The Maine Integrated Youth Health Survey (MIYHS)
Looking at the 2017 Data, and How to use it

Reid Plimpton
MIYHS Project Coordinator
MCDC/ MCDPH

Sheila Nelson MPH, MSW
Program Manager, Adolescent Health, & Injury Prevention
MCDC

MIYHS Background

• Comprehensive youth health survey
• First year of the project was 2009, and the project is administered in February of odd years
• The MIYHS is a result of combining multiple national survey instruments together
  • To minimize educational interruption
  • And maximize data availability
• Collaboration between the Maine Department of Health and Human Services and the Maine Department of Education.

Module Survey Design Participants Survey Question Method Data Depth

Kindergarten & Third Grade Sample (w/ replacements) Students Survey Questions: Parents Oral Health Screening: Students Paper or Phone Call State Level Data

5th & 6th Grade Sample (volunteer schools) Students Survey Questions: 5th Grade Oral Health Screening: Students Paper during normal class period -State Level Data -Public Health District Data -School Level Data* -School District Level Data*

Middle School (7th & 8th Grade) Census Students

High School (9th-12th Grade) Census

Explanation of Survey Modules and Sample Design

5th/6th and K/3 Surveys- The Basics

5th and 6th Grade Survey
• Student survey with age appropriate questions
• Height/Weight assessment for 5th grade only
• About 129 Schools sampled for 2017
  — Over 75 of those sampled participated
  — About 25 volunteer schools

Kindergarten and Third Grade
• Parent Survey
• Student Oral Health Screening:
  — Screening assistance provided by Registered Dental Hygienist
• Student Height/Weight assessment
• 24 Schools sampled for 2017
  — 22 of those sampled participated
Middle School (MS) and High School (HS) Surveys- The Basics

Middle School (7th-8th) Survey
- Student survey with age appropriate questions
- Self reported Ht/Wt
- 4 Survey Modules
  - Total question pool of about 90
  - Module question counts
    - Lowest: 80
    - Highest: 81
- All Schools invited to participate
- Over 120 Schools in 2017

High School (9th-12th) Survey
- Student survey with age appropriate questions
- Self reported Ht/Wt
- 4 Survey Modules
  - Total question pool of about 115
  - Module question counts
    - Lowest: 99
    - Highest: 110
- All Schools invited to participate
- Over 105 Schools in 2017

MIYHS Background

- Depending on the survey module, the survey covers the following topics:
  - Alcohol, tobacco and drug use
  - Bullying
  - Sexual health
  - Injury
    - Intentional
    - Unintentional
    - Vehicle Safety
  - Housing Stability
  - Physical activity
  - Nutrition
  - Mental health
  - Protective factors
    - Self confidence
    - Perception (of: harm, supports, assets, etc.)
  - Grades
  - School Climate
  - Hours of Sleep

2017 MIYHS- Fast Facts

- Over 350 schools participated
- Surveying 61,000+ students.
- Over 80% of all Middle Schools (MS) & High Schools (HS)
- All Counties and Geographic PHD’s* are reportable for the first time (!!!)
  *= Population Based Tribal Public Health District Report Unavailable

Confidence Intervals

<table>
<thead>
<tr>
<th>Survey Year</th>
<th>2015</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>51.3% (50.0%-52.5%)</td>
<td>57.3% (55.9%-58.6%)</td>
</tr>
</tbody>
</table>

- For all surveys, the reported percentage is an estimate & has some statistical error.
- This is error is accounted for by the Confidence Interval (C.I.):
  - a range defined by the Lower Confidence Limit (LCL) & the Upper Confidence Limit (UCL).
- Like the margin of error presented in political polls, the confidence interval presents a range of values within which the true underlying rate or prevalence is likely to lie.
Confidence Intervals: Determining Significant Changes

Survey Question: (High School)
Do you agree or disagree that in your community you feel like you matter to people?

Confidence Interval of this data point in 2015 and 2017; it can be seen that there is no overlap between the C.I.'s. This means there IS a statistically significant difference between the percent of high school students who reported that they feel like they matter in their community in 2015 and the percentage in 2017.

Survey Year
2015 2017
51.3% (50.0%-52.5%) 57.3% (55.9%-58.6%)

Confidence Intervals: Example
Significant Change trending over time

Survey Question: During your life, how many days have you had at least one drink of alcohol?

Showing HS Students who answered: At least 1 day

By comparing each Confidence Interval of this data point from: 2009, 2011, 2013, and 2015, it can be seen that there is no overlap between the C.I.'s. This means there has been a statistically significant decrease in Maine high school students who reported drinking alcohol at least once since 2009.

Survey Year
2009 2011 2013 2015
66.1 (65.1-67.1) 59.4 (58.2-60.6) 56.5 (55.1-58.0) 58.9 (58.0-59.8)

WHAT’S NEW
From the 2017 Maine Integrated Youth Health Survey

Have you ever been bullied on school property in the past 12 months?

<table>
<thead>
<tr>
<th>Sexual Orientation</th>
<th>%</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heterosexual</td>
<td>19.6</td>
<td>(18.6-20.7)</td>
</tr>
<tr>
<td>Gay/lesbian</td>
<td>34.2</td>
<td>(30.6-37.8)</td>
</tr>
<tr>
<td>Bisexual</td>
<td>37.5</td>
<td>(35.1-39.9)</td>
</tr>
</tbody>
</table>
2017 MIYHS Data - A Few Highlights

• 11% of Maine HS students reported being of LBG sexual orientation
• 1.5% of Maine HS students reported identifying as transgender
• 22% of Maine HS students reported being bullied on school property in the past year
• 46% of Maine MS students reported being bullied on school property in their lifetime
• Significantly more Maine HS students agreed that “at least one of their teachers really cares and is there for help and support” as compared to 2015 (81.5% vs. 79.7%)
• 22% of Maine 5th&6th grade students reported being home alone for more than 2 hours on an average school day.

2017 MIYHS Data - A Few Highlights

• Significantly fewer Maine HS students reported smoking a cigarette in the past 30 days as compared to 2015 (8.8% vs. 10.7%)
• Significantly fewer Maine MS students reported smoking a cigarette in the past 30 days as compared to 2015 (1.9% vs 2.7%)
• About 22.5% of Maine HS students and about 4% of Maine MS students have tried alcohol in the past 30 days
• About 19% of Maine HS students and about 4% of Maine MS students have tried marijuana in the past 30 days
  – About 65% of Maine HS students reported a low perception of harm in using marijuana once or twice a week
  – About 52% of Maine HS students reported a high ease of access to marijuana
New ?’s for 2017

“Some people describe themselves as transgender when their sex at birth does not match the way they think or feel about their gender. Are you transgender?”

A. Yes, I am transgender
B. No, I am not transgender
C. I am not sure if I am transgender
D. I do not understand the question

New ?’s for 2017

“During the past 30 days, where did you usually sleep?”

A. In my parent’s or guardian’s home
B. In the home of a friend, family member, or other person because I had to leave my home or my parent or guardian cannot afford housing
C. In a shelter or emergency housing
D. In a motel or hotel
E. In a car, park, campground, or other public place
F. I do not have a usual place to sleep
G. Somewhere else

Housing Insecure

Bullied in School, Past 12 Months

Not Transgender

Transgender

Depression, Past 12 Months

Not Transgender

Transgender

Considered Suicide, Past 12 Months

Not Transgender

Transgender
Please tell us how many of the following six things have EVER happened to you (add up how many ever happened to you):

- Your parents/guardians got divorced or separated
- A parent/guardian died
- A parent/guardian was in jail or prison
- You lived with an adult who had a mental illness
- Your parent or another adult you lived with often swore at you, insulted you, put you down, or humiliated you
- You were physically hurt by an adult in your home

Nearly 1 in 4 Maine high school students have experienced 3 or more ACEs. The majority have experienced less than 3; over one-third have experienced no adverse events.
Experiencing 3 or more ACEs...

... was more common in Piscataquis, Waldo and Washington counties.

Experiencing 3 or more ACEs...

... was more common among girls and LGB students compared with boys and heterosexual students.

Experiencing 3 or more ACEs...

... was more common among American Indian, Multiracial and Hispanic/Latino students relative to students of other races or non-Hispanic ethnicity.

Over one-third of students with 3 or more ACEs reported having experienced bullying at school in the past year compared less than 17% of students with less than 3 ACEs.
Smoking cigarettes and using alcohol in the past 30 days were both higher among students with 3 or more ACEs.

Higher ACE students with frequent support from non-parental adults were less likely to consider suicide or smoke cigarettes.

Strong familial love and support was protective against suicide consideration and smoking among higher ACE students.

Higher ACE students who felt their school “cares about kids” were less likely to experience suicidal ideation or to smoke.
Challenges and limitations

- MIYHS data are generalizable to public school students, but not to young people who are not in school.
- ACE and protective factor questions are at end of the HS survey and have higher % of missing answers.
- ACE question leaves out exposure to substance use in home.
- Not able to assess association between ACE score and academic performance; questions are on different survey modules.
- On-going efforts are underway to improve quality of MIYHS data.

2017 MIYHS Data- Helpful Hints and Where to find the data:

- 2017 Detailed Reports-
  - All pdf versions of reports have a “search” function- Ctrl+F (use either key words or variable code)
- The Comparison Reports-
  - these highlight only core measures
  - meaning that these showcase the data that is available all the way down to the school level (as response rates and confidentiality allows)

For both sets of reports above, See here (click the “Reports by” at data depth needed for a drop down menu to appear)

- Data Dashboard-
  - Has been updated with 2017 MS and HS data, along with some new measures! See here
- Topic Specific Infographics
  - Previous year’s formats have been updated and can be found here
  - New formats are being developed (including Transgender, LGBT, and more)
Thank you!

- Questions?
- Contact information:
  Reid Plimpton - reid.plimpton@maine.gov or 207-287-5084
  Sheila Nelson - Sheila.nelson@maine.gov or 207-287-3856