

**"IT PAYS TO ASK...IT PAYS TO KNOW"**

# **Enhancing Your Data IQ:** Advanced Techniques to Help Tell Your Prevention Story

**Presented by:**

- Elizabeth Eckley Winder, Training & Technical Assistance Coordinator, EPISCenter

**PA Youth Survey**  
**Webinar Series**

**Webinar #2**  
**9/16/2016**



**pennsylvania**  
DEPARTMENT OF EDUCATION



**pennsylvania**  
DEPARTMENT OF DRUG AND  
ALCOHOL PROGRAMS



**pennsylvania**  
COMMISSION ON CRIME  
AND DELINQUENCY

# PAYS Webinar Schedule



- September 16<sup>th</sup>      Enhancing Your Data Analysis IQ:  
Advanced Techniques to Help Tell  
Your Prevention Story
- September 23<sup>rd</sup>      2015 PAYS State Report: Trends and  
Highlights
- September 30<sup>th</sup>      Fighting the Opioid Epidemic  
through Prevention

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# Topics Covered Today



- Crosstabs Online Tool
- Cut Points

# Session Objectives

- ✓ Participants will understand and be able to explain the PAYS crosstabs feature
- ✓ Participants will recognize and understand cut-point methodology

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# Before you can tell your story using outcomes...

- 1) Need to completely understand your data, including its nuances
- 2) Need to understand all of the tools available to help you tell your best story

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# Mental Set

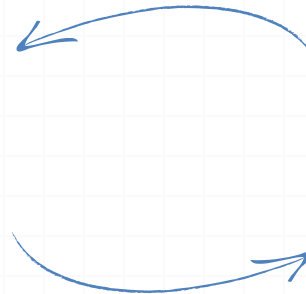
## Long Division

$$\begin{array}{r} 37 \overline{) 85434} \\ \underline{74000} \phantom{=} 2000x \\ 11434 \phantom{=} 200x \\ \underline{7400} \phantom{=} 100x \\ 4034 \phantom{=} 8x \\ \underline{3700} \phantom{=} 1x \\ 334 \\ \underline{296} \\ 38 \\ \underline{37} \\ 1 \end{array} = 2309$$

$\Rightarrow 2309 \times 1$

See calculator for step  
by step instructions.  
[www.doubledivision.org](http://www.doubledivision.org)

## Calculator



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# Crosstabs Online Tool

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# Crosstab Online Tool

- Allows you to examine responses to one variable on the PAYS relative to responses on a second item.

How to Use  
Crosstabs

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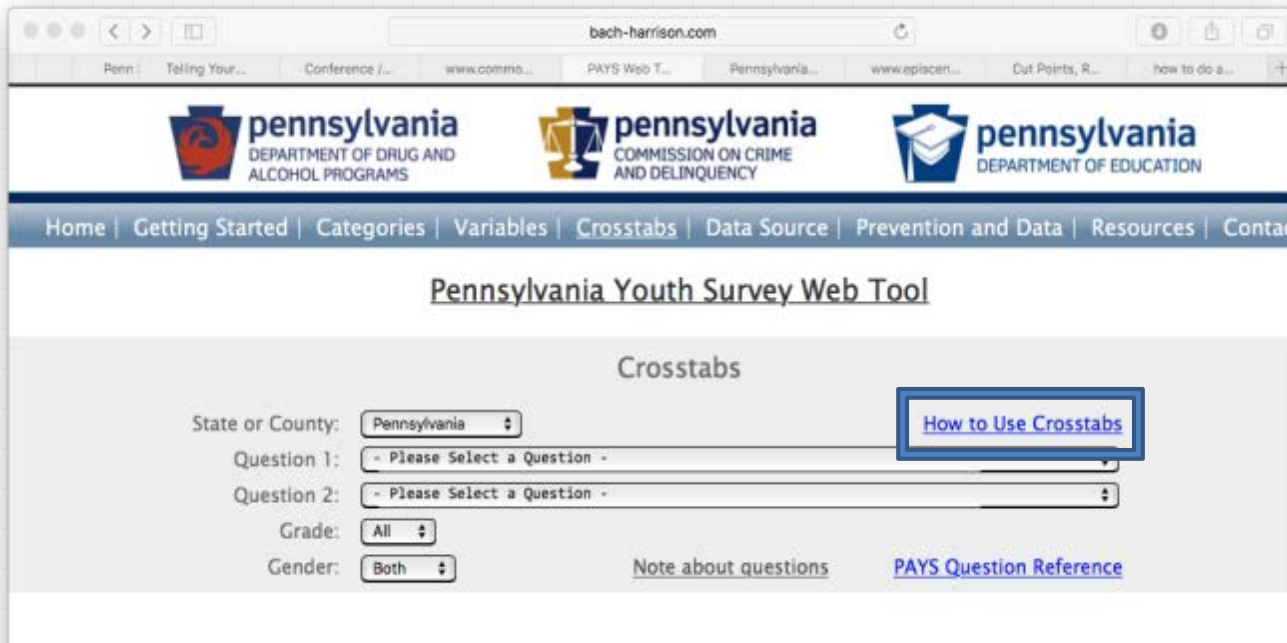




# How to Access the Crosstabs Feature?

- 1) Visit [www.bach-harrison.com/payswebtool/](http://www.bach-harrison.com/payswebtool/)
- 2) Under the **Viewing Data** heading, click **Getting Started**.
- 3) Under the **Crosstabs** heading, click **Crosstabs**.

# Crosstabs Web Tool



## NOTE:

*2015 PAYS data has been added to the web tool*

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# Crosstabs Example



[Getting Started](#) | [Categories](#) | [Variables](#) | [Crosstabs](#) | [Data Source](#) | [Prevention and Data](#) | [Resources](#) | [Contact Us](#)

## Pennsylvania Youth Survey Web Tool

### Crosstabs

State or County:

[How to Use Crosstabs](#)

Question 1:

Question 2:

Grade:

Gender:

[Note about questions](#)

[PAYS Question Reference](#)

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# Crosstabs Example

Question 2

State Crosstab Percentages (PAYS 2015)

Grade: All, Gender: Both		How many times in the past 30 days have you had beer, wine, or hard liquor?							Total
		0 Occasions	1-2 Occasions	3-5 Occasions	6-9 Occasions	10-19 Occasions	20-39 Occasions	40+ Occasions	
How wrong do your parents feel it would be for you to: Drink beer, wine or hard liquor (for example, vodka, whiskey, or gin) regularly?	Not Wrong at All	2.7	4.4	9.2	10.4	14.2	20.2	29.8	3.6
	A Little Bit Wrong	3.4	16.8	23.9	28.6	38.0	37.9	17.6	6.7
	Wrong	14.5	33.4	35.4	35.3	30.2	27.3	21.2	18.1
	Very wrong	79.3	45.4	31.6	25.7	17.6	14.5	31.5	71.7
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Question 1

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# Question???

**So what does this crosstabs between the following two questions tell us?**

- **B23d:** How wrong do your parents feel it would be for you to: Drink beer, wine or hard liquor regularly?
- **X10a:** How many times in the past 30 days have you, had beer, wine, or hard liquor?

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# Crosstabs Example

State Crosstab Percentages (PAYS 2015)

Grade: All, Gender: Both		How many times in the past 30 days have you had beer, wine, or hard liquor?							Total
		0 Occasions	1-2 Occasions	3-5 Occasions	6-9 Occasions	10-19 Occasions	20-39 Occasions	40+ Occasions	
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	Wrong	14.5	33.4	35.4	35.3	30.2	27.3	21.2	18.1
	Very wrong	79.3	45.4	31.6	25.7	17.6	14.5	31.5	71.7
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

# Only You Can Make It Meaningful!!!

- The **more wrong** parents feel it would be for their children to drink (*beer, wine, and/or hard liquor*) the **less likely** their children are to have consumed these substances at a high rate the past 30 days.

## Conversely:

- Those parents who **do not feel** that drinking (*beer, wine, and/or hard liquor*) is wrong, are **more likely** to have children who drink at a higher rate during the past 30 days.

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# Reflection Questions

- Please reflect on the following:
  1. What questions do you see value in “cross tabbing” based on your coalition’s prevention efforts?
  2. What benefits/contributions do you foresee the crosstabs feature providing your coalition in terms of PAYS analysis?
  3. How might the crosstabs feature help your coalition to better tell its story?

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# Cut-Points

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# Cut Point Methodology

- Based on the research done in Michael Arthur and colleagues (including Hawkins & Catalano) in 2007 on 84,663 students from 6 states
- In 2015, the cut points are based on 11 states:
  1. Pennsylvania
  2. Arizona
  3. Florida
  4. Iowa
  5. Louisiana
  6. Montana
  7. Nebraska
  8. New York
  9. Oklahoma
  10. Utah
  11. Washington

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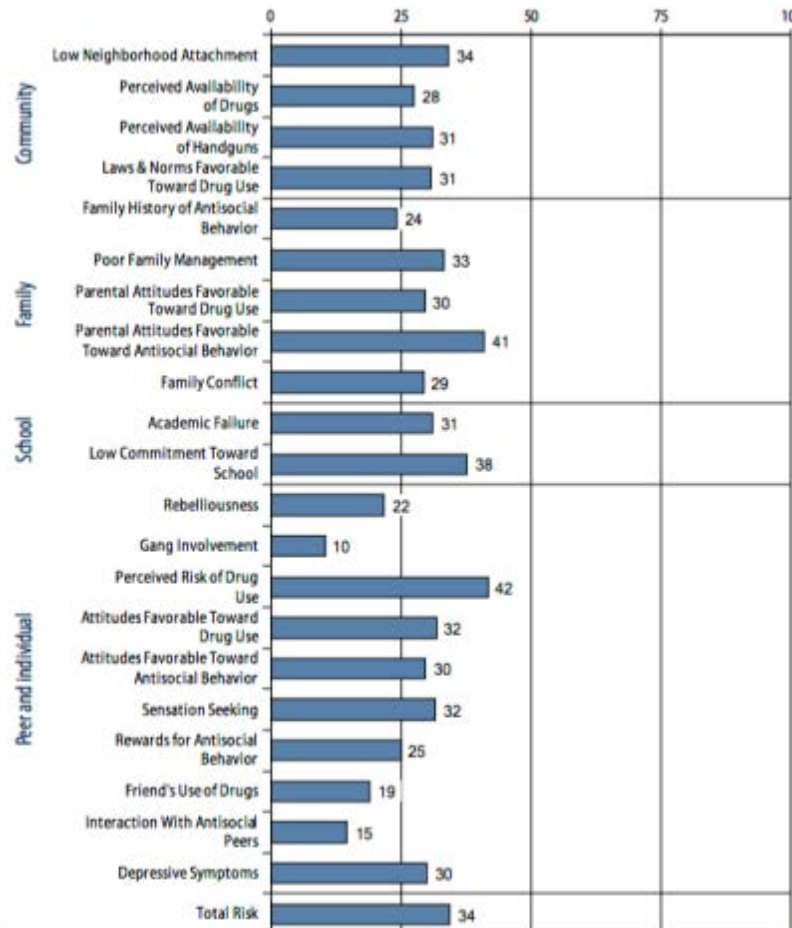
# What Are Cut-Points?

- A cut-point helps to define the level of responses that are **at or above** a standard/normal level of risk, or conversely **at or below** a standard/normal level of protection.
- Rather than randomly determining whether a youth may be at risk or protected, a statistical analysis is completed that helps to determine at what point on any particular scale that the risk or protective factor **is outside the normal range**.

# What Are Cut Points?

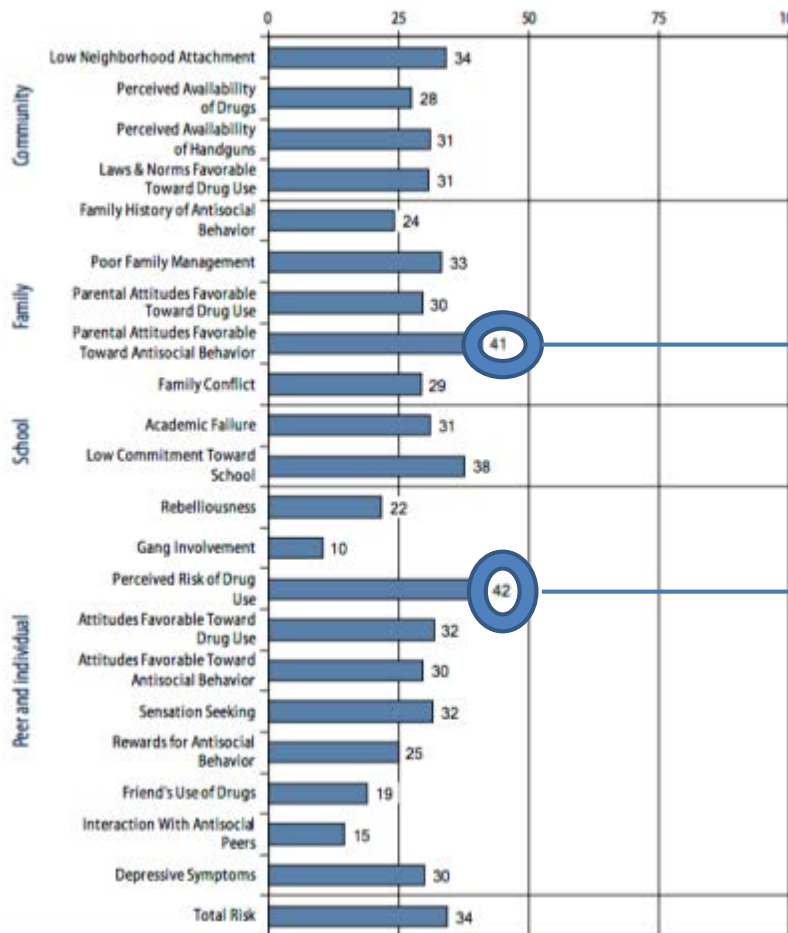
- When you are provided a % for a particular scale, you will know that this % represents the population of your youth that are either at greater risk or lower protection than the national cut-point level.
- Total Risk and Protection:
  - 6<sup>th</sup> and 8<sup>th</sup> grade **5 or more** risk factors
  - 10<sup>th</sup> and 12<sup>th</sup> grade **7 or more** risk factors
  - Total protection is **3 or more** protective factors regardless of grade

## Risk Factors, Centre County 2015 Pennsylvania Youth Survey



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# Risk Factors, Centre County 2015 Pennsylvania Youth Survey



**If you have a 41 on “parental attitudes favorable towards drug use,” that means:**

- 41% of students are at risk for problem behaviors associated with poor family management

**If you have a 42 on “perceived risk of drug use,” that means:**

- 42% of students are at risk for problem behaviors associated with perceived risk of drug use

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# Want More Information on Cut-Points?

1. Pennsylvania Youth Survey
  - pp. 90 *“Understanding Cut Points”*
2. Bach Harrison Web Tool:
  - Risk and Protective Factor Information *(Scroll half way down the page to “Understand Cut-Points”)*
3. Arthur, et. al. (2007). *Measuring risk and protection in communities using the Communities That Care Youth Survey.*

# Your PAYS Toolbox

- Visit [www.PAYS.pa.gov](http://www.PAYS.pa.gov) for your PAYS Toolbox:
  - Statewide Summary Report
  - County-Level Reports *(for 55 counties)*
  - PAYS User Guide and Worksheets
  - PAYS Online Data Analysis Tool
  - PAYS Survey Instrument available
  - Fact Sheets about PAYS for various audiences
  - PAYS FAQ
  - And other great information!

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# How can you best analyze your PAYS data?

The Pennsylvania Youth Survey (PAYS) 2015

User Guide and Worksheets for School Professionals

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[www.episcenter.org/paysguide](http://www.episcenter.org/paysguide)

The EPISCenter represents a collaborative partnership between the Pennsylvania Commission on Crime and Delinquency (PCCD), and the Prevention Research Center, College of Health and Human Development, Penn State University. The EPISCenter is funded by PCCD and the Department of Public Welfare. This resource was developed by the EPISCenter through PCCD grant VP-ST-24368.



- Visit [www.PAYS.pa.gov](http://www.PAYS.pa.gov) to access your PAYS Toolbox
- Download and use the PAYS Guide & Worksheets to analyze your data
- Order special report for specific data sets
- Reach out to local “experts” from your SCA, coalitions, school board, etc...
- Reach out to PCCD & the EPISCenter experts for assistance

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# Let's Answer Your Questions!

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# Have More Questions? We've got answers!



The screenshot shows the EPISCenter website interface. At the top left is the EPISCenter logo with the tagline "Connecting research, policy, and real-world practice". Below this, it states "A collaborative partnership between:" followed by logos for the Pennsylvania Commission on Crime and Delinquency and the Pennsylvania Department of Human Services. A navigation menu includes "About Us", "PA Youth Survey", and "Communities That Care". Under "PA Youth Survey", there are links for "PAYS How-to Guide & Workbook" and "Submit a Question", with the latter circled in red and a mouse cursor hovering over it. A blue text box on the right contains the following instructions:

1. Visit [www.episcenter.psu.edu](http://www.episcenter.psu.edu)
2. Click the **PA Youth Survey** tab.
3. Select **Submit a Question**.

Your question will go directly to EPISCenter staff!

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In Conclusion.....

# PAYS Webinar Schedule Reminder



- September 23<sup>rd</sup>            The PAYS State Report
- September 30<sup>th</sup>            Fighting the Opioid Epidemic through Prevention

*The recorded PAYS Webinar Series will be available at  
[www.EPISCenter.psu.edu](http://www.EPISCenter.psu.edu) after the last webinar on Sept 30<sup>th</sup>.  
Be sure to check them out!*

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