

Collecting Quantitative Data in Your Community Health Assessment

January 23, 2012

Presented by:
Julie Willems Van Dijk



Webinar Logistics

- The lines are muted. If you wish to mute/unmute your line to ask/answer a question, please do the following:
- To **unmute** your own line, **press *7**
- To **mute** your own line, **press *6.**
- Throughout the presentation and during the Q&A session, if you have a question, please use ReadyTalk's 'raise your hand' feature or use the chat box to indicate you have a question. The facilitator will call your name and ask for your question.

PROJECT REQUIREMENTS: DATA COLLECTION

Reena Chudgar, NACCHO



Setting the Gold Standard for CHAs and CHIPs



- Your work will set the standard for others!
- In some cases, the project requirements around data collection are more specific and slightly different than PHAB's Standards and Measures Version 1.0 include.

Project Requirements: Data Collection in the CHA

- Community members must be engaged in a meaningful and substantive way throughout the CHA processes, including indicator selection, data collection...
- Partners should be engaged in a strategic way throughout the CHA processes, including gaining access to data, mobilizing community members, data collection, data review...

Project Requirements: Data Collection in the CHA

- Be sure to review the requirements related to indicators since they relate directly to data collection.
- Demonstrate the use of...multiple data sources.
- Incorporate data from a variety of sectors that influence health such as housing, education, transportation, etc.
- Use federal, state, and/or local data as appropriate.
- Use qualitative data as well as quantitative data. Include qualitative data on community perceptions, assets, priorities, and the community health context.
- Use primary and secondary data (to coincide with this mention in PHAB's Standards and Measures Version 1.0)

Project Requirements: Data Collection in the CHA

- Demonstrate the use of...data collection methods and data analysis techniques that allow for the identification and examination of health inequities.
- Use data and data collection methods that can be analyzed and reviewed for health inequities (i.e., if a data source already exists for an indicator but the data cannot be analyzed for health inequities, consider using another data source or collecting new data on this indicator to fulfill this need).
- Ensure that sample sizes are large enough, when appropriate, to allow for data analysis to examine health inequities between and among sub-populations.

Project Requirements: Data Collection in the CHA

- Compare jurisdiction data with that of neighboring jurisdictions, state, and/or the nation.
- Include a review of trends and sub-population specific data when possible (e.g., if sufficient data are available on health status, risk factors, etc. for different racial or ethnic groups, then the data presented should be stratified by race and ethnicity).

Webinar Learning Objectives

- Re-state the CHA/CHIP demonstration site project requirements for data collection.
- Describe the related required documentation from PHAB Standards and Measures Version 1.0.
- Determine whether or not they will need to collect primary and secondary data based on the indicator set and chosen community health improvement process model/framework.
- Understand how to successfully engage agencies, organizations, community members, and partners in obtaining existing data and collecting new quantitative data.
- Discuss the advantages and disadvantages of various quantitative data collection methods.
- Discuss what to consider in deciding upon quantitative data collection methods.
- Describe methods for addressing the limitations of quantitative data.

Webinar Learning Objectives

- Discuss strategies for overcoming barriers to obtaining existing or new quantitative data.
- Identify needed resources (time, manpower, funds, materials, expertise) for collecting primary quantitative data.
- Determine how to apply quality standards to quantitative data to ensure a robust set of indicators and data.
- Prepare to establish a strong data collection platform that will enable partnerships to set the stage for a robust analysis of the data.
- Describe examples, samples, and resources of quantitative data collection methods and tools.
- Determine what, if any, CHA/CHIP project quantitative data collection-related technical assistance from which their site would benefit.

Quantitative Data

Julie Willems Van Dijk

January 23, 2012



PHAB Standards & Measures: Quantitative Data

1.1.1 T/L Participate in or conduct a local partnership for the development of a comprehensive CHA:

- The health department must provide documentation of the collaborative process to identify and collect data and information...

1.1.2 T/L Complete a Tribal/local community health assessment:

- Documentation that data and information from various sources contributed to the community health assessment and how the data were obtained:
 - Evidence that comprehensive, broad-based data and information from a variety of sources were used to contribute to the health assessment.
 - The assessment must also include both primary data and secondary data.

PHAB Standards & Measures: Quantitative Data

1.2.3 A Collect additional primary and secondary data on population health status

- Documented aggregated primary and secondary data collected and the sources of each.
- Documentation of standardized data collection instruments.

1.2.4 L Provide reports of primary and secondary data to the state health department and Tribal health departments in the state.

1.4.2 T/L Develop and distribute Tribal/community health data profiles to support public health improvement planning processes at the Tribal or local level.

Quantitative Data

PRIMARY & SECONDARY DATA



What is Quantitative Data?

- Things that can be counted
- Sometimes referred to as “hard data,” but DON’T!
- Two types—Primary & Secondary



Primary & Secondary Data Collection Advantages

Primary	Secondary
<p>You control what and how the data are collected</p> <p>You can customize data collection for your community</p> <p>Data are usually more recent than secondary data</p>	<p>It's already done for you</p> <p>Generally available in down-loadable electronic formats</p> <p>Sample sizes may be larger</p> <p>Data may be more reliable</p>

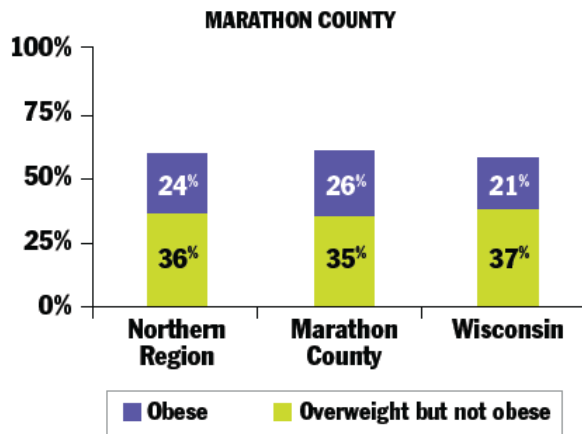
So, how do we decide? Primary or Secondary?

- Review your indicators
- Clearly define what you want to measure
- Search for secondary measures first
- Ask your stakeholders if they have any sources for this measure
- If secondary measures are found, consider the quality of the secondary data
- If no secondary measures are found or if the quality is poor, decide how important it is to have this information
- If it's critically important to your group, design a primary data collection strategy to collect the data
- Then decide if this method is feasible, reliable, and if there are resources to conduct the primary data collection.

Obesity in Marathon County

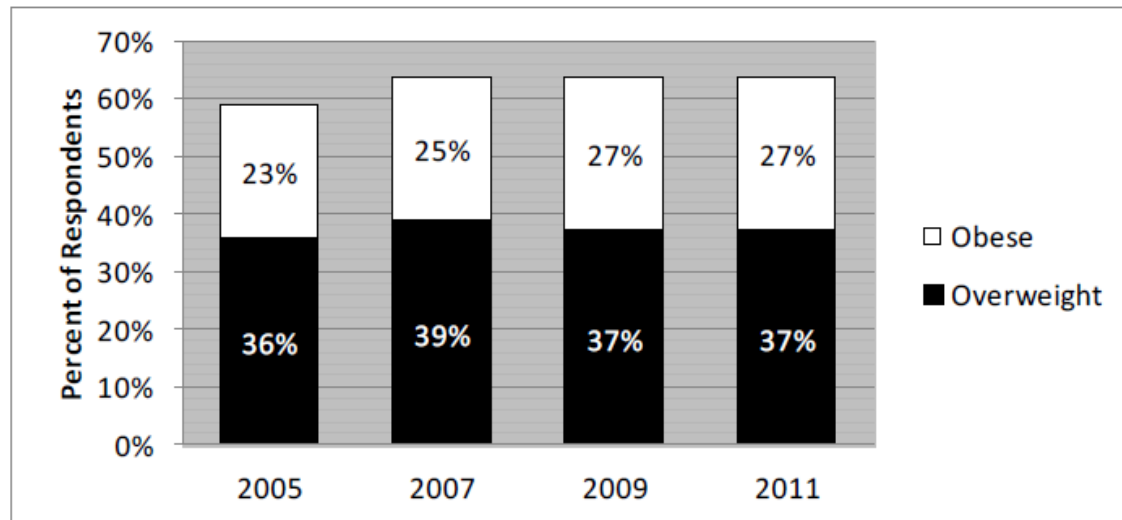
FIGURE 4: OBESITY AND OVERWEIGHT, 2000 - 2002

Adults 18+ obese and/or overweight based on Body Mass Index (BMI)



Source: Wisconsin Behavioral Risk Factor Survey (BHIPS, DHFS)

Key Measure: Percentage of Overweight and Obese Marathon County Adults, 2011 LIFE Respondents



Sources of Primary Data

- Surveys, Focus Groups, Interviews
- Of these, surveys are most likely to produce quantitative data
- Surveillance data: Communicable disease, Health Hazards
- Registries: Immunizations, Cancer
- Health Department Service Data: # of inspections, # of clinics, # of home visits
- Outcomes from Services: # of critical violations, # of women who stopped smoking

Involving your Stakeholders

- Follow through on discussions you had about indicator selection
- Survey them to see what primary & secondary data sources they use
- Based on your vision, model, and indicator selection discussion, identify specific data that stakeholders can contribute to the process
- Inquire about who may have the skills, time, and resources to assist with data collection
- Frank discussions up front about quantitative vs. qualitative data; primary vs. secondary data; volume of data

Considerations Before You Jump Into Surveys

- Sampling—Random or Convenience
- Sample Size: Depends on how much error you can tolerate
- Reliability and Validity of Survey Questions—Borrow questions from other tested surveys
- Methodology—Paper, Telephone, Online
- Will you have capacity to repeat the survey in the future?
- Resources (skills and funding) for data collection, data entry, and data analysis
- Timeline

Every dollar spent on data collection is a dollar that is not available to take action

Secondary Data Sources

<http://www.countyhealthrankings.org/take-action>

TAKE ACTION

WORK TOGETHER



Action Steps

Improving community health requires people from multiple fields to work collaboratively on an ongoing cycle of activities. Communities may be at different points in this process. Click on various components of our action cycle model for additional, tailored resources and materials.

Our Guides

[Funding Your Community Health Initiative](#)

Suggestions for identifying funding sources to tackle issues raised in your community's rankings.

[Data Drilldown](#)

Suggestions for finding more detailed information about key areas in your community's rankings.

Sources of State-Specific Data Sources

State Data Sources

Select a state below and go the Downloads, Link and Data Guide tab to locate state-specific data sources.

Alabama	Hawaii	Massachusetts	New Mexico	South Dakota
Alaska	Idaho	Michigan	New York	Tennessee
Arizona	Illinois	Minnesota	North Carolina	Texas
Arkansas	Indiana	Mississippi	North Dakota	Utah
California	Iowa	Missouri	Ohio	Vermont
Colorado	Kansas	Montana	Oklahoma	Virginia
Connecticut	Kentucky	Nebraska	Oregon	Washington
Delaware	Louisiana	Nevada	Pennsylvania	West Virginia
Florida	Maine	New Hampshire	Rhode Island	Wisconsin
Georgia	Maryland	New Jersey	South Carolina	Wyoming

National Data Sources with Local Data

National Data Sources

Here is a summary of some key national data sources for further information on health outcomes and health factors. In addition, a more detailed summary of these data sources is [available](#).

National Data Sources	Types of Data Available	Specificity of Data Available	Factors/Focus Areas and Examples of Indicators Available
American FactFinder : The website serves as a clearinghouse for information on social, economic, and housing characteristics, as well as the most recent demographic estimates from the American Community Survey.	Public use data sets including demographic information from the Census, the American Community Survey, Other annual economic surveys.	Data are available by state, county, ZIP code, city/town, combined statistical area, congressional district, public use microdata sample, and county subdivisions (cities, towns, villages, etc). Select indicators are available by race, ethnic, and ancestry groups at the county level.	General demographics <ul style="list-style-type: none">• Average household size• Foreign born population Social and economic factors <ul style="list-style-type: none">• Median household income• Population age 16 and over in labor force Built environment <ul style="list-style-type: none">• Mean travel time to work• Vacant housing units
CDC Wonder , developed by the Centers for Disease Control and Prevention (CDC), is an integrated information and communication system for public health. WONDER allows users to access statistical research data published by CDC, as well as reference materials, reports and guidelines on health-related topics.	Public-use data sets about mortality (deaths), cancer incidence, HIV and AIDS, tuberculosis, vaccinations, natality (births), census data and many other topics are available for query	Data are available by state and county. Mortality and birth data can be examined by gender, age, race and ethnicity. Mortality data can also be broken out by cause of death.	Health outcomes <ul style="list-style-type: none">• Cause-specific mortality rates• Leading causes of death for different age groups

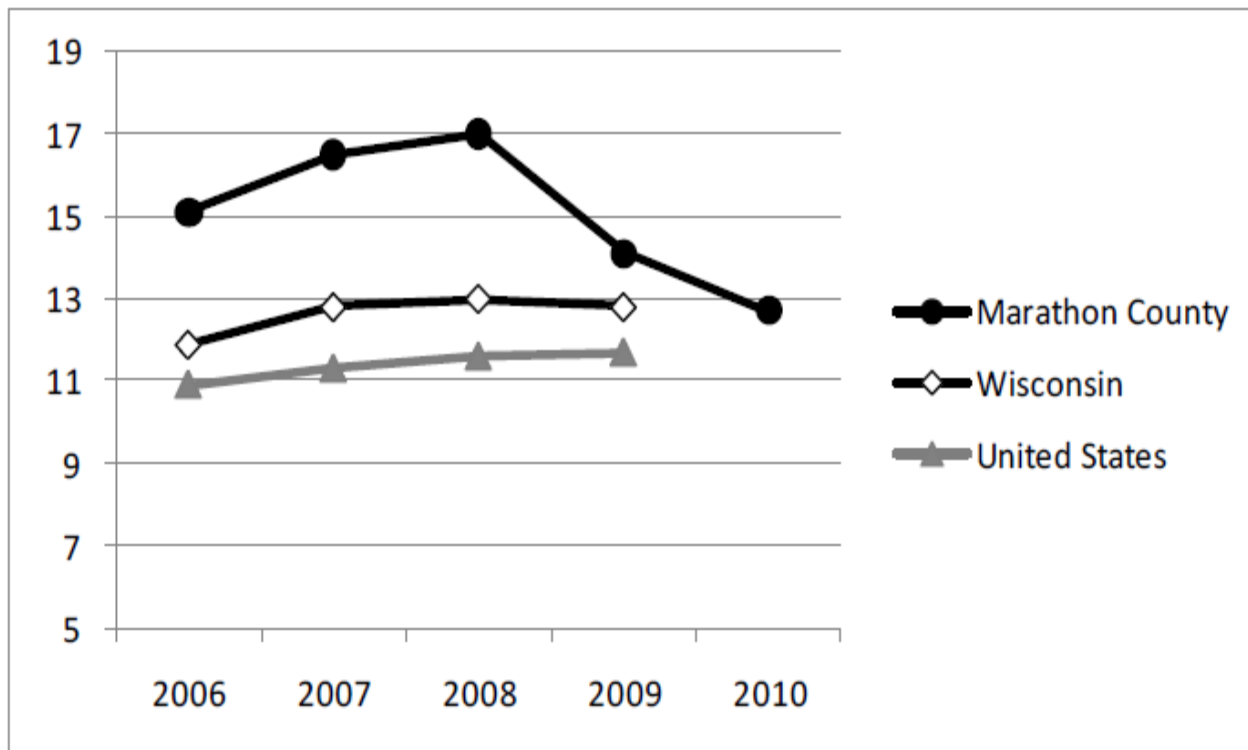
Quantitative Data

CHALLENGES AND CONSIDERATIONS



Numbers Vs. Rates

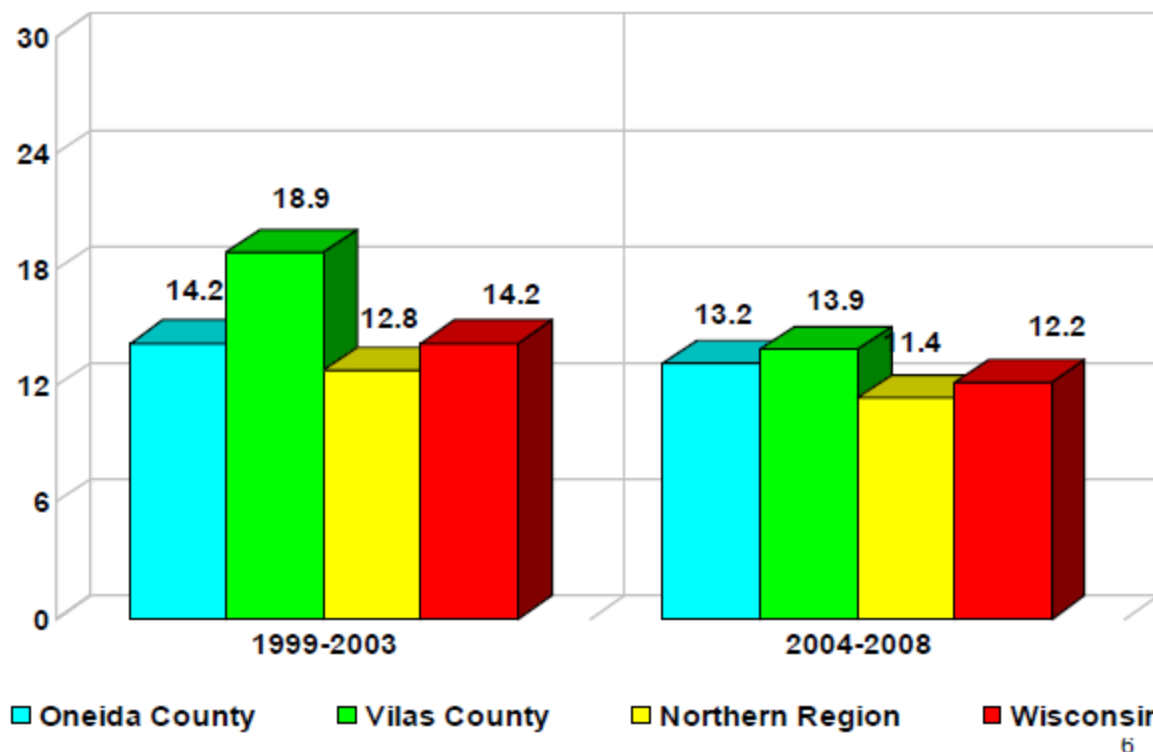
Key Measure: Suicide Rates (per 100,000) for County, State, and US, 2006-2010



Note: The data in the graph (2006-2009) describes suicides among Marathon County residents (Wisconsin Interactive Statistics on Health); 2010 data derived from the Marathon County Medical Exam-

Population Vs. Sample

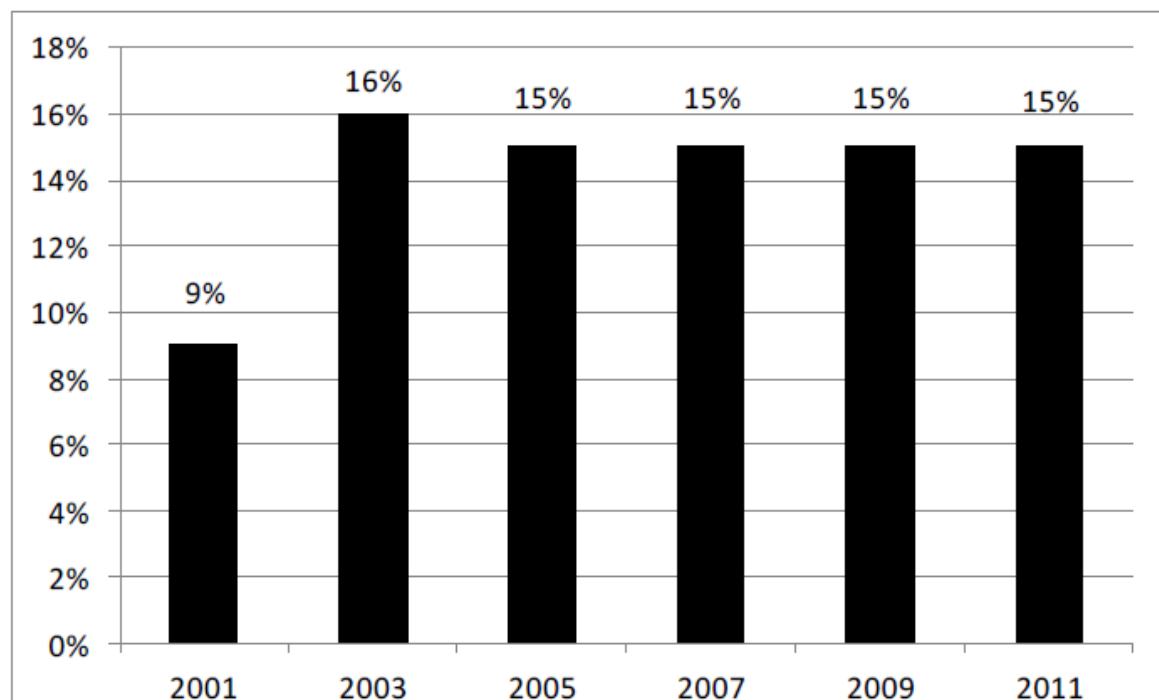
1999-2003 and 2004-2008 Comparison Age Adjusted Mortality Rate with Breast Cancer Listed as the Primary Cause of Death – by County of Residence



Source: Wisconsin Interactive Statistics on Health

Population Vs. Sample

Key Measure: Percentage of Respondents in Marathon County Who Felt That They Experienced Discrimination, 2001-2011



DATA HIGHLIGHTS

- According to the 2011 LIFE in Marathon County Community Survey, of the respondents who felt they experienced discrimination, they felt it was based upon:

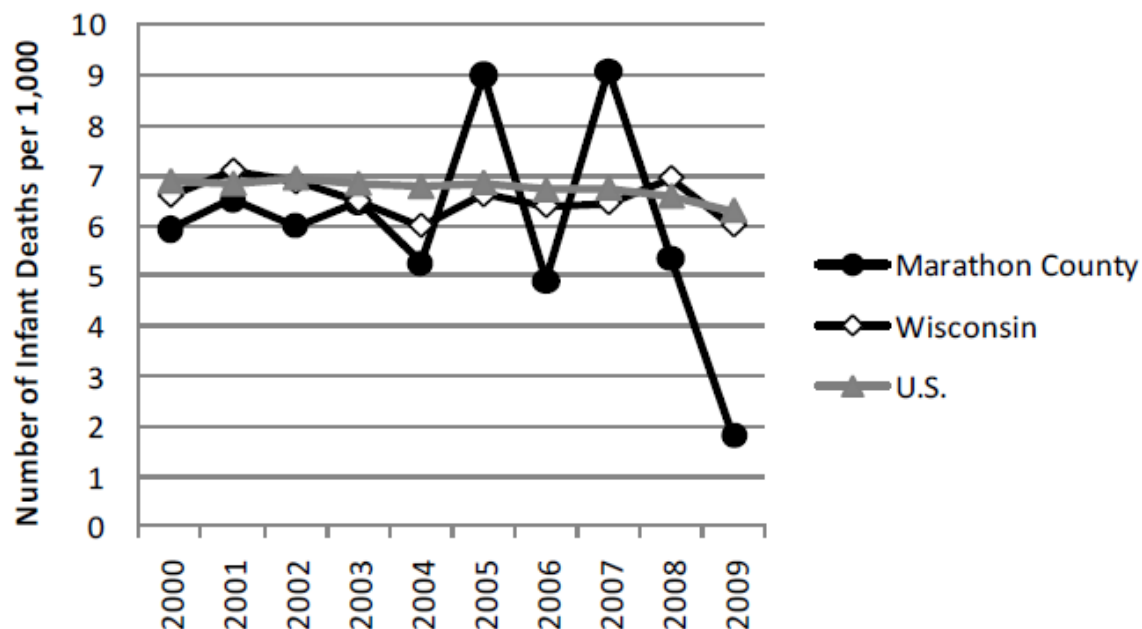
Age	24.3%
Disability or Handicap	10.1%
Gender	13.5%
Race	11.5%
Religion	4.1%
Sexual Orientation	4.1%
Income	15.5%
Weight	4.1%

Small Numbers

Infant Mortality

INDICATOR 16

Key Measure: Infant Mortality in Marathon County, State, and US, 2001-2009



DATA HIGHLIGHTS

- In Marathon County, there was an increase in the number of infant deaths in 2004 and 2007, with a marked decrease in 2009. Given the small number of deaths, the rate is statistically unstable.
- For 2005-2009, the rate of infant mortality in Marathon County was 6.03. For Wisconsin, the rate was 6.49 for the same time period.
- In Marathon County, there was no difference in terms of race and ethnicity. For White (Non-Hispanic) the rate was 5.99 per 1,000 live births for the time period 2000-

Size & Statistical Uncertainty

Plumas County: 20,000

	Plumas County	Error Margin	National Benchmark*	California
Health Outcomes				
▼ Mortality				
Premature death	7,209	5,932-8,486	5,564	6,128
▼ Morbidity				
Poor or fair health	6%	2-17%	10%	18%
Poor physical health days	3.7	0.5-7.0	2.6	3.7
Poor mental health days	3.2	0.0-6.3	2.3	3.6
Low birthweight	6.1%	4.8-7.5%	6.0%	6.7%

Gallatin County: 90,000

	Gallatin County	Error Margin	National Benchmark*	Montana
Health Outcomes				
▼ Mortality				
Premature death	4,829	4,297-5,361	5,564	7,469
▼ Morbidity				
Poor or fair health	9%	7-10%	10%	13%
Poor physical health days	2.5	2.2-2.8	2.6	3.4
Poor mental health days	2.5	2.2-2.8	2.3	3.1
Low birthweight	5.9%	5.3-6.4%	6.0%	7.1%

Data Definitions and Years

	Marathon County	Error Margin	National Benchmark*	Wisconsin
Teen birth rate	26	24-28	22	32

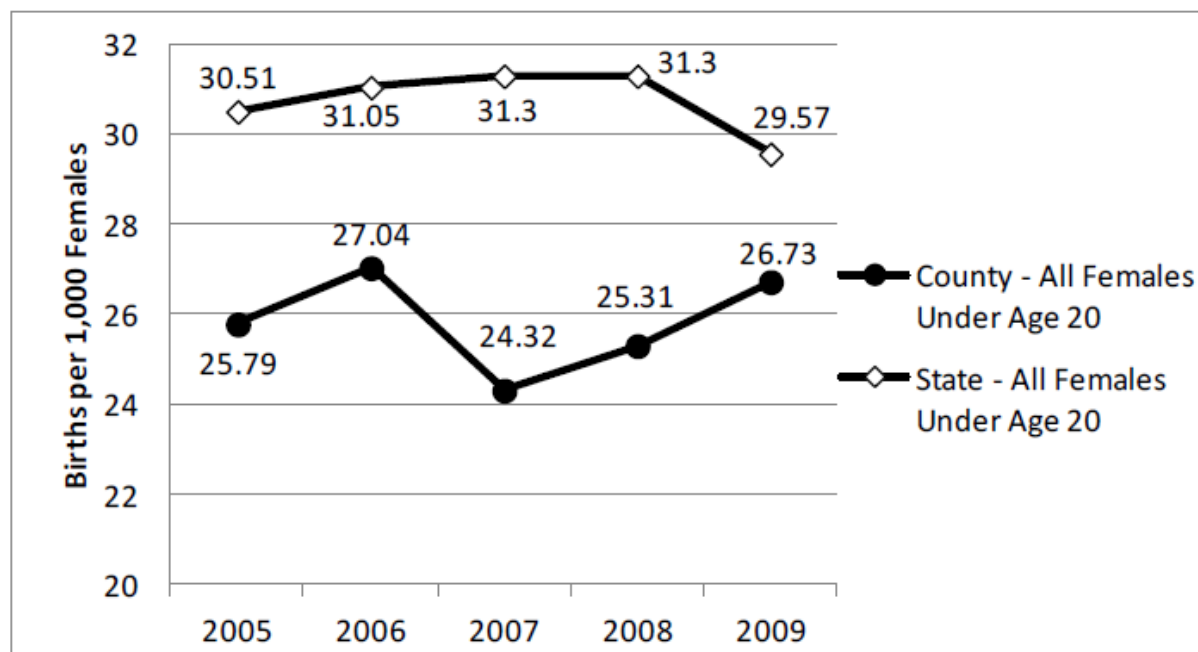
INDICATOR 17

Teenage Pregnancy and Childbirth

DATA HIGHLIGHTS

- Marathon County's birth rate among females aged 15-17 years remains stable, lower than the state average. In 2009, the county birth rate was 10.34 in comparison to the state birth rate of 14.41.
- Marathon County's birth rate among females aged 18-19 years remains stable, lower than the state average. In 2009, the county birth rate was 49.29 in comparison to the state birth rate of 50.92.
- From 2006-2009, there were 4 births to females under the age of 15, an average 1 birth per year in Marathon County.

Key Measure: Rate of Births per 1,000 Females Ages 19 and Younger in Marathon County, 2005-2009



Trends, Disaggregation, & Comparisons

Figure 20. Smoking Cessation in Past 12 Months (Current Smokers)

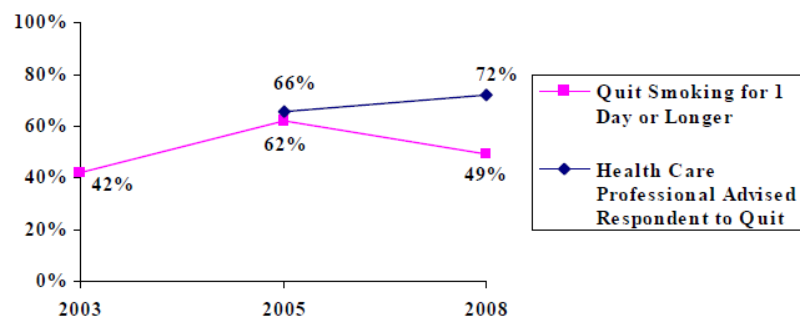
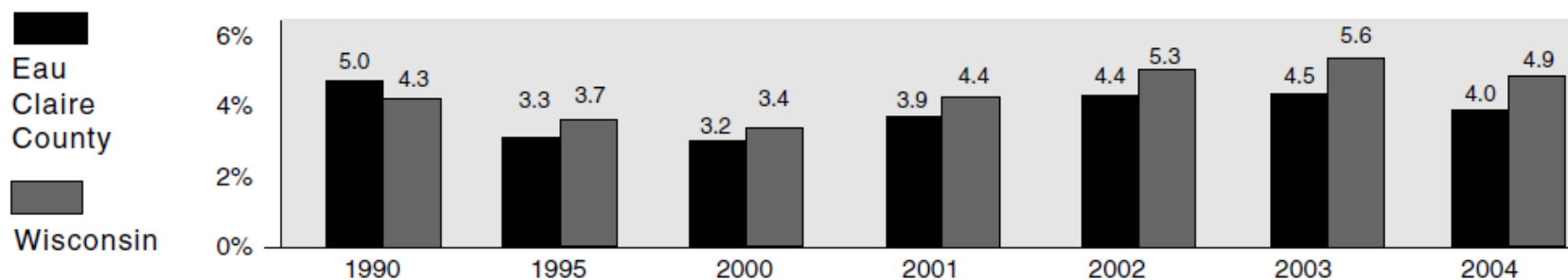


Table 37. Smoking Not Allowed in Home by Demographic Variables for 2008[®]

	2008
TOTAL	73%
Household Income¹	
Bottom 40 Percent Bracket	63
Middle 20 Percent Bracket	62
Top 40 Percent Bracket	87
Marital Status¹	
Married	80
Not Married	64
Smoking Status¹	
Nonsmoker	83
Smoker	43
Children in Household¹	
Yes	82
No	66

Percent of Unemployment ¹⁰



Quantitative Data

EXAMPLES FROM DEMONSTRATION SITES



ALACHUA COUNTY HEALTH STATUS ASSESSMENT

Diane Dimperio



ACHD

- Conducted periodic needs assessment
- Health Status Assessment
- Oversight by Alachua County Health Care Advisory Board
- Data dense
- Little dissemination and/or follow up

Needs Assessment 2010

- Collaborative Partners
 - CHD leadership
 - Community Hospitals (2)
 - FQHC
 - County
- Contract with local planning council

<http://www.doh.state.fl.us/chdalachua/index.htm>

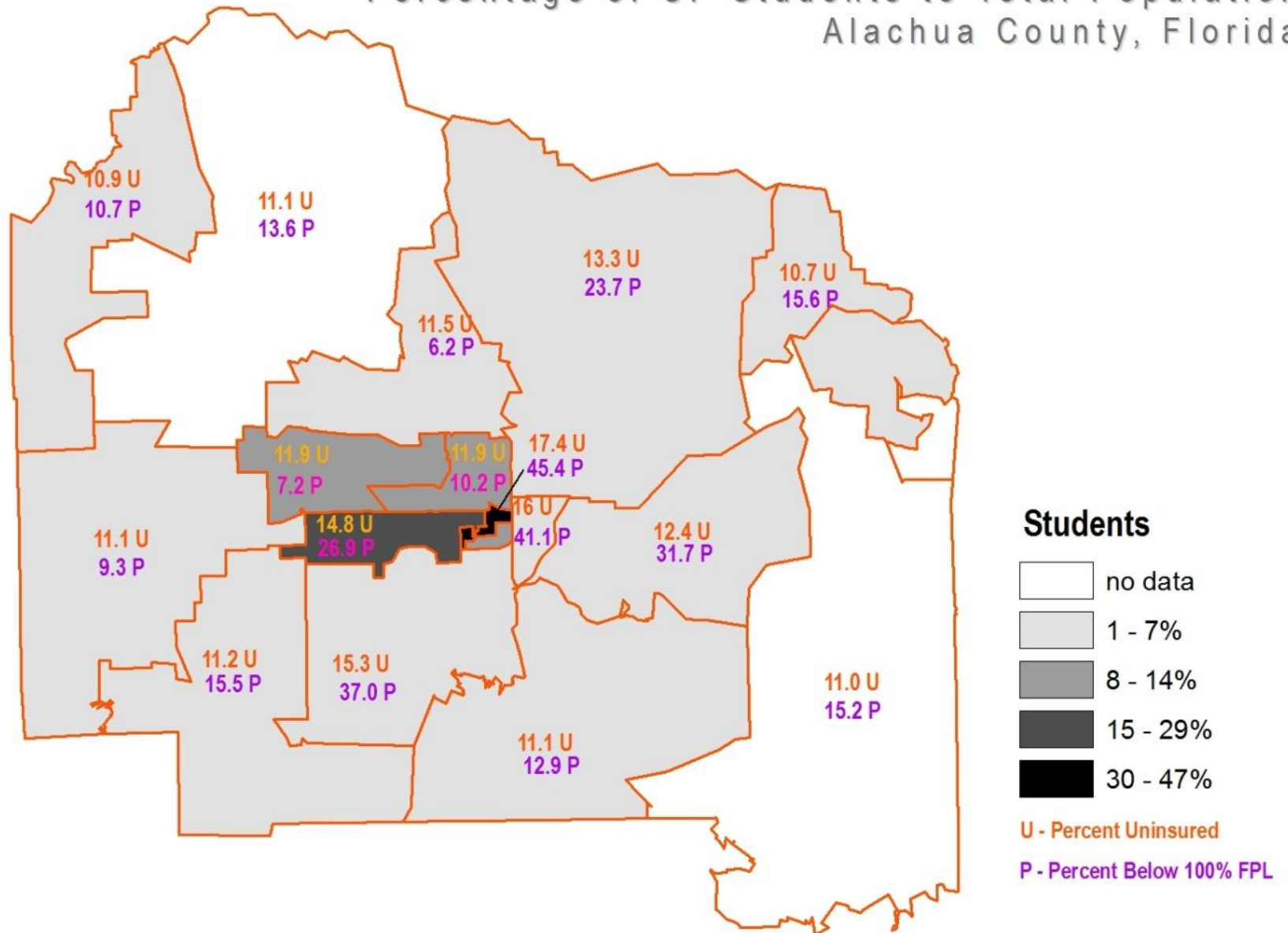
Identified Data of Interest

- County Data Report
 - Used the 2005 assessment as a starting point
 - Fewer tables
 - Less detail
- Detailed technical appendix
 - Data by Zip Codes

Demographic and Socioeconomic Profile

- Demographic Characteristics
- Socioeconomic Characteristics

Percentage of UF Students to Total Population Alachua County, Florida

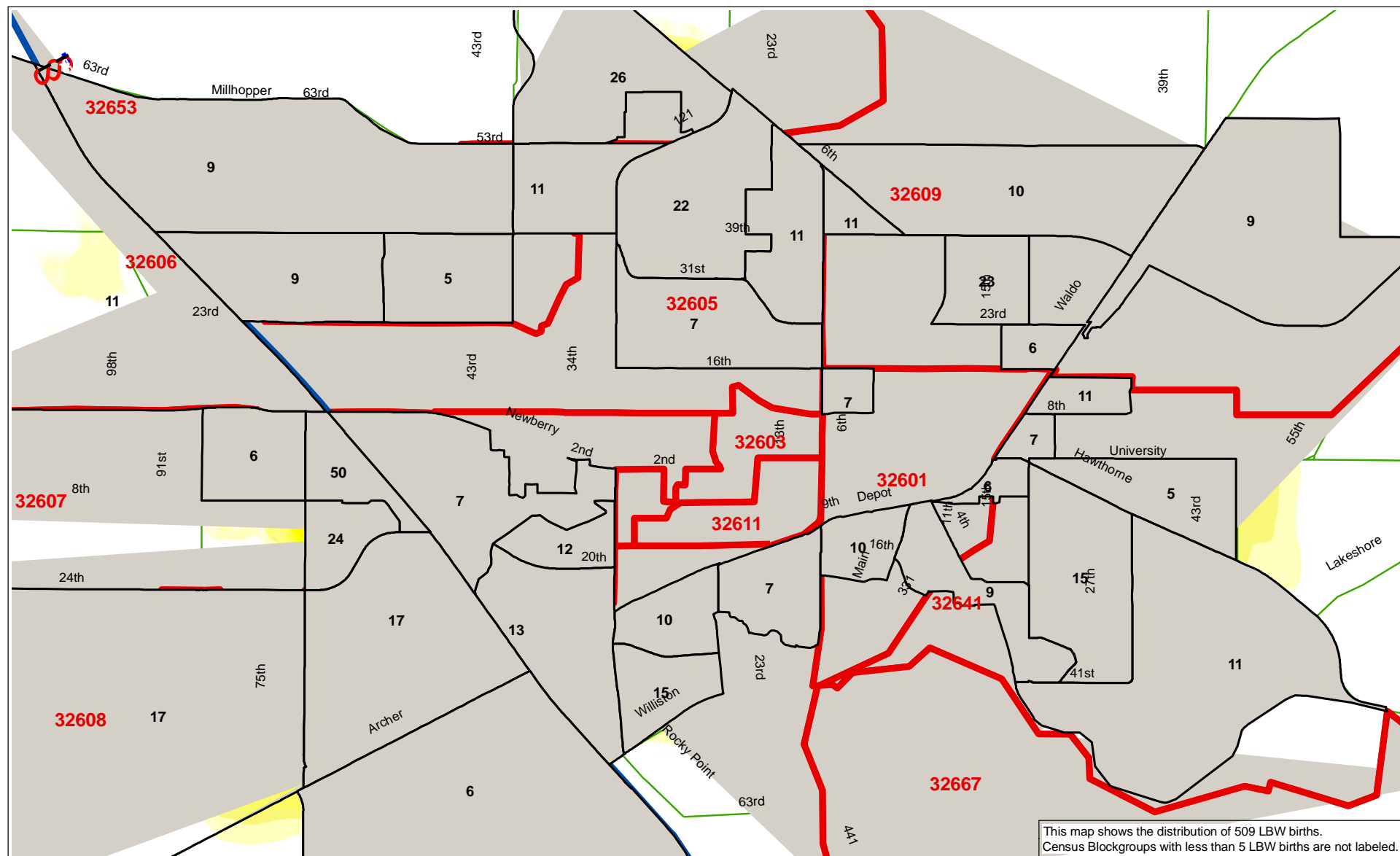


Data Sources: US Census Bureau; US Postal Service; ESRI Business Solutions; University of Florida.

Health Status and Lifestyle

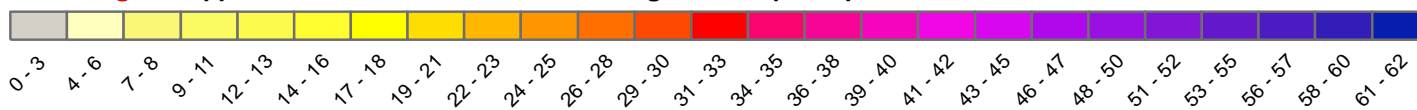
- Mortality Indicators
- Mental Health Indicators
- Birth and Pregnancy Outcomes
- Behavioral Risk Factor Data
- Childhood Obesity
- Zip Code Health Report Card

GAINESVILLE, FL: LOW BIRTH WEIGHT BIRTH DENSITY AND COUNT BY CENSUS BLOCKGROUP (2007-2009)



This map shows the distribution of 509 LBW births.
Census Blockgroups with less than 5 LBW births are not labeled.

Color Legend: Approximate Number of Low Birth Weight Births per Square Mile



Health Care Access and Utilization

- Health Insurance Coverage
- Safety Net Providers
- Professional Shortage and Medically Underserved Areas
- Medicaid and CHOICES Utilization
- Physician and Facility Supply
- Hospital Utilization

Assessment 2012

- 2010 as a starting point
- Oral Health Data
- Add social indicators

Possible Additions

- High school graduation/drop out rates
- Violent crime rate
- Inadequate social support
- Access to healthy foods (food deserts)

Additions

- Air pollution
- Access to recreational facilities
- SNAP recipients
- Child abuse

Data to Include

- Less is more...
- Requires data review and decisions by staff and subcommittee
 - Overlap with other assessments
 - Overlap with other local initiatives
 - Accurate and current
- Do we need to include traditional indicators ? (mortality)
- Maps better than tables

SAN FRANCISCO DEPARTMENT OF PUBLIC HEALTH

Lori Cook



Quantitative Data

WHAT NEXT?



Quantitative Data is a Balancing Act

- Knowing everything and knowing what is important
- Thinking about the past, the present, and the future
- Most reliable may not be what is most important
- What speaks to public health may not speak to our stakeholders

SUMMARY

- Quantitative data is one tool to help your community select its highest priorities
- There is no perfect data
- Data alone will not answer questions. Make sure it is linked to your vision, mission, and model of health
- Think about data in a way that helps you identify priorities, but also helps you monitor progress

Resources

State and National Data Sets:

<http://www.countyhealthrankings.org/take-action/data-drilldown>

Great Information on Surveys and Other Data Collection Items:

<http://www.statcan.gc.ca/edu/power-pouvoir/toc-tdm/5214718-eng.htm>

Quantitative Data

DISCUSSION



Last Word

The next CHA/CHIP training webinar will be on:

‘Analyzing and Interpreting Quantitative Data’

Presenter: Lisa Lehman

Wednesday, 2/8/12 at 2:30 PM ET

**Please complete the evaluation before
logging off the webinar.**