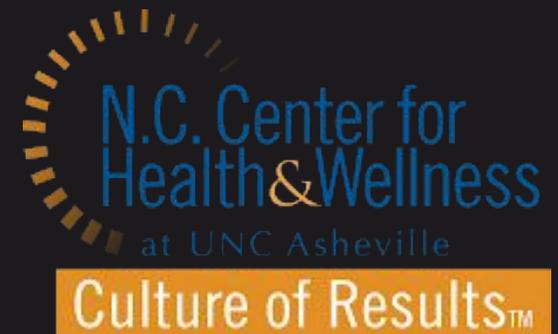


COMMUNICATING RESILIENCY ADVISORY GROUP MEETING

Kenneth Roche, CWP, Public Health Intern (MAHEC & NCCHW)

Emma Olson, LMSW, MPH Interim Director of Partnerships and Evaluation

North Carolina Center for Health and Wellness



Purpose of the Project

To create a targeted public health communications campaign to raise awareness about trauma-- what it is, its impacts, and how to build resilience-- in Buncombe County and across Western North Carolina.

Desired Results for this Group

- The CR Advisory Group is comprised of community partners use their expertise and experience to guide the project in development and dissemination.

Desired Results for Today

- This meeting is to get your perspectives and input on what audiences might benefit most from messages related to trauma and resiliency and which messages might be most effective.
- 

Agenda

- Welcome and Introductions
 - Background on Adverse Childhood Experiences (ACEs)
 - Data on ACEs in NC, WNC and BC
 - Brief reflections and responses (space for processing)
 - Results-based Accountability (RBA) Exercise to Prioritize Community Indicators and Strategies for Communicating Resilience
 - Close and Next Steps
-

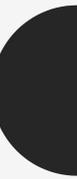
Welcome and Introductions

- Name, Role and Affiliation
- Safe to fail and safe to feel space

Our role:

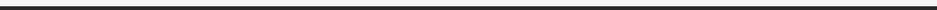
- The North Carolina Center for Health and Wellness strives to impact policies, build capacity, and ignite community initiatives in order to support the health and wellbeing of North Carolinians across the state.
 - NCCHW's Culture of Results is a training and technical assistance program that supports state-wide initiatives, as well as local public health departments, hospitals, clinics, and community providers to measure impact and improve results.
- 

*BACKGROUND
ON ACES*



ACEs study

- Assessed associations between childhood maltreatment and later-life health and well-being
- Certain experiences are major risk factors for the leading causes of illness, death, as well as poor quality of life in the United States
- Research has shown that many health and well being problems arise as a consequence of ACEs
- Understanding ACEs will help people work towards progress in preventing and recovering from illness, disease and social challenges



ACEs study (cont.)

- Collaboration between the Centers for Disease Control and Prevention in Atlanta, Georgia and Kaiser Permanente's Health Appraisal Clinic in San Diego, California
 - Study includes the 10 most common stressful childhood events experienced by the 17,000 participants in the Kaiser ACE Study
 - These 10 stressful childhood events have been well studied in research literature
- 

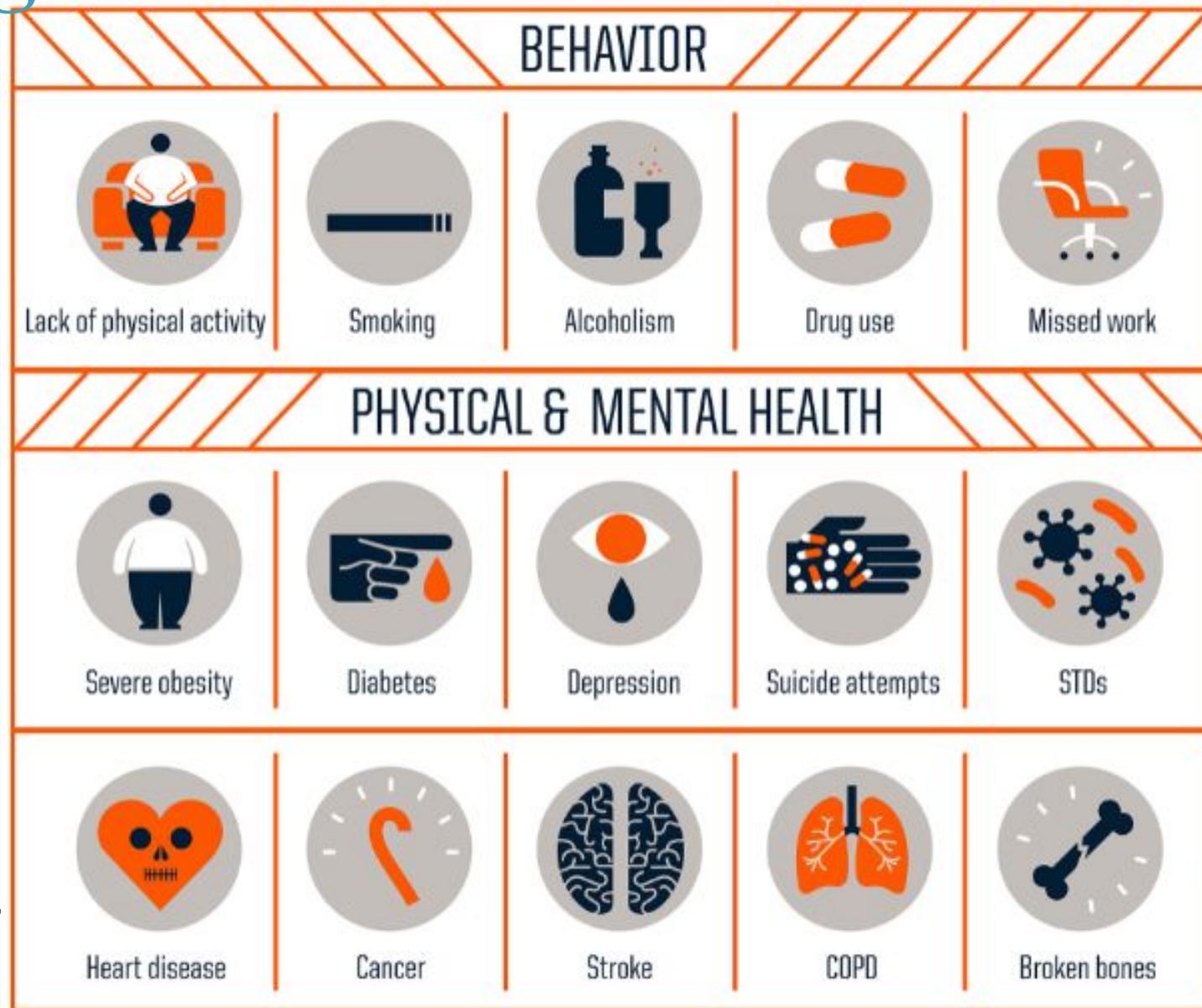
Types of Trauma

- Personal
 - Emotional abuse
 - Physical abuse
 - Sexual abuse
 - Emotional neglect
 - Physical neglect
 - Household Challenges
 - Absence of a parent/caregiver through divorce, death or abandonment
 - A parent/caregiver who was treated violently
 - A household member who abused alcohol or drugs
 - A household member who was diagnosed with a mental illness
 - A household member who went to prison
-

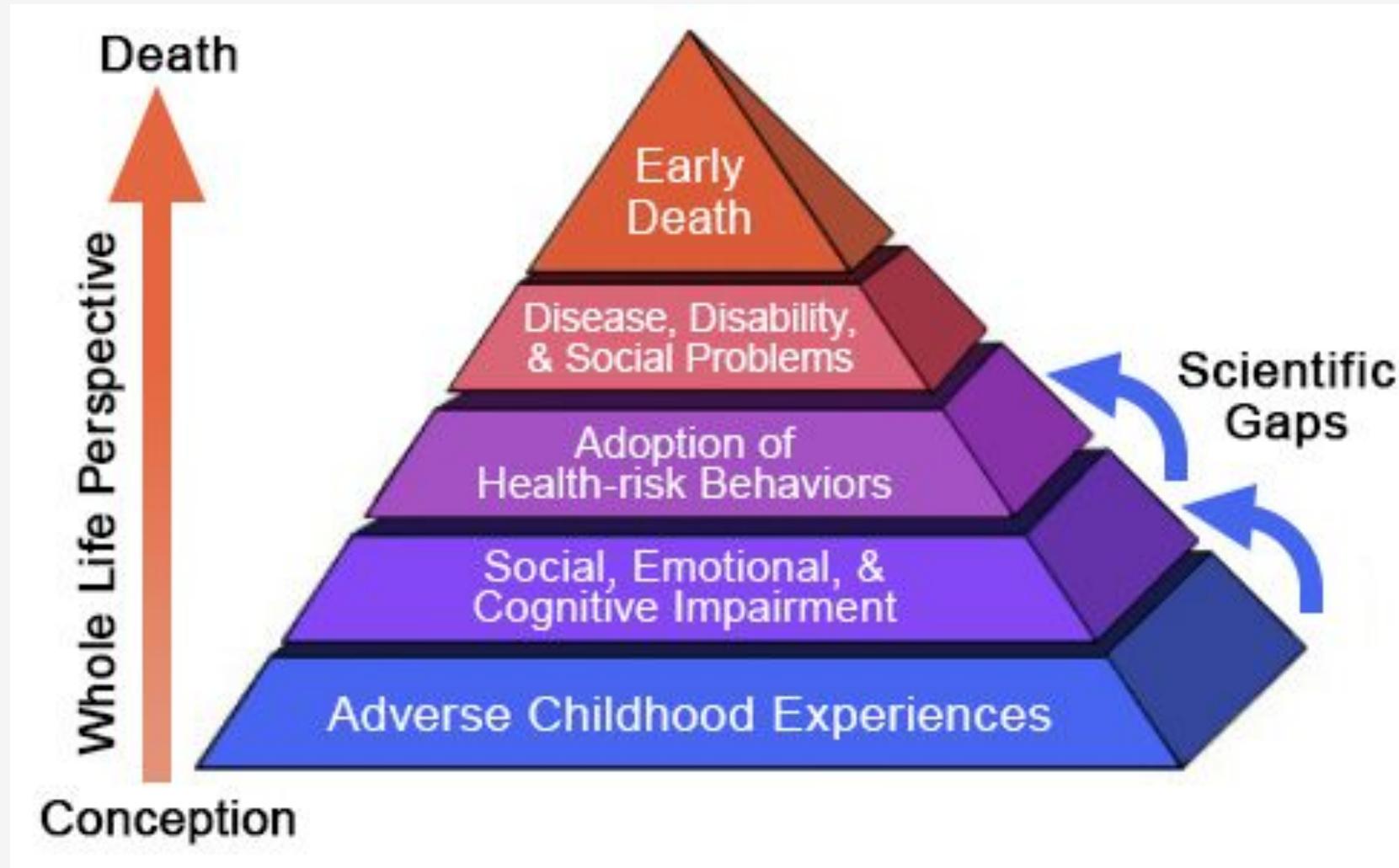
Individual Responses to Trauma

- Alcohol Consumption/Abuse
 - Aggression/Bullying
 - Anxiety
 - Poor Social Skills/Social Cueing
 - Poor grades/Absenteeism
 - Poor Mental Health/Depression/Suicide
 - Sleep Disturbances/ Nightmares
 - Smoking
 - Sexual Activity
 - Substance Use/Abuse
 - Etc.
- 

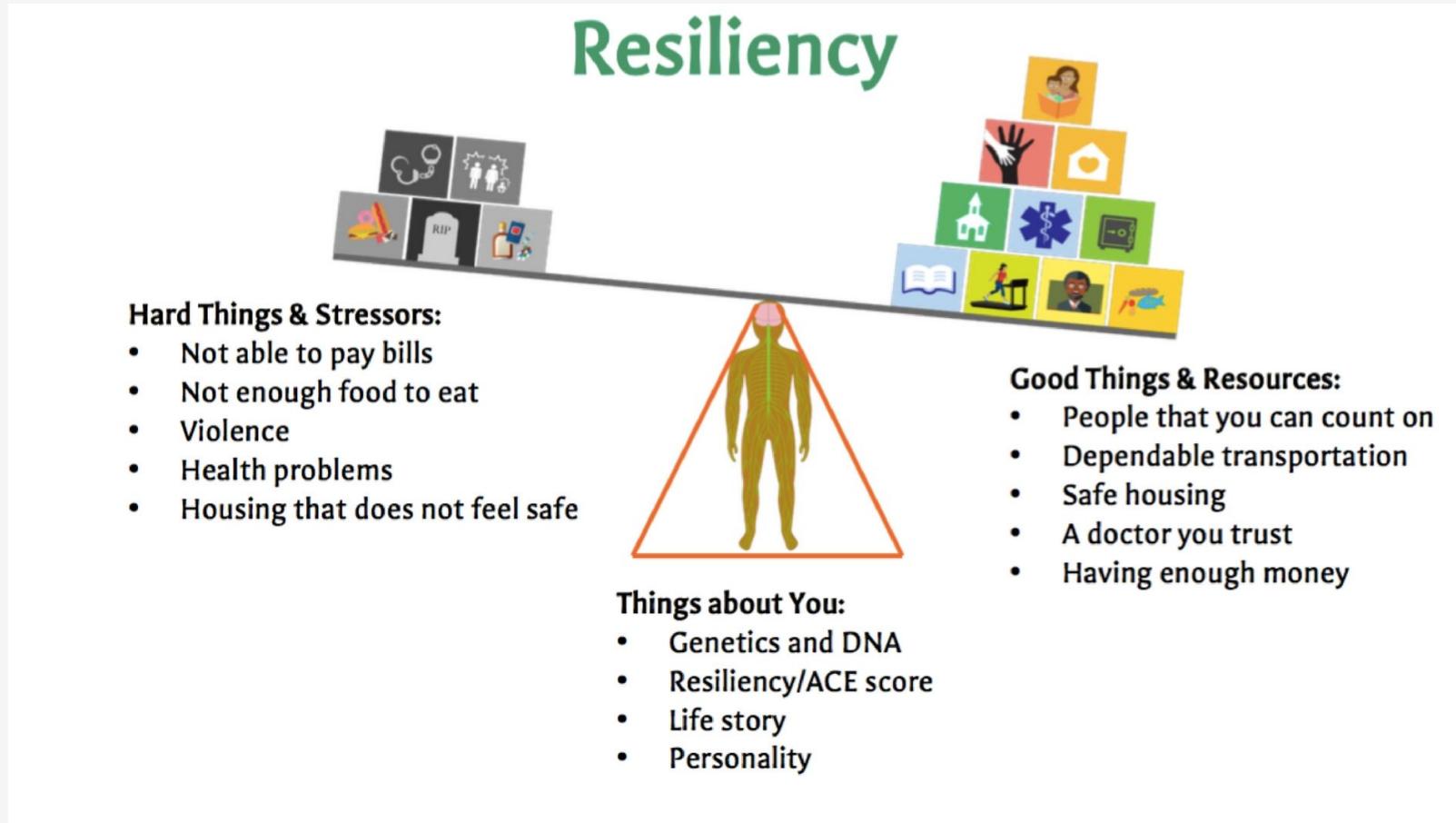
Higher ACEs score Increases Risk of:



Why this is important



Resiliency is when the scale tips toward the good even when there are stressors or hard things



DATA ON ACES IN NC

2012 BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM (BRFSS)

10,383 RESPONDENTS IN NC; 1,408 IN WNC; 348 IN BUNCOMBE COUNTY

| | | | | AGES | Female | Male | Total | | | | |
|------------------|-------|-------|--------|-------|--------|------|-------|---------------|--------|------|-------|
| | | | | 18-34 | 946 | 706 | 1,652 | | | | |
| | | | | 35-44 | 843 | 610 | 1,453 | Education | Female | Male | Total |
| Participants | 6,379 | 4,004 | 10,383 | 45-54 | 1,100 | 707 | 1,807 | < H.S. | 728 | 521 | 1,249 |
| White | 4,510 | 2,895 | 7,405 | 55-64 | 1,285 | 841 | 2,126 | H.S./GED | 1,836 | 644 | 2,480 |
| African American | 1,238 | 630 | 1,868 | 65-74 | 1,196 | 705 | 1,901 | Post H.S. | 1,828 | 436 | 2,264 |
| Other | 577 | 453 | 1,030 | 75+ | 936 | 420 | 1,356 | College Grad. | 1,970 | 530 | 2,500 |

ACE Data in North Carolina

Of respondents, 5.2% more females experienced 3-8 ACEs

Of respondents with high ACE scores, almost double are current smokers

Of respondents with 3-8 ACEs, 30% more were heavy drinkers

10,383 respondents

| | No ACE | Low ACEs (1-2) | High ACEs (3-8) |
|-----------------------|---|----------------|-----------------|
| Gender | (Percentage indicates yes response to ACE occurrence) | | |
| Female | 41.7% | 33.9% | 24.4% |
| Male | 43.3% | 37.5% | 19.2% |
| Current Smoker | | | |
| No | 46% | 35.5% | 18.5% |
| Yes | 28% | 36% | 35.9% |
| Heavy Drinker | | | |
| No | 43% | 35.7% | 21.3% |
| Yes | 31.3% | 35.5% | 33.2% |

Comparing percentage of ACE numbers in Buncombe County, Western North Carolina, and the State

Of people who experienced 3-8 ACEs, the prevalence was 2.5% higher in Buncombe County compared to the State

| Frequency of ACE Scores in: | No Ace | Low ACEs 1-2 | High ACEs 3-8 |
|-----------------------------|---|--------------|---------------|
| | (Percentage indicates yes response to ACE occurrence) | | |
| Buncombe County | 41.9% | 33.6% | 24.5% |
| WNC | 44.5% | 34% | 21.6% |
| NC | 42.4% | 35.6% | 22% |

1,408 respondents in WNC; 348 in Buncombe County

Comparing ACEs survey questions :

| Questions: | BunCo | WNC | NC |
|---|--------------|-------|-------|
| 1. Did you live with anyone who was depressed, mentally ill, or suicidal? | 19.5% | 16.6% | 15.5% |
| 2. Did you live with anyone who was a problem drinker or alcoholic? | 25.4% | 24.3% | 23.4% |
| 3. Did you live with anyone who used illegal street drugs or who abused prescription medications? | 11.8% | 9.8% | 10.2% |

- *Note the theme of mental health and potential coping strategies*
- *Questions 1 and 2 show higher frequency of occurrence rates in WNC compared to the state*
- *Again, in Buncombe County there are **significantly higher** percentages across the board*

Comparisons continued

4. How often did a parent or adult in your home ever swear at you, insult you, or put you down?

| | Never | Once | Two or more |
|-----------------|-------|-----------|--------------|
| Buncombe County | 64.9% | 7% | 28.1% |
| WNC | 71.4% | 4.5% | 24.1% |
| NC | 71.1% | 5.2% | 23.7% |

5. Living with an alcoholic OR drug abuser

| | Yes | No |
|-----------------|--------------|-------|
| Buncombe County | 29.4% | 70.6% |
| WNC | 27.2% | 72.8% |
| NC | 26.8% | 73.2% |

- *High frequency of verbal and emotional abuse and multiple occurrences*
- *Living with someone who abuses alcohol or drugs occurs at a higher prevalence in Buncombe County compared to the State and WNC*

The high rates of sexual misconduct in Buncombe County

| 6. Experienced sexual abuse? | Yes | No |
|------------------------------|--------------|-------|
| Buncombe County | 11.6% | 88.4% |
| WNC | 10.4% | 89.6% |
| NC | 10.8% | 89.2% |

| 7. How often did anyone at least 5 years older than you or an adult, ever touch you sexually? | | | |
|---|-------|------|-------------|
| | Never | Once | Two or more |
| Buncombe County | 90.8% | -- | 7.8% |
| WNC | 90.7% | 2.8% | 6.6% |
| NC | 90.8% | 3.1% | 6.1% |

| 8. How often did anyone at least 5 years older than you or an adult, try to make you touch them sexually? | | | |
|---|-------|------|-------------|
| | Never | Once | Two or more |
| Buncombe County | 93.1% | -- | 7.4% |
| WNC | 93.4% | 1.8% | 4.8% |
| NC | 93.1% | 2.3% | 4.6% |

Key ACE data in NC: Risk factors and outcomes

- NC **females** have experienced multiple (3-8) ACEs at higher rates than males (**5.2%**).
 - People in NC with high ACE scores are **twice as likely to be a current smoker** and **10%** more likely to engage in **heavy drinking**.
 - In **Buncombe County**, people reported **2.5%** more frequently to having an ACE score of 3+ compared to the the rest of the state.
 - People in Buncombe County reported a **4%** higher rate of living with someone with a **mental health condition**-- who was depressed, mentally ill, or suicidal-- and higher **rates of sexual abuse (1.2% higher** than WNC).
- 

Buncombe County Infant Mortality Rates

- Defined:
 - **Infant mortality rate (IMR)** is the number of **deaths** per 1,000 live births of children under one year of age.
- The IMR in Buncombe has **increased** from 5.4 in 2010 to **6.6** in 2015.¹
 - The IMR from 2010-2016 by race was 6 for white and **14** for black.^{1.5}
- According to the CDC, the NC infant mortality rate:
 - 7.1 in 2014
 - 7.3 in 2015
 - 7.2 in 2016



Infant Mortality Rate - Buncombe Total (with comparisons)

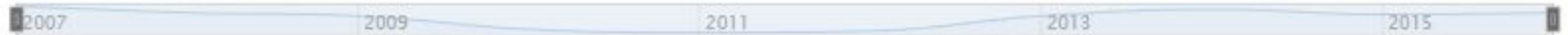
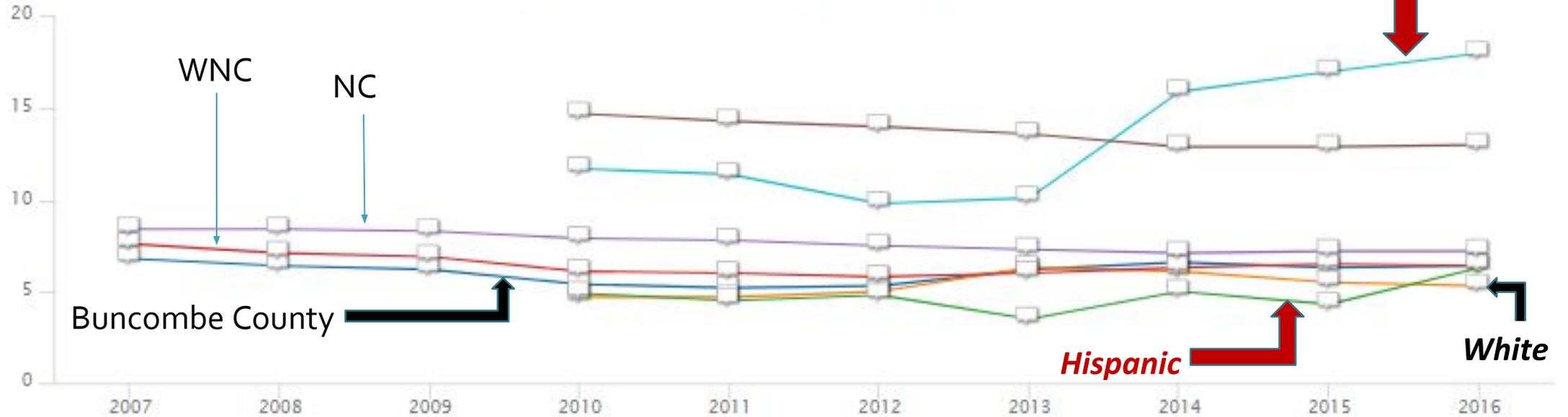
InfantMortality

Healthy Babies

Annually | Lower is Better | Not Calculated



Infant Mortality Rate - Buncombe Total (with comparisons) -



- [InfantMortality] Infant Mortality Rate - Buncombe Total (with comparisons)
- [Comparison] Infant Mortality Rate (5 year) for Buncombe - White Non-Hispanic
- [Comparison] Infant Mortality Rate (5 year) for Buncombe - African American Non-Hispanic
- [Comparison] Infant Mortality Rate (5 year) for Buncombe - Hispanic
- [Comparison] Infant Mortality Rate (5 year) for North Carolina - Total
- [Healthy Babies] Infant Mortality Rate (5 year) for North Carolina - African American
- [Comparison] Infant Mortality Rate (5 year) for Western NC Region - Total

Poverty and Single-Parent Households

- Children (under 18) in Poverty: 26% in 2012; 21% in 2014; 19% in 2016

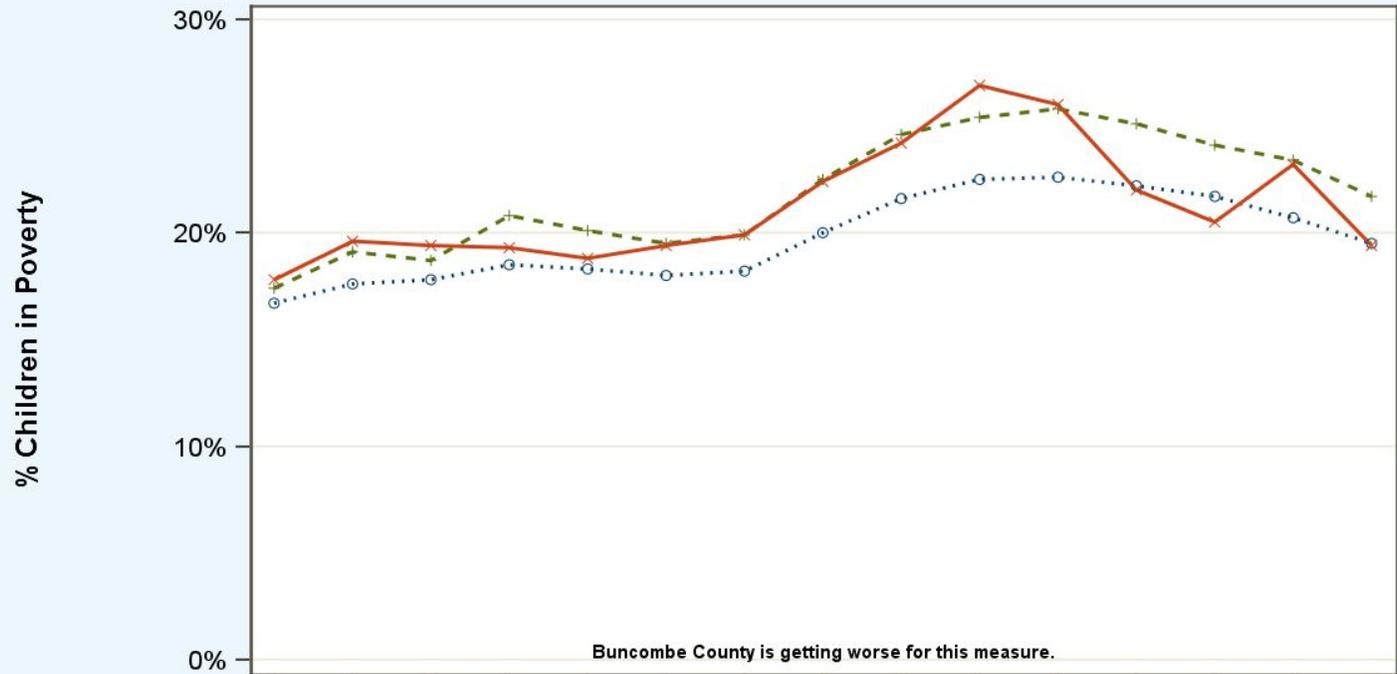


– By race, 35% Black, 49% Hispanic, 15% White⁸

- 32% of children live in a single parent home (2012-2016)⁹
2010-2014= 33%¹⁴

Children in poverty in Buncombe County, NC
County, State and National Trends

—x— Buncombe County -+- North Carolina ...o... United States



| Year | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|-----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| United States | 17% | 18% | 18% | 19% | 18% | 18% | 18% | 20% | 22% | 23% | 23% | 22% | 22% | 21% | 20% |
| North Carolina | 17% | 19% | 19% | 21% | 20% | 20% | 20% | 23% | 25% | 25% | 26% | 25% | 24% | 23% | 22% |
| Buncombe County | 18% | 20% | 19% | 19% | 19% | 19% | 20% | 22% | 24% | 27% | 26% | 22% | 21% | 23% | 19% |

Please see Measuring Progress/Rankings Measures for more information on trends. Trends were measured using all years of data



Teen Pregnancy Rate (15-19 years of age) for Buncombe - Total (with comparisons) ⓘ

Monitor

InfantMortality

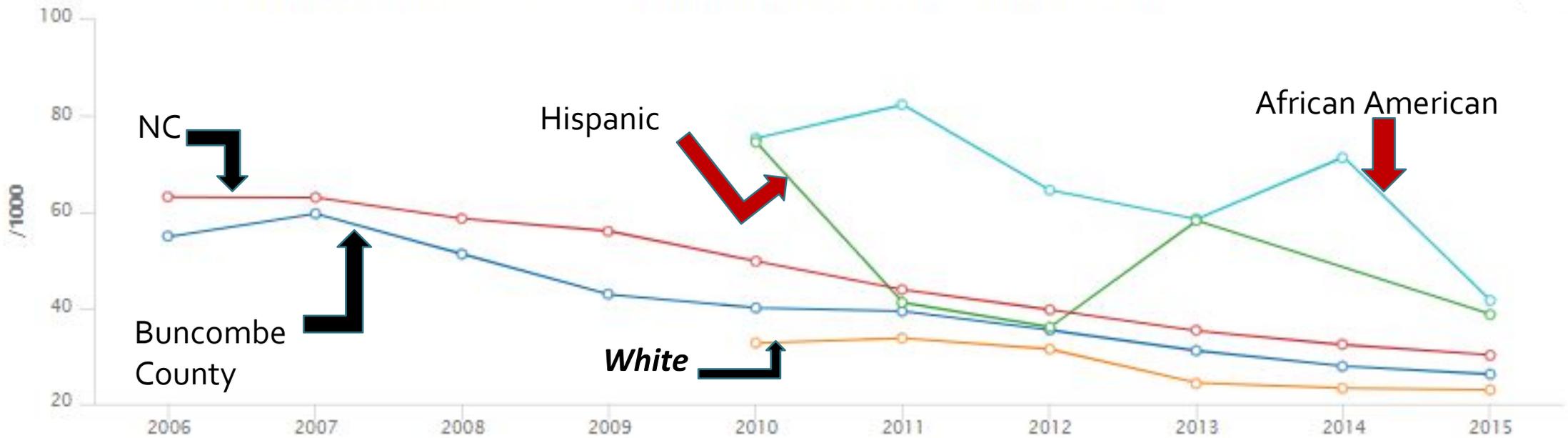
Healthy Babies

Annually | Lower is Better | Not Calculated



Add to favorites

Teen Pregnancy Rate (15-19 years of age) for Buncombe - Total (with comparisons)

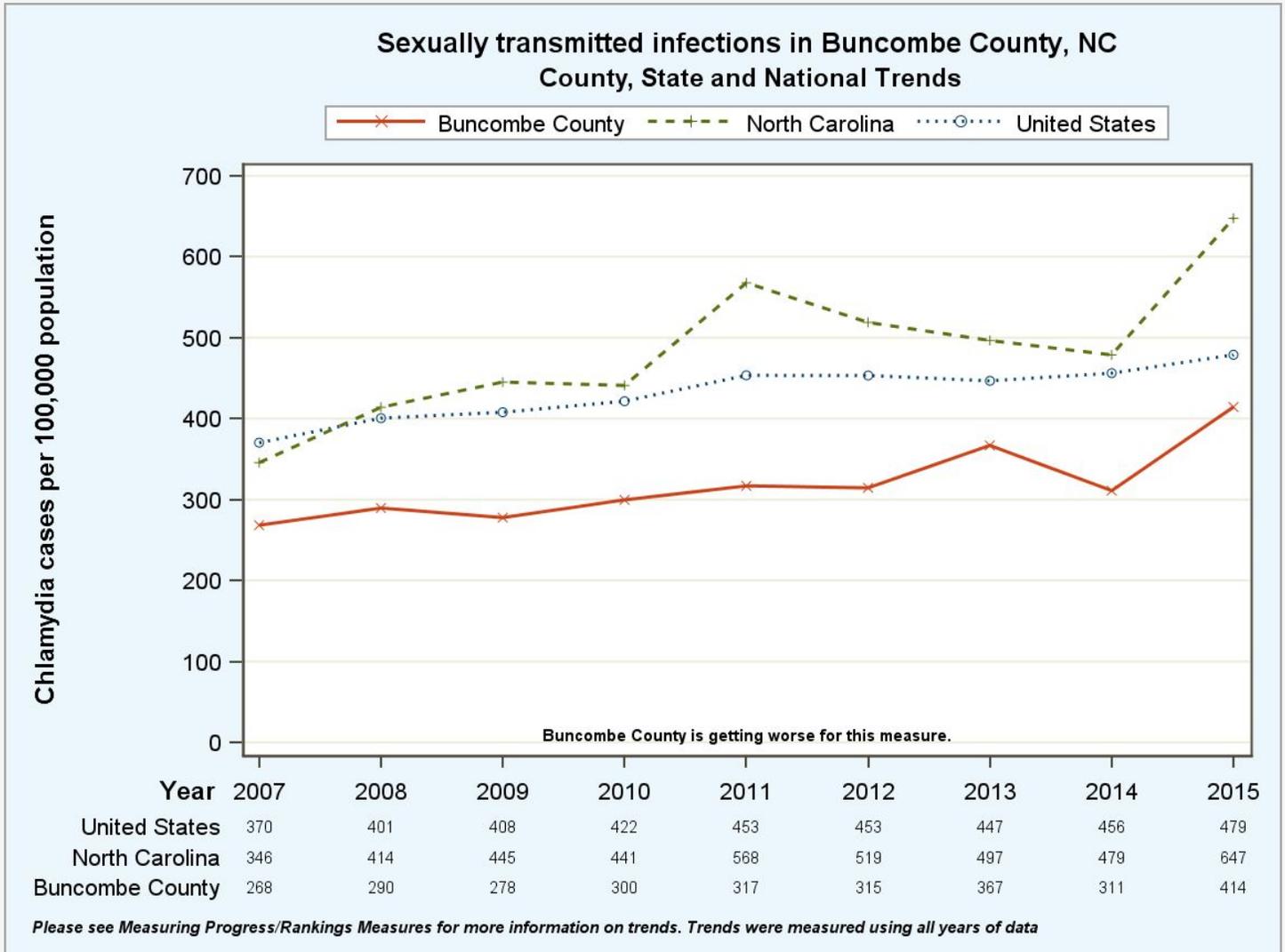


- [Monitor] Teen Pregnancy Rate (15-19 years of age) for Buncombe - Total (with comparisons)
- [Monitor] Teen Pregnancy (15-19 years of age) for Buncombe - White Non-Hispanic
- [Monitor] Teen Pregnancy (15-19 years of age) for Buncombe - African American Non-Hispanic
- [Monitor] Teen Pregnancy (15-19 years of age) for Buncombe - Hispanic
- [Monitor] Teen Pregnancy (15-19 years of age) for North Carolina - Total

The Rise in STIs

From 2007 to 2011 the sexually transmitted infection rate has **increased** from 262.8 to 316.8⁶

In 2015 it was up to **414.3**⁷



Mental Health Conundrum & Coping

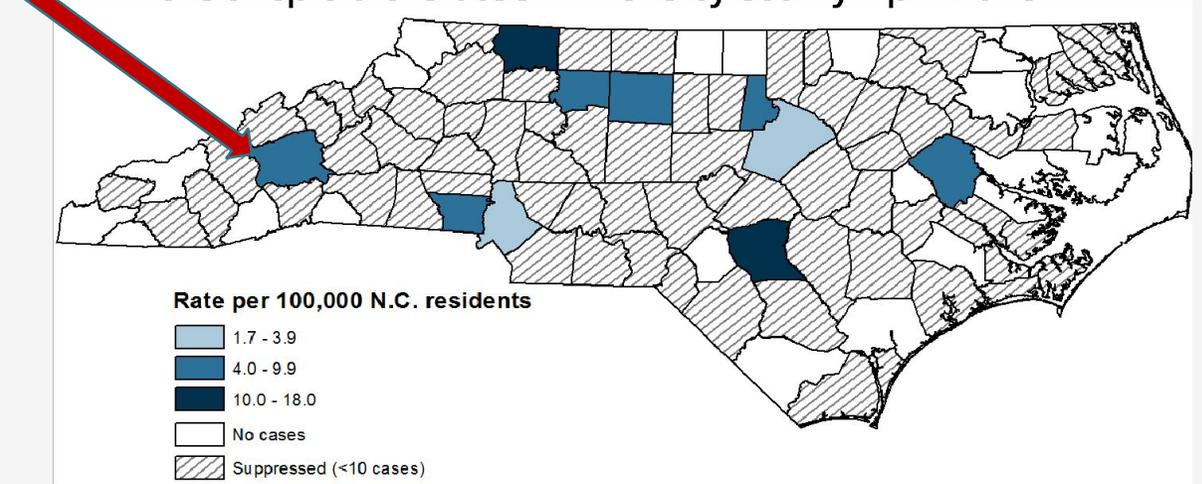
- In Buncombe, the percent of people without access to mental health care or counseling has increased from 6.6% in 2012 to **8.3%** in 2015². Conversely, ratio of population to mental health providers 190:1 (3rd best ratio in the state)³
- In 2016, **17%** of adults reported heavy or binge **drinking**¹⁰
 - In 2014 the reported number was 16%¹¹
- In 2016, **16%** of adults reported being a current **smoker**¹²
 - In 2014 the reported number was 19%¹³
- **Opioids** use is high

Highest Rates of Opioid Overdose ED Visits by County.

| County | Count | Rate |
|-------------|-------|------|
| Surry• | 13 | 18.0 |
| Cumberland• | 36 | 11.0 |
| Gaston• | 14 | 6.5 |
| Buncombe | 15 | 5.9 |
| Pitt | 10 | 5.6 |
| Guilford | 27 | 5.2 |
| Forsyth• | 17 | 4.6 |
| Durham | 14 | 4.6 |
| Mecklenburg | 33 | 3.1 |
| Wake | 18 | 1.7 |

Note: Rate per 100,000 N.C. residents;
 Rates not shown for counties <10 cases;
 • ≥5 overdoses this month compared to last month.

Rate of Opioid Overdose ED Visits by County: April 2018*



Where Buncombe County Ranks

Impact of the Opioid Crisis on Buncombe County (2016)

Population: 253,178

Total Opioid Pills Prescribed in 2016: 17,221,655

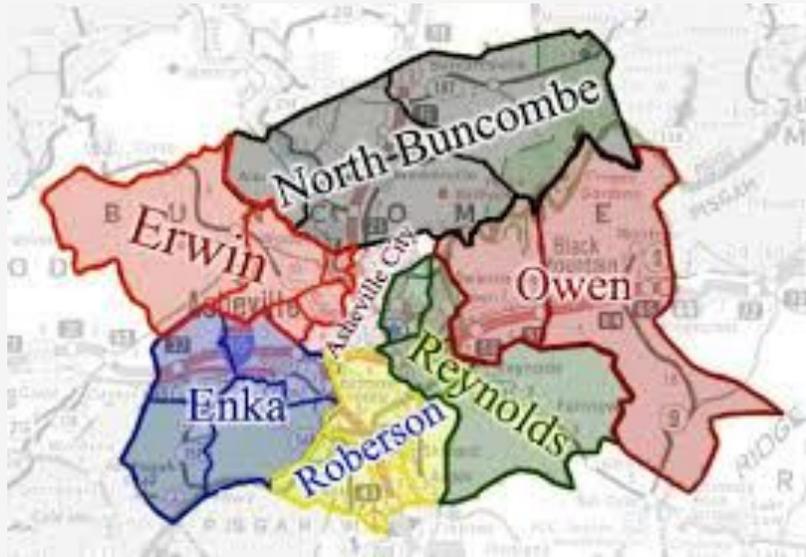
68 Opioid Pills per Resident

*Inmates on Detox Protocol in County Detention Center in 2016:
approximately 800*

*Babies Delivered at Mission Hospital with a positive toxicology
in 2016: 399 (**154 babies are Buncombe County Residents**)*

*TOTAL: \$19 million spent in County Services due to Opioid
Crisis*

Key takeaways



Buncombe County School Districts

- The prevalence of anyone having an ACE is higher in Buncombe County compared to WNC and the State. This includes overall ACE scores and specific questions on the ACE screen.
- Trauma does not discriminate AND females do experience higher rates in our community.
- The trauma created by ACEs often makes thriving more difficult.
- The high prevalence and risk of ACEs occurring here is cause for our pilot program, Communicating Resiliency.

Headline community indicators for prioritizing

- % of Buncombe County residents with High ACE Scores (3-8)
 - % of people in Buncombe County without access to mental health care/counseling
 - % of people in Buncombe County who have experienced sexual abuse
 - Teen pregnancy rates among Hispanic and African American women
 - Heavy drinking among NC residents with High ACE Scores
 - May expand to other drinking community indicators
 - Teen drinking
 - Others?
 - Data development agenda
- 

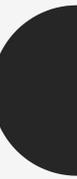
*Considerations
for who we will
serve
(customers)
through this
targeted
communication
campaign*

- Characteristics that increase risk and correlate with outcomes:
- Female, living in Buncombe County
- Minorities
- Teens (Pregnancy rates)
- Those at risk for experiencing, perpetrating and/or providing support
- Actionable youth (grades 6-12)
- Teachers, mentors, role models (can positively effect outcomes)



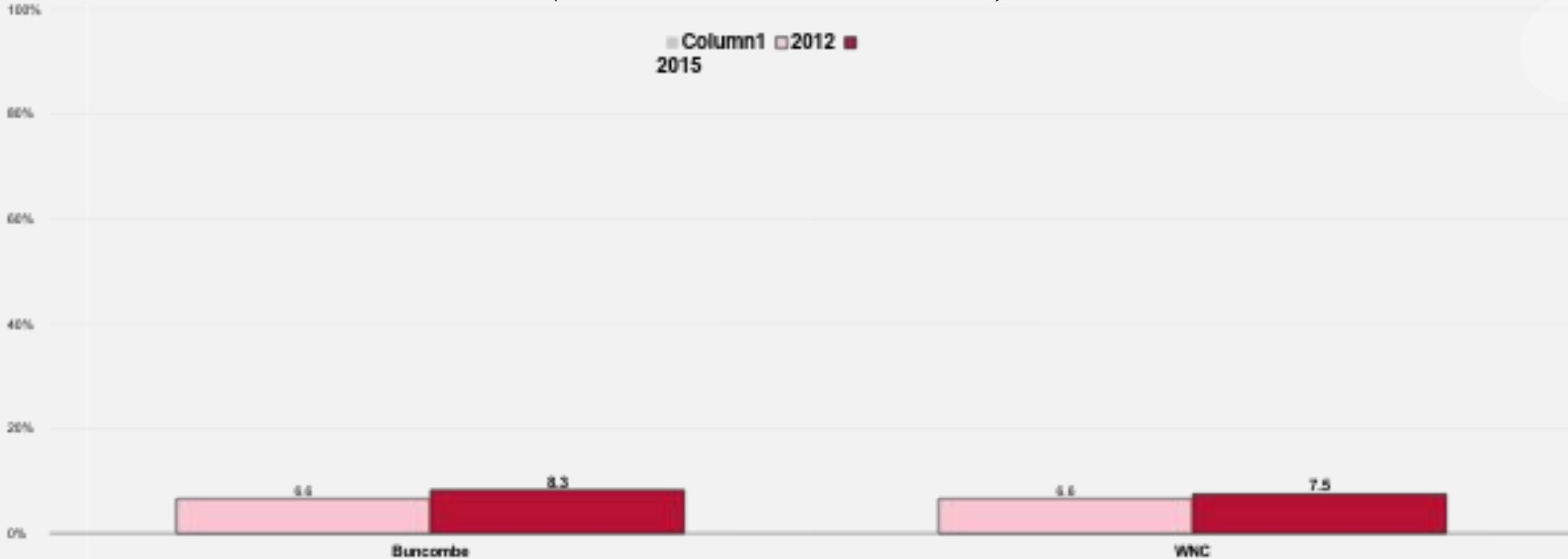
*BRIEF SPACE
FOR
PROCESSING*

*“TURNING THE
CURVE” ON
TRAUMA IN OUR
COMMUNITY*



*CLOSING, NEXT
STEPS AND
THANK YOU*

UNABLE TO GET NEEDED MENTAL HEALTH CARE OR COUNSELING IN THE PAST YEAR (BUNCOMBE COUNTY)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc.

[Item 54]

Notes: • Asked of all respondents.

Qualitative responses ranked from highest to lowest (Most common answer at the top)

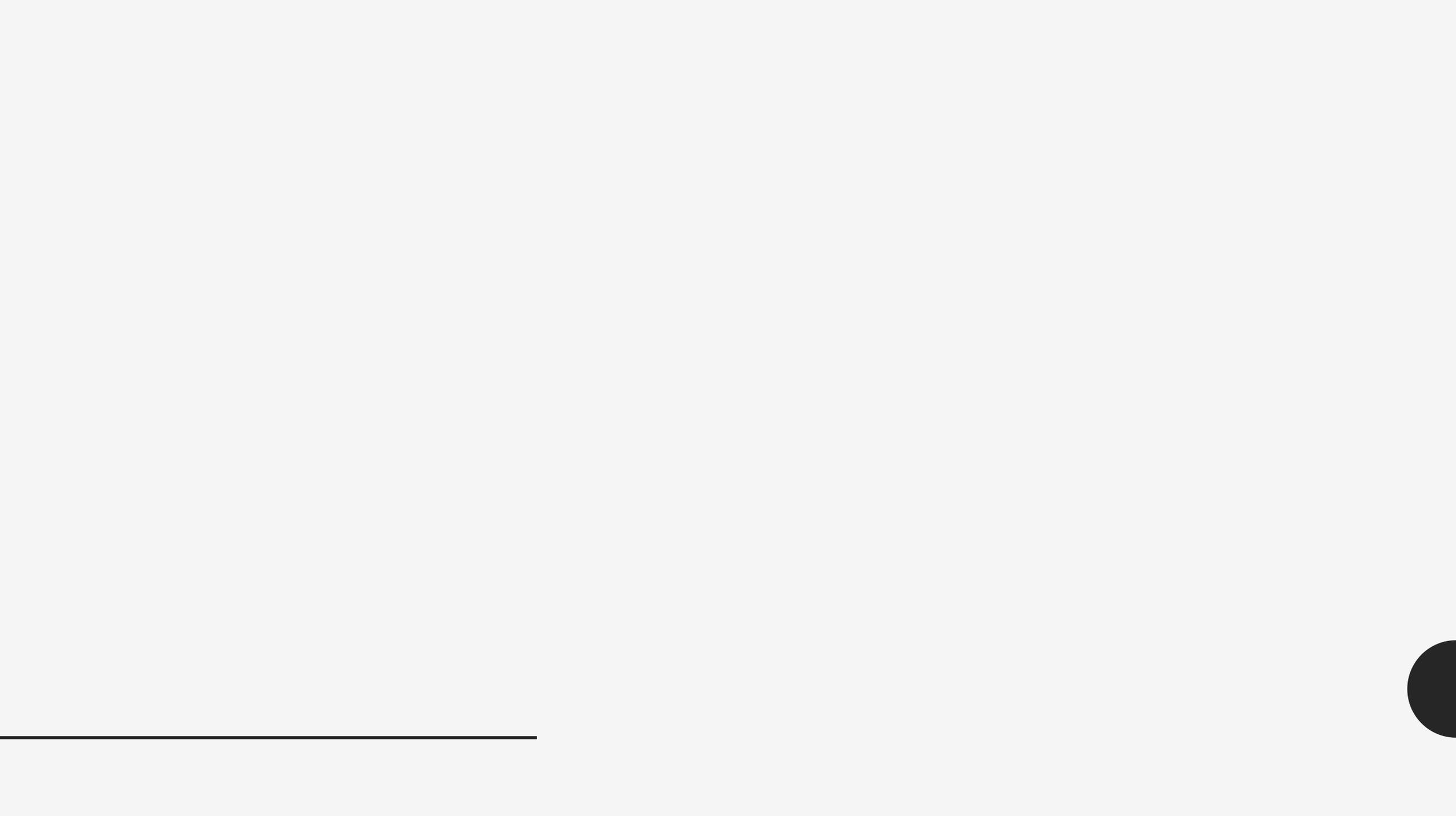
Some respondents who answered that they were unable to get needed mental health care or counseling named some of the barriers to why.

2012

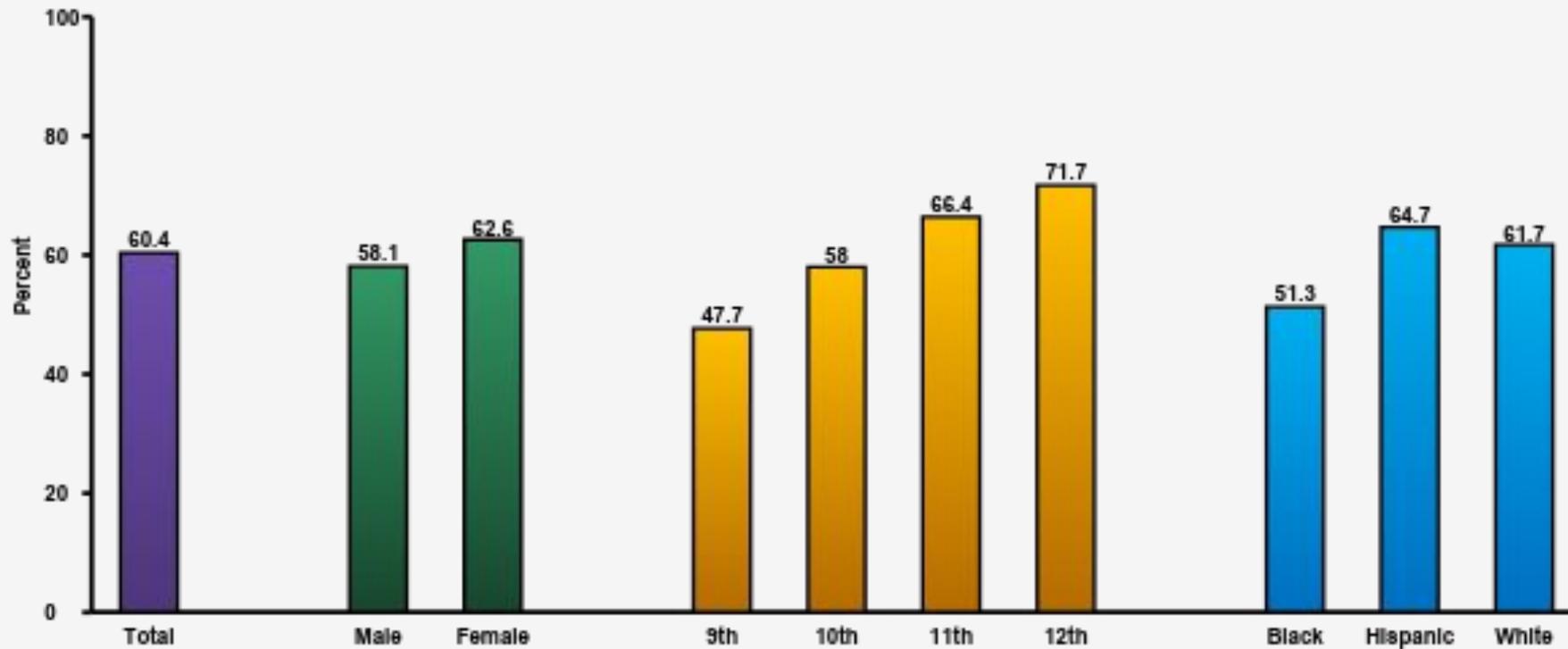
Don't Have Insurance/Could Not Afford It
Don't Know/Not Sure
Apprehension/Fear/Nervousness/Embarrassment
Never Got Around to Going
Didn't Accept Medicaid/Insurance
Difficulty Getting Appointment
Didn't Know Where to Go
Inconvenient Hours

2015

Don't Have Insurance/ Could Not Afford It
Difficulty Getting Appointment
Never Got Around to Going
Apprehension/Fear/Nervousness/Embarrassment
Inconvenient Hours
Didn't Want It
No Counselor Available
Lack of Transportation
Health of Another Family Member
Didn't Accept Medicaid/Insurance
Thought I could get through it on my own
My Health
Don't Know/Not Sure



Percentage of High School Students Who **Ever Drank Alcohol**,* by Sex,[†] Grade,[†] and Race/Ethnicity,[†] 2017



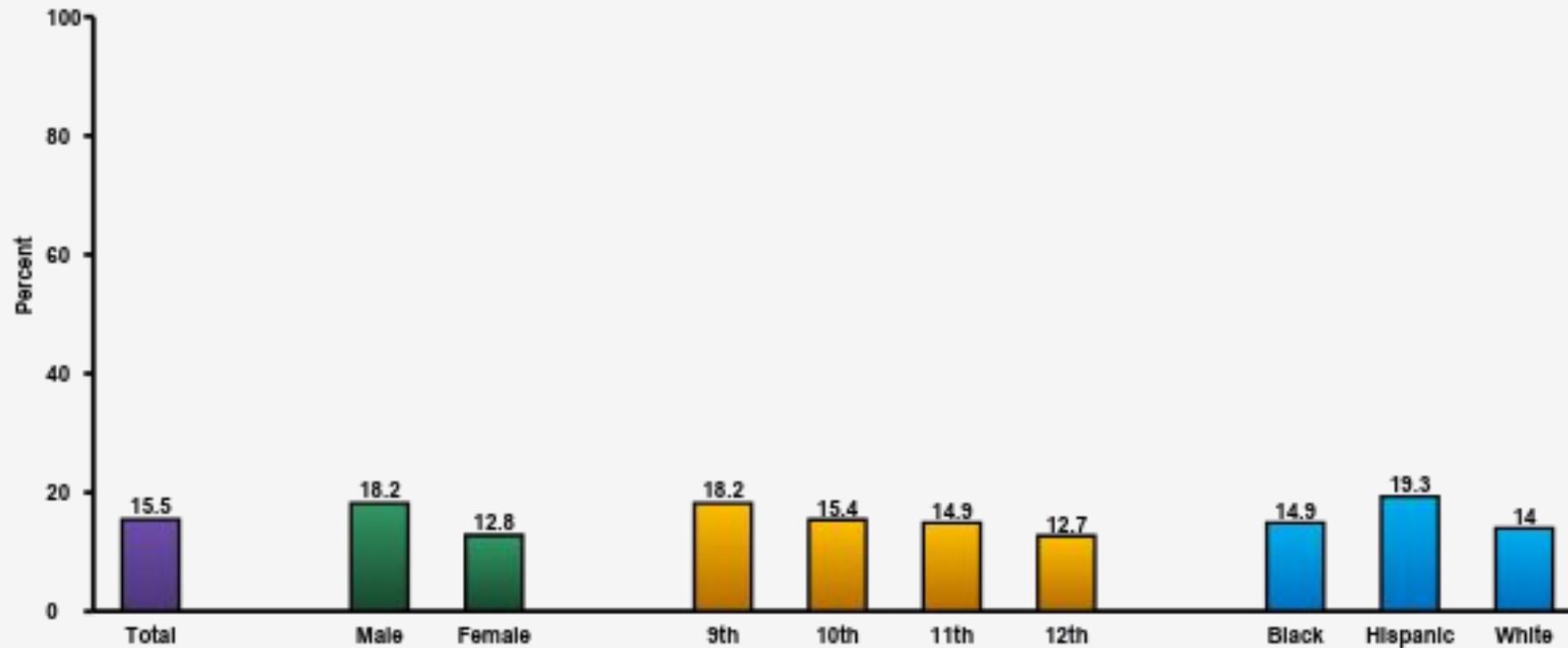
*At least one drink of alcohol, on at least 1 day during their life

[†]F > M; 10th > 9th, 11th > 9th, 11th > 10th, 12th > 9th, 12th > 10th, 12th > 11th; H > B, W > B (Based on t-test analysis, $p < 0.05$.)

All Hispanic students are included in the Hispanic category. All other races are non-Hispanic.

Note: This graph contains weighted results.

Percentage of High School Students Who Had Their First Drink of Alcohol **Before Age 13 Years**,* by Sex,[†] Grade,[†] and Race/Ethnicity,[†] 2017



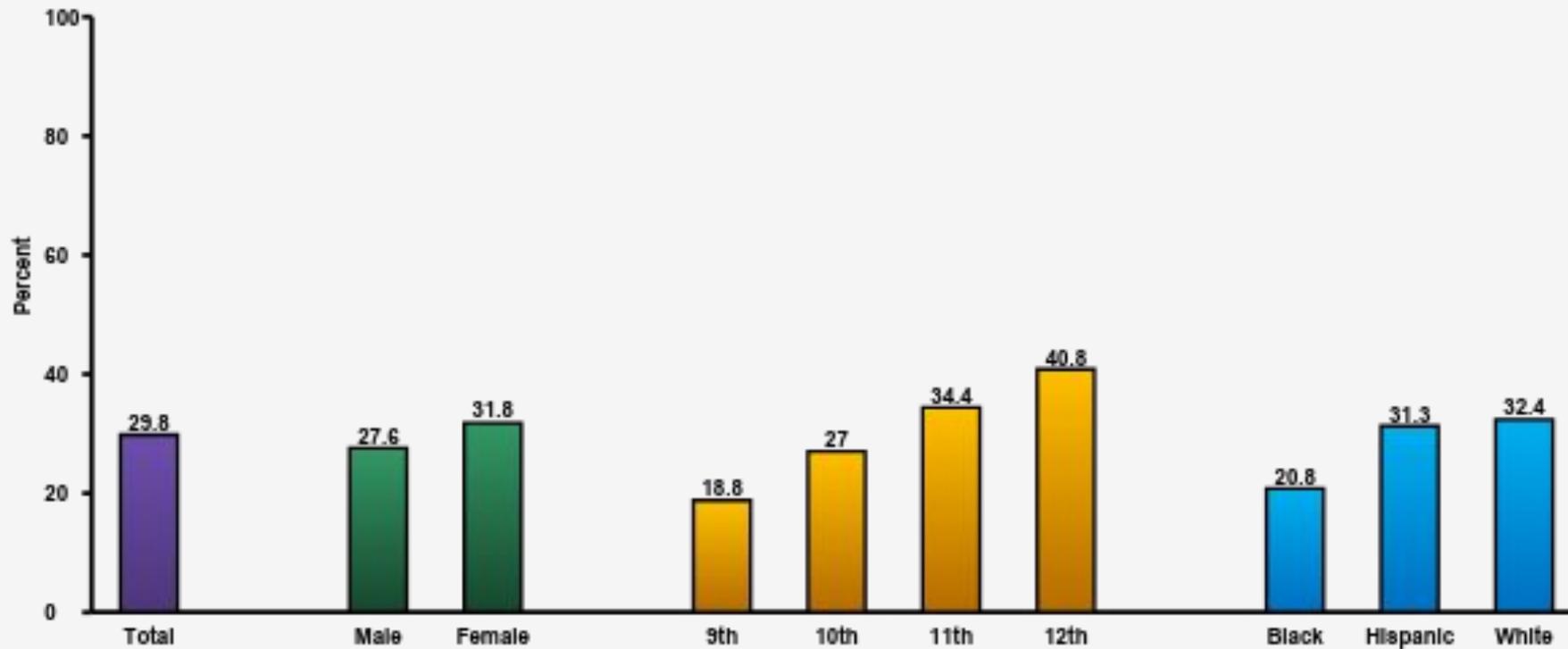
*Other than a few sips

[†]M > F; 9th > 11th, 9th > 12th, 10th > 12th, 11th > 12th; H > B, H > W (Based on t-test analysis, $p < 0.05$.)

All Hispanic students are included in the Hispanic category. All other races are non-Hispanic.

Note: This graph contains weighted results.

Percentage of High School Students Who **Currently** Drank Alcohol,* by Sex,[†] Grade,[†] and Race/Ethnicity,[†] 2017



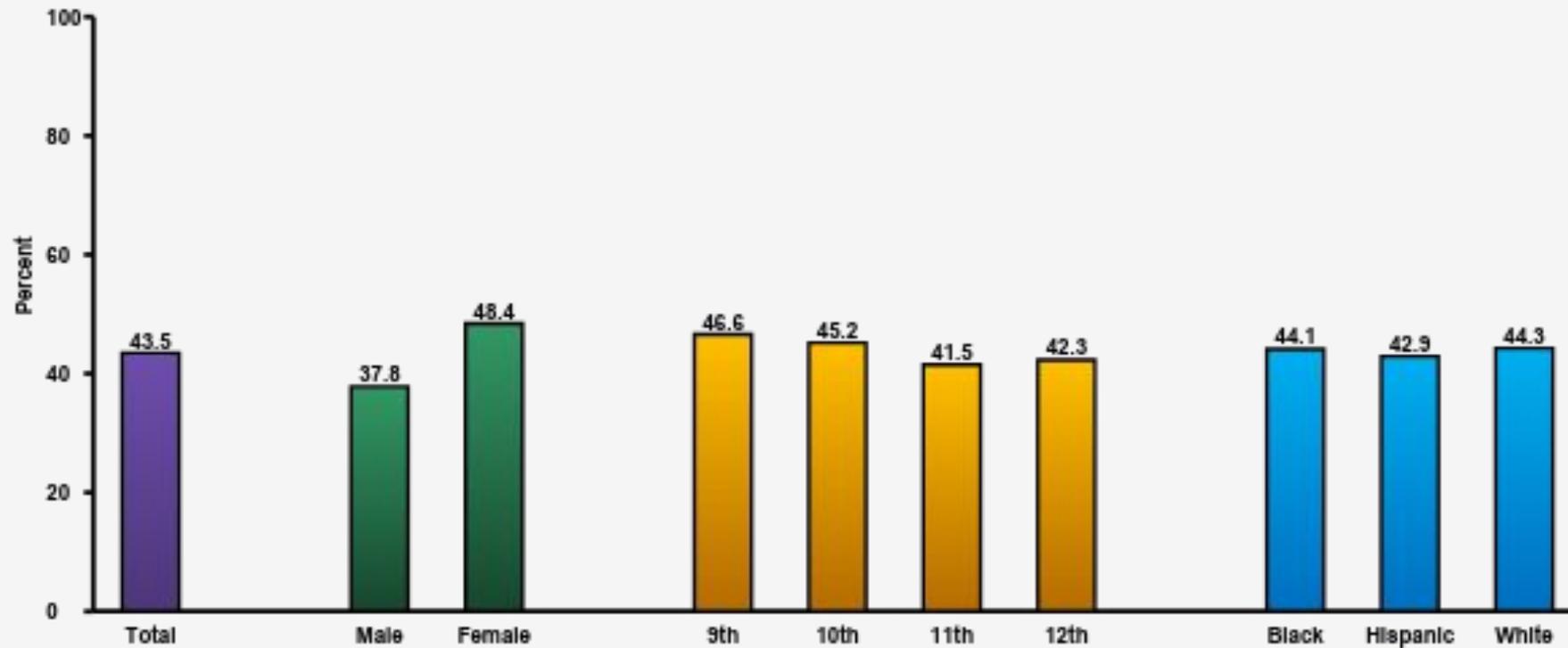
*At least one drink of alcohol, on at least 1 day during the 30 days before the survey

[†]F > M; 10th > 9th, 11th > 9th, 11th > 10th, 12th > 9th, 12th > 10th, 12th > 11th; H > B, W > B (Based on t-test analysis, $p < 0.05$.)

All Hispanic students are included in the Hispanic category. All other races are non-Hispanic.

Note: This graph contains weighted results.

Percentage of High School Students Who Usually Got the Alcohol They Drank by **Someone Giving It to Them**,* by Sex,[†] Grade, and Race/Ethnicity, 2017



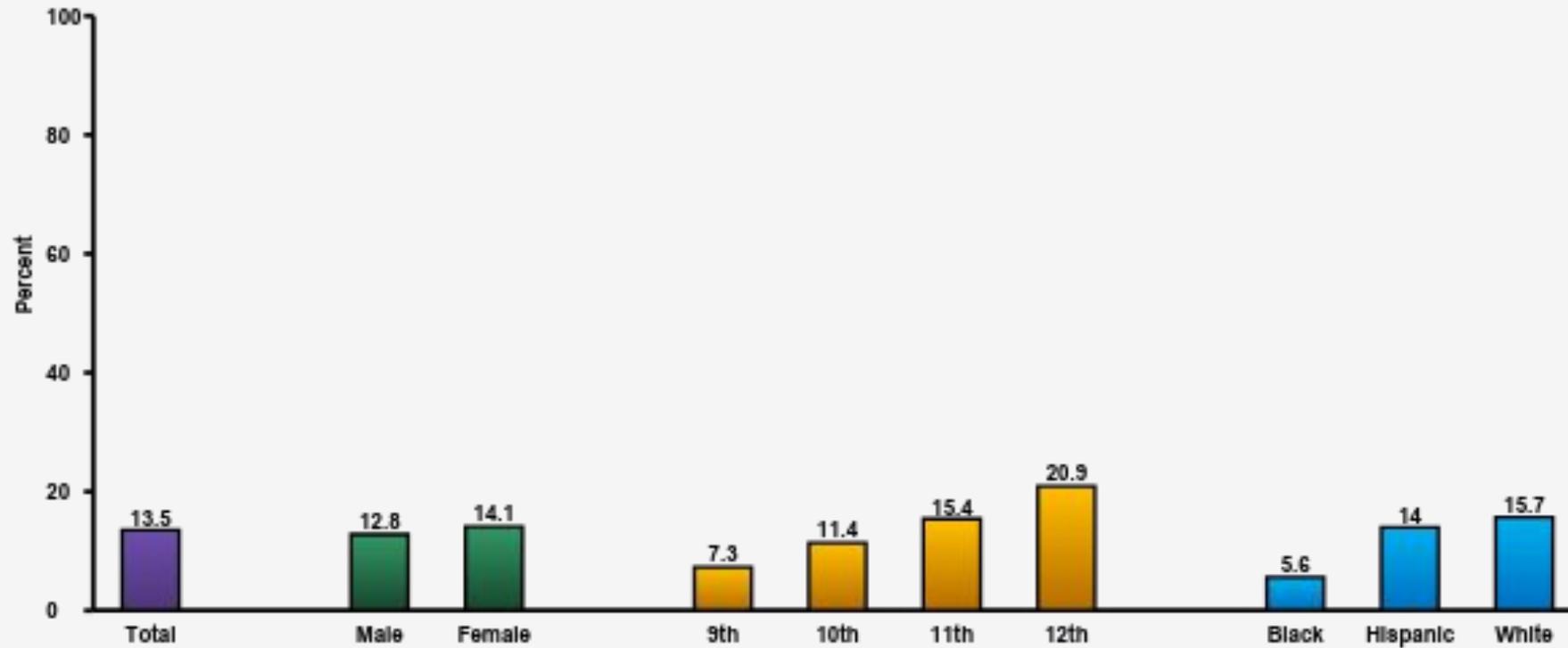
*During the 30 days before the survey, among students who currently drank alcohol

[†]F > M (Based on t-test analysis, $p < 0.05$.)

All Hispanic students are included in the Hispanic category. All other races are non-Hispanic.

Note: This graph contains weighted results.

Percentage of High School Students **Who Currently Were Binge Drinking,*** by Sex, Grade,[†] and Race/Ethnicity,[†] 2017



*Had four or more drinks of alcohol in a row for female students or five or more drinks of alcohol in a row for male students, within a couple of hours, on at least 1 day during the 30 days before the survey

[†]10th > 9th, 11th > 9th, 11th > 10th, 12th > 9th, 12th > 10th, 12th > 11th; H > B, W > B (Based on t-test analysis, $p < 0.05$.)

All Hispanic students are included in the Hispanic category. All other races are non-Hispanic.

Note: This graph contains weighted results.



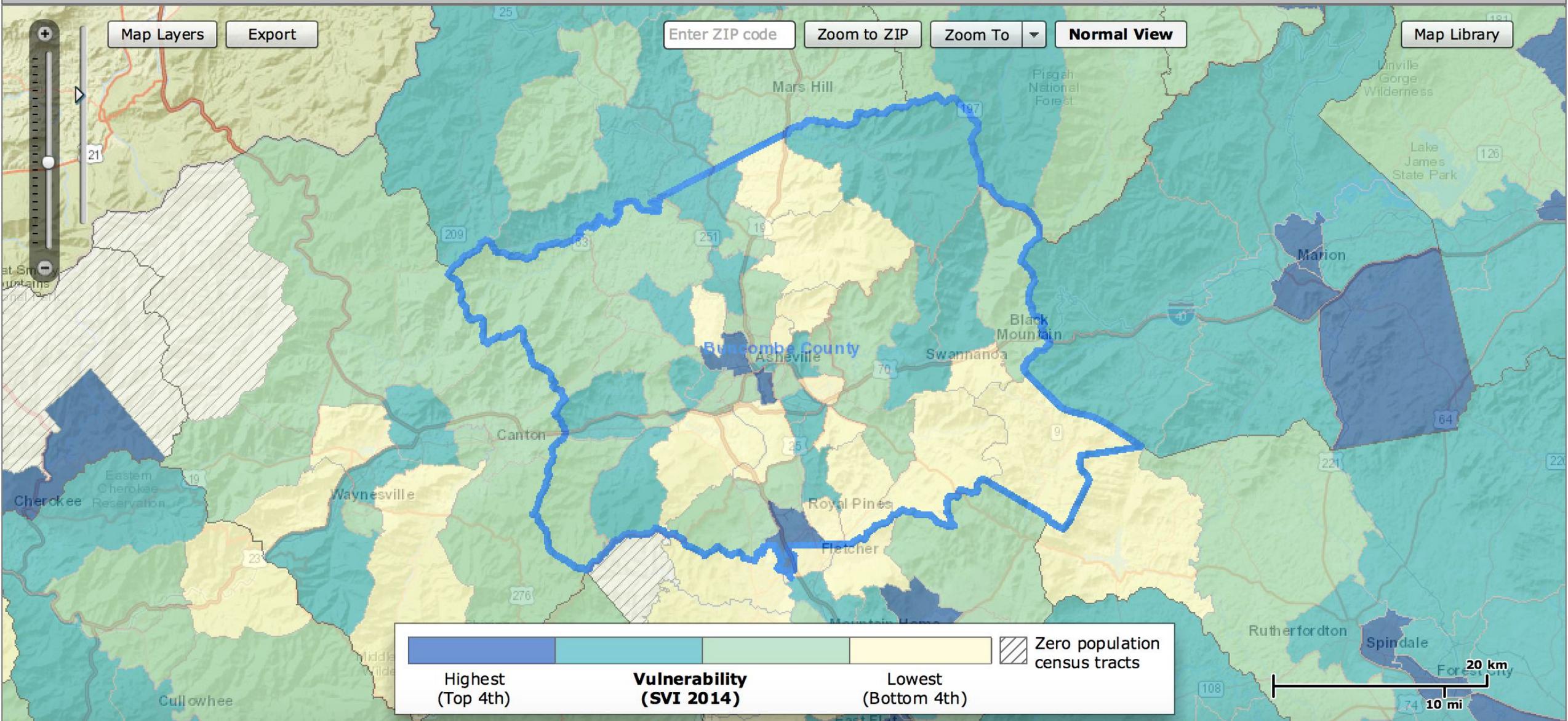
Trends in the Prevalence of Alcohol Use National YRBS: 1991—2017

The national Youth Risk Behavior Survey (YRBS) monitors health behaviors that contribute to the leading causes of death, disability, and social problems among youth and adults in the United States. The national YRBS is conducted every two years during the spring semester and provides data representative of 9th through 12th grade students in public and private schools throughout the United States.

| Percentages | | | | | | | | | | | | | | Trend from 1991–2017 ¹ | Change from 2015–2017 ² |
|--|------|------|------|------|------|------|------|------|------|------|------|------|------|---|------------------------------------|
| 1991 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 | 2011 | 2013 | 2015 | 2017 | | |
| Ever drank alcohol (at least one drink of alcohol on at least 1 day during their life) | | | | | | | | | | | | | | | |
| 81.6 | 80.9 | 80.4 | 79.1 | 81.0 | 78.2 | 74.9 | 74.3 | 75.0 | 72.5 | 70.8 | 66.2 | 63.2 | 60.4 | Decreased 1991–2017 Decreased 1991–2007 Decreased 2007–2017 | No change |
| Drank alcohol before age 13 years (had their first drink other than a few sips) | | | | | | | | | | | | | | | |
| 32.7 | 32.9 | 32.4 | 31.1 | 32.2 | 29.1 | 27.8 | 25.6 | 23.8 | 21.1 | 20.5 | 18.6 | 17.2 | 15.5 | Decreased 1991–2017 No change 1991–1999 Decreased 1999–2017 | No change |
| Current alcohol use (at least one drink of alcohol on at least 1 day during the 30 days before the survey) | | | | | | | | | | | | | | | |
| 50.8 | 48.0 | 51.6 | 50.8 | 50.0 | 47.1 | 44.9 | 43.3 | 44.7 | 41.8 | 38.7 | 34.9 | 32.8 | 29.8 | Decreased 1991–2017 Decreased 1991–2007 Decreased 2007–2017 | No change |

¹ Based on linear and quadratic trend analyses using logistic regression models controlling for sex, race/ethnicity, and grade, $p < 0.05$. Significant linear trends (if present) across all available years are described first followed by linear changes in each segment of significant quadratic trends (if present).

² Based on t-test analysis, $p < 0.05$.



| | | | | |
|----------------------|-------------------------------------|------------------------|--|----------------------------------|
| | | | | Zero population census tracts |
| Highest (Top 4th) | Vulnerability (SVI 2014) | | | |
| | | Lowest (Bottom 4th) | | |