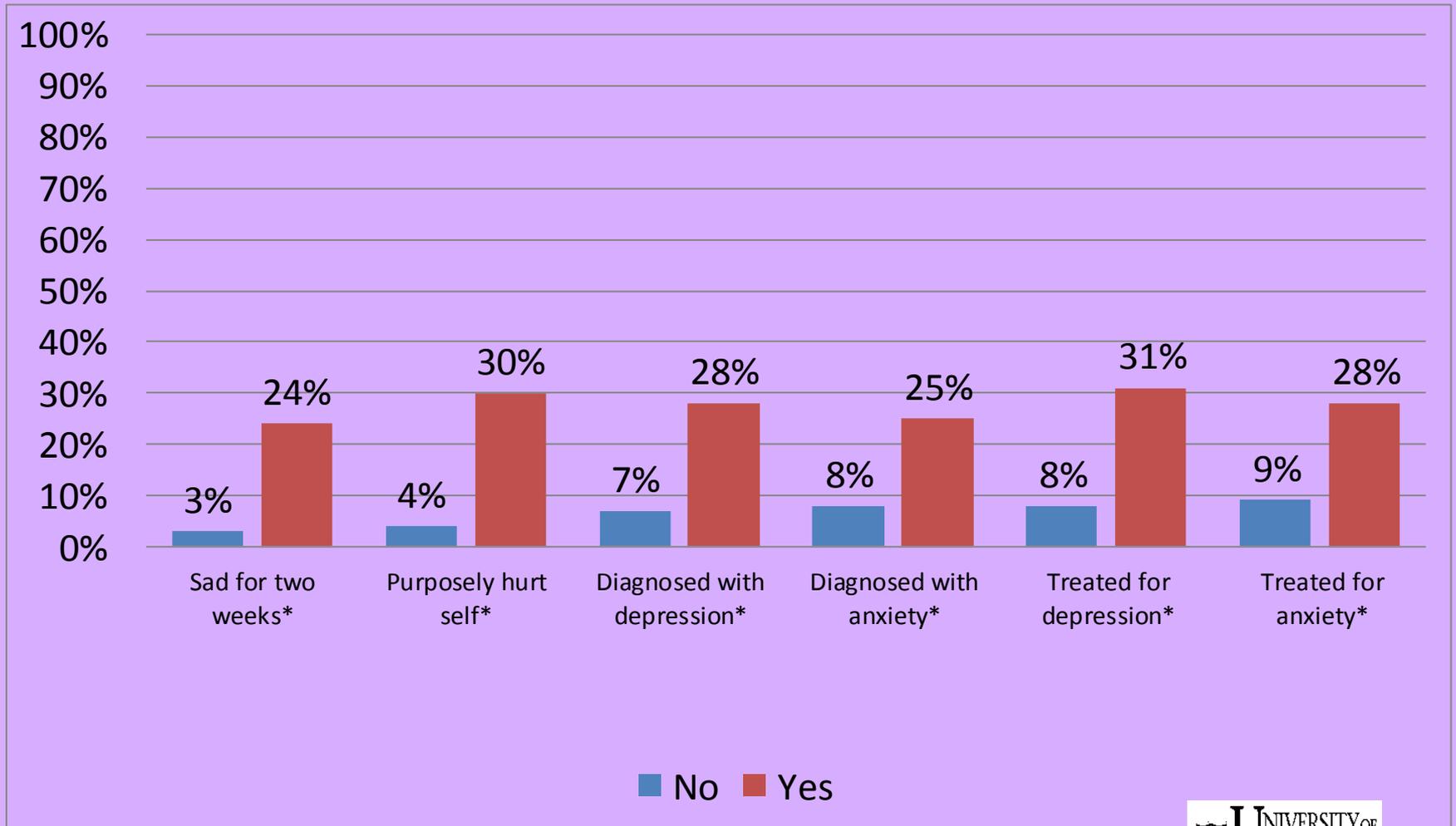
# Attempted Suicide by Substance Use Past 30 Days High School



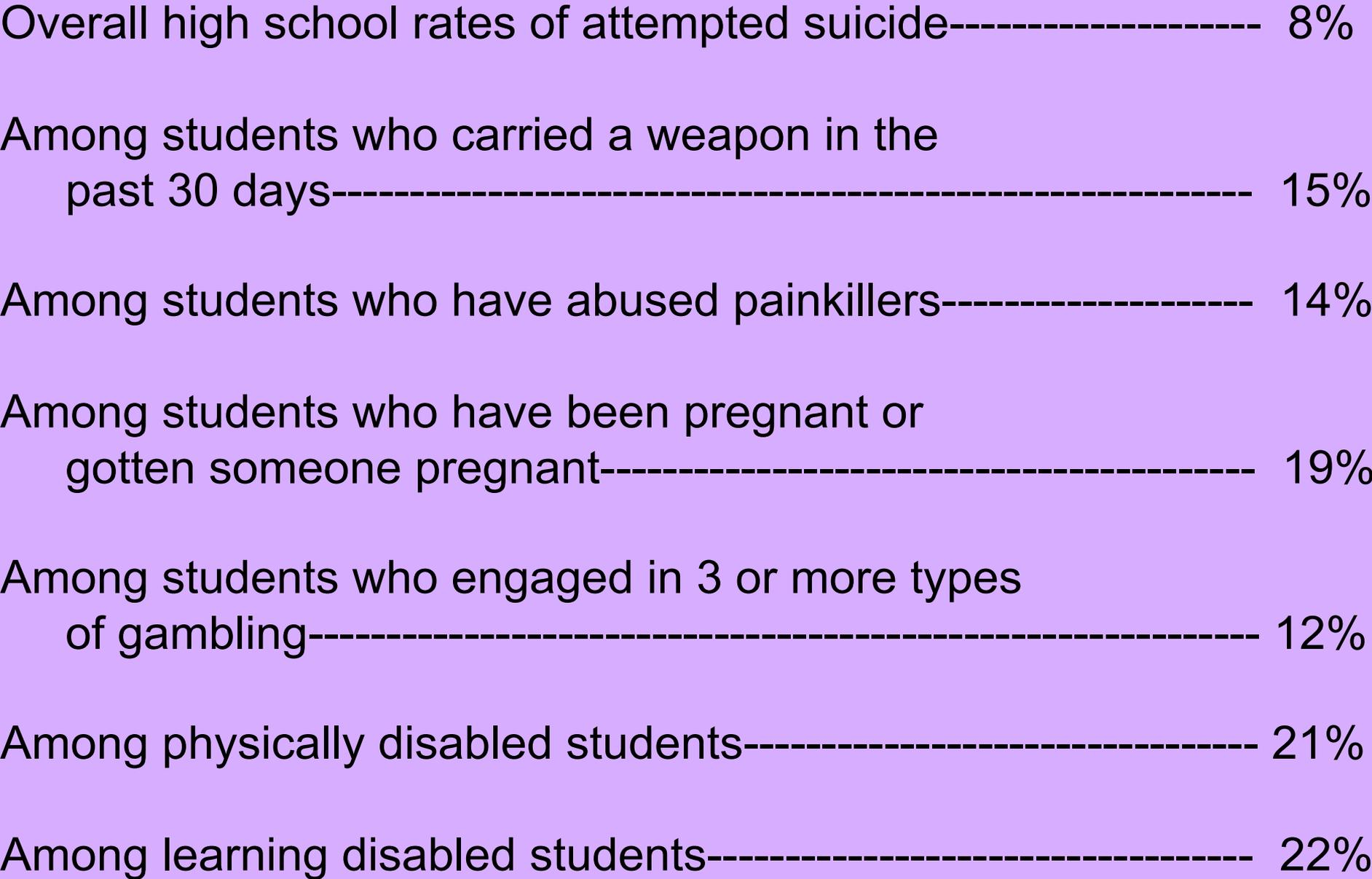
# Attempted Suicide by Sexual Risk Taking Behaviors High School



# Attempted Suicide by Mental Health High School



And other risk factors:





As in the middle schools, high school aged students in Delaware alternative schools and detention centers are much more likely to report they have attempted suicide—14% compared to 8% in the regular public high schools.

# Who is watching for warning signs in the schools?

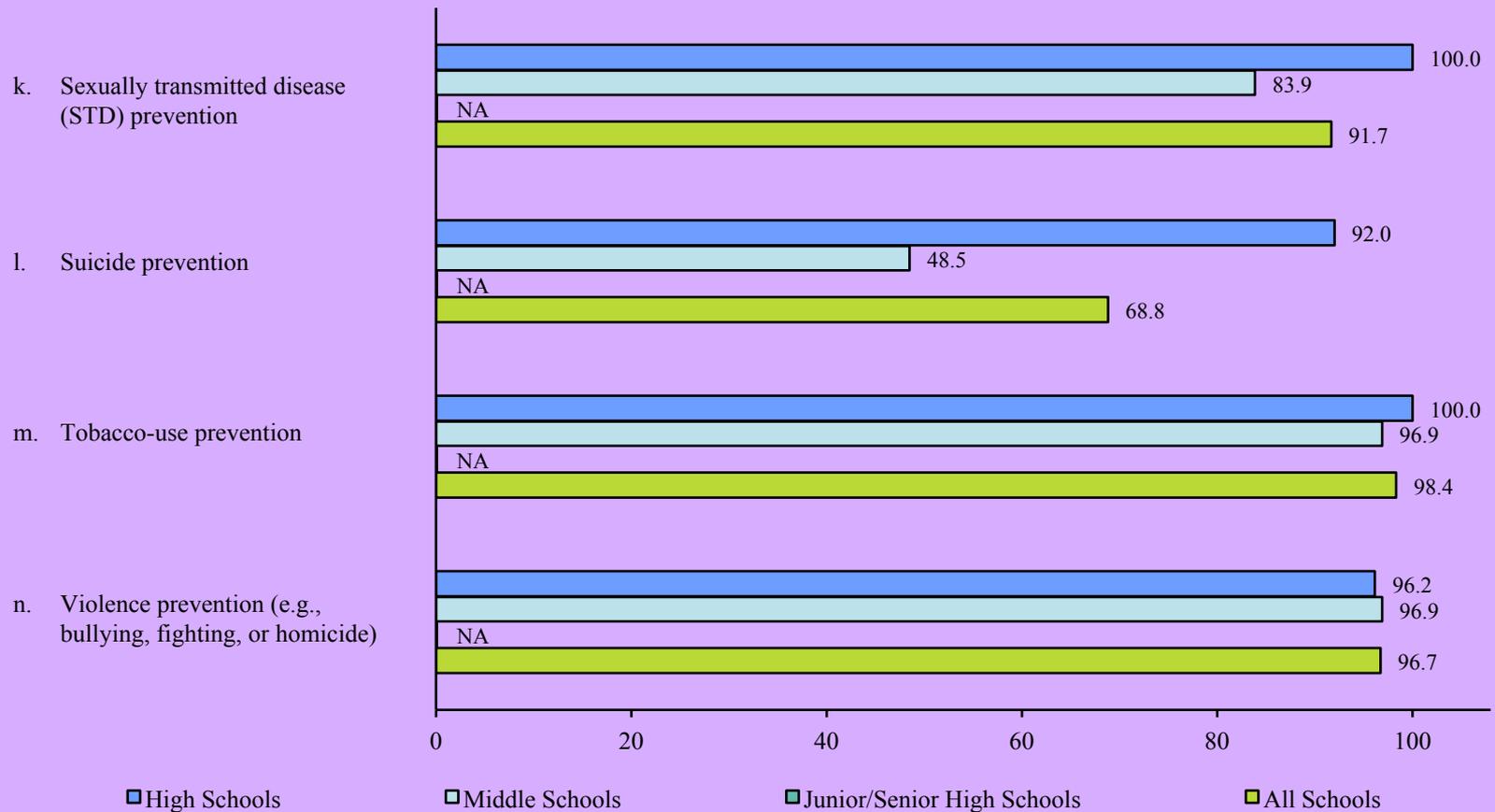
- Teachers, staff , nurses,... but

they are often not well prepared for what  
to see and what to do.

# DELAWARE

## 2010 School Health Profiles Report Weighted Lead Health Education Teacher Survey Results

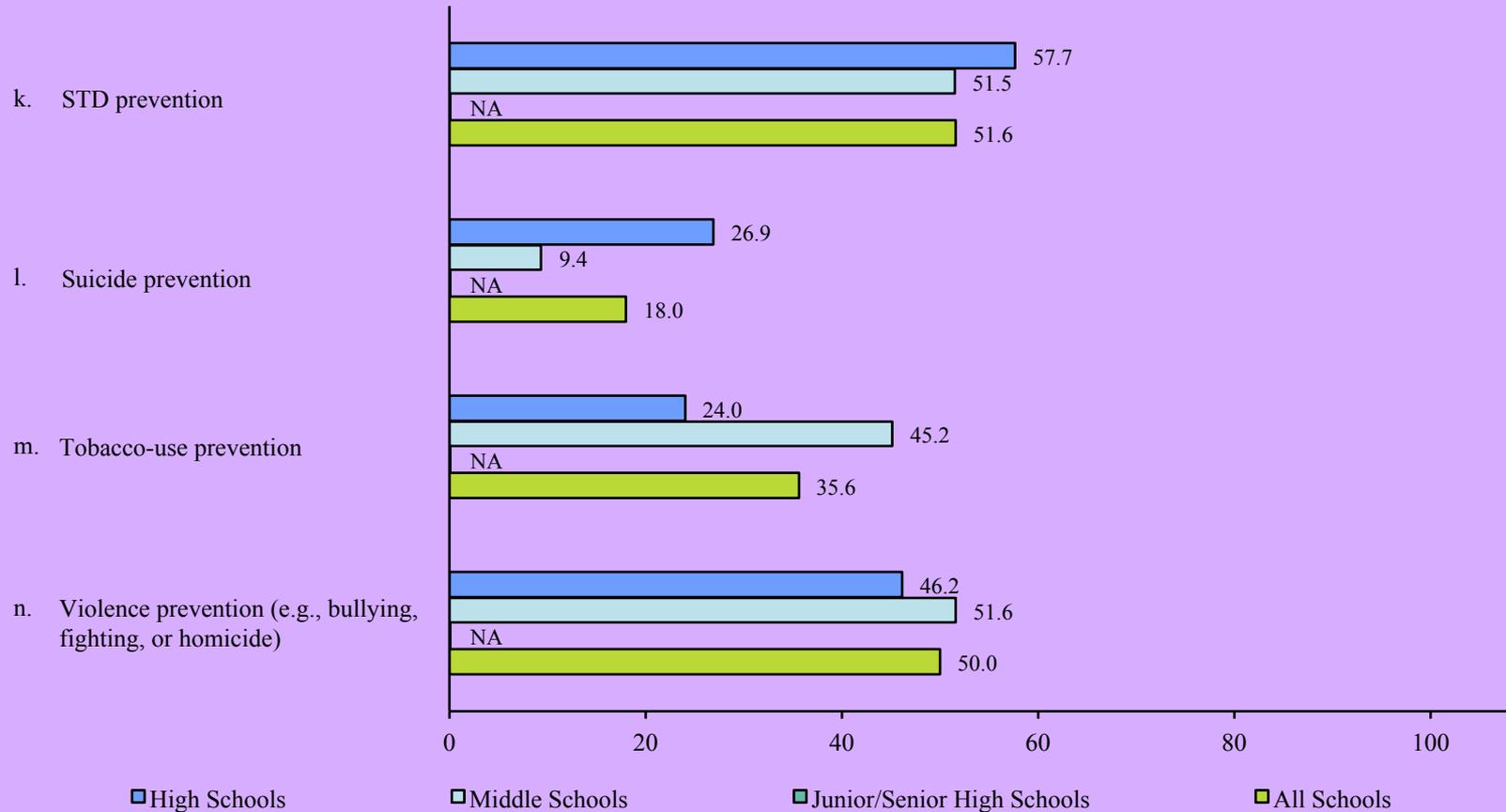
7. Percentage of schools in which teachers tried to increase student knowledge on each of the following topics in a required course in any of grades 6 through 12.



## DELAWARE

### 2010 School Health Profiles Report Weighted Lead Health Education Teacher Survey Results

16. Percentage of schools in which the lead health education teacher received professional development (e.g., workshops, conferences, continuing education, or any other kind of in-service) on each of the following topics during the past two years.



# And when Sophia gets to College:

- 1 student in her freshman English comp class of 25 will have seriously considered suicide; and
- 1 student in her dorm of 100 students will have attempted suicide
- Source 2009 Delaware College Risk Behavior Survey

