

# Can You Hear Me Now? What is the Data Saying?



1. Review general strategies for interpreting data
2. Introduce one approach for considering data from multiple sources
3. Practice putting it all together to identify opportunities for action

# Interpreting the Data



## General strategies for interpreting data

- Look for extremes, outliers
- Compare to a standard
  - Quartiles
  - Healthy People 2020
  - Best/worst
- Note the magnitudes
- Look at trends
  - Changes over time? Getting better or worse?
- Consider subpopulations

# So What is “Important?”



One approach:

- Rough guideline – 15% or greater difference between health indicators
- Use the 15% rule to gauge:
  - Comparisons between
    - Standards
    - Peer counties
    - State, nation
    - Areas of great improvement
    - Problem areas

# Putting it all together: Important Questions



- What makes your community (agency, system) unique?
- What do these numbers mean for my community's health (or agency, system functioning)?
- How has my community (agency, system) changed?
- Do recent changes affect the health of community members? The work of health professionals, agencies, service providers?
- What gaps in services did you identify?

# Putting it all together: Important Questions, continued



- Why are these risks or rates so high? So low?
- Where did these problems come from?
- How has my community's development/history affected the health of its residents?

# Interpreting the Data: Health Status



Health status assessment or health profile report

- Community's major health risks and problems
- Major causes of death
- Major causes of illness and disability
- Major causes of hospitalizations
- Health areas that are better/worse than peer communities
- Health areas getting better/worse than they have been in the past

# Interpreting the Data: Local System Assessment



Local public health system assessment results from  
National Public Health Performance Standards

- Major strengths
- Major weaknesses
- Weaker, weakest Essential Services
- Areas of inconsistent performance (within Essential Services or Model Standards)

# Interpreting the Data: Performance Snapshot



## County Health Department Performance Snapshot

- Major strengths
- Major weaknesses
- Changes
- Emerging trends

# Interpreting the Data: Opinion Survey Data



Community themes and strengths assessment,  
health perceptions surveys

- According to survey respondents:
  - What areas seem to need attention in your community?
  - What are the biggest health issues, health problems?
  - What are some of your community's health assets?
  - What was the general opinion about quality of life in your community?

# Example Exercise




- Identify key findings from each data source
  - List 3-5 findings from each report
- For each key finding, use other data sources to answer these questions:
  - How does info from this source validate or support finding?
  - How does info challenge or contradict finding?
  - How does info offer different perspective on finding?
  - How does this source help to better understand finding?
- Answer: what story does the data tell?
- Identify 3 of your most significant opportunities for action

# Exercise – Key Findings



- Health Profile reports

**High rates of HIV, STDs**

<div>  <div> Gadsden County, Florida  County Health Status Summary </div> </div>							
Indicator	Year(s)	Rate Type	County Quartile <sup>A</sup> 1=most favorable 4=least favorable	County Rate	State Rate	County Trend <sup>B</sup> (click to view)	Healthy People 2020 Goals <sup>C</sup>
<b>Communicable &amp; Infectious Diseases</b>							
Vaccine preventable diseases <sup>10</sup>	2007-09	Per 100,000	1	2.0	3.8	No Trend ↔	
HIV cases reported <sup>10</sup>	2007-09	Per 100,000	4	37.5	33.2		
AIDS cases reported <sup>10</sup>	2007-09	Per 100,000	4	30.3	22.9	Worse ↑	
HIV/AIDS age-adjusted death rate <sup>7</sup>	2007-09	Per 100,000	4	12.9	7.4	No Trend ↔	3.7
B cases reported <sup>10</sup>	2007-09	Per 100,000	4	9.2	4.9	No Trend ↔	1.0
Chlamydia cases reported <sup>10</sup>	2007-09	Per 100,000	4	1002.2	357.3	Worse ↑	
Gonorrhea cases reported <sup>10</sup>	2007-09	Per 100,000	4	474.7	119.7	Worse ↑	
Infectious syphilis cases reported <sup>10</sup>	2007-09	Per 100,000	4	2.6	5.3	Better ↓	

# Exercise – Key Findings



- Health Profile reports

## MCH issues


Maternal, Infant & Young Child Health							
Early prenatal care (care began 1st trimester) <sup>7, 13</sup>	2007-09	Percent	1	82.2%	77.0%		77.9%
Low birth weight births (births < 2500 grams) <sup>7</sup>	2007-09	Percent	4	11.8%	8.7%	No Trend	
Premature births (births < 37 weeks gestation) <sup>7</sup>	2007-09	Percent	4	16.1%	14.1%	No Trend	11.4%
Multiple births <sup>7</sup>	2007-09	Percent	4	3.6%	3.2%	No Trend	
Births to teens 15-19 <sup>7</sup>	2007-09	Rate per 1,000	4	69.9	40.4	Better	
Repeat births to mothers 15-19 <sup>7</sup>	2007-09	Percent	2	22.7%	22.7%	No Trend	
Infant death rate <sup>7</sup>	2007-09	Per 1,000 live births	4	11.9	7.1	Better	6.0
Neonatal death rate <sup>7</sup>	2007-09	Per 1,000 live births	4	6.9	4.5	Better	4.1
Postneonatal death rate <sup>7</sup>	2007-09	Per 1,000 live births	4	5.0	2.5	No Trend	2.0
Fetal death ratio <sup>7</sup>	2007-09	Per 1,000 live births	4	9.1	7.4	No Trend	5.6
Kindergarten children fully immunized <sup>11</sup>	2007-09	Percent	1	97.8%	91.5%	No Trend	

# Exercise – Key Findings



- Health Profile reports

**Rates of deaths from chronic diseases improving**

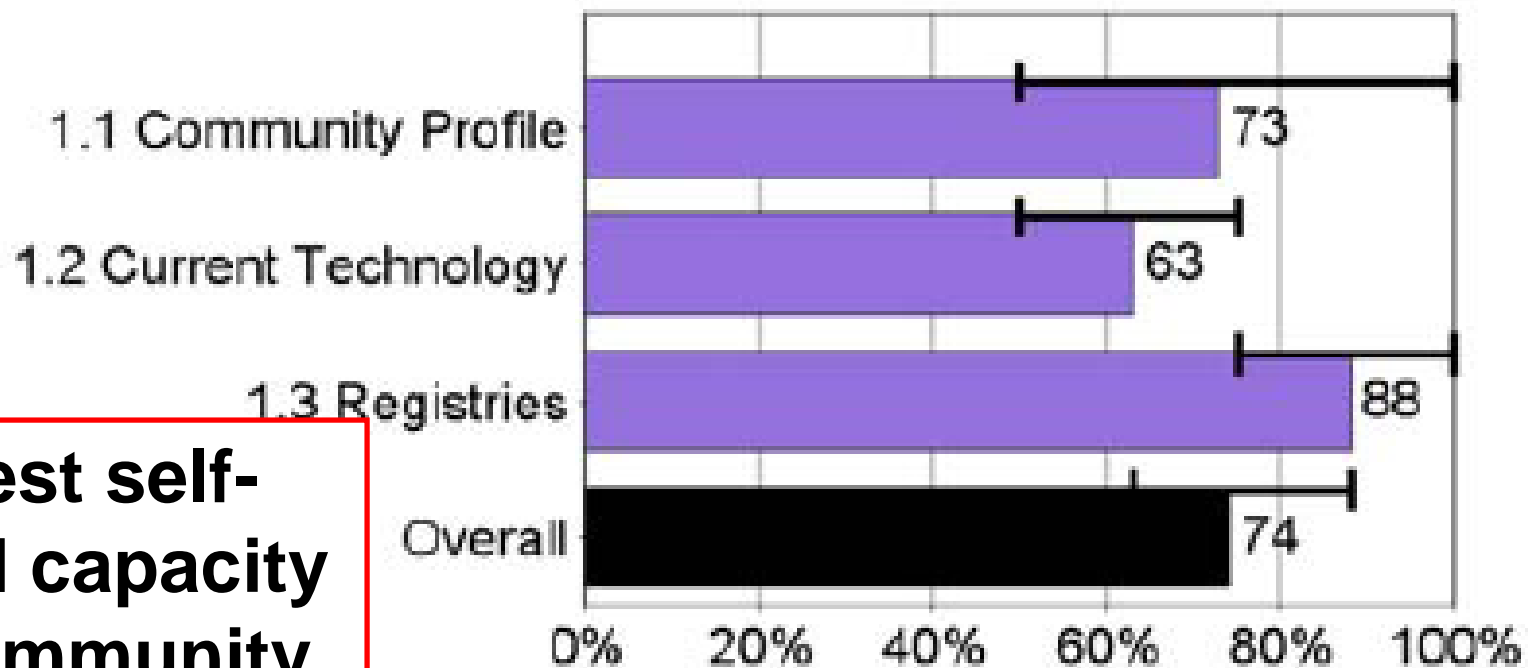
 <b>Gadsden County, FL</b> <b>County Health Status Report</b>							
Indicator	Year(s)	Rate Type	County Quartile <sup>A</sup> 1=most favorable 4=least favorable	County Rate	State Rate	Trend <sup>B</sup> (click to view)	People 2020 Goals <sup>C</sup>
<b>Chronic Diseases</b>							
<b>Coronary Heart Disease</b>							
Coronary heart disease age-adjusted death rate <sup>7</sup>	2007-09	Per 100,000	2	110.6	108.5	Better ↓	100.8
Coronary heart disease age-adjusted hospitalization rate <sup>8</sup>	2007-09	Per 100,000	1	354.2	440.4	Better ↓	
<b>Stroke</b>							
Stroke age-adjusted death rate <sup>7</sup>	2007-09	Per 100,000	4	54.2	31.6	No Trend ↔	33.8
Stroke age-adjusted hospitalization rate <sup>8</sup>	2007-09	Per 100,000	3	290.7	268.6	Better ↓	
<b>Heart Failure</b>							
Heart failure age-adjusted death rate <sup>7</sup>	2007-09	Per 100,000	3	10.5	7.6	No Trend ↔	
Congestive heart failure age-adjusted hospitalization rate <sup>8</sup>	2007-09	Per 100,000	2	142.0	185.3	Better ↓	
Adults with diagnosed hypertension <sup>1</sup>	2007	Percent	3	30.6%	28.2%		
Adults who have diagnosed high blood cholesterol <sup>1</sup>	2007	Percent	2	36.9%	37.1%		13.5%
Adults who had their cholesterol checked in the past five years <sup>1</sup>	2007	Percent	2	72.4%	73.3%		

# Exercise – Key Findings



- Local Public Health System Assessment

## EPHS 1. Monitor Health Status

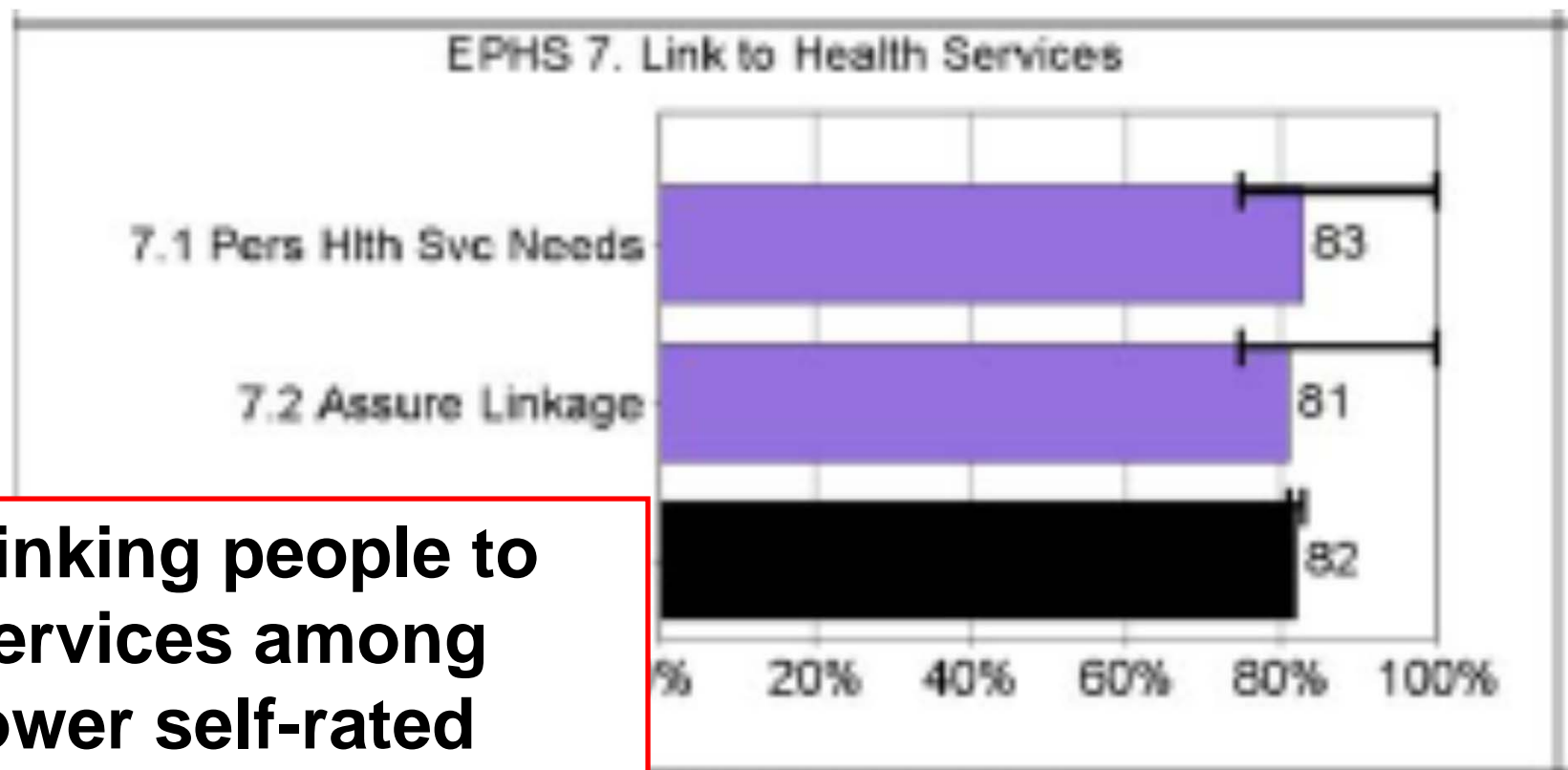


**Lowest self-rated capacity in community health assessment**

# Exercise – Key Findings



- Local Public Health System Assessment



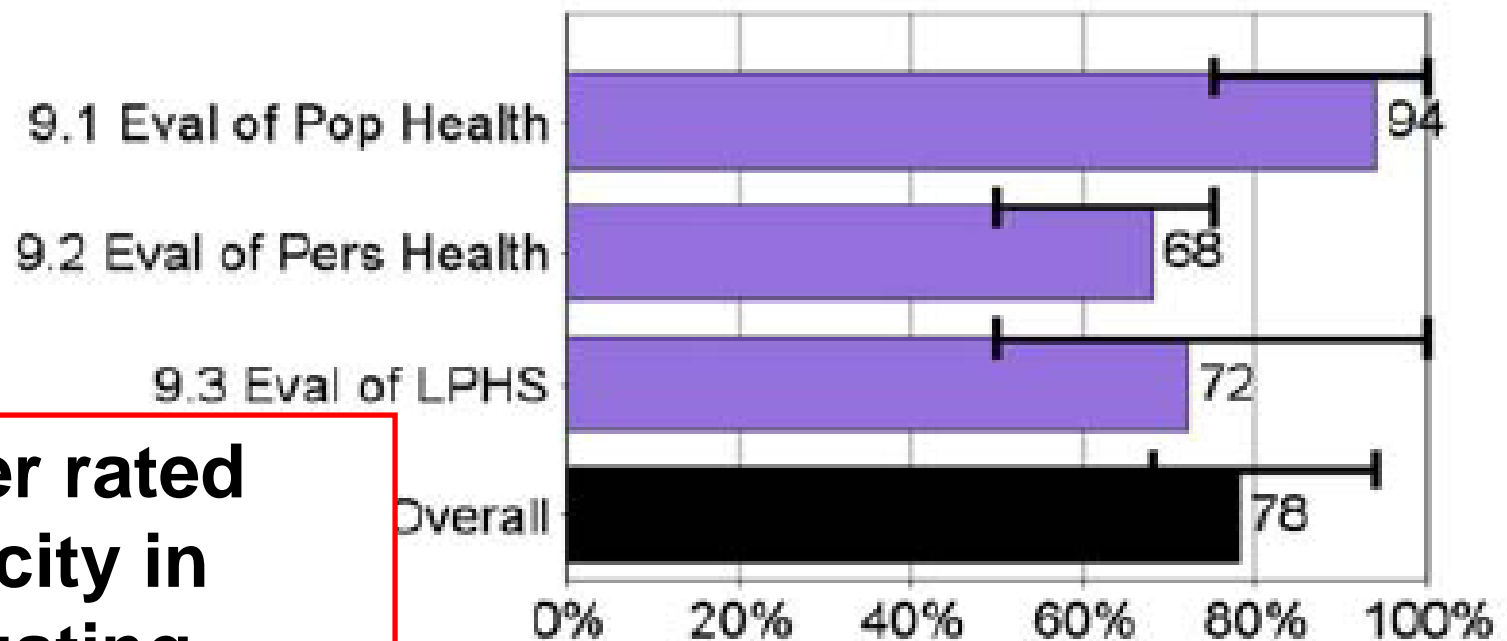
**Linking people to  
services among  
lower self-rated  
capacities**

# Exercise – Key Findings



- Local Public Health System Assessment

## EPHS 9. Evaluate Services



**Lower rated capacity in evaluating personal health services**

# Exercise – Key Findings



- Snapshot Report

High rates of STDs, HIV and getting worse

Gadsden County, Florida Year: 2011							
County Performance Snapshot							
Measure	Year(s)	Rate Type	County Quartile 1=most favorable 4=least favorable	County Rate	State Rate	County Trend (change vs previous year)	County Trend (change vs previous year)
1 Product and Service Outcomes							
1a Monitor health status and understand health issues facing the community							
(1a.1) Heart Disease Deaths	2009	Age-adjusted death rate	4	196.9	149.8	Better	158.7
(1a.2) Cancer Deaths	2009	Age-adjusted death rate	1	152.6	160.1	↓	✓
(1a.3) Chronic Lower Respiratory Disease (CLRD) Deaths	2009	Age-adjusted death rate	1	26.7	37.5	No Trend	34.8
(1a.4) Unintentional Injury Deaths	2009	Age-adjusted death rate	3	55.2	42.6	No Trend	45
(1a.5) Stroke Deaths	2009	Age-adjusted death rate	4	52.5	30.3	No Trend	39
(1a.6) Unintentional injury death rate for children ages 14 and under	2009	Rate per 100,000 children ages 14 and under	3	9.5	9.5	No Trend	7.3
(1a.7) Enteric Diseases Total	2009	Rate per 100,000 population	1	33.1	59.2	No Trend	28.474
(1a.8) New AIDS Cases	2009	Rate per 100,000 population	4	33.1	23.5	No Trend	26.5
(1a.9) Bacterial STD rate in 15 - 24 year old	2009	Rate per 100,000 population	4	3838.7	2714.1	Worse ↑	2628
(1a.10) Tuberculosis (TB) Cases	2009	Rate per 100,000 population	4	9.7	4.4	No Trend	3.5

# Exercise – Key Findings



- Snapshot Report

**Strategic planning,  
community health  
improvement planning  
potential weaknesses**

5 Process Effectiveness Outcomes								
5d Develop public health policies and plans								
<a href="#">(5d.1) Degree to which a strategic planning process is implemented</a>	CY 2010	Score		2.0		<a href="#">Worse</a> ↓	N/A	

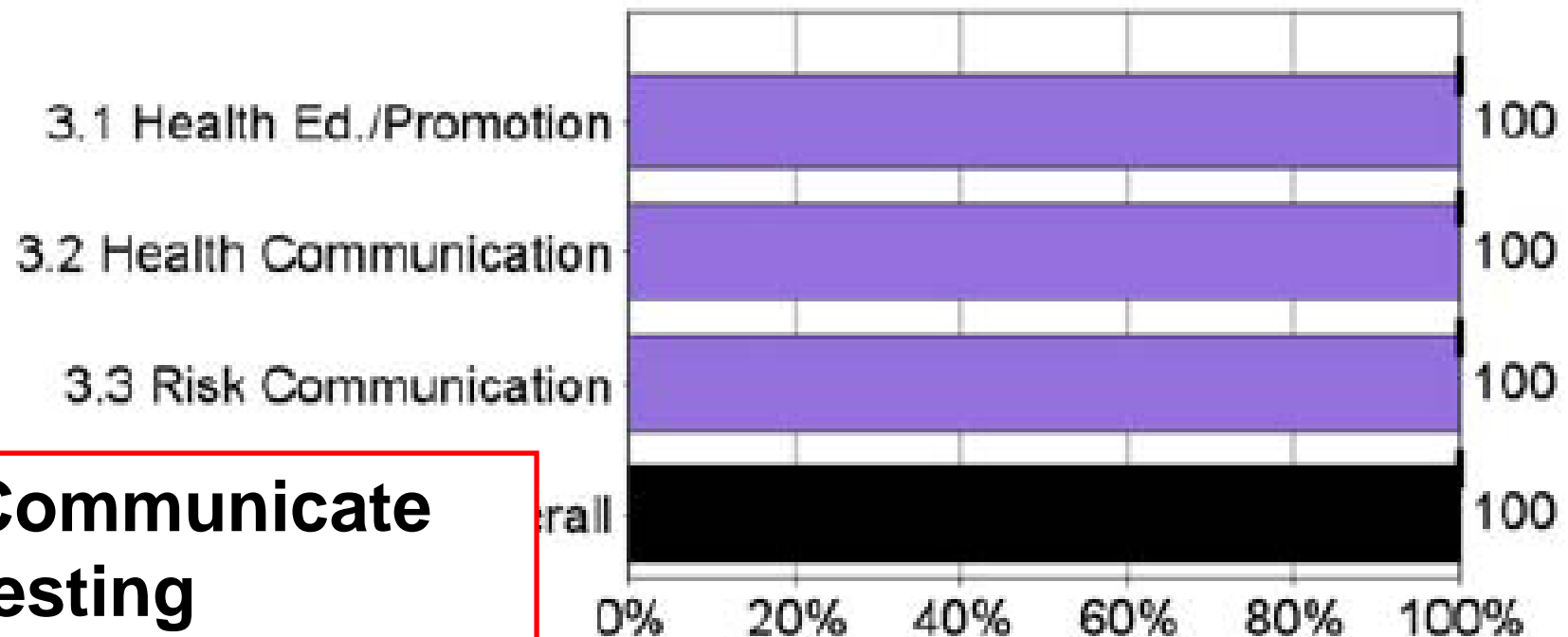
5 Process Effectiveness Outcomes								
5e Engage the community to identify and solve health problems								
<a href="#">(5e.1) Degree to which a comprehensive community health improvement planning process is implemented</a>	CY 2010	Score		2.0		<a href="#">No Trend</a> ↔	N/A	

# Exercise – Key Finding: High HIV, STD rates



- Local Public Health System Assessment Data Support Key Finding:

## EPHS 3. Educate/Empower



**Communicate  
testing  
message**

# Exercise – Key Finding: High HIV, STD rates



- Snapshot Report Data Support Finding

Gadsden County, Florida Year: 2011						
County Performance Snapshot						
Measure	Year(s)	Rate Type	County Quartile 1=most favorable 4=least favorable	County Rate	State Rate	County Trend (click view)
1 Product and Service Outcomes						
1a Monitor health status and understand health issues facing the community						
(1a.1) Heart Disease Deaths	2009	Age-adjusted death rate	4	196.9	149.8	Better ↓
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(1a.3) Chronic Lower Respiratory Disease (CLRD) Deaths	2009	Age-adjusted death rate	1	26.7	37.5	No Trend ↔
(1a.4) Unintentional Injury Deaths	2009	Age-adjusted death rate	3	55.2	42.6	No Trend ↔
(1a.5) Stroke Deaths	2009	Age-adjusted death rate	4	52.5	30.3	No Trend ↔
(1a.6) Unintentional injury death rate for children ages 14 and under	2009	Rate per 100,000 children ages 14 and under	3	9.5	9.5	No Trend ↔
(1a.7) Enteric Diseases Total	2009	Rate per 100,000 population	1	33.1	59.2	No Trend ↔
(1a.8) New AIDS Cases	2009	Rate per 100,000 population	4	33.1	23.5	No Trend ↔
(1a.9) Bacterial STD rate in 15 - 24 year old	2009	Rate per 100,000 population	4	3838.7	2714.1	Worse ↑
(1a.10) Tuberculosis (TB) Cases	2009	Rate per 100,000 population	4	9.7	4.4	No Trend ↔

High rates of STDs, HIV and getting worse

# Exercise – Key Finding: High HIV, STD rates



- BRFSS County Report Data Support Finding

2010 Florida BRFSS Data Report

Gadsden

## HIV/AIDS

Percentage of adults less than 65 years of age who have ever been tested for HIV

		2010 County			2010 State			2007 County
		Measure	95% CI		Measure	95% CI		Measure
ALL	Overall	56.8	49.4	64.2	48.4	46.8	50.0	52.2
SEX	Men	52.8	39.6	66.0	45.3	42.7	47.8	36.4
	Women	60.2	52.5	67.9	51.5	49.5	53.5	66.1
RACE/ETHNICITY	Non-Hisp. White	41.4	30.8	52.1	42.4	40.7	44.1	39.1
	Non-Hisp. Black	73.8	64.9	82.6	67.0	61.9	72.0	68.1
	Hispanic				56.2	51.0	61.4	39.6
SEX BY RACE/ETHNICITY	Non-Hisp. White Men	46.8	28.3	65.4	40.6	37.9	43.2	24.9
	Non-Hisp. White Women	36.9	25.4	48.4	44.4	42.2	46.5	55.0
	Non-Hisp. Black Men	70.1	52.0	88.2	58.6	49.7	67.5	64.8
	Non-Hisp. Black Women	76.1	67.3	84.8	73.7	68.4	78.9	70.5
	Hispanic Men				52.4	44.0	60.8	
	Hispanic Women				59.9	53.7	66.1	
AGE GROUP	18-44	71.4	60.3	82.5	57.0 *	54.5	59.6	61.6
	45-64	45.4	35.8	55.0	40.6	38.5	42.7	37.8
EDUCATION LEVEL	<High School	42.8	19.4	66.3	47.7	41.5	54.0	52.6
	H.S. / GED	61.2	49.5	72.8	43.8 *	40.7	46.9	54.6
	>High School	58.5	48.8	68.2	50.3	48.3	52.3	49.7
ANNUAL INCOME	<\$25,000	64.7	53.0	76.4	54.7	51.3	58.1	54.3
	\$25,000-\$49,999	46.8	31.2	62.4	51.5	48.0	55.1	62.7
	\$50,000 or More	56.6	43.0	70.3	46.1	43.7	48.5	46.6
MARITAL STATUS	Married/Couple	49.6	38.9	60.3	46.9	44.9	48.9	47.9
	Not Married/Couple	66.3	56.8	75.8	51.3 *	48.5	54.2	57.4

**HIV  
testing  
rates  
high for  
some  
groups**

# Exercise – Key Finding: High HIV, STD rates



- BRFSS County Report Data Support Finding

Percentage of adults less than 65 years who think they can get AIDS virus from mosquitos

		2010 County			2010 State			2007 County
		Measure	95% CI		Measure	95% CI		Measure
ALL	Overall	29.9	21.8	38.1	19.2 *	17.8	20.6	
SEX	Men	39.2	24.4	54.0	20.6 *	18.4	22.8	
	Women	21.9	14.9	29.0	17.8	16.1	19.5	
RACE/ETHNICITY	Non-Hisp. White	20.6	10.8	30.5	17.4	16.0	18.9	
	Non-Hisp. Black	35.0	21.5	48.4	27.5	22.4	32.5	
	Hispanic				21.5	17.0	25.9	
SEX BY RACE/ETHNICITY	Non-Hisp. White Men	29.4	11.4	47.4	19.4	17.1	21.8	
	Non-Hisp. White Women	12.6	4.7	20.6	15.5	13.7	17.3	
	Non-Hisp. Black Men				30.9	21.6	40.2	
	Non-Hisp. Black Women	25.0	13.9	36.0	25.0	19.5	30.5	
	Hispanic Men				20.0	13.8	28.0	
	Hispanic Women				22.0	16.4	27.6	
AGE GROUP	18-44	43.0	28.2	57.8	20.9 *	18.6	23.1	
	45-64	21.5	13.3	29.6	17.8	16.1	19.6	
EDUCATION LEVEL	<High School				42.2	34.9	49.5	
	H.S. / GED	39.9	25.5	54.2	28.0	22.5	33.5	
	>High School	21.1	10.6	31.7	13.0	10.0	16.0	
ANNUAL INCOME	<\$25,000	47.8	33.4	62.2	31.0	24.0	38.0	
	\$25,000-\$49,999	16.6	6.2	27.0	21.0	17.0	25.0	
	\$50,000 or More	17.7	0.1	35.3	11.0	8.0	14.0	
MARITAL STATUS	Married/Couple	23.3	12.5	34.0	15.0	12.0	18.0	
	Not Married/Couple	39.4	27.3	51.4	25.5	22.5	28.0	

**Misconceptions  
about HIV**

# Example Exercise



- Identify key findings from each data source
  - List 3-5 findings from each report
- For each key finding, use other data sources to answer these questions:
  - How does info from this source validate or support finding?
  - How does info challenge or contradict finding?
  - How does info offer different perspective on finding?
  - How does this source help to better understand finding?
- Answer: what story does the data tell?
- Identify 3 of your most significant opportunities for action