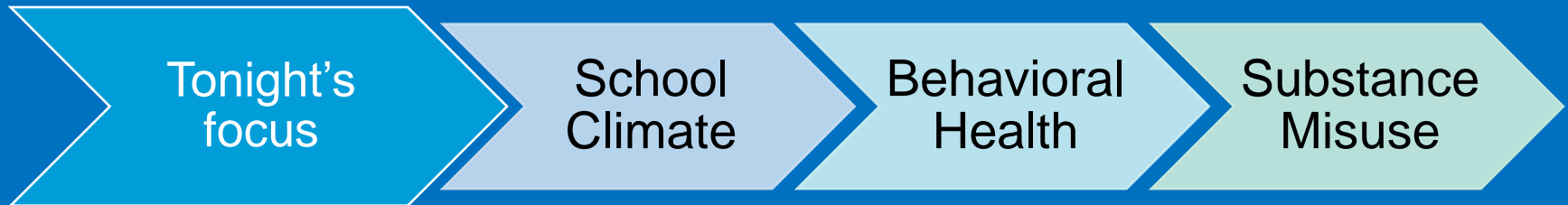


# Overview of YRBS 2017 RMHS Data Results



2017 Reading YRBS Results produced by Rothenbach Research and Consulting for Reading Public Schools

Presentation by Erica McNamara (RCASA) US and Massachusetts data includes weighted results



# TOOLS TO ADDRESS SUBSTANCE USE

## Education

- Grade 9, Health course
- Grade 11, Health course
- Student Leaders Annual Training

## Connections

- Parent Education & Events sponsored by RCASA & RPS
- Youth Mental Health First Aid for staff and parents
- Interface Referral Service
- Safe Project
- Northeast Recovery High School

## Policies

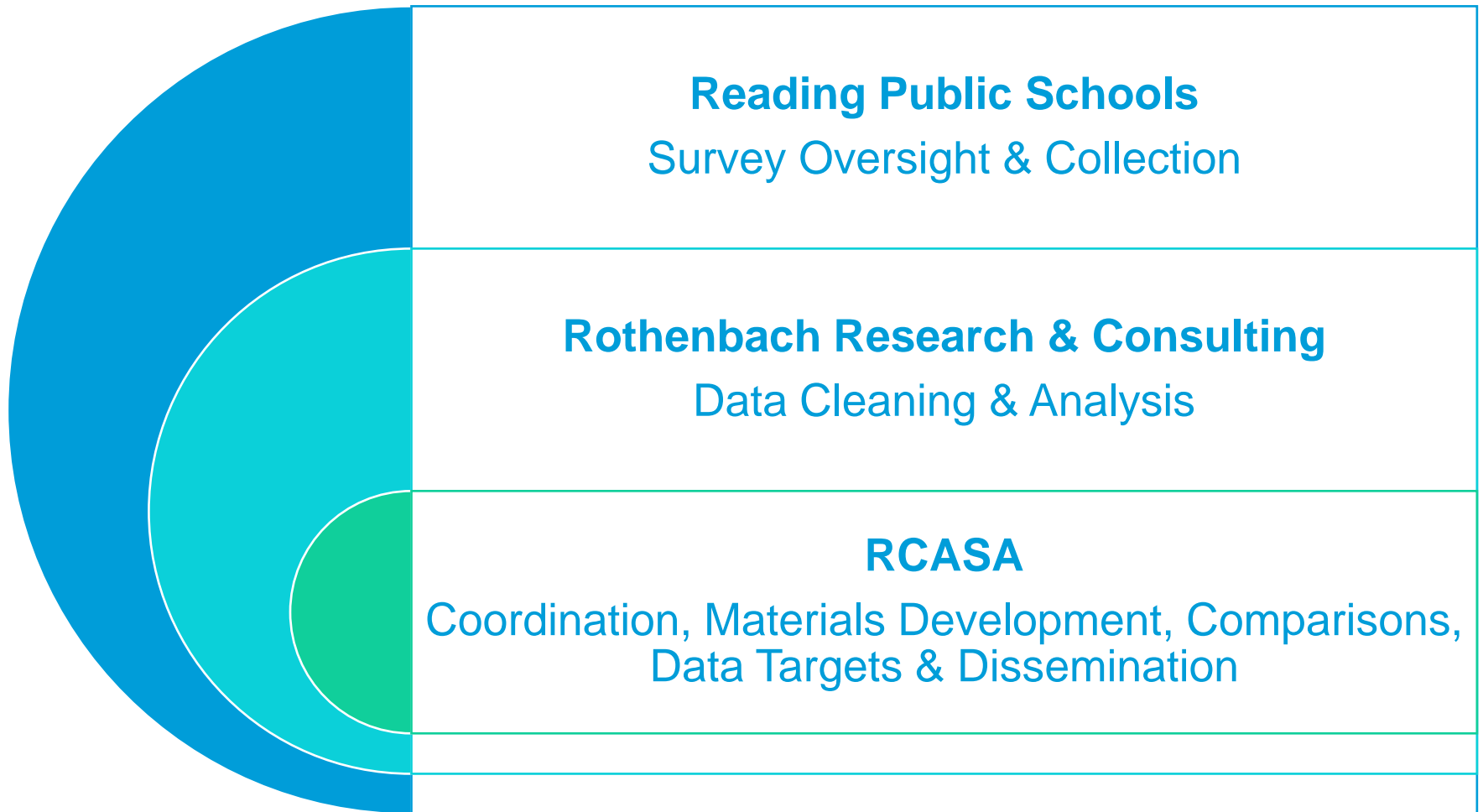
- School Search & Seizure, Breathalyzer, Chemical Health Policy and Police Diversion

## Monitoring

- School staff take all use seriously and draws on resources as needed
- Chemical Health program
- Reading Police Pre-Trial Diversion Program



# Data Partner Roles



2017 Reading YRBS Results produced by Rothenbach Research and Consulting for Reading Public Schools

Presentation by Erica McNamara (RCASA) US and Massachusetts data includes weighted results





# Youth Risk Behavior Survey

**Started in 1990 by U.S. Centers for Disease Control**



**Monitors health behaviors of students in grades 6-12**



**Reading conducts the survey every 2 years.**



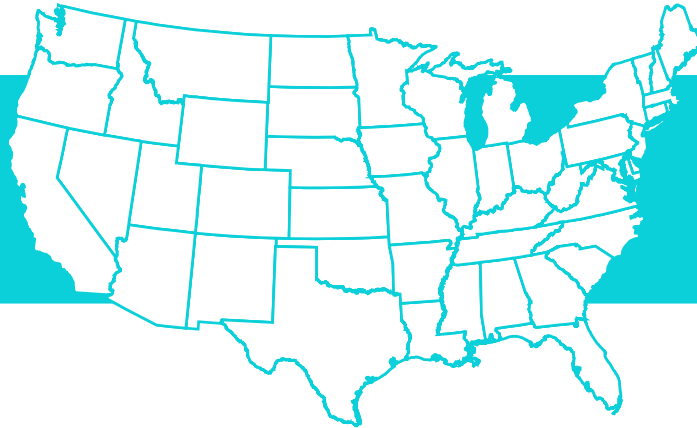
**Comparison represent thousands of surveys**





# YRBS by the Numbers

1991 =  
26 states



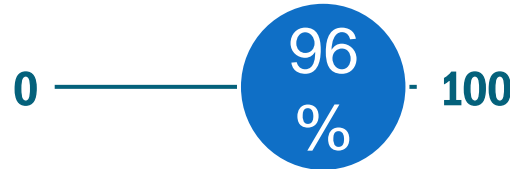
2015 =  
47 states

United States CDC  
YRBS Data Pool

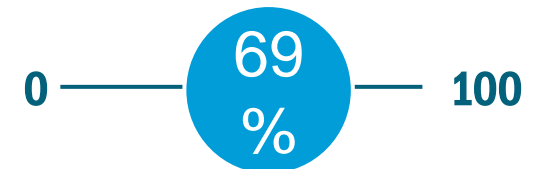
**15,624**

public/private high school  
students comprise the 2015  
probability sample.

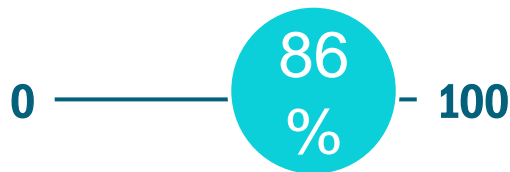
States Participation



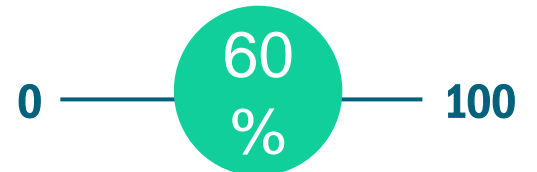
School response rate



Student response rate



Actual response rate



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Presentation by Erica McNamara (RCASA) US and Massachusetts data includes weighted results





# Validity

## Do students tell the truth?

“According to the CDC, research indicates data of this nature may be gathered as credibly from adolescents as from adults. Internal reliability checks help identify the small percentage of students who falsify their answers. To obtain truthful answers, students must perceive the survey as important and know procedures have been developed to protect their privacy and allow for anonymous participation.





# Reliability

## Do you test for reliability?

“Yes, the CDC Methodology of the Youth Risk Behavior Surveillance System studies include test-retest reliability studies on versions of the questionnaire; a study examining how varying honesty appeals, question wording, and data-editing protocols affect prevalence estimates; and a study examining how varying the mode and setting of survey administration affects prevalence estimates.





# Introduction

Appropriate protocols were implemented for obtaining permission from parents for student participation. All surveys and answer sheets were anonymous

## Confidentiality

Wellness teachers that participated in the data collection process signed confidentiality forms.

## Setting

Wellness teachers administered the survey in physical education classes.

## Survey

With a total of 123 items, the questionnaire was short enough to allow the survey to be easily completed in one class period.

## Procedures

Students were told that participation is voluntary. Students could skip any question that they were not comfortable answering.







# Reading High School Data Pool

# 80%<sub>rr</sub>



**Gr. 9-12 enrollment  
2016-2017**



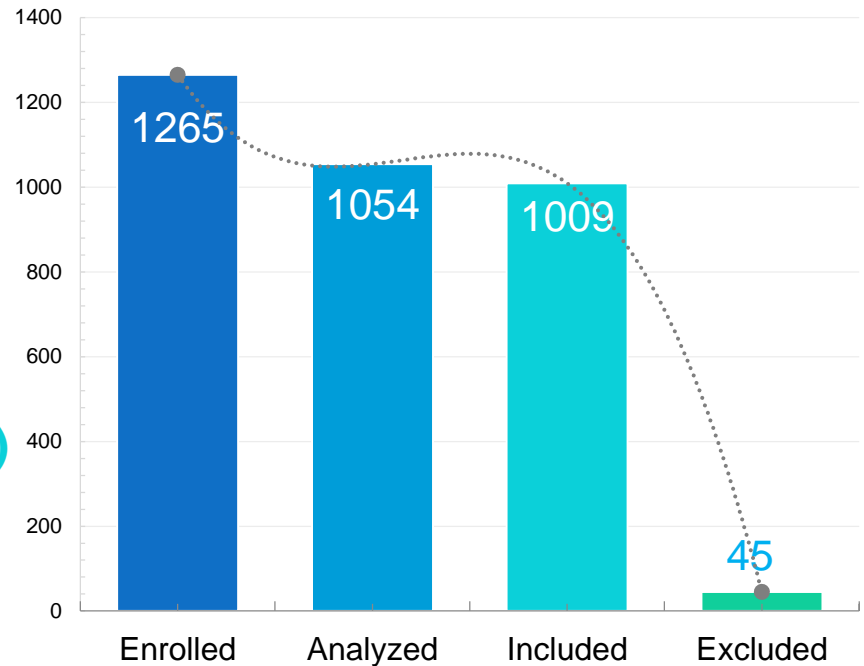
**Students surveyed & sent  
for analysis**



**80% of Surveys included in  
Final Sample (response rate)**



**Surveys excluded during  
data cleaning**



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Presentation by Erica McNamara (RCASA) US and Massachusetts data includes weighted results

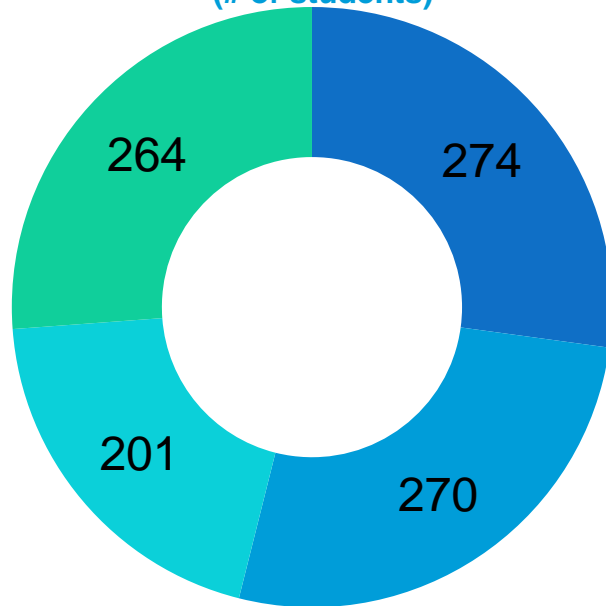




# Reading High School Survey Sample n=1,009

## GRADE

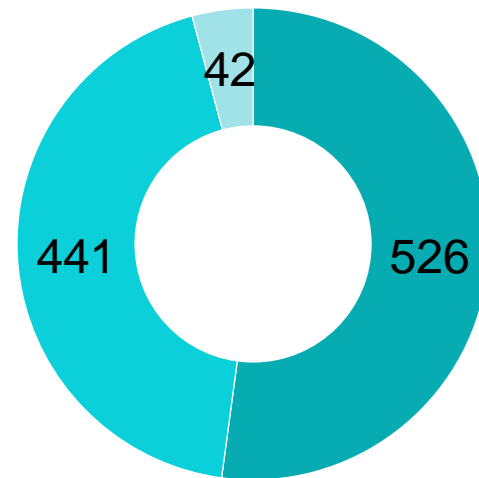
(# of students)



- Grade 9
- Grade 10
- Grade 11
- Grade 12

## GENDER

(# of students)



- Female
- Male
- Other response

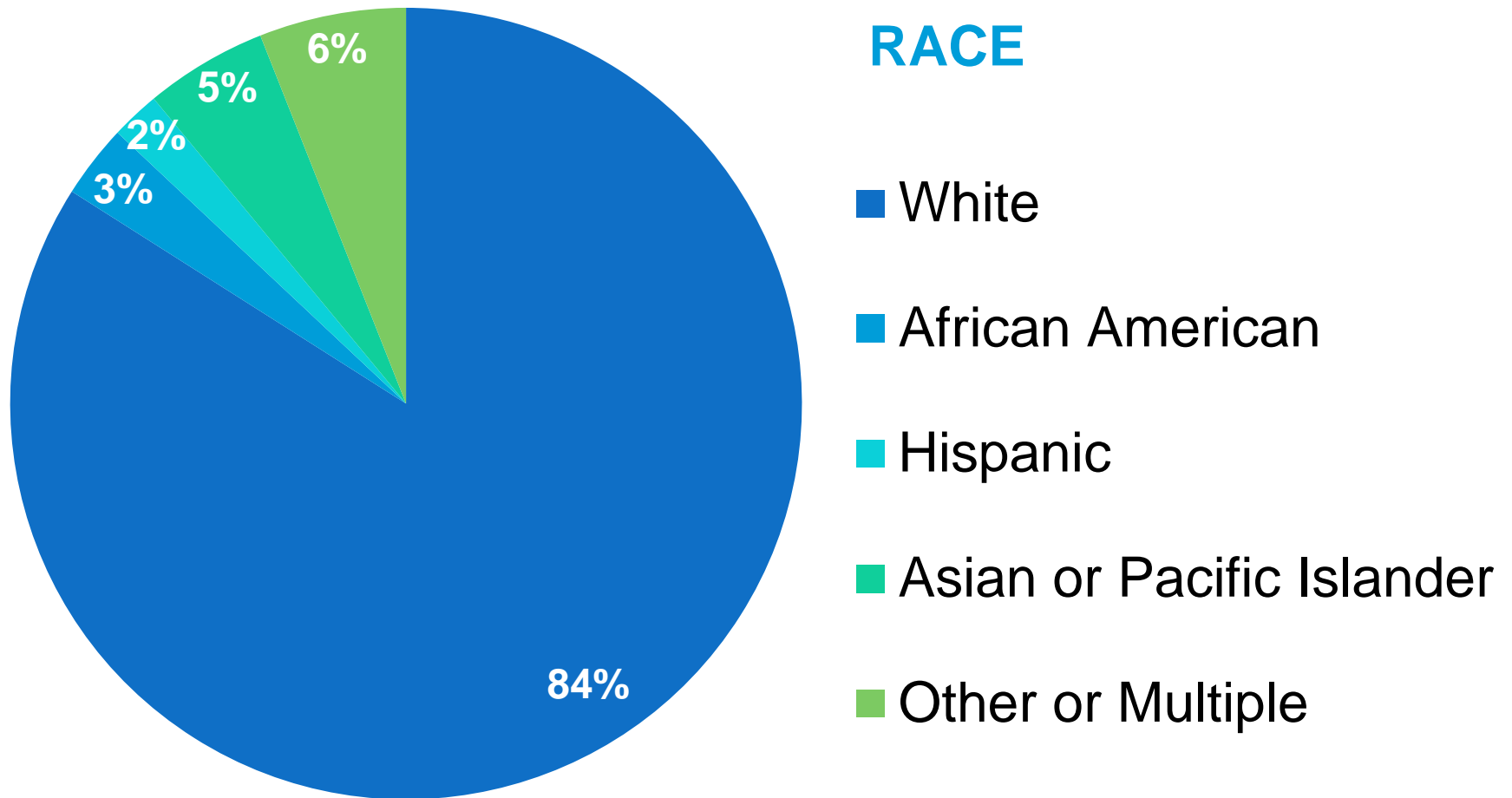
2017 Reading YRBS Results produced by Rothenbach Research and Consulting for Reading Public Schools

Presentation by Erica McNamara (RCASA) US and Massachusetts data includes weighted results <sup>10</sup>





# Reading High School Survey Sample n=1,009



2017 Reading YRBS Results produced by Rothenbach Research and Consulting for Reading Public Schools

Presentation by Erica McNamara (RCASA) US and Massachusetts data includes weighted results <sup>11</sup>





# Protective Factors Rationale

Search Institute- [The Developmental Assets®](#) are 40 research-based, positive experiences and qualities that influence young people's development



## Adult Support

**Positive Family Communication** | Youth & parent(s) communicate positively, and youth seeks advice and counsel from parents.

**Other Adult Relationships** | Youth receives support from 3 or more nonparent adults.



## Constructive Use of Time

**Creative Programs** | spends 3+ hours per wk in lessons or practice in music, theater, or other arts.

**Religious at Home** | spends 3+ hours per wk in sports, clubs, or organizations.

**at Home** | Youth is out w/friends "with nothing special to do" 2 or fewer nights per wk.



## Commitment to Learning

**Achievement Motivation** | motivated to do well in school

**School Engagement** | actively engaged in learning

Source: <http://www.search-institute.org/content/40-developmental-assets-adolescents-ages-12-18>

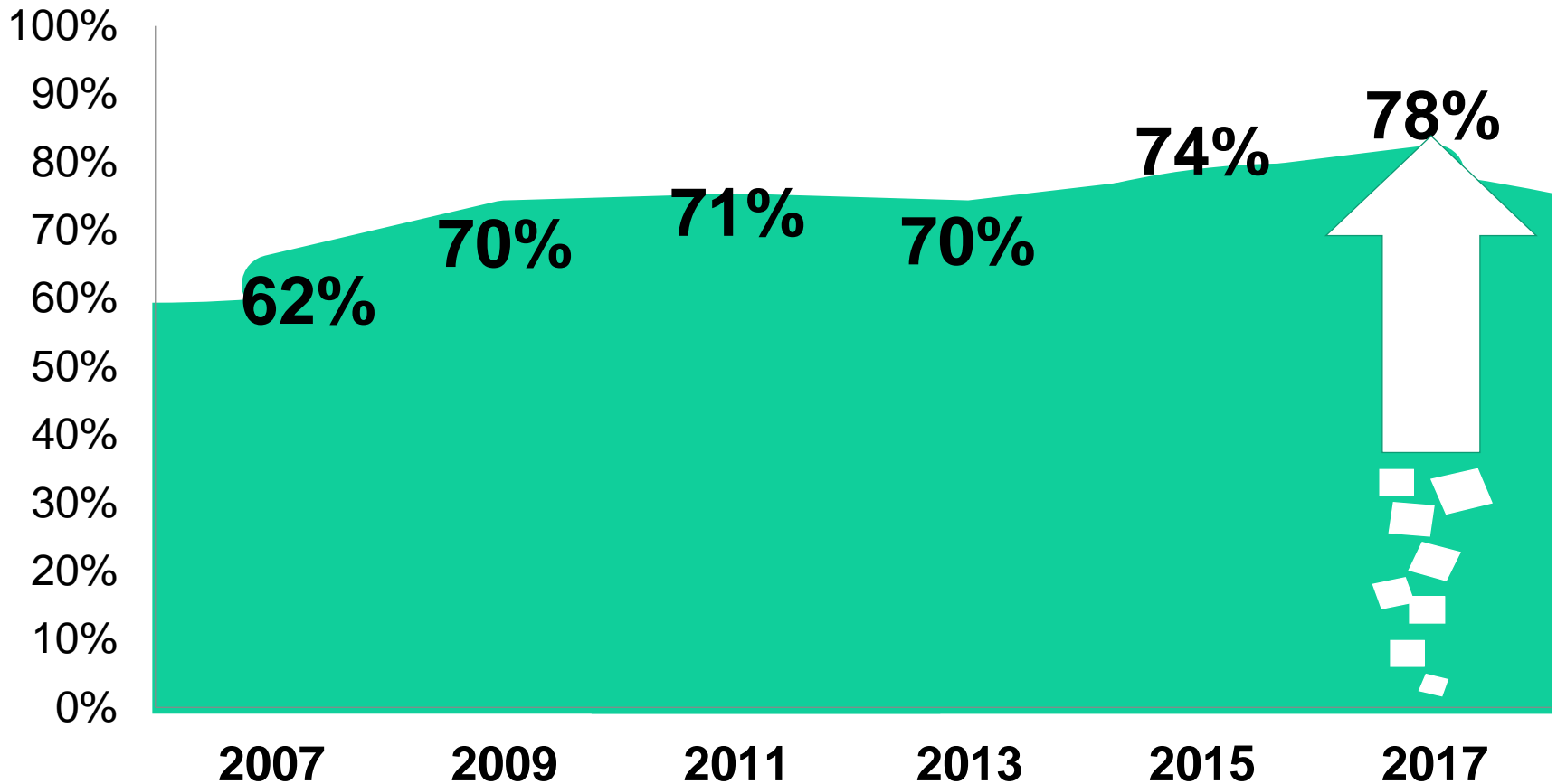
2017 Reading YRBS Results produced by Rothenbach Research and Consulting for Reading Public Schools

Presentation by Erica McNamara (RCASA) US and Massachusetts data includes weighted results





# At least one trusted adult to talk to in school: Reading High School



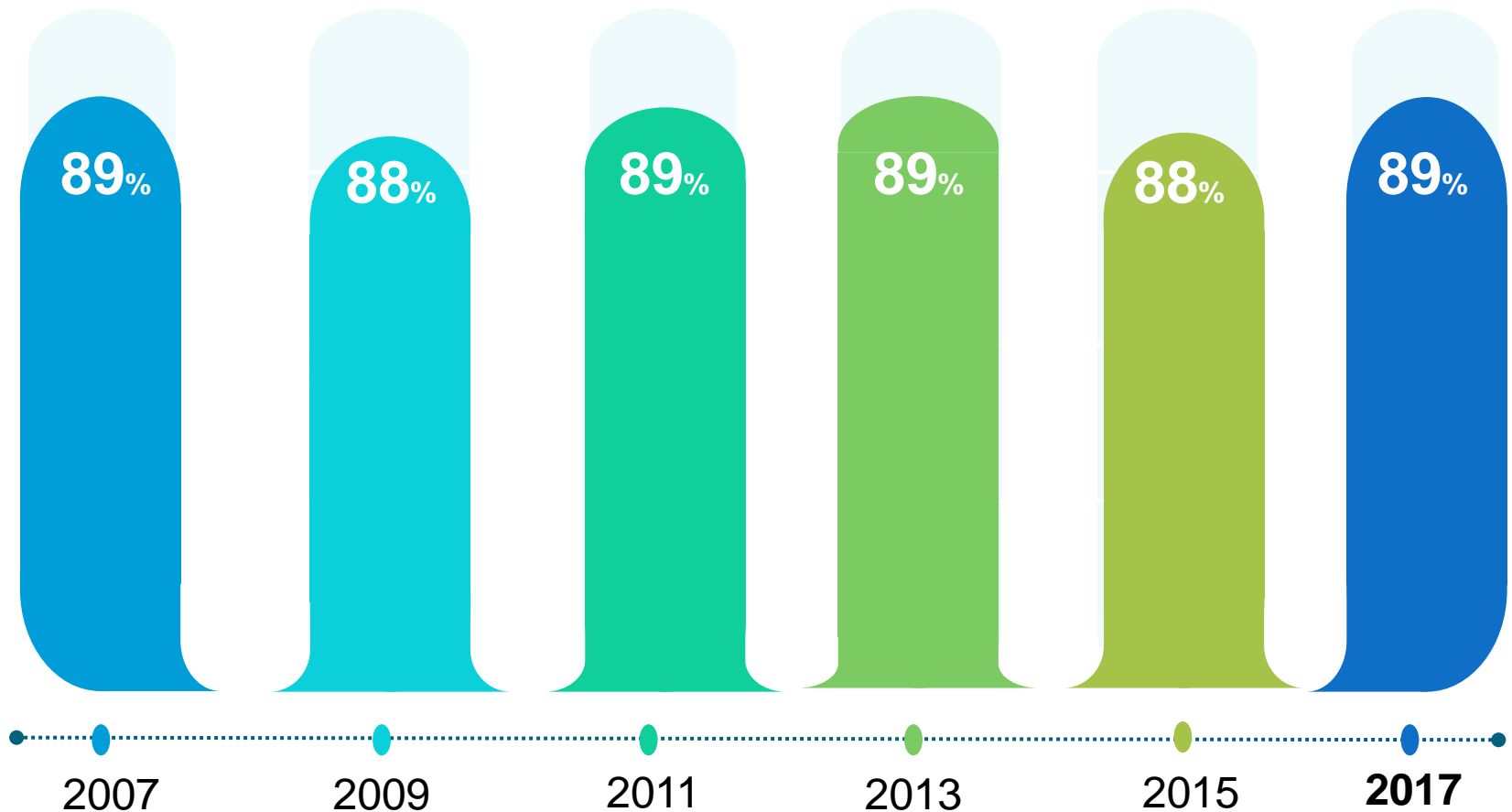
2017 Reading YRBS Results produced by Rothenbach Research and Consulting for Reading Public Schools

Presentation by Erica McNamara (RCASA) US and Massachusetts data includes weighted results <sup>13</sup>





# At least 1 trusted adult (family or community): Reading High School



2017 Reading YRBS Results produced by Rothenbach Research and Consulting for Reading Public Schools

Presentation by Erica McNamara (RCASA) US and Massachusetts data includes weighted results <sup>14</sup>

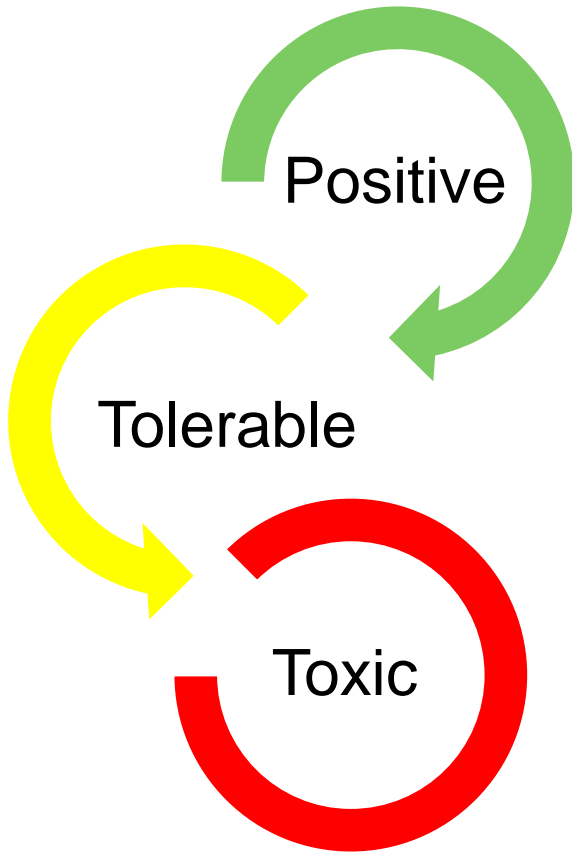




Eustress/Stress



Protective & Risk Factor Variability



Mild elevation in stress hormones

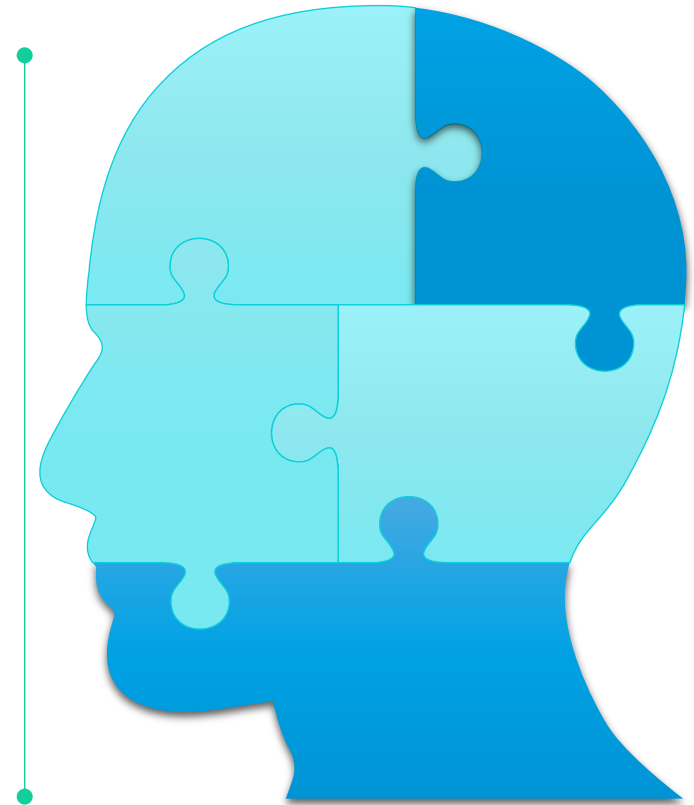
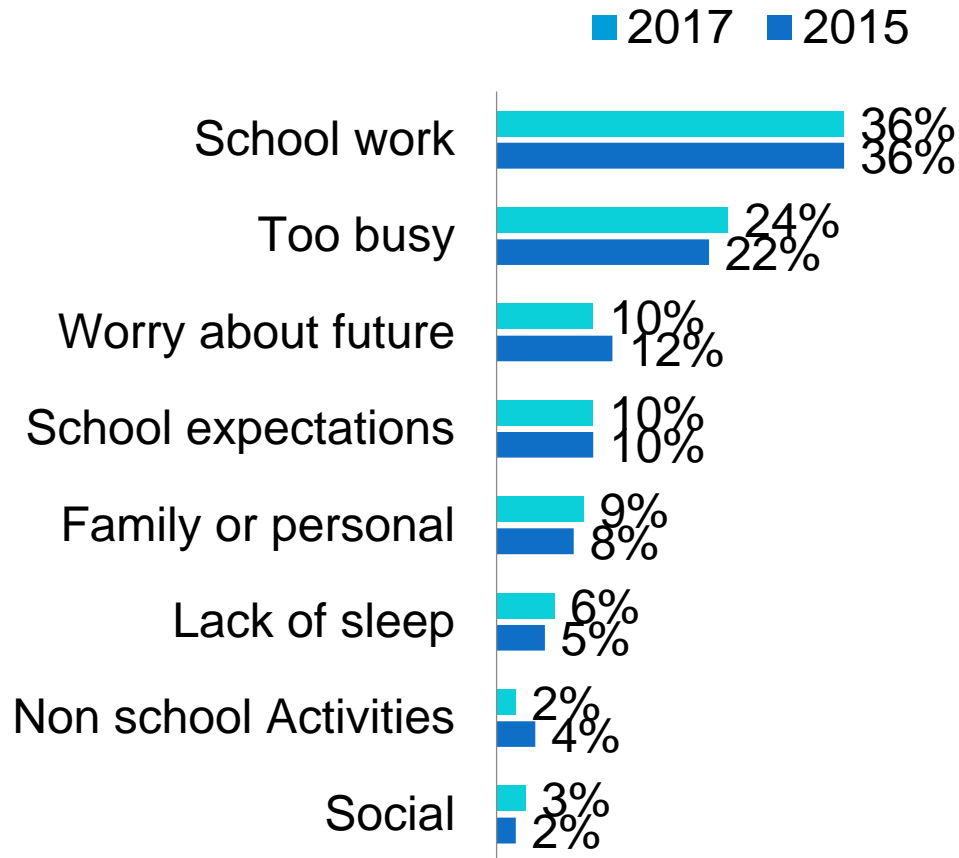
Serious temporary stress response buffered by supportive relationships

Prolonged activation of stress response systems in the absence of protective relationships





# Negative Stressors: Reading High School



2017 Reading YRBS Results produced by Rothenbach Research and Consulting for Reading Public Schools

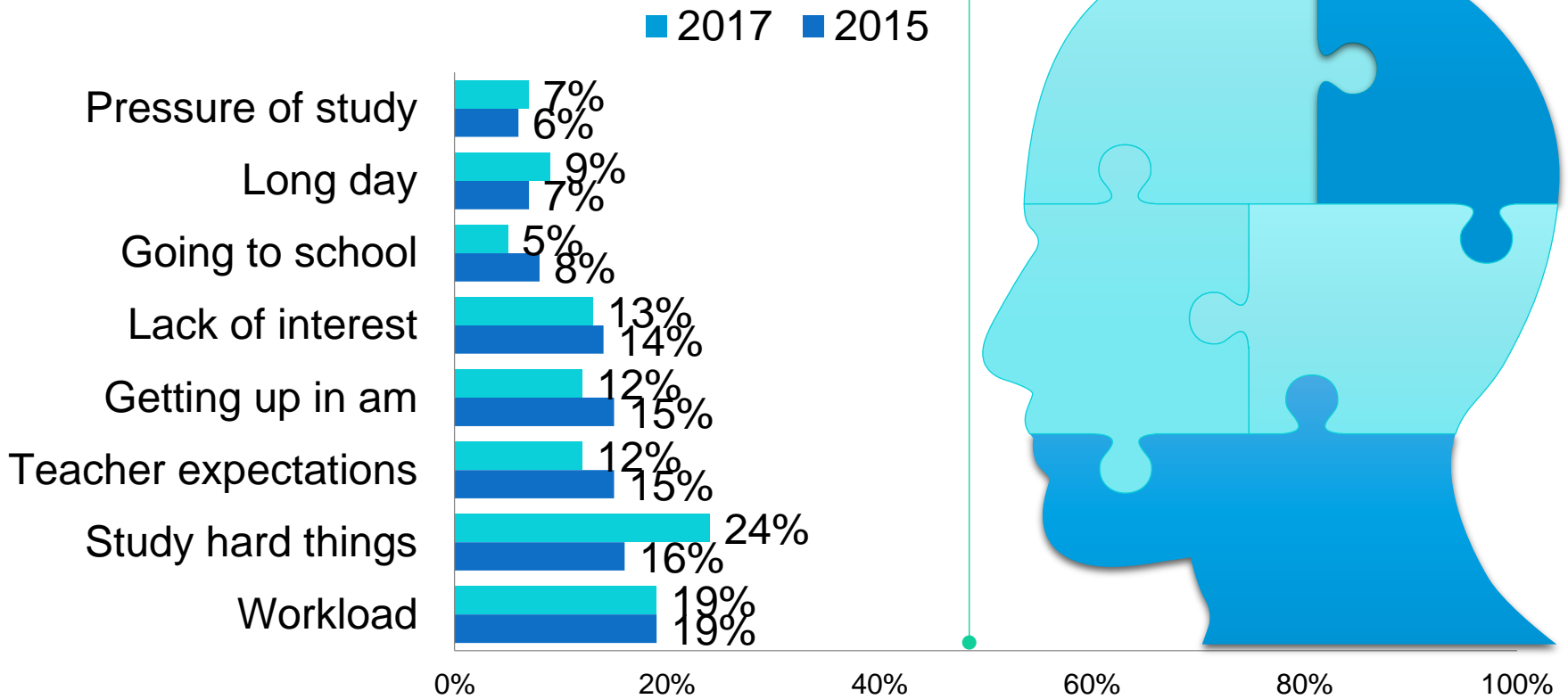
Presentation by Erica McNamara (RCASA) US and Massachusetts data includes weighted results 16







# Sources of School Stress: Reading High School



2017 Reading YRBS Results produced by Rothenbach Research and Consulting for Reading Public Schools

Presentation by Erica McNamara (RCASA) US and Massachusetts data includes weighted results <sup>17</sup>



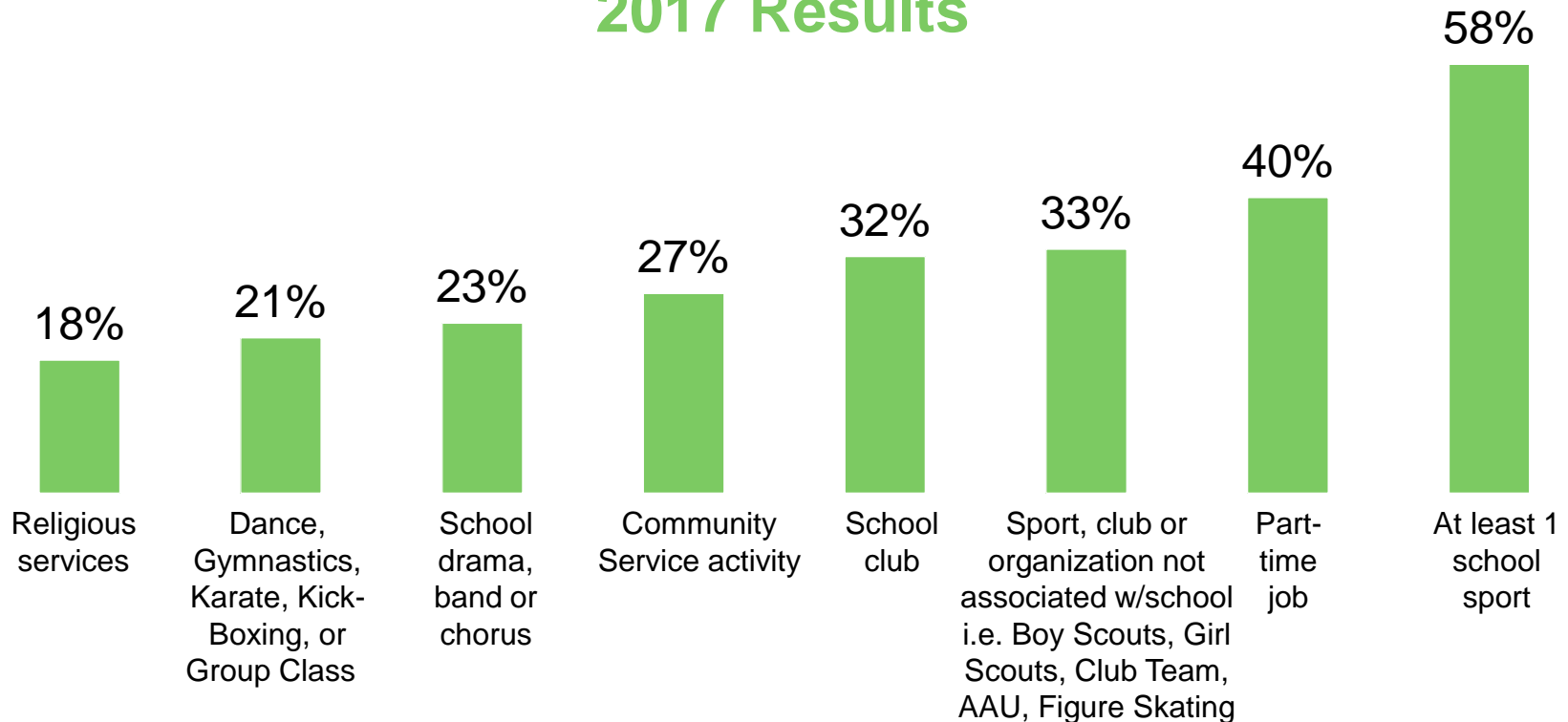


# Extracurricular Activities

## Reading High School

Choose all extra-curricular or outside of school activities that you participate in

### 2017 Results



2017 Reading YRBS Results produced by Rothenbach Research and Consulting for Reading Public Schools

Presentation by Erica McNamara (RCASA) US and Massachusetts data includes weighted results 18



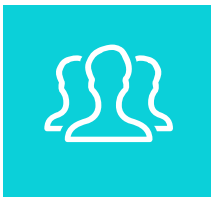
# Sleep: CDC Rationale



This question measures the amount of sleep students get on an average school night. **Sleep is necessary for physical and mental health** and is particularly important during adolescence.



Analysis of the national YRBS has shown that **insufficient sleep is associated with higher odds** of current use of cigarettes, marijuana, and alcohol; current sexual activity; seriously considering attempting suicide; feeling sad or hopeless; physical fighting; physical inactivity; obesity; engaging in injury-related risk behaviors; and engaging in unhealthy weight control behaviors.



In 2015, the National Sleep Foundation **recommended that teens aged 14-17 years get 8-10 hours of sleep per night**. U.S. high school students who got 8+ or more hours of sleep on an average school night decreased significantly from 2007–2015 (31%–27%).

Source: Retrieved at [https://www.cdc.gov/healthyyouth/data/yrbs/pdf/2017/2017\\_standard\\_yrbs\\_item\\_rationale.pdf](https://www.cdc.gov/healthyyouth/data/yrbs/pdf/2017/2017_standard_yrbs_item_rationale.pdf), Reference: Wheaton AG, Olsen EO, Miller GF, Croft JB. Sleep duration and injury-related risk behaviors among hs students—U.S., 2007–2013. Morbidity and Mortality Weekly Report 2016;65(13):337–341

2017 Reading YRBS Results produced by Rothenbach Research and Consulting for Reading Public Schools

Presentation by Erica McNamara (RCASA) US and Massachusetts data includes weighted results <sup>19</sup>

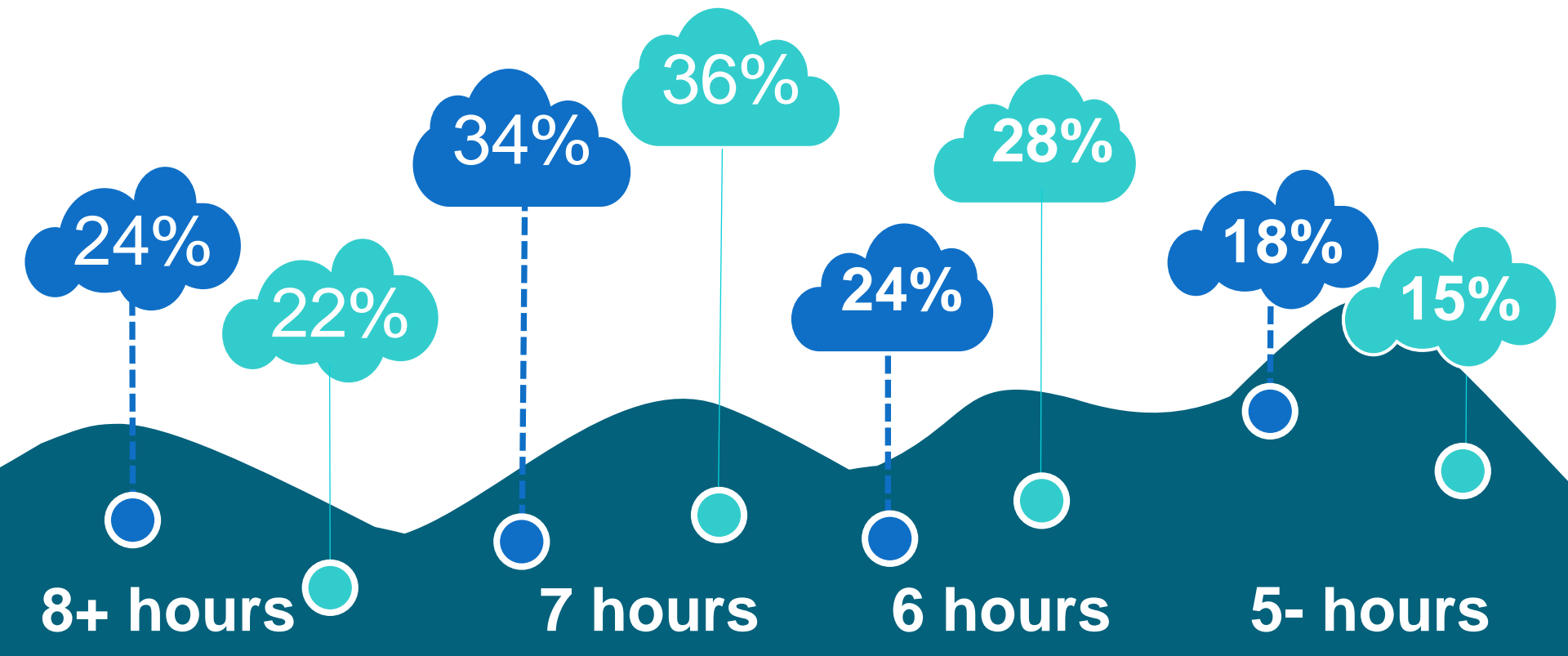


# Sleep: Reading High School

2015

2017

29% of freshman got 8+ hours of sleep compared to 19% of juniors.



2017 Reading YRBS Results produced by Rothenbach Research and Consulting for Reading Public Schools

Presentation by Erica McNamara (RCASA) US and Massachusetts data includes weighted results <sup>20</sup>





# Concussion: CDC Rationale



In 2013, the National Academy of Sciences report entitled Sports Related Concussions in Youth challenged the CDC to improve the surveillance of sports-related concussions among youth. The report identified gaps.



There were no comprehensive national incidence estimates of sports and recreation-related concussions experienced by youth.



Legislation related to sports concussions was passed in all 50 states within the past 5–7 years and the ability to monitor prevention efforts is critical.

Reference: Institute of Medicine and National Research Council. Sports-related Concussions in Youth: Improving the Science, Changing the Culture. Washington, DC: The National Academies Press; 2014.

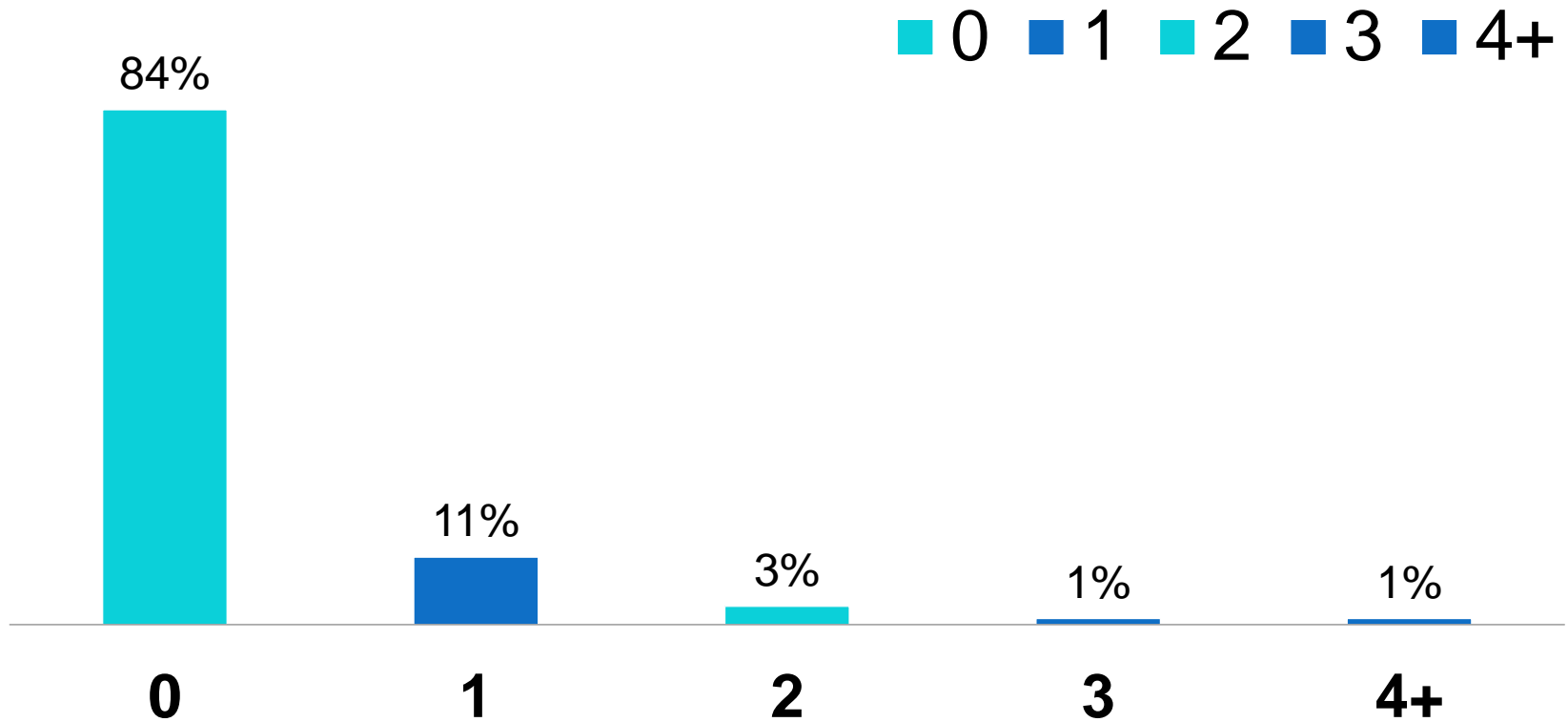
Available at: <http://www.shapeamerica.org/upload/TheEssentialComponentsOfPhysicalEducation.pdf>. Accessed May 18, 2016





# Concussion: Reading High School

During the past 12 months, how many times did you have a concussion from playing a sport or being physically active?



2017 Reading YRBS Results produced by Rothenbach Research and Consulting for Reading Public Schools

Presentation by Erica McNamara (RCASA) US and Massachusetts data includes weighted results





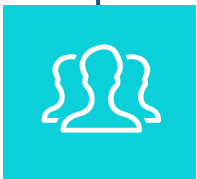
# Behavioral Health: CDC Rationale



These questions measure **sadness, suicide ideation, attempted suicide, and the seriousness of those attempts.**



In 2015, among U.S. high school students, **30% felt so sad or hopeless** almost every day for 2+ weeks in a row that they stopped doing some usual activities. A **prior suicide attempt** is a significant risk factors for a suicide fatality.



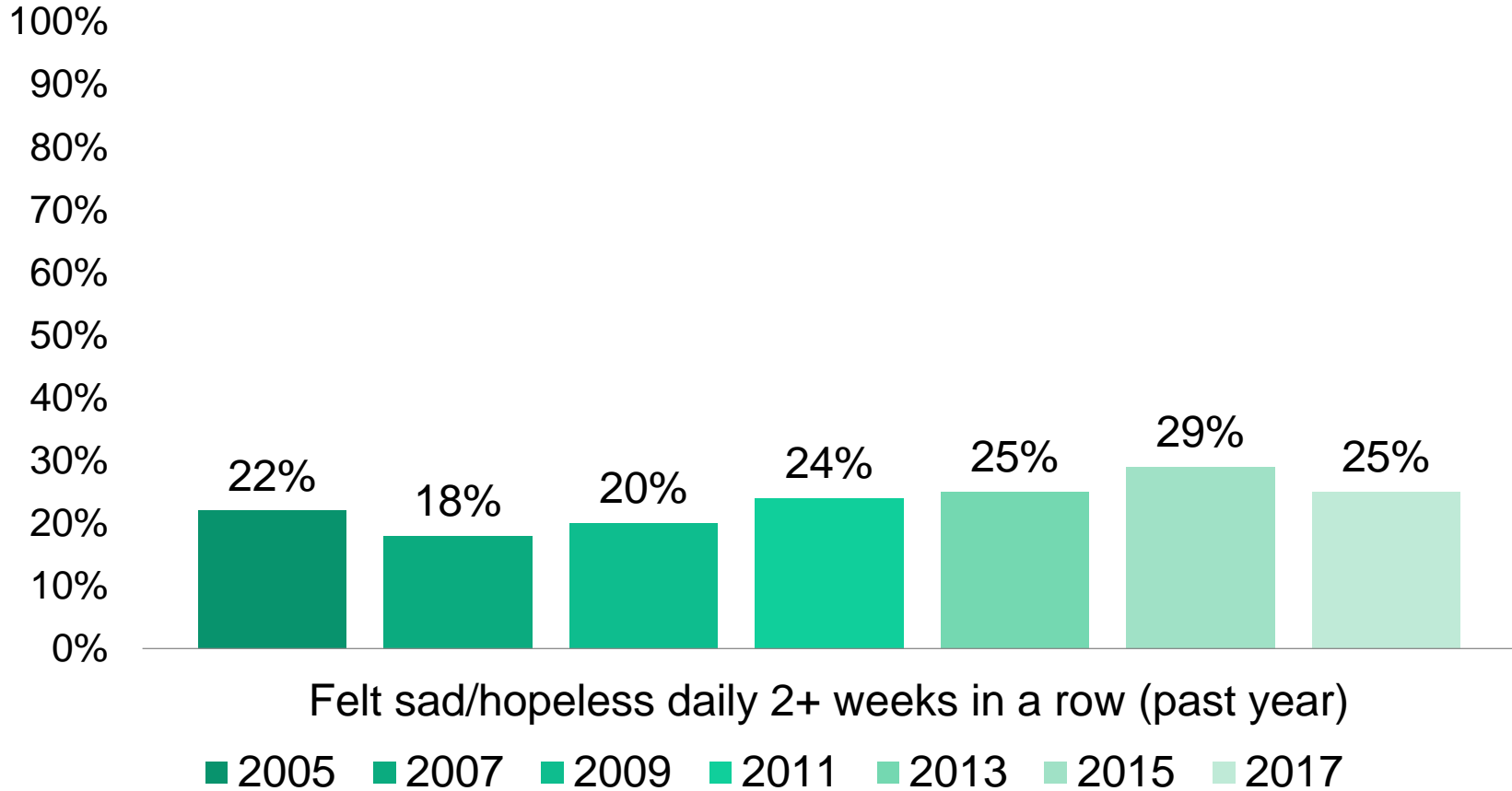
The prevalence of students who **seriously considered attempting suicide, having made a suicide plan, and attempted suicide** increased over the last 6 years.

*REFERENCES: 1. Web-based Injury Statistics Query and Reporting System (WISQARS) [database online]. Atlanta, GA: Centers for Disease Control and Prevention, National Center for Injury Prevention and Control; 2014. Accessed May 2, 2016. 2. Borowsky IW, Ireland M, Resnick MD. Adolescent suicide attempts: risks and protectors. *Pediatrics* 2001; 107:485–493. 3. Bridge JA, Goldstein TR, Brent DA. Adolescent suicide and suicidal behavior. *Journal of Child Psychology and Psychiatry* 2006;47(3/4):372–394. 4. Centers for Disease Control and Prevention. Youth risk behavior surveillance—United States, 2015. *Morbidity and Mortality Weekly Report* 2016;65(No. SS-6):1–174.*





# Depression-Related: Reading High School



2017 Reading YRBS Results produced by Rothenbach Research and Consulting for Reading Public Schools

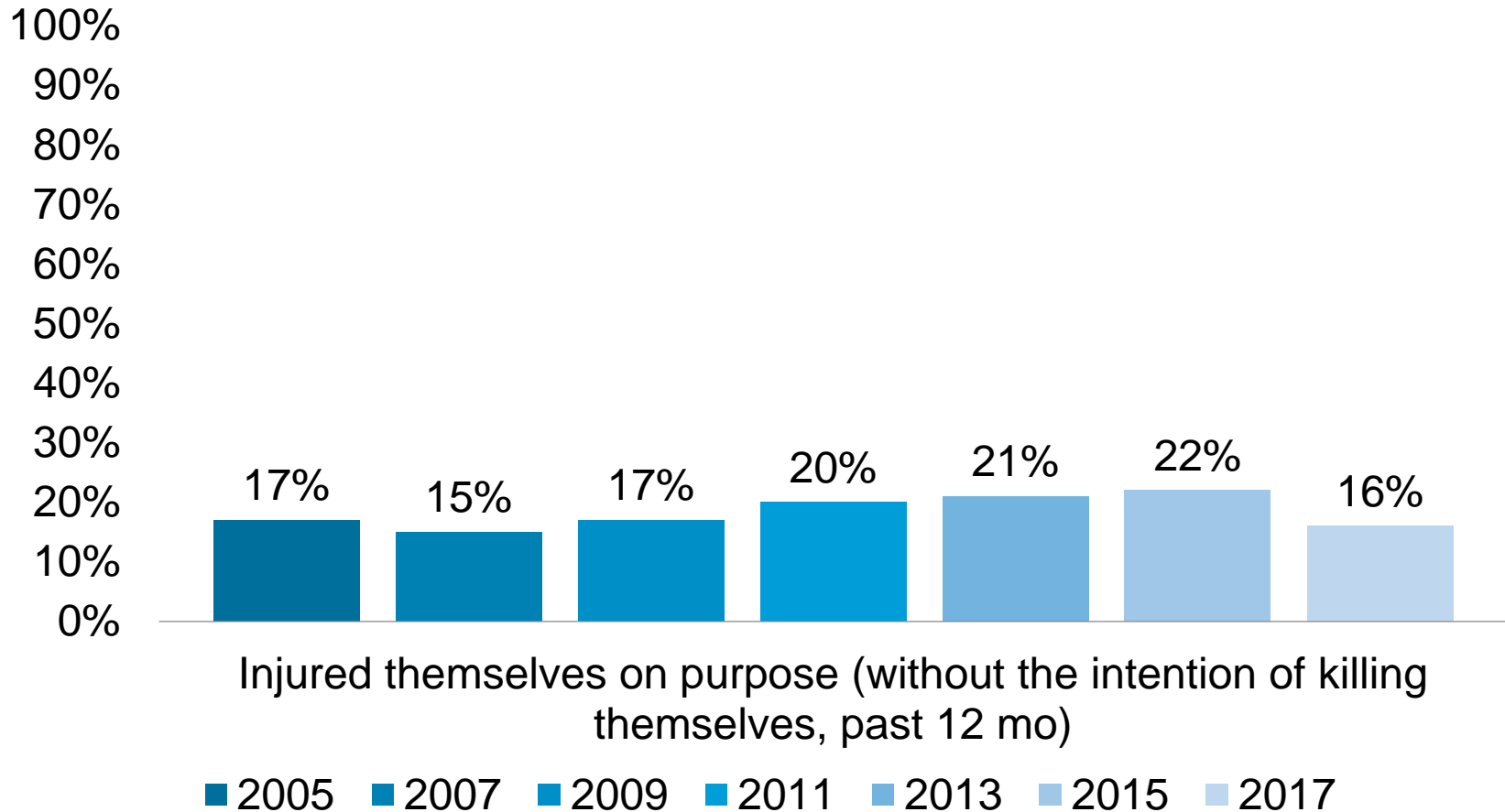
Presentation by Erica McNamara (RCASA) US and Massachusetts data includes weighted results 24







# Non-Suicidal Self-Injury: Reading High School



2017 Reading YRBS Results produced by Rothenbach Research and Consulting for Reading Public Schools

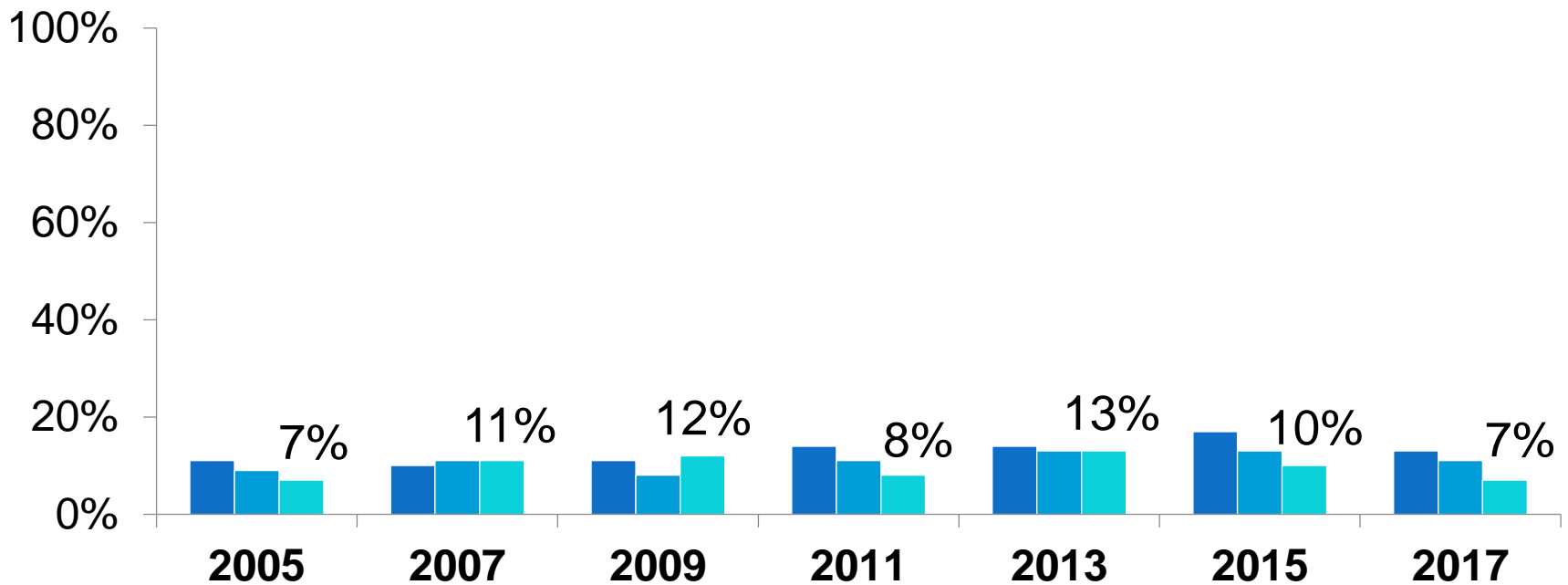
Presentation by Erica McNamara (RCASA) US and Massachusetts data includes weighted results <sup>25</sup>





# Suicide Risk: Reading High School

- Ever seriously considered suicide
- Ever made a plan to commit suicide
- Actually attempted suicide (past 12 mo)



2017 Reading YRBS Results produced by Rothenbach Research and Consulting for Reading Public Schools

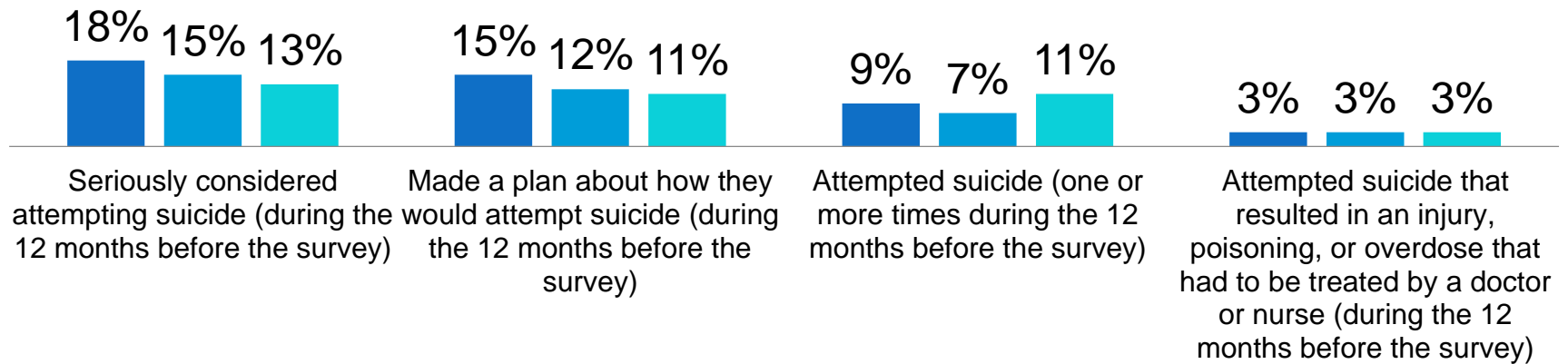
Presentation by Erica McNamara (RCASA) US and Massachusetts data includes weighted results <sup>26</sup>





# Suicide Risk Comparison: High School

■ U.S. 2015   ■ Mass 2015   ■ Reading 2017



2017 Reading YRBS Results produced by Rothenbach Research and Consulting for Reading Public Schools

Presentation by Erica McNamara (RCASA) US and Massachusetts data includes weighted results <sup>27</sup>

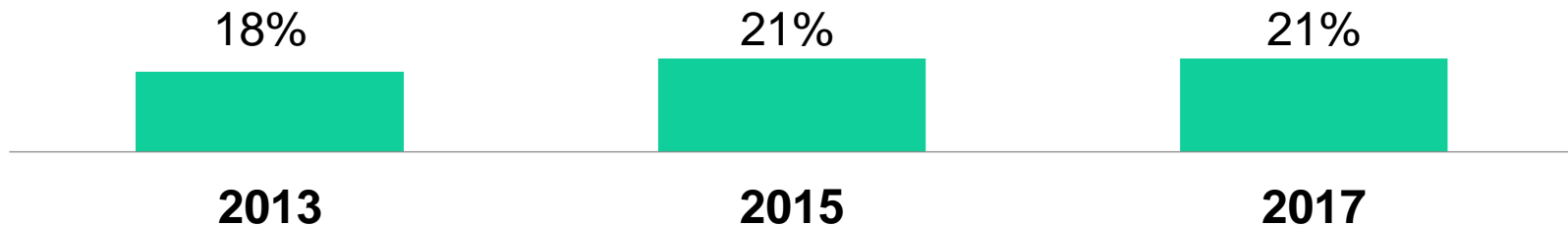




# Behavioral Health Treatment: Reading High School

**2013-2017**

Taking medicine or receiving treatment from a doctor or other health professional for any type of behavioral health, mental health condition or emotional problem



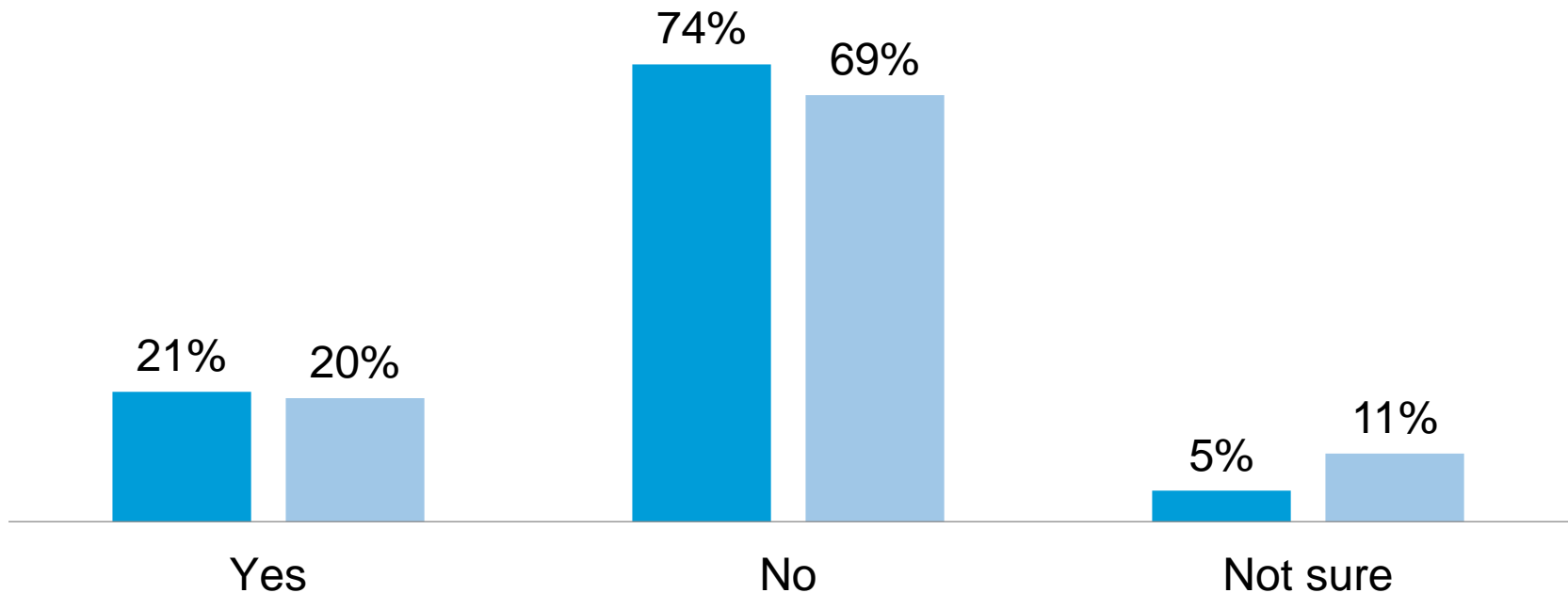
2017 Reading YRBS Results produced by Rothenbach Research and Consulting for Reading Public Schools

Presentation by Erica McNamara (RCASA) US and Massachusetts data includes weighted results 28



# Distraction due to Physical, Mental or Emotional Problems: Reading High School

■ 2015 ■ 2017 Difficulty concentrating, remembering or making decisions due to physical, mental or emotional problem



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Presentation by Erica McNamara (RCASA) US and Massachusetts data includes weighted results <sup>29</sup>



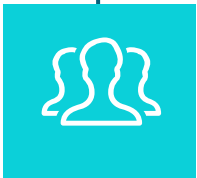
# Nicotine Misuse: CDC Rationale



These questions measure **use of nicotine products in a variety of forms.**



Nicotine exposure during adolescence, can cause addiction, might harm brain development, and could lead to sustained tobacco product use among youths. Among youth, there is **no safe exposure to nicotine**, be it from combustible, non-combustible, or electronic sources



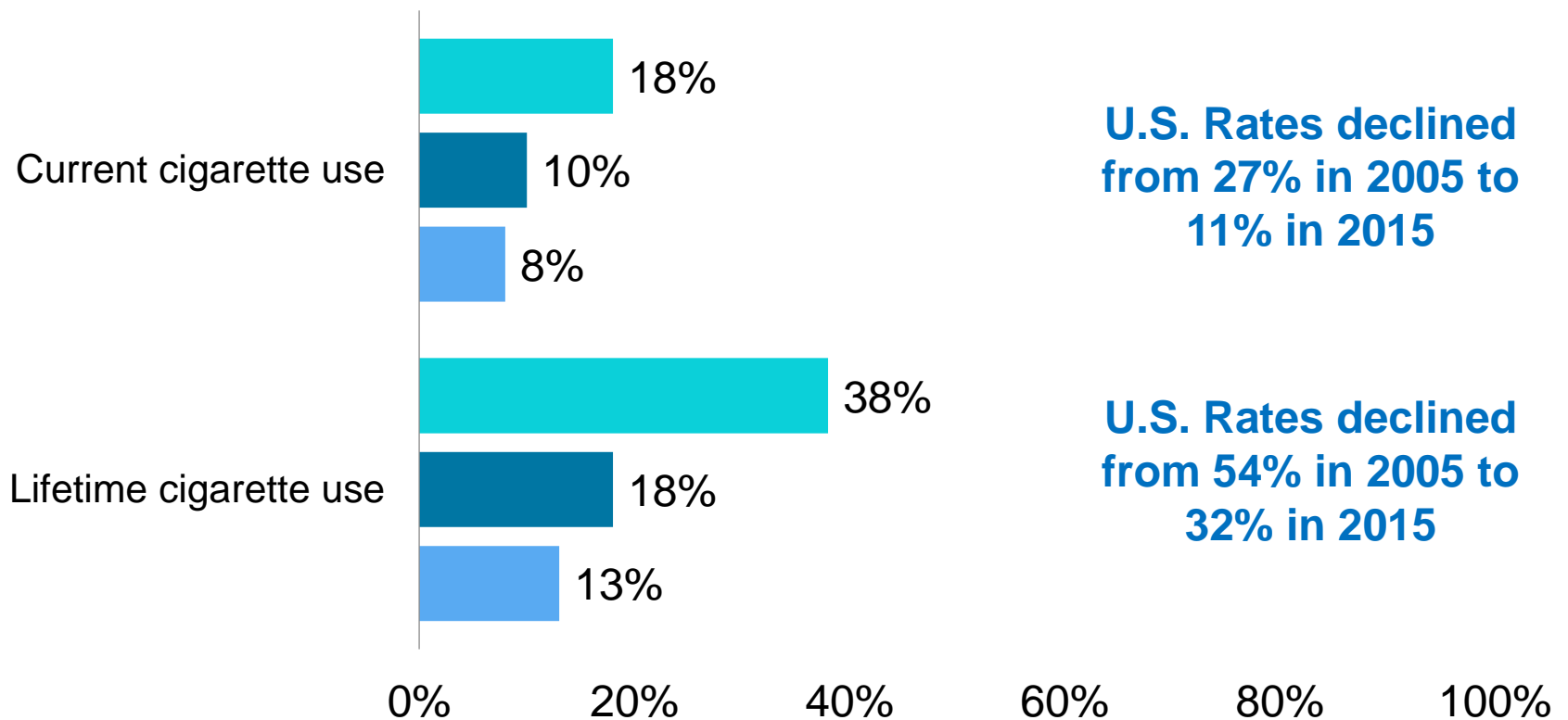
Smokers are **more likely to drink alcohol, use marijuana and cocaine, engage in risky sex, engage in fighting, carry a weapon, and attempt suicide.** Adolescent smokeless tobacco and e-vape users and are more likely to **become adult cigarette smokers.**





# Cigarette Use: Reading High School

■ Reading 2005 ■ Reading 2015 ■ Reading 2017



2017 Reading YRBS Results produced by Rothenbach Research and Consulting for Reading Public Schools

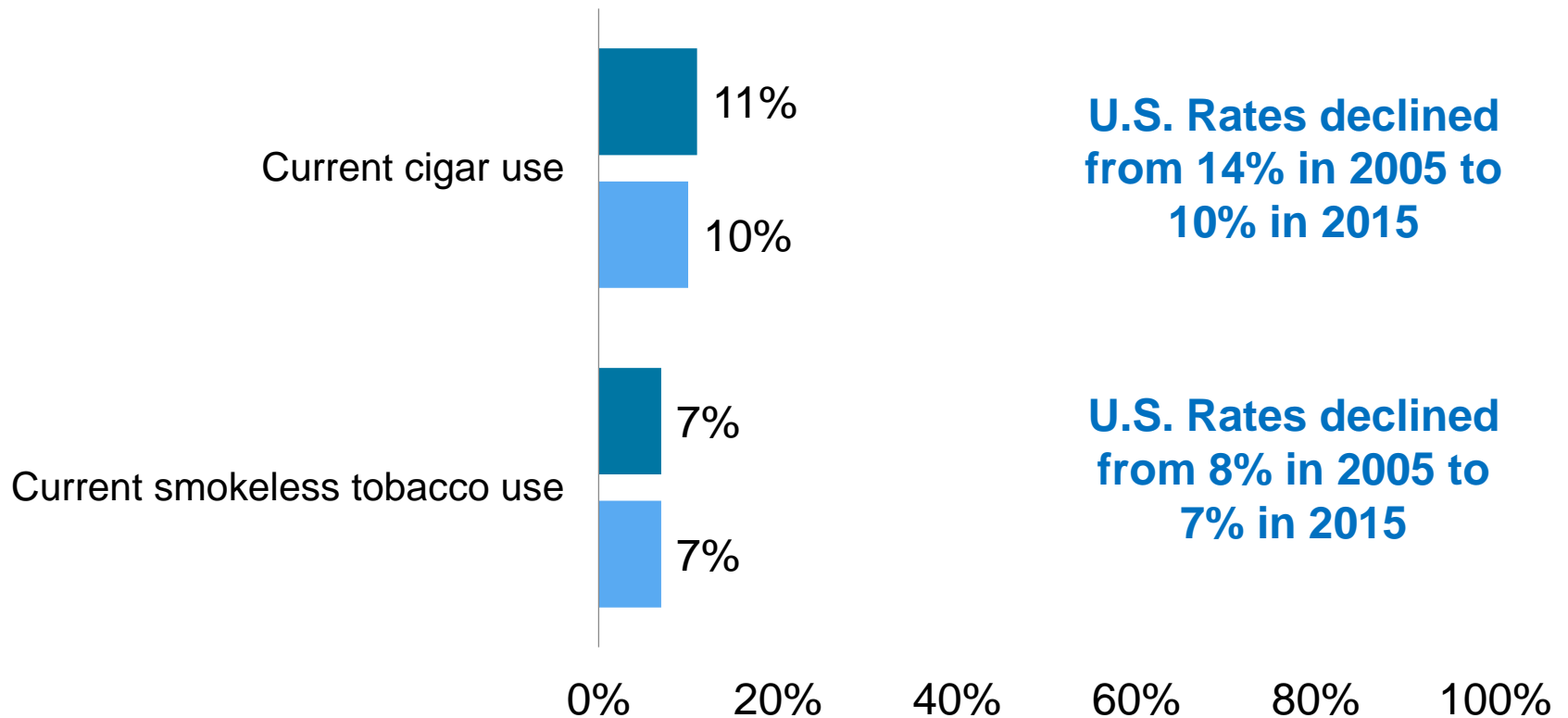
Presentation by Erica McNamara (RCASA) US and Massachusetts data includes weighted results <sup>31</sup>





# Other Tobacco Use: Reading High School

■ Reading 2015 ■ Reading 2017



2017 Reading YRBS Results produced by Rothenbach Research and Consulting for Reading Public Schools

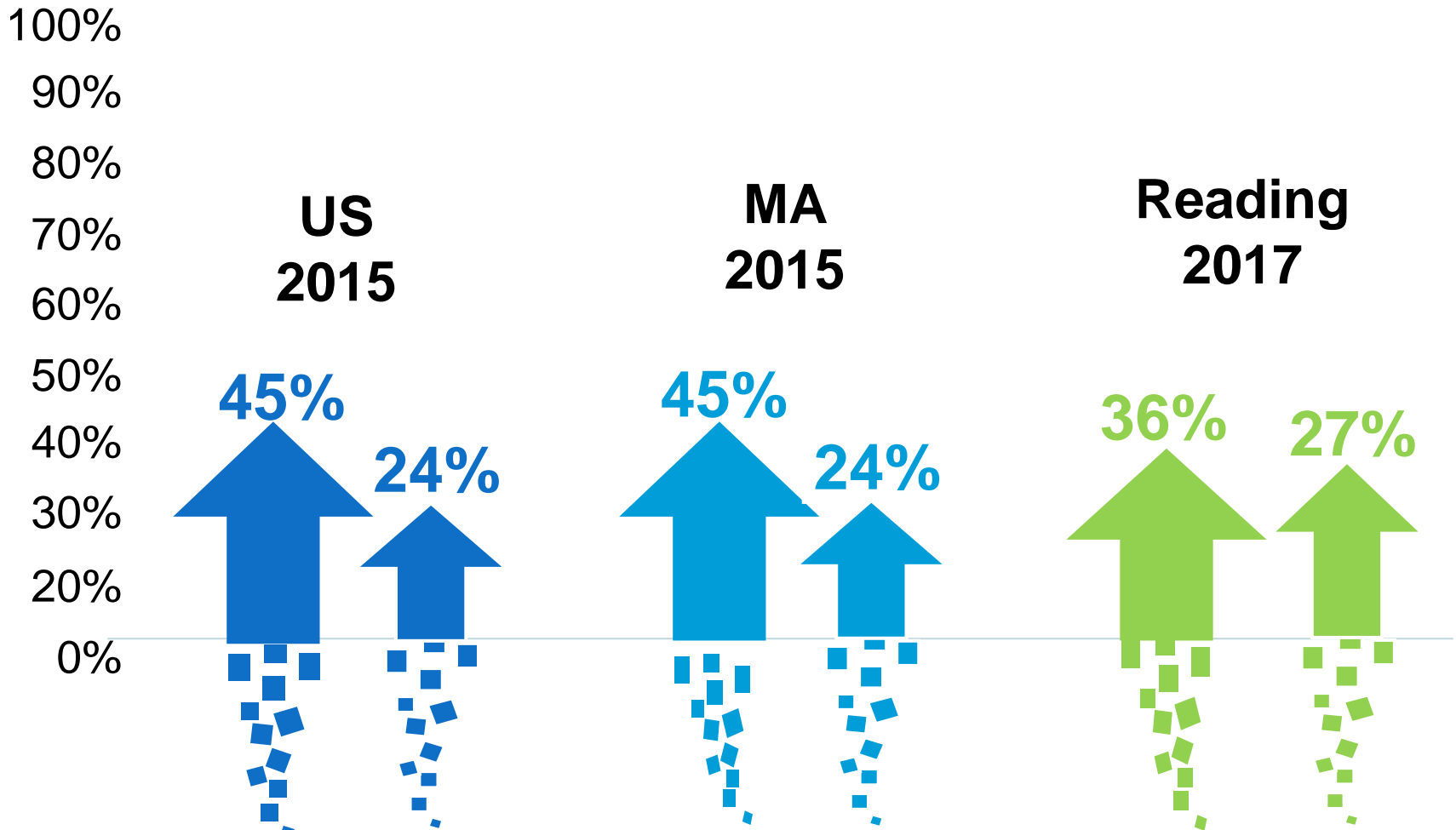
Presentation by Erica McNamara (RCASA) US and Massachusetts data includes weighted results <sup>32</sup>







# E-vapor Lifetime & Current Use: High School



2017 Reading YRBS Results produced by Rothenbach Research and Consulting for Reading Public Schools



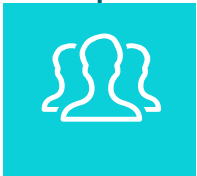
# Alcohol Misuse: CDC Rationale



Excessive drinking, including underage and binge drinking, is responsible for more than **4,300 deaths among underage youth each year**, and cost the U.S. \$24 billion in 2010.



**Underage drinking contributes** to motor vehicle crashes, suicide, homicides, assaults, rapes, burns, falls, drowning, brain impairment, alcohol dependence, risky sexual activity, academic problems, and alcohol and drug poisoning.



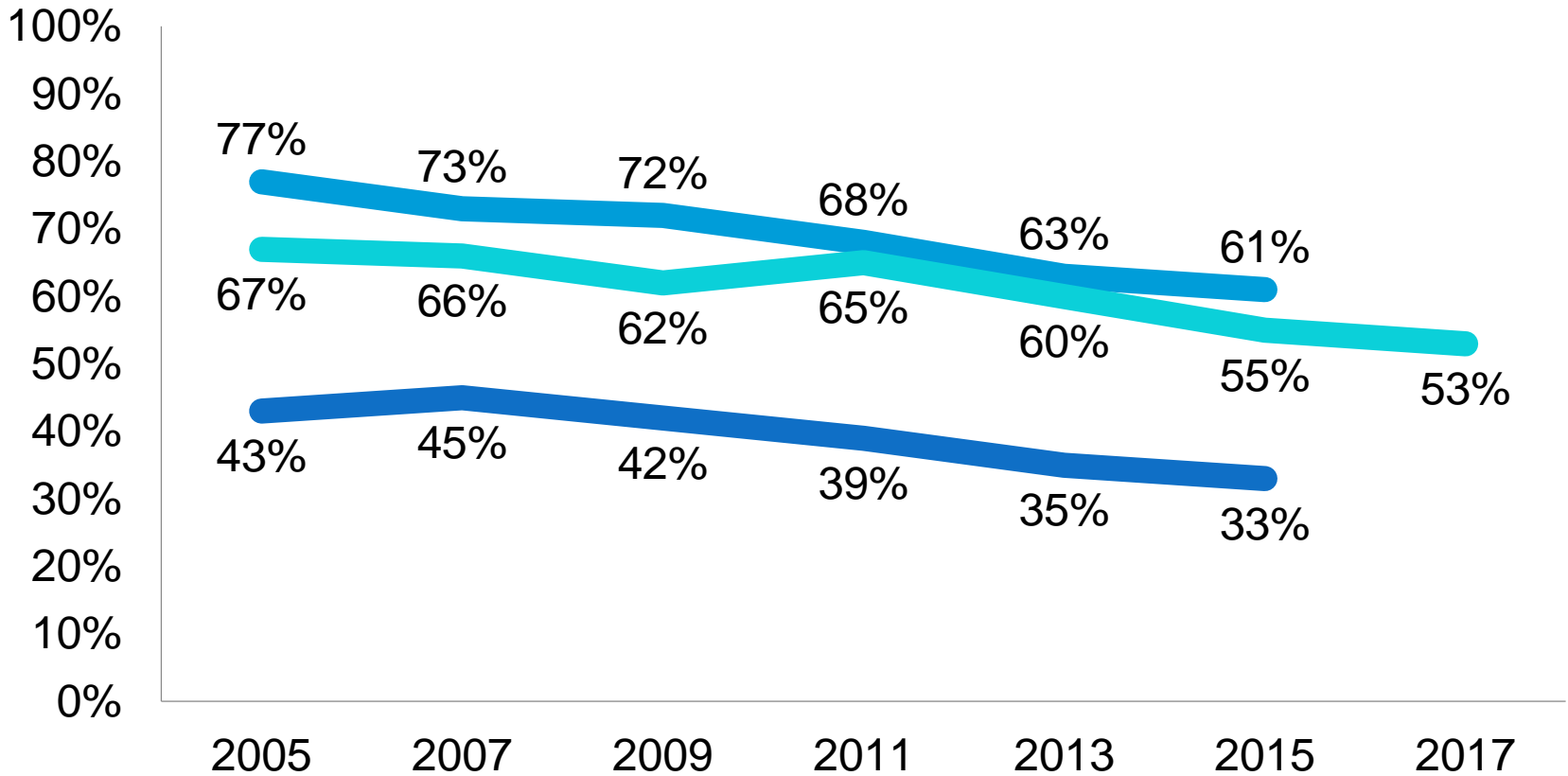
Persons who start drinking before age 15 years are **6x more likely to develop alcohol dependence** or abuse later in life than those who begin drinking at or after age 21 years.





# Lifetime Alcohol Use: Reading High School

## High School Students Who Ever Drank Alcohol, 2005-2015



2017 Reading YRBS Results produced by Rothenbach Research and Consulting for Reading Public Schools

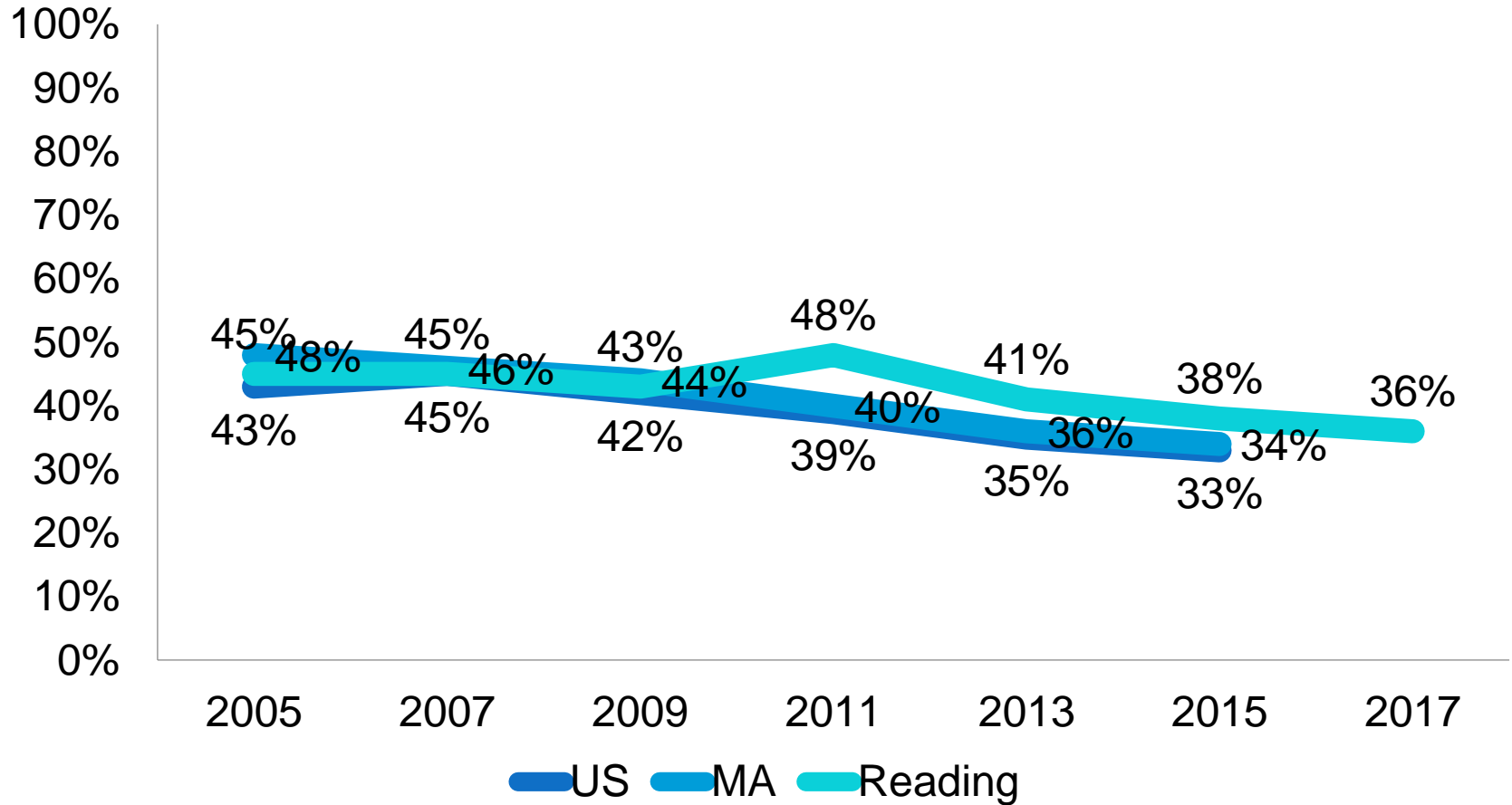
Presentation by Erica McNamara (RCASA) US and Massachusetts data includes weighted results <sup>35</sup>





# Underage Drinking: Reading High School

Percentage of High School Students Who Drank in Past 30 days, 2005-2017



2017 Reading YRBS Results produced by Rothenbach Research and Consulting for Reading Public Schools

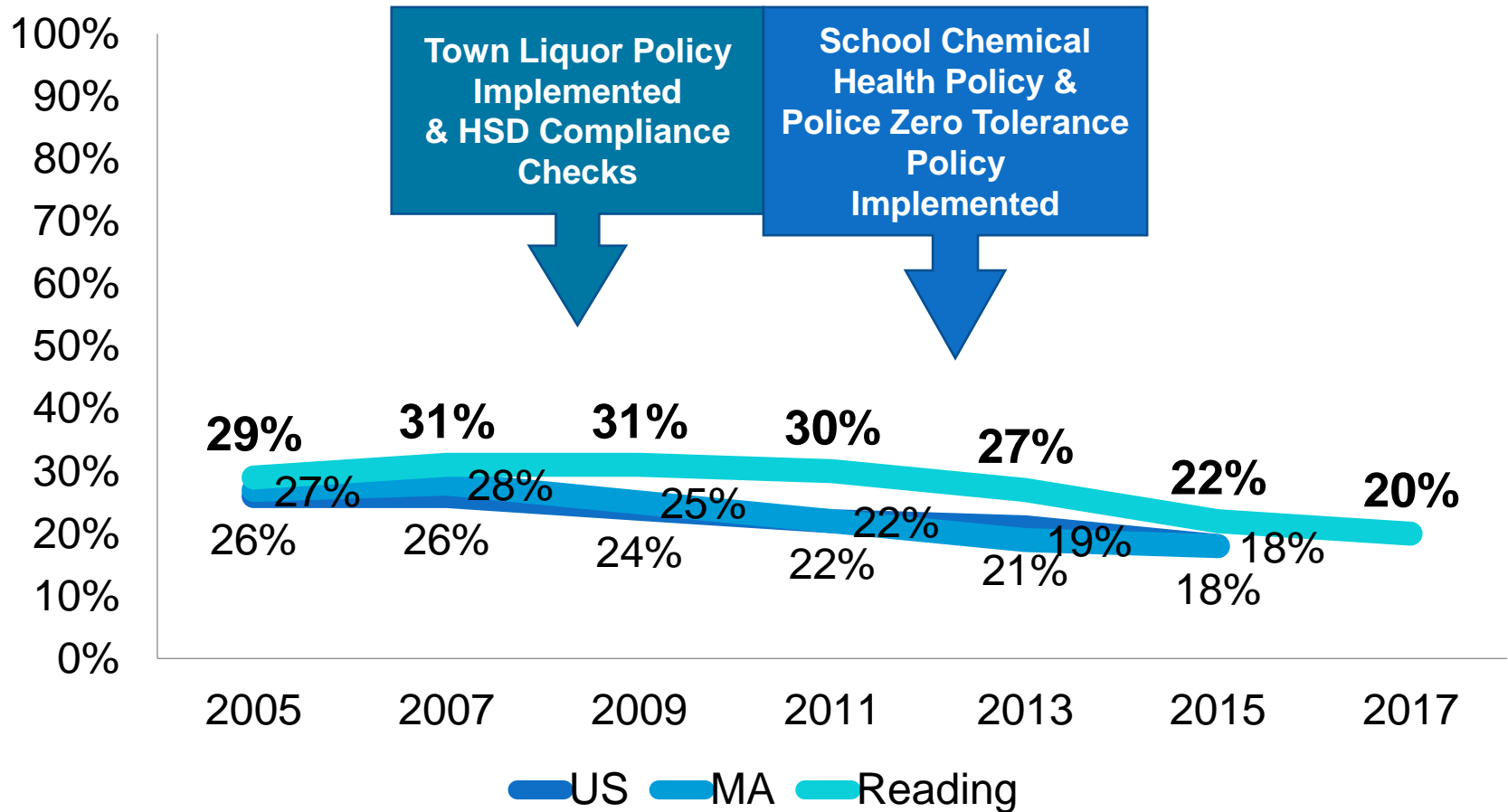
Presentation by Erica McNamara (RCASA) US and Massachusetts data includes weighted results 36





# Binge Drinking: High School Comparison

## High School Students Who Drank 5+ Alcohol Drinks in a Row, 2005-2017



2017 Reading YRBS Results produced by Rothenbach Research and Consulting for Reading Public Schools

Presentation by Erica McNamara (RCASA) US and Massachusetts data includes weighted results <sup>37</sup>





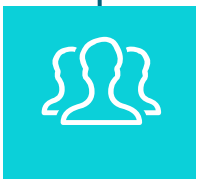
# Drug Misuse: CDC Rationale



These questions measure marijuana, cocaine, inhalants, heroin, methamphetamines, ecstasy, steroids, injected drugs use; use of prescription pain medicine without a doctor's prescription; and illegal drug activity on school property.



Among youth, illicit drug use is associated with heavy alcohol and tobacco use, violence and delinquency, and suicide.



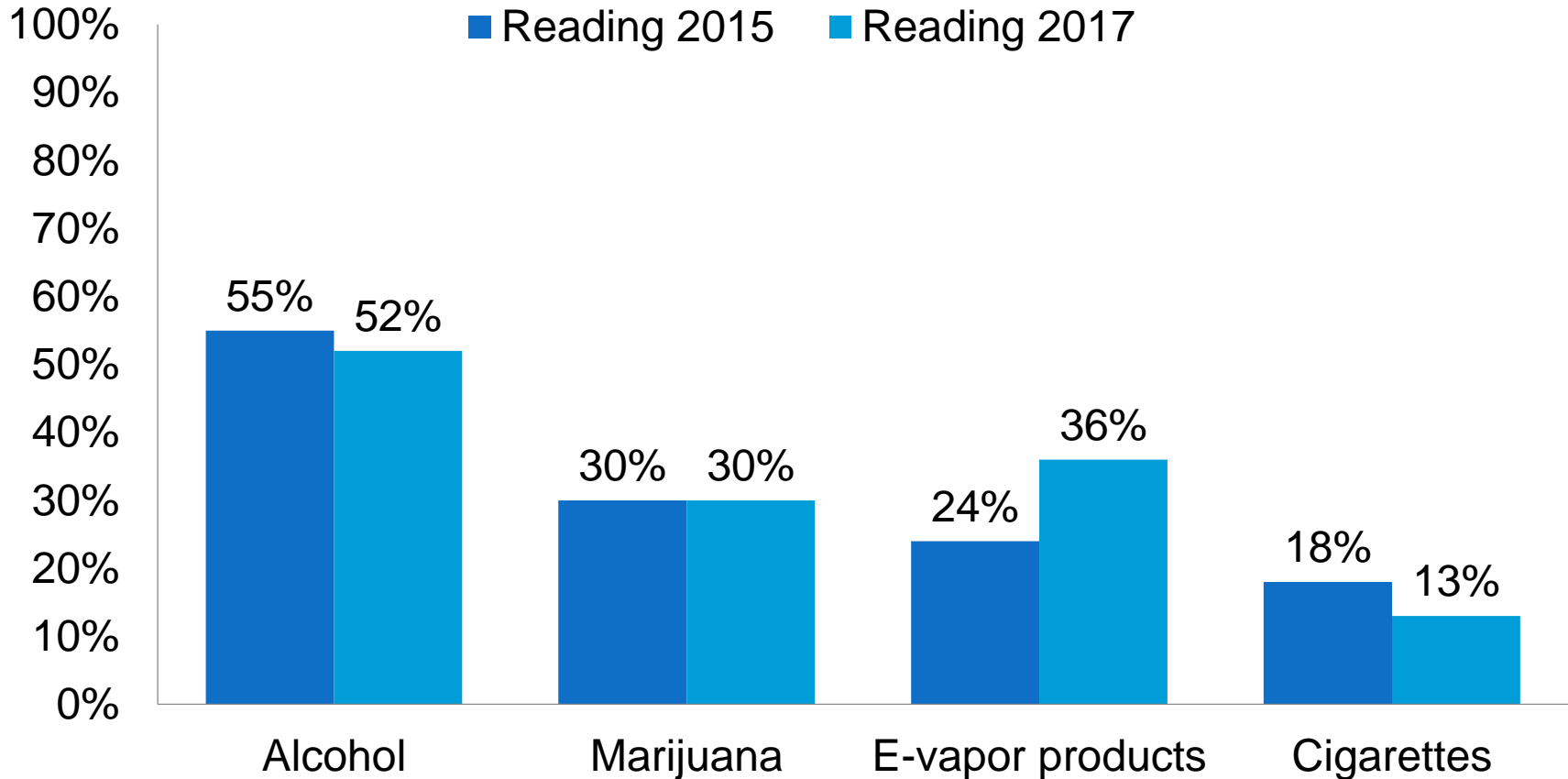
Synthetic marijuana use has been linked with adverse effects such as increased heart rate and blood pressure, drowsiness, nausea, vomiting, chest pain, hallucinations, agitation, and acute kidney injury.





# Lifetime Substance Use: Reading High School

## Top 4



2017 Reading YRBS Results produced by Rothenbach Research and Consulting for Reading Public Schools

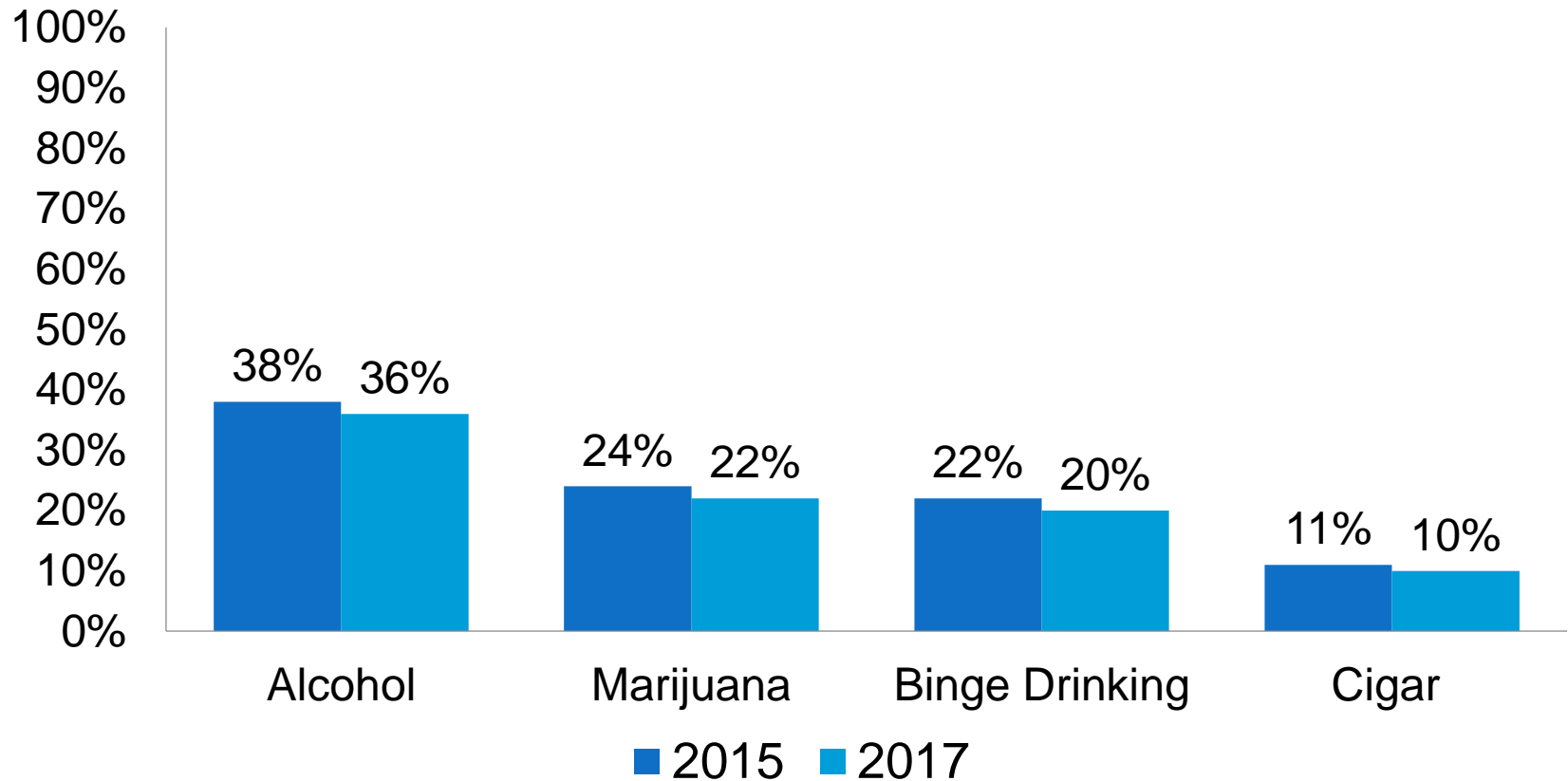
Presentation by Erica McNamara (RCASA) US and Massachusetts data includes weighted results <sup>39</sup>





# Current Substance Use: Reading High School

## Top 4



2017 Reading YRBS Results produced by Rothenbach Research and Consulting for Reading Public Schools

Presentation by Erica McNamara (RCASA) US and Massachusetts data includes weighted results 40

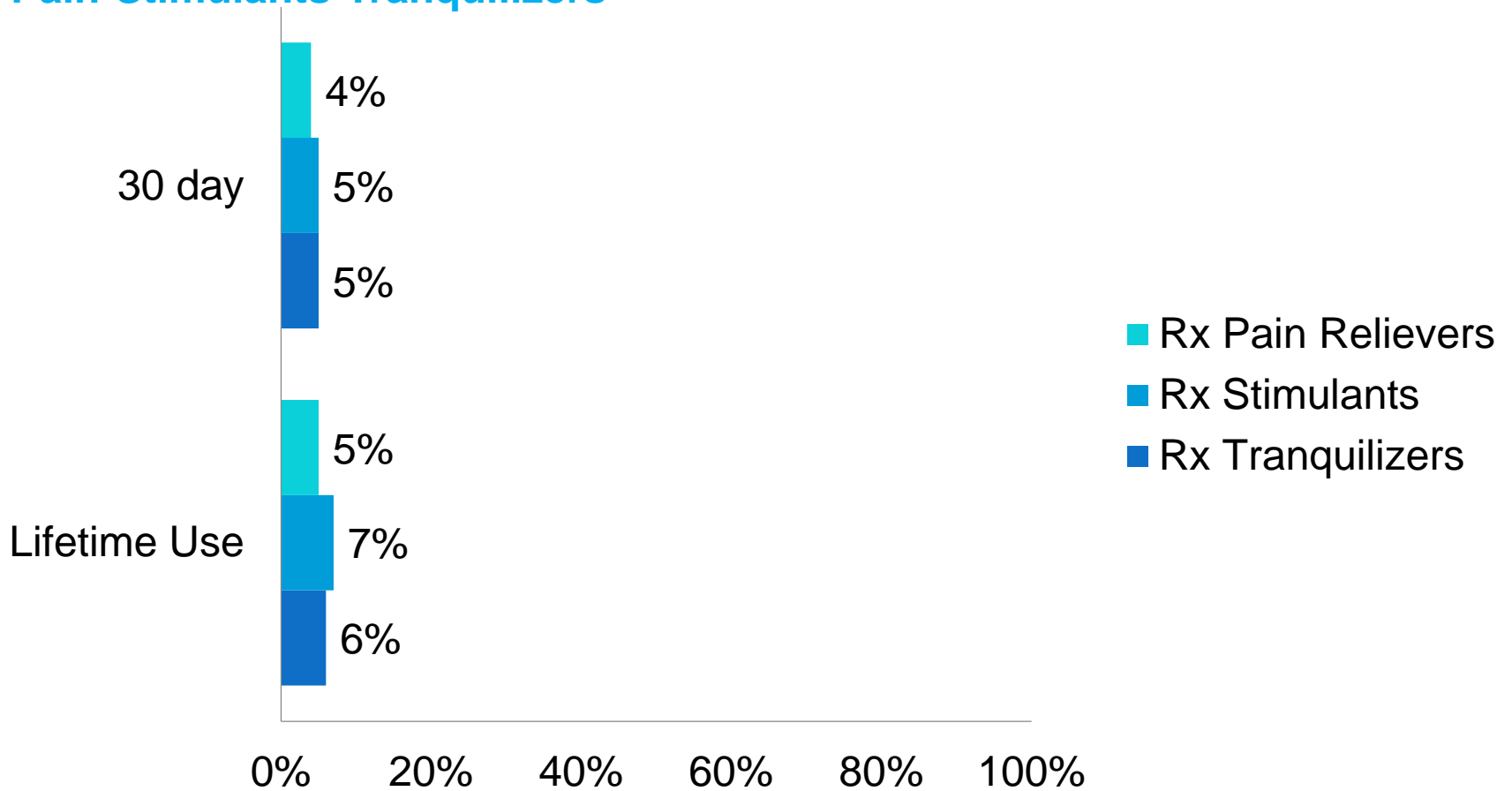






# Rx Misuse: Reading High School

## Pain-Stimulants-Tranquilizers



2017 Reading YRBS Results produced by Rothenbach Research and Consulting for Reading Public Schools

Presentation by Erica McNamara (RCASA) US and Massachusetts data includes weighted results <sup>41</sup>

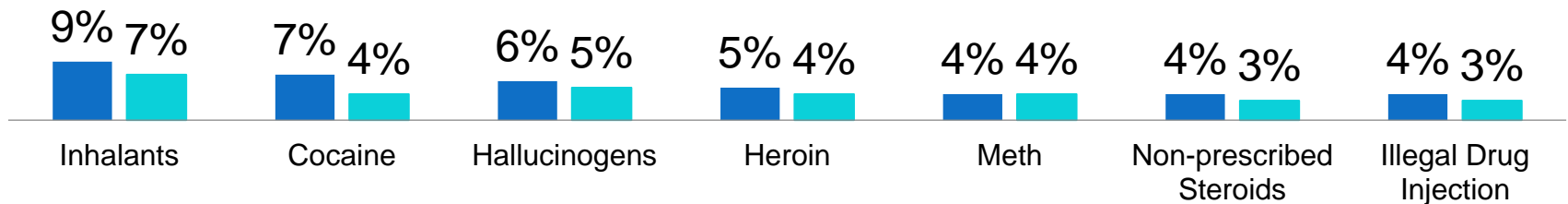




# Lifetime Substance Use: Reading High School

## Other Drugs

■ Reading 2015 ■ Reading 2017



2017 Reading YRBS Results produced by Rothenbach Research and Consulting for Reading Public Schools

Presentation by Erica McNamara (RCASA) US and Massachusetts data includes weighted results 42





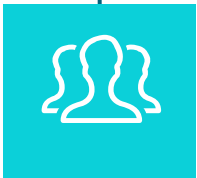
# Perception of Risk/Harm: SAMHSA Rationale



These questions measure an individual's perception of harm or risk related to peers and parents in four substance misuse content areas.



Research shows that the higher the perceived risk of harm, the less likely a person will engage in that behavior.



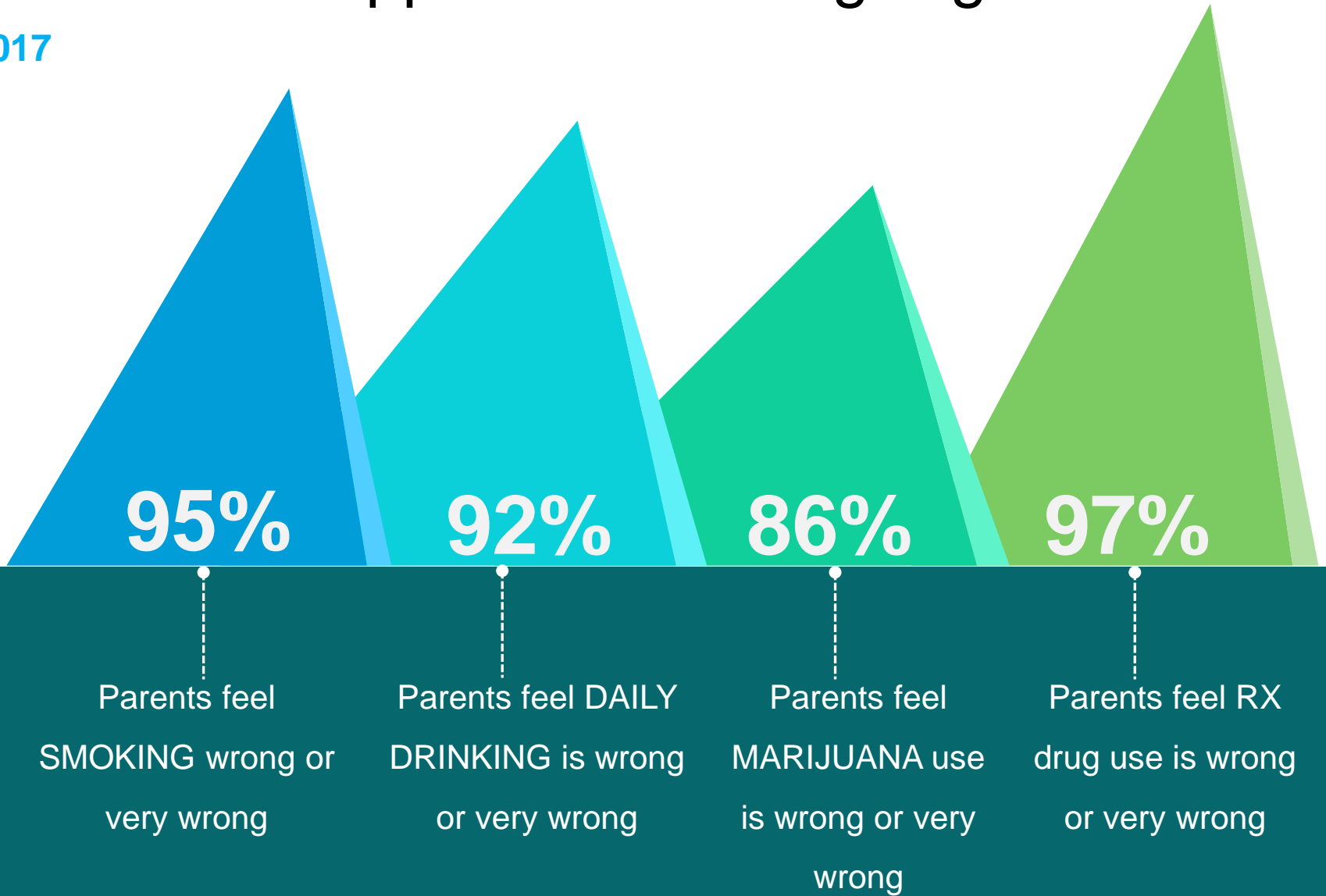
Behavior predictors are multi-faceted and perception is just one area that can reduce risk,





# Parental Disapproval: Reading High School

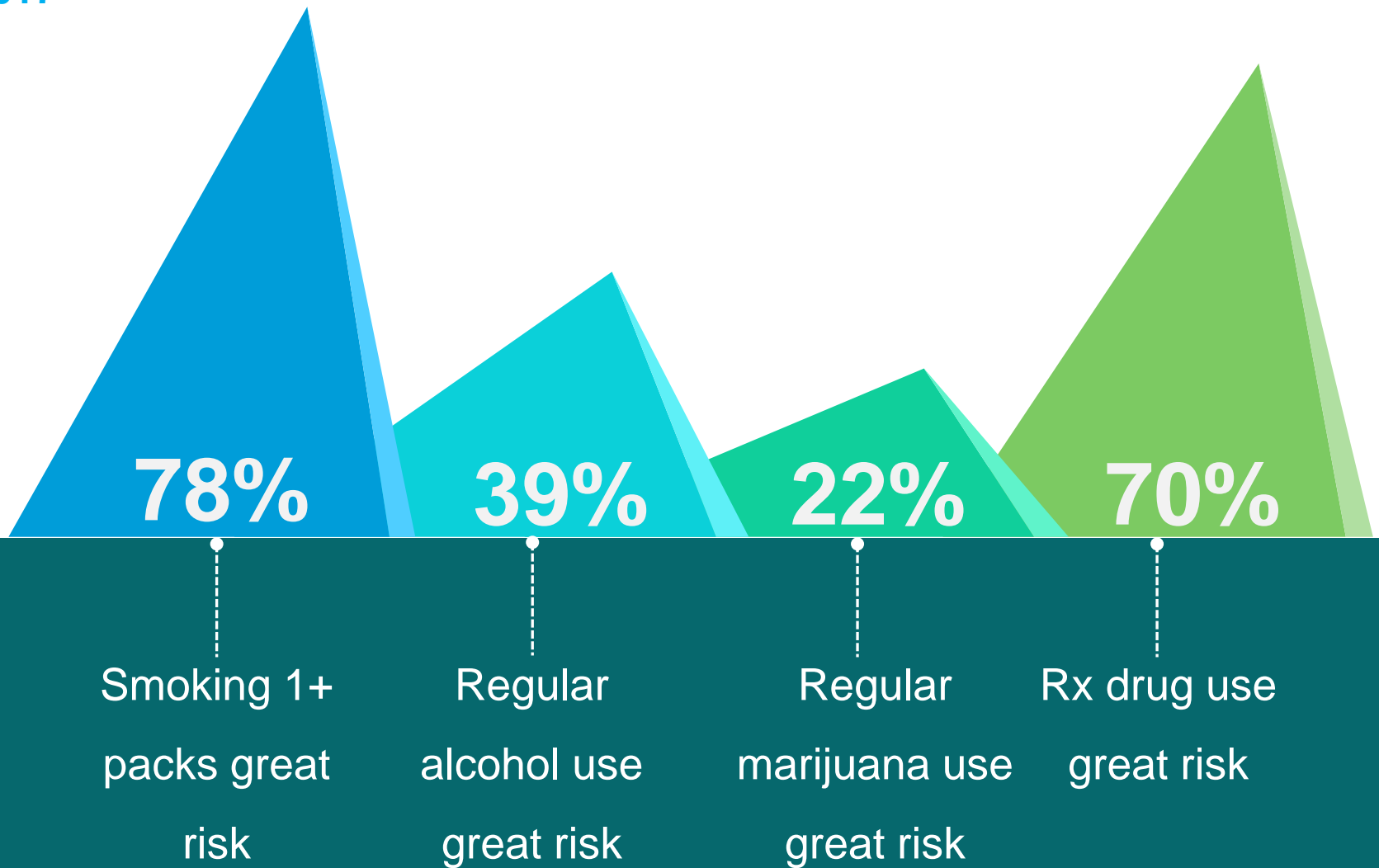
2017





# Risk of Harm: Reading High School

2017



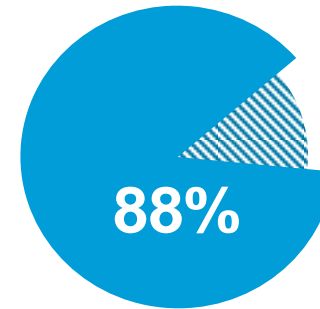
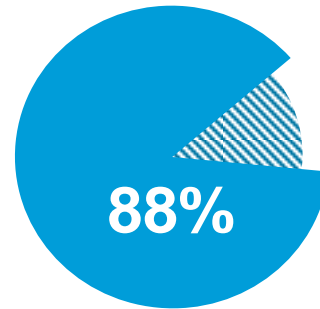
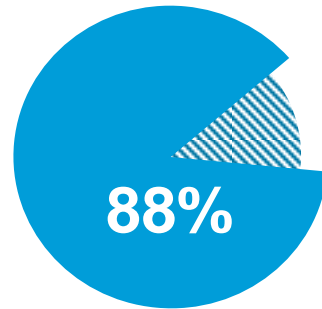


# ATOD Prevention: Reading High School

2013

2015

2017



Taught about alcohol and drug  
prevention at school





# Added Supports by School Level

## High School

- School policies
- Health Education in grades 9 & 11
- SBIRT in grades 9 & 11
- Chemical Health & Diversion Programs
- Youth Mental Health First Aid Training
- INTERFACE Referral Service
- Mobile Crisis Service
- SAFE Project Collaboration & Recovery High School

## Middle School

- School policies and team based support
- Expanded health education lessons
- Youth Mental Health First Aid Training
- INTERFACE Referral Service
- Mobile Crisis Service

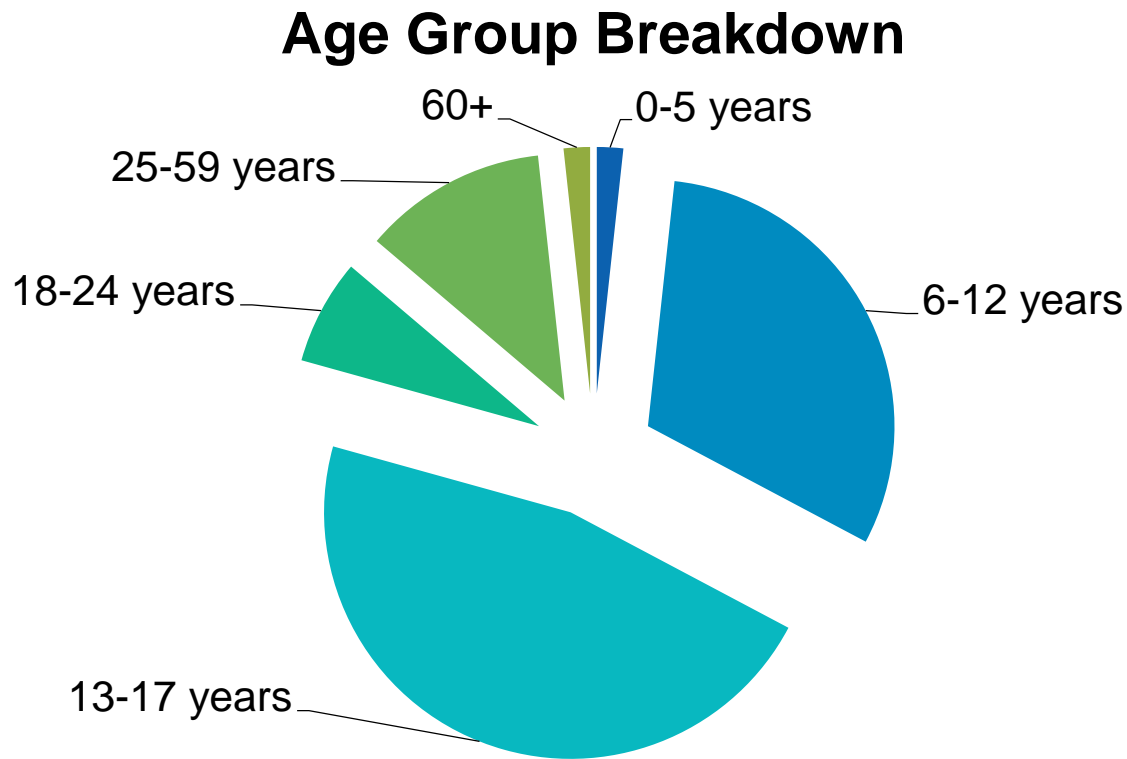
## Elementary

- Open Circle
- Yoga in the Classroom
- Core skills in health education (carve out time)
- Youth Mental Health First Aid Training
- INTERFACE Referral Service
- Mobile Crisis Service





# Interface Referral Service: 60 local cases (Nov 2016-June 2017)

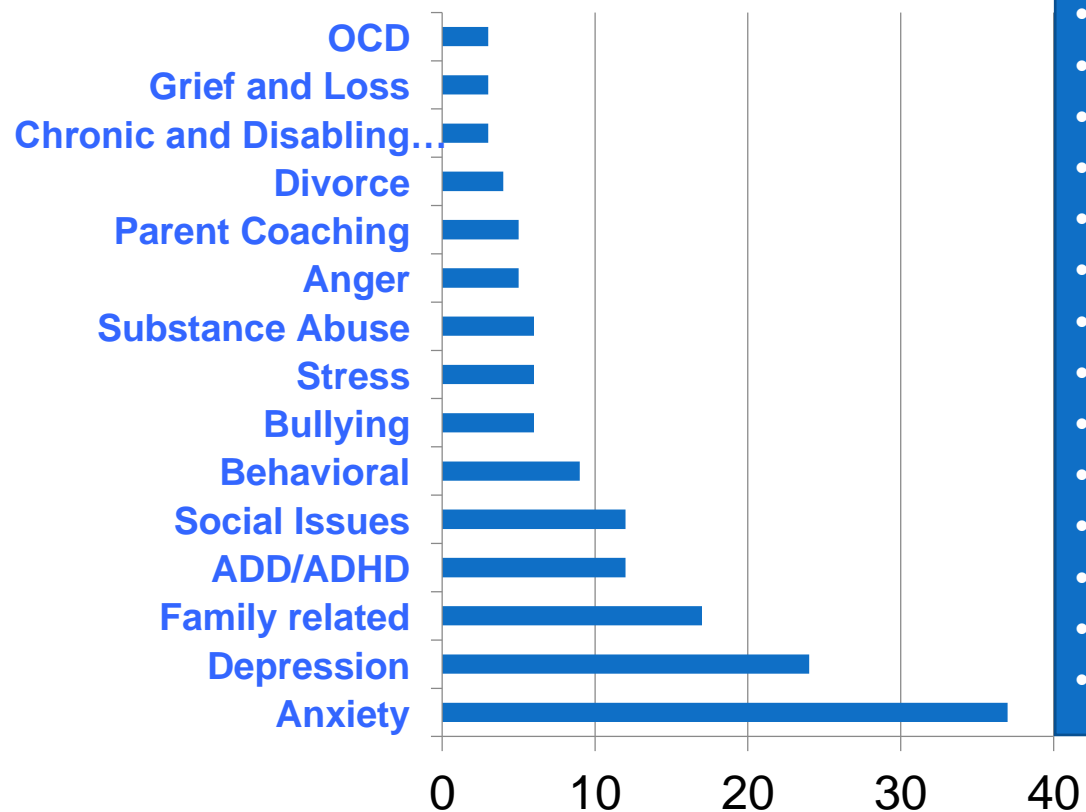






# Interface Referral Service: 60 local cases

## By presenting concerns



- Other presenting concerns
- Abuse/Neglect
  - Chronic Absenteeism
  - Relationship Violence
  - Trauma
  - Bipolar
  - Cognitive Changes/Impairment
  - Education & Training
  - End of Life issues
  - GLBT Support
  - Personality Disorders
  - Self injury
  - Suicidal Ideation
  - Veterans Issues
  - Learning Issues

2017 Reading YRBS Results produced by Rothenbach Research and Consulting for Reading Public Schools





# **Reading Coalition Against Substance Abuse**

## Get in **Touch**



Erica McNamara



[emcnamara@ci.reading.ma.us](mailto:emcnamara@ci.reading.ma.us)



781.942.6793

