

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

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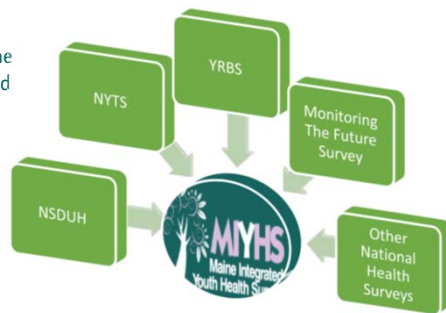


Explanation of Survey Modules and Sample Design

Module	Survey Design	Participants	Survey Question Method	Data Depth
Kindergarten & Third Grade	Sample (w/ replacements)	Survey Questions: Parents Oral Health Screening: Students	Paper or Phone Call	State Level Data
5 th & 6 th Grade	Sample (+volunteer schools)	Students	Paper during normal class period	-State Level Data -Public Health District Data -School Level Data* -School District Level Data*
Middle School (7 th & 8 th Grade)	Census			-State Level Data -Public Health District Data -County Level Data
High School (9 th -12 th Grade)	Census			-School Level Data* -School District Level Data*

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.



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

2017 MIYHS- Fast Facts

Data.mainepublichealth.gov/miyhs

OR

Maine.gov/MIYHS

- 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

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

Confidence Intervals

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

- For all surveys, the reported percentage is an estimate & has some statistical error.
- This 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.

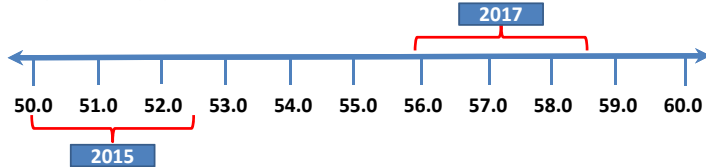
Confidence Intervals: Determining Significant Changes

Survey Question: (High School)

Do you agree or disagree that in your community you feel like you matter to people?

Showing HS Students who answered:

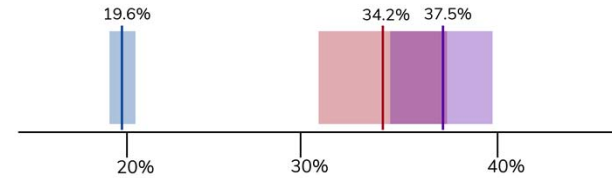
'Agree' or 'Strongly Agree'



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

By comparing the *Confidence Interval* of this data point in 2015 and 2017, it can be seen that there is no overlap between the C.I.'s.

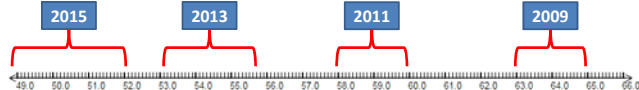
This means there **IS** a statistically significant difference between the percent of high school students who reported that they feel like they matter in their community in 2015 and the percentage in 2017



Have you ever been bullied on school property in the past 12 months?		
	%	95% Confidence Interval
Heterosexual	19.6	(18.6-20.7)
Gay/lesbian	34.2	(30.6-37.8)
Bisexual	37.5	(35.1-39.9)

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

Survey Year			
2009	2011	2013	2015
64.1 (63.1-65.1)	59.4 (58.2-60.6)	54.3 (53.1-55.6)	50.9 (49.8-52.0)

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.

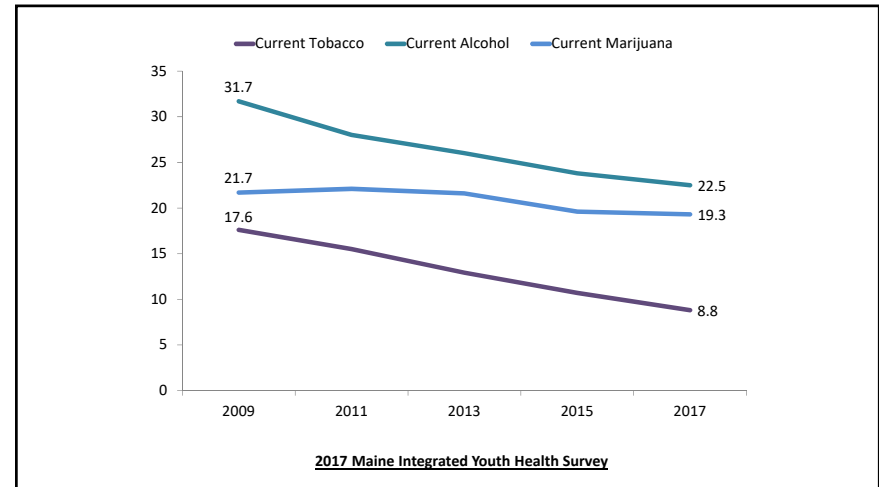
WHAT'S NEW



From the 2017 Maine Integrated Youth Health Survey

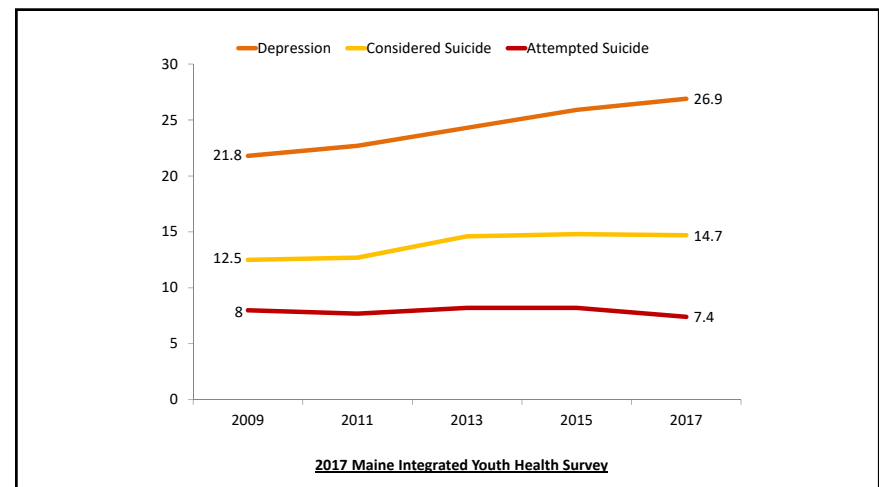
2017 MIYHS Data- A Few Highlights

- 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

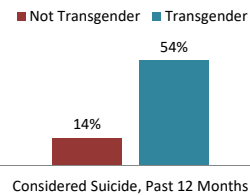
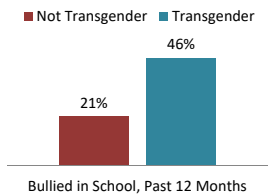
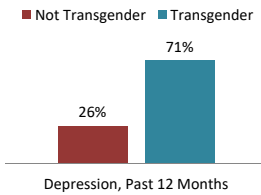
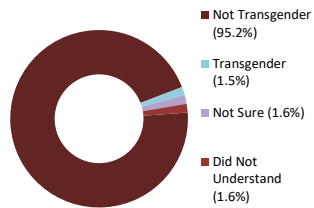
“Some people describe themselves as transgender when their sex at birth does not match the way they think or feel about their gender. Are you transgender?”

- 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

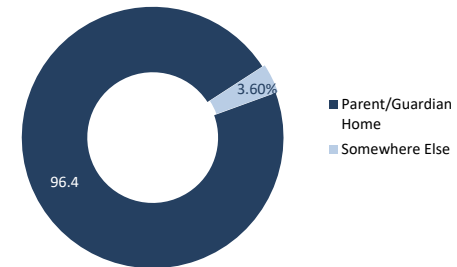
New ?'s for 2017

“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



How are ACEs measured in other national surveys?

BRFSS 2010 Data

Number of Adverse Childhood Experiences (ACE Score)	Women Percent (N =32,539)	Men Percent (N =21,245)	Total Percent (N =53,784)
0	40.0%	41.4%	40.7%
1	22.4%	24.9%	23.6%
2	13.4%	13.2%	13.3%
3	8.0%	8.1%	8.1%
4 or more	16.2%	12.4%	14.3%

Image source: <https://www.cdc.gov/violenceprevention/acestudy/about.html>

Behavioral Risk Factor Surveillance Survey (BRFSS)

What is it?

- https://www.cdc.gov/violenceprevention/acestudy/ace_brfss.html
- “The BRFSS is an annual, state-based, random-digit-dial telephone survey that collects data from non-institutionalized U.S. adults regarding health conditions and risk factors.”

So, What does it measure?

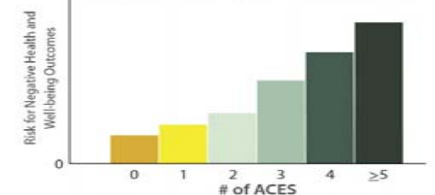
- BRFSS surveys adults aged 18+ years old
- Asks about ACES experienced during “first 18 years of life”
- “Adapted from the original CDC-Kaiser ACE study...to collect information on child abuse and household challenges”
- Does not include Neglect Measures

Image source: <https://www.cdc.gov/violenceprevention/acestudy/about.html>

Behavioral Risk Factor Surveillance Survey (BRFSS)

Association between ACEs and Negative Outcomes

ACES have been found to have a graded dose-response relationship with 40+ outcomes to date.



*This pattern holds for the 40+ outcomes, but the exact risk values vary depending on the outcome.

Image source: <https://www.cdc.gov/violenceprevention/acestudy/about.html>

National Survey on Children's Health (NSCH)

<https://www.rwjf.org/en/library/articles-and-news/2017/10/traumatic-experiences-widespread-among-u-s-youth--new-data-show.html>



Image source: <https://www.cdc.gov/violenceprevention/acesstudy/about.html>

So, What does it measure?

- Parental Response of youth 0-18
- Answer of Interest: “% of Children to experience 1 or more (or 2 or more) Adverse Childhood Experiences”
- Denominator (experiences asked about): 8 ACEs
- **2015-2016 Maine %: 25%** of Maine’s youth 0-18 have experienced 2 or more ACEs

MIYHS ACE question

- Question asked for first time in 2017 HS survey.
- MIYHS ACE question includes similar items to those in the original ACEs study.
- ACE score includes responses to separate questions on **sexual violence** and **domestic violence at home**.
- Did **not** include **parental substance abuse**, but planning to include in 2019 version.

Child and Adolescent Health Measurement Initiative (CAHMI)

What is it?

- <http://www.cahmi.org/>
- “The Child and Adolescent Health Measurement Initiative (CAHMI) is a national initiative based out of the Bloomberg School of Public Health at Johns Hopkins University in Baltimore, Maryland. Originally housed at FACCT – Foundation for Accountability, the CAHMI was established in 1998.”

Image source: <https://www.cdc.gov/violenceprevention/acesstudy/about.html>

So, What does it measure?

- The CAHMI ACE agenda and data work utilizes NSCH ACE datasets
- For more NSCH info, see previous slide

ACE question wording

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

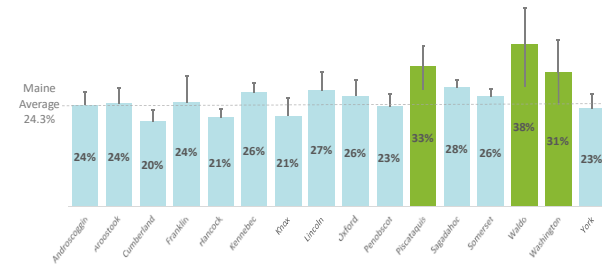
- Your parents/guardians got divorced or separated
- A parent/guardian died
- A parent/guardian was in jail or prison
- You lived with an adult who had a mental illness
- Your parent or another adult you lived with often swore at you, insulted you, put you down, or humiliated you
- You were physically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

Additional ACE score questions

- **Sexual violence:** *Have you ever been forced (physical or otherwise) to have sexual contact?*
- **Exposure to domestic violence at home:** *Has violence in your home, or the threat of violence, ever made you want to leave home, even just for a short while?*

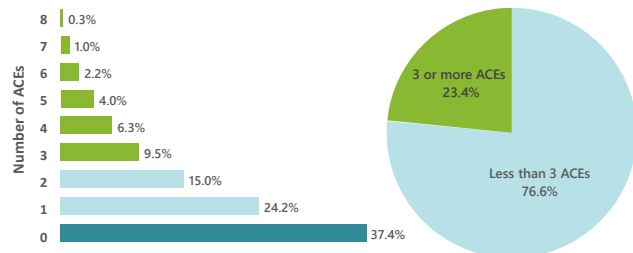
Experiencing 3 or more ACEs...

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



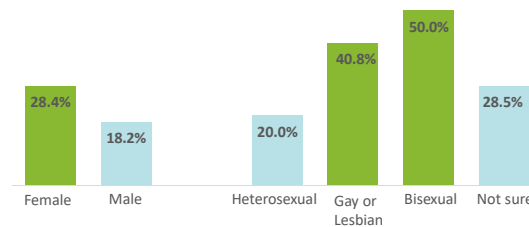
Nearly **1 in 4** Maine high school students have experienced **3 or more ACEs**.

The **majority** have experienced **less than 3**; **over one-third** have experienced **no adverse events**.



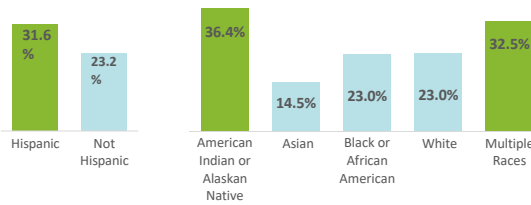
Experiencing 3 or more ACEs...

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

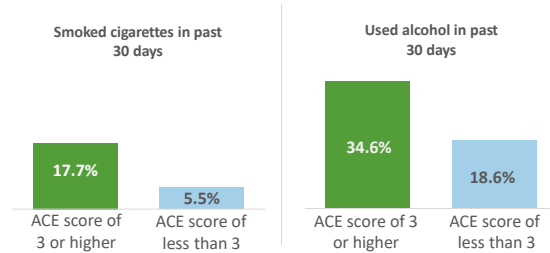


Experiencing 3 or more ACEs...

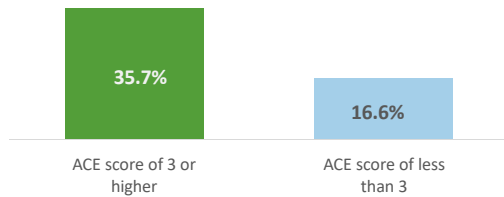
... was more common among **American Indian, Multiracial** and **Hispanic/Latino students** relative to students of **other races** or **non-Hispanic ethnicity**.



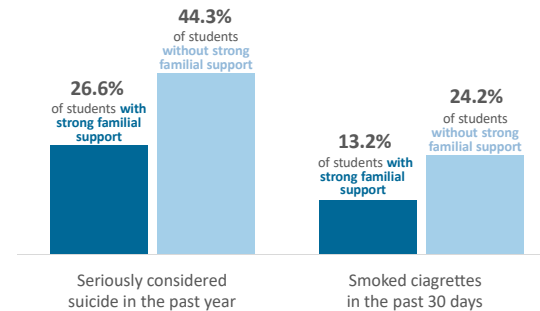
Smoking cigarettes and using alcohol in the past 30 days were both **higher** among students with **3 or more ACEs**.



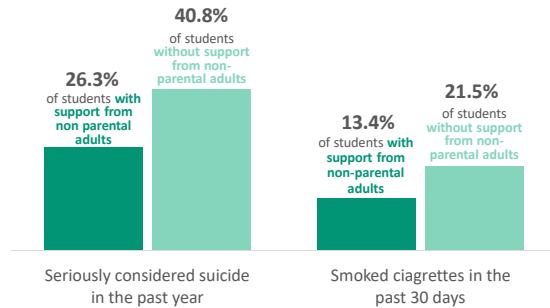
Over one-third of students with **3 or more ACEs** reported having experienced bullying at school in the past year, compared **less than 17%** of students with **less than 3 ACEs**.



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



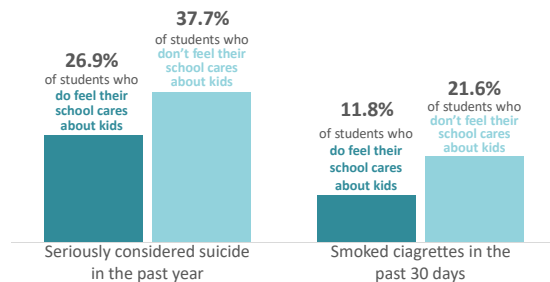
Higher ACE students **with frequent support from non-parental adults** were less likely to consider suicide or smoke cigarettes.



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.

Higher ACE students who felt their **school "cares about kids"** were less likely to experience suicidal ideation or to smoke.

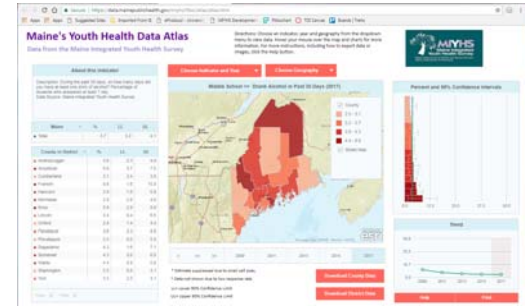
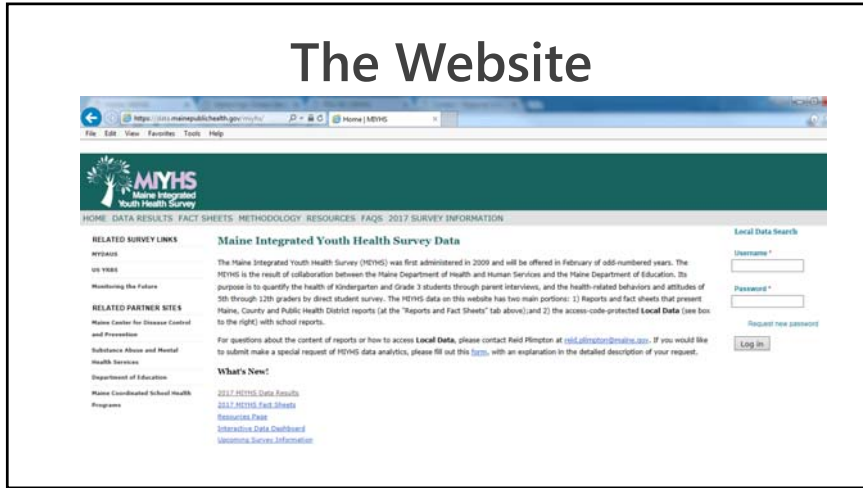


2017 MIYHS Data- Helpful Hints and Where to find the data:

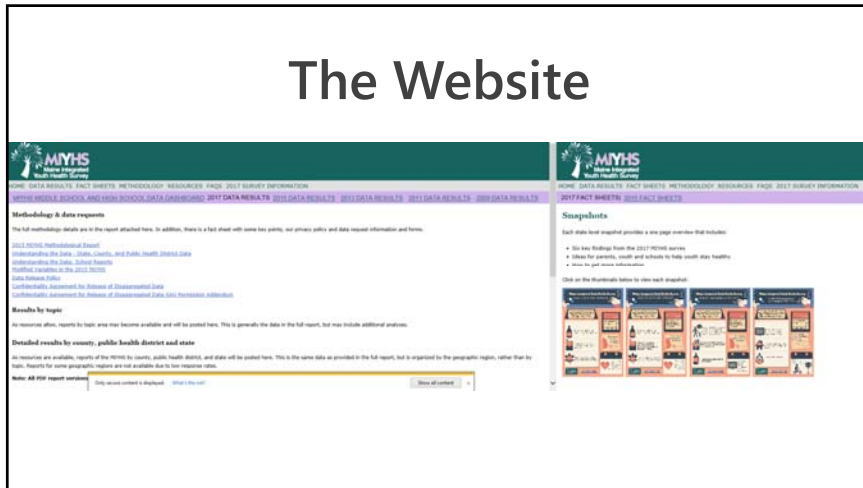
- **2017 Detailed Reports-**
 - All pdf versions of reports have a "search" function- Ctrl+F (use either key words or *variable code*)
- **The Comparison Reports-**
 - these highlight only *core* measures
 - meaning that these showcase the data that is available all the way down to the school level (as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

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

The Website



The Website



Thank you!

- Questions?
- Contact information:
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 Sheila Nelson- Sheila.nelson@maine.gov or 207-287-3856

