Overview of YRBS 2017 RMHS Data Results

Tonight’s focus
School Climate
Behavioral Health
Substance Misuse
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

Reading Public Schools
Survey Oversight & Collection

Rothenbach Research & Consulting
Data Cleaning & Analysis

RCASA
Coordination, Materials Development, Comparisons, Data Targets & Dissemination

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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

Student response rate

96% - 100%

0 - 100%

School response rate

Actual response rate

69% - 100%

0 - 100%

60% - 100%

0 - 100%

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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

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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Reading High School Survey Sample n=1,009

<table>
<thead>
<tr>
<th>GRADE</th>
<th>(# of students)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 9</td>
<td>201</td>
</tr>
<tr>
<td>Grade 10</td>
<td>274</td>
</tr>
<tr>
<td>Grade 11</td>
<td>270</td>
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</table>

<table>
<thead>
<tr>
<th>GENDER</th>
<th>(# of students)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>441</td>
</tr>
<tr>
<td>Male</td>
<td>526</td>
</tr>
<tr>
<td>Other response</td>
<td>42</td>
</tr>
</tbody>
</table>
Reading High School Survey Sample n=1,009

- **84%** White
- **5%** African American
- **3%** Hispanic
- **2%** Asian or Pacific Islander
- **6%** Other or Multiple

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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** | spends 3+ hours per wk in lessons or practice in music, theater, or other arts.
- **Programs** | spends 3+ hours per wk in sports, clubs, or organizations.
- **Religious** | spends 1+ hour pr week in activities in a religious institution.
- **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](http://www.search-institute.org/content/40-developmental-assets-adolescents-ages-12-18)
At least one trusted adult to talk to in school: Reading High School

2007: 62%
2009: 70%
2011: 71%
2013: 70%
2015: 74%
2017: 78%

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

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>89%</td>
</tr>
<tr>
<td>2009</td>
<td>88%</td>
</tr>
<tr>
<td>2011</td>
<td>89%</td>
</tr>
<tr>
<td>2013</td>
<td>89%</td>
</tr>
<tr>
<td>2015</td>
<td>88%</td>
</tr>
<tr>
<td>2017</td>
<td>89%</td>
</tr>
</tbody>
</table>

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Eustress/Stress
Protective & Risk Factor Variability

- **Positive**: Mild elevation in stress hormones
- **Tolerable**: Serious temporary stress response buffered by supportive relationships
- **Toxic**: Prolonged activation of stress response systems in the absence of protective relationships
Negative Stressors: Reading High School

- **School work**: 36% (2017), 36% (2015)
- **Too busy**: 24% (2017), 22% (2015)
- **Worry about future**: 10% (2017), 12% (2015)
- **School expectations**: 18% (2017), 18% (2015)
- **Family or personal**: 9% (2017), 8% (2015)
- **Lack of sleep**: 6% (2017), 5% (2015)
- **Non school Activities**: 2% (2017), 4% (2015)
- **Social**: 3% (2017), 2% (2015)

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Sources of School Stress: Reading High School

- Pressure of study
  - 2017: 7%
  - 2015: 6%

- Long day
  - 2017: 9%
  - 2015: 7%

- Going to school
  - 2017: 5%
  - 2015: 8%

- Lack of interest
  - 2017: 13%
  - 2015: 14%

- Getting up in am
  - 2017: 12%
  - 2015: 15%

- Teacher expectations
  - 2017: 12%
  - 2015: 15%

- Study hard things
  - 2017: 16%
  - 2015: 24%

- Workload
  - 2017: 19%
  - 2015: 19%

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Extracurricular Activities
Reading High School

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

2017 Results

Religious services: 18%
Dance, Gymnastics, Karate, Kick-Boxing, or Group Class: 21%
School drama, band or chorus: 23%
Community Service activity: 27%
School club: 32%
Sport, club or organization not associated w/school i.e. Boy Scouts, Girl Scouts, Club Team, AAU, Figure Skating: 33%
Part-time job: 40%
At least 1 school sport: 58%
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%).

Sleep: Reading High School

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

- 2015:
  - 24% of students got 8+ hours of sleep
  - 34% got 7 hours
  - 36% got 6 hours
  - 28% got 5-6 hours
  - 18% got 5 hours
  - 15% got 5-4 hours

- 2017:
  - 24% of students got 8+ hours of sleep
  - 22% got 7 hours
  - 24% got 6 hours
  - 24% got 5-6 hours
  - 15% got 5 hours
  - 18% got 5-4 hours

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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.

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?

- 84% had no concussions
- 11% had one concussion
- 3% had two concussions
- 1% had three concussions
- 1% had four or more concussions
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:
Depression-Related: Reading High School

Felt sad/hopeless daily 2+ weeks in a row (past year)

- 2005: 22%
- 2007: 18%
- 2009: 20%
- 2011: 24%
- 2013: 25%
- 2015: 29%
- 2017: 25%


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Non-Suicidal Self-Injury: Reading High School

Injured themselves on purpose (without the intention of killing themselves, past 12 mo)

- 2005: 17%
- 2007: 15%
- 2009: 17%
- 2011: 20%
- 2013: 21%
- 2015: 22%
- 2017: 16%

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Suicide Risk: Reading High School

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

2005: 7%
2007: 11%
2009: 12%
2011: 8%
2013: 13%
2015: 10%
2017: 7%
Suicide Risk Comparison: High School

- **U.S. 2015**
- **Mass 2015**
- **Reading 2017**

<table>
<thead>
<tr>
<th>Category</th>
<th>U.S. 2015</th>
<th>Mass 2015</th>
<th>Reading 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seriously considered attempting suicide (12 months)</td>
<td>18%</td>
<td>15%</td>
<td>13%</td>
</tr>
<tr>
<td>Made a plan about how they would attempt suicide (12 months)</td>
<td>15%</td>
<td>12%</td>
<td>11%</td>
</tr>
<tr>
<td>Attempted suicide (one or more times during 12 months)</td>
<td>9%</td>
<td>7%</td>
<td>11%</td>
</tr>
<tr>
<td>Attempted suicide that resulted in an injury, poisoning, or overdose</td>
<td>3%</td>
<td>3%</td>
<td>3%</td>
</tr>
</tbody>
</table>

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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

18%  21%  21%
2013  2015  2017
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

Yes  No  Not sure

21%  74%  20%  69%  5%  11%

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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

- **Current cigarette use**:
  - Reading 2005: 10%
  - Reading 2015: 8%
  - Reading 2017: 18%

- **Lifetime cigarette use**:
  - Reading 2005: 18%
  - Reading 2015: 38%
  - Reading 2017: 13%

**U.S. Rates declined from 27% in 2005 to 11% in 2015**

**U.S. Rates declined from 54% in 2005 to 32% in 2015**

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Other Tobacco Use: Reading High School

- **Current cigar use**
  - Reading 2015: 11%
  - Reading 2017: 10%
  - U.S. Rates declined from 14% in 2005 to 10% in 2015

- **Current smokeless tobacco use**
  - Reading 2015: 7%
  - Reading 2017: 7%
  - U.S. Rates declined from 8% in 2005 to 7% in 2015
E-vapor Lifetime & Current Use: High School

US 2015: 45% ever used, 24% currently used
MA 2015: 45% ever used, 24% currently used
Reading 2017: 36% ever used, 27% currently used

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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**

2005: 77%
2007: 73%
2009: 72%
2011: 68%
2013: 63%
2015: 61%
2017: 53%

2005: 43%
2007: 45%
2009: 42%
2011: 39%
2013: 35%
2015: 33%
2017: 53%

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Underage Drinking: Reading High School

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

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Binge Drinking: High School Comparison

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

Town Liquor Policy Implemented & HSD Compliance Checks

School Chemical Health Policy & Police Zero Tolerance Policy Implemented


US  MA  Reading

29% 31% 31% 30% 27% 22% 20%

27% 28% 25% 22% 19% 18% 18%

26% 26% 24% 22% 21% 19% 18% 18%

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

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Drug Misuse: CDC Rationale

These questions measure marijuana, cocaine, inhalants, heroin, methamphetamine, 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

<table>
<thead>
<tr>
<th>Substance</th>
<th>Reading 2015</th>
<th>Reading 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol</td>
<td>55%</td>
<td>52%</td>
</tr>
<tr>
<td>Marijuana</td>
<td>30%</td>
<td>30%</td>
</tr>
<tr>
<td>E-vapor products</td>
<td>24%</td>
<td>36%</td>
</tr>
<tr>
<td>Cigarettes</td>
<td>18%</td>
<td>13%</td>
</tr>
</tbody>
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Current Substance Use: Reading High School

Top 4

<table>
<thead>
<tr>
<th>Substance</th>
<th>2015</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol</td>
<td>38%</td>
<td>36%</td>
</tr>
<tr>
<td>Marijuana</td>
<td>24%</td>
<td>22%</td>
</tr>
<tr>
<td>Binge Drinking</td>
<td>22%</td>
<td>20%</td>
</tr>
<tr>
<td>Cigar</td>
<td>11%</td>
<td>10%</td>
</tr>
</tbody>
</table>
Rx Misuse: Reading High School

Pain-Stimulants-Tranquilizers

- **30 day**
  - Rx Pain Relievers: 4%
  - Rx Stimulants: 5%
  - Rx Tranquilizers: 5%

- **Lifetime Use**
  - Rx Pain Relievers: 7%
  - Rx Stimulants: 6%
  - Rx Tranquilizers: 5%
Lifetime Substance Use: Reading High School

Other Drugs

- Inhalants: 9% (2015), 7% (2017)
- Cocaine: 7% (2015), 4% (2017)
- Hallucinogens: 6% (2015), 5% (2017)
- Heroin: 5% (2015), 4% (2017)
- Meth: 4% (2015), 4% (2017)
- Non-prescribed Steroids: 4% (2015), 3% (2017)
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

95% Parents feel SMOKING wrong or very wrong
92% Parents feel DAILY DRINKING is wrong or very wrong
86% Parents feel MARIJUANA use is wrong or very wrong
97% Parents feel RX drug use is wrong or very wrong
Risk of Harm: Reading High School

2017

- Smoking 1+ packs great risk: 78%
- Regular alcohol use: 39%
- Regular marijuana use: 22%
- Rx drug use: 70%

All risks are great, indicating significant harm and potential for intervention.
ATOD Prevention: Reading High School

2013  2015  2017

88%  88%  88%

Taught about alcohol and drug prevention at school

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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)

Age Group Breakdown

- 60+
- 0-5 years
- 25-59 years
- 18-24 years
- 13-17 years
- 6-12 years

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Interface Referral Service: 60 local cases
By presenting concerns

- OCD
- Grief and Loss
- Chronic and Disabling...
- Divorce
- Parent Coaching
- Anger
- Substance Abuse
- Stress
- Bullying
- Behavioral
- Social Issues
- ADD/ADHD
- Family related
- Depression
- Anxiety

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

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