

***COMMUNITY HEALTH NEEDS ASSESSMENT***

***2013***

**Peoria County**

**Tazewell County**

**Woodford County**

Prepared by: Dr. Laurence G. Weinzimmer and Professor Eric Michel

## Tri-County Community Health-Needs Assessment

**TABLE OF CONTENTS**

EXECUTIVE SUMMARY .....	11
I. INTRODUCTION .....	15
II METHODS .....	21
III. PHASE 1 – COMMUNITY ASSESSMENT .....	25
Chapter 1. Demographic Profile .....	26
1.1 Population .....	26
1.2 Age Distribution .....	35
1.3 Household/Family.....	47
1.4 Economic Information .....	55
1.5 Education .....	58
1.6 People with Disabilities .....	68
Demographic Profile: Strategic Implications .....	70
Chapter 2. Prevention .....	73
2.1 Accessibility .....	73
2.2 Wellness.....	80
Prevention: Strategic Implications.....	98
Chapter 3. Symptoms/Predictors .....	100
3.1 Tobacco Use .....	100
3.2 Drug and Alcohol Abuse .....	104
3.3 Overweight and Obesity .....	109
Symptoms/Predictors: Strategic Implications.....	112
Chapter 4. Diseases/Morbidity .....	115
4.1 Age Related .....	115
4.2 Cardiovascular .....	117
4.3 Respiratory.....	131
4.4 Cancer .....	136
4.5 Type 2 Diabetes .....	149
4.6 Infectious Diseases .....	153
4.7 Secondary Diagnoses.....	154
4.8 Injuries .....	157
Diseases/Morbidity: Strategic Implications.....	159
Chapter 5. Mortality .....	161
5.1 Leading Causes of Death.....	161
Mortality: Strategic Implications.....	166

## Tri-County Community Health-Needs Assessment

IV. PHASE 2 – PRIMARY DATA RESEARCH FOR COMMUNITY HEALTH NEEDS	168
Chapter 6. General Characteristics of Respondents	169
6.1 Age	169
6.2 Race and Ethnicity	170
6.3 Educational Attainment	171
6.4 Income Distribution	172
6.5 Living Arrangements	173
6.6 Household Composition	174
6.7 Employment Status	174
6.8 Gender	175
Chapter 7. Findings and Results Community Perceptions	177
7.1 Health Problems in the Community	177
7.2 Unhealthy Behaviors	184
7.3 Issues with Quality of Life	189
Community Perceptions: Strategic Implications	194
Chapter 8. Accessibility to Health Care	195
8.1 Choice of Medical Care	195
8.2 Frequency of Checkups	199
8.3 Access to Medical Care	202
8.4 Access to Prescription Drugs	205
8.5 Access to Dental Care	208
8.6 Access to Counseling	213
8.7 Access to Information	217
8.8 Personal Physician	218
8.9 Type of Insurance	220
Access to Health Care: Strategic Implications	221
Chapter 9. Health-Related Behaviors	222
9.1 Physical Exercise	222
9.2 Healthy Eating	223
9.3 Smoking	224
9.4 Overall Health	226
Healthy Behaviors: Strategic Implications	230
V. PHASE 3 – PRIORITIZATION OF HEALTH-RELATED ISSUES	231
Chapter 10. Prioritization of Health-Related Issues	231
10.1 Summary of Community Health Issues	231
10.2 Community Resources	233
10.3 Priority of Community Health-Related Issues	242
VI. APPENDIX	245

## Tri-County Community Health-Needs Assessment

**LIST OF EXHIBITS**

- Figure 1. Community Needs Assessment Framework
- Table 1. Percentage of Total Patients per County
- Table 2. Weighted Percentage of Patients per County
- Table 1.1.1-1. Population of Tri-County Region, 2000 and 2010
- Table 1.1.1-2. Population of Municipalities in Peoria County, 2000 and 2010
- Table 1.1.1-3. Population of Municipalities in Tazewell County, 2000 and 2010
- Table 1.1.1-4. Population of Municipalities in Woodford County, 2000 and 2010
- Table 1.1.2-1. Population Growth and Projections by County
- Table 1.1.2-2. Gross Actual and Projected Population Gains by County
- Table 1.1.2-3. 2000-2010 Population Growth Rate for Municipalities in Peoria County
- Table 1.1.2-4. 2000-2010 Population Growth Rate for Municipalities in Tazewell County
- Table 1.1.2-5. 2000-2010 Population Growth Rate for Municipalities in Woodford County
- Table 1.2-1. Age Distribution of Tri-County Region Residents, 2010 vs. 2007
- Table 1.2-2. Age Distribution of Peoria County Residents, 2010 vs. 2007
- Table 1.2-3. Age Distribution of Tazewell County Residents, 2010 vs. 2007
- Table 1.2-4. Age Distribution of Woodford County Residents, 2010 vs. 2007
- Table 1.2-5. Median Age of Residents in Tri-County Region, 2010 vs. 2007
- Table 1.2-6. Population of Tri-County Region Under 18 Years of Age, 2010 vs. 2007
- Table 1.2-7. Population of Tri-County Region 62 Years of Age and Over, 2010 vs. 2007
- Table 1.2.2-1. Gender Distribution of Tri-County Region Residents, 2010 vs. 2007
- Table 1.2.3-1. Racial Distribution of Peoria County Residents, 2010 vs. 2007
- Table 1.2.3-2. Racial Distribution of Tazewell County Residents, 2010 vs. 2007
- Table 1.2.3-3. Racial Distribution of Woodford County Residents, 2010 vs. 2007
- Table 1.2.3-4. Racial Distribution of Tri-County Residents, 2010 vs. 2007
- Table 1.3-1. Growth Rate in Number of Family Households Tri-County Region, 2007-2010
- Table 1.3.1-1. Family Composition in Peoria County, 2010 vs. 2007
- Table 1.3.1-2. Family Composition in Tazewell County, 2010 vs. 2007
- Table 1.3.1-3. Family Composition in Woodford County, 2010 vs. 2007
- Table 1.3.3-1. Three-year Growth Rate in the Percentage of Tri-County Residents who are Married, but not separated, 2007-2010
- Table 1.3.3-2. Three-year Growth Rate in the Percentage of Tri-County Residents who are Divorced or Separated, 2007-2010
- Table 1.3.3-3. Three-year Growth Rate in the Percentage of Tri-County Residents who are Widowed or Never Married, 2007-2010
- Table 1.3.4-1. Births to Teenage Mothers in Tri-County Region vs. State of Illinois, 2009 vs. 2006
- Table 1.4.1-1. Median Household Income for Tri-County Region, 2007 vs. 2010
- Table 1.4.2-1. Average Annual Unemployment Rate for Tri-County Region, 2007-2011
- Table 1.4.3-1. Percentage of Families Living in Poverty in Tri-County, 2010 vs. 2007
- Table 1.5.1-1. Grade 3 Student Achievement in Peoria County 2009-2010
- Table 1.5.1-2. Grade 3 Student Achievement in Tazewell County 2009-2010
- Table 1.5.1-3. Grade 3 Student Achievement in Woodford County 2009-2010
- Table 1.5.1-4. Grade 8 Student Achievement in Peoria County 2009-2010
- Table 1.5.1-5. Grade 8 Student Achievement in Tazewell County 2009-2010
- Table 1.5.1-6. Grade 8 Student Achievement in Woodford County 2009-2010

## Tri-County Community Health-Needs Assessment

- Table 1.5.2-1. Truancy in School Districts of Peoria County in 2010
- Table 1.5.2-2. Truancy in School Districts of Tazewell County in 2010
- Table 1.5.2-3. Truancy in School Districts of Woodford County in 2010
- Table 1.5.3-1. High School Graduation Rates in Peoria County, 2007 vs. 2010
- Table 1.5.3-2. High School Graduation Rates in Tazewell County, 2007 vs. 2010
- Table 1.5.3-3. High School Graduation Rates in Woodford County, 2007 vs. 2010
- Table 1.6.1-1. Percentage of Tri-County Region Respondents with Days of Physical Health Rated "Not Good" Per Month, 2004-2006 vs. 2007-2009
- Table 1.6.1-2. Percentage of Tri-County Region Respondents with Days of Mental Health Rated "Not Good" Per Month, 2004-2006 vs. 2007-2009
- Table 2.1.1-1. Percentage of Tri-County Region Respondents with Health Care Coverage, 2004-2006 vs. 2007-2009
- Table 2.1.1-2. Percentage of Tri-County Region Respondents with Dental Insurance, 2004-2006 vs. 2007-2009
- Table 2.1.1-3. Percentage of Tri-County Region Respondents with Medicare Coverage, 2007-2009
- Table 2.1.2-1. Methodist, Proctor, Pekin, and SFMC ER Visits from the Tri-County for Cardiovascular and Respiratory by Age, 2008-2011
- Table 2.1.2-2. Methodist, Proctor, Pekin, and SFMC ER Visits from the Tri-County for Various Conditions by Age, 2008-2011
- Table 2.1.2-3. Percentage of Tri-County Region Respondents with a Usual Health Care Provider, 2004-2006 vs. 2007-2009
- Table 2.1.2-4. Percentage of Tri-County Region Respondents who have not Visited a Dentist in 2+ Years, 2004-2006 vs. 2007-2009
- Table 2.2.1-1. Prevalence of Last Routine Checkup by Tri-County Residents, 2007-2009
- Table 2.2.2-1. Percentage of Tri-County Region Residents with High Cholesterol
- Table 2.2.2-2. Time Since Last Cholesterol Screening by Tri-County Region Residents
- Table 2.2.2-3. Percentage of Tri-County Region Residents with High Blood Pressure
- Table 2.2.2-4. Percentage of Tri-County Region Residents Over the Age of 40 Who Have Ever Had A Mammogram
- Table 2.2.2-5. Time Since Last Mammogram by Tri-County Region Residents
- Table 2.2.2-6. Percentage of Peoria County Residents Who Have Ever Had An Osteoporosis Screening
- Table 2.2.2-7. Percentage of Peoria County Residents Ever Diagnosed with Osteoporosis
- Table 2.2.2-8. Percentage of Peoria County Residents Who Have Ever Had A Pap Smear
- Table 2.2.2-9. Time Since Last Pap Smear by Tri-County Region Residents
- Table 2.2.3-1. Percentage of Tri-County Residents Who Obtained A Flu Shot
- Table 2.2.3-2. Percentage of Tri-County Residents Who Obtained A Pneumonia Shot
- Table 2.2.4-1. Adherence to Regular and Sustained Physical Activity Guidelines by Tri County Region Residents
- Table 2.2.4-2. Physical Activity from Work-related Exertion by Tri-County Region Residents
- Table 2.2.4-3. Regular Exercise and Intent to Exercise by Tri-County Region Residents
- Table 2.2.4-4. Percentage of Tri-County Residents Who Meet Moderate Activity Standard (5x per week for 30 minutes per day)
- Table 2.2.4-5. Percentage of Tri-County Residents Who Meet Vigorous Activity Standard (3x per week for 20 minutes per day)

## Tri-County Community Health-Needs Assessment

- Table 2.2.4-6. Total Servings of Fruits/Vegetables Consumed by Tri-County Residents
- Table 2.2.5-1. Time Since Last Teeth Cleaning by Tri-County Region Residents
- Table 3.1-1. Smoking Status of Residents in the Tri-County Region
- Table 3.1-2. Reported Age that Tri-County Region Residents Began Smoking Regularly, 2007-2009
- Table 3.1-3. Rules for Smoking in Home Among Tri-County Region Residents
- Table 3.1-4. Smoking Policy for Work Areas of Tri-County Region Residents, 2007-2009
- Table 3.1-5. Tri-County Region Resident Options Regarding Smoking in Restaurants
- Table 3.2-1. Percent of Tri-County Region Residents at Risk for Acute/Binge Drinking
- Table 3.2-2. Reported Substance Abuse Usage of Peoria County 8th Graders, 2008
- Table 3.2-3. Reported Substance Abuse Usage of Peoria County 12th Graders, 2008
- Table 3.2-4. Reported Substance Abuse Usage of Tazewell County 8th Graders, 2008
- Table 3.2-5. Reported Substance Abuse Usage of Tazewell County 12th Graders, 2008
- Table 3.2-6. Reported Substance Abuse Usage of Woodford County 8th Graders, 2008
- Table 3.2-7. Reported Substance Abuse Usage of Woodford County 12th Graders, 2008
- Table 3.3-1. Percentage of People Diagnosed with Overweight or Obesity in Peoria Tri-County and Illinois
- Table 3.3-2. Overweight and Obesity in Peoria Tri-County and Illinois
- Table 3.3-3. Percent of Tri-County Region Residents Advised About Weight
- Table 3.3-4. Percent of Tri-County Region Residents Now Trying to Lose Weight
- Table 3.3-5. Percent of Tri-County Region Residents Now Trying to Maintain Current Weight
- Table 4.1.1-1. Percentage of Babies Born Preterm or with Low Birth Weight in the Tri-County Region, 2009
- Table 4.1.2-1. Percentage of Babies Born with Adequate or Better Prenatal Care based on Kotelchuck Index Scores in the Tri-County Region, 2009
- Table 4.2.1-1. Number of Treated Cases of Hypertension and Hypertension Complications at Peoria Area Hospitals, 2008-2011 For Inpatient Admissions
- Table 4.2.2-1. Number of Treated Cases of Noncardiac Chest Pain at Peoria Area Hospitals, 2008-2011 For Inpatient Admissions
- Table 4.2.2-2. Number of Treated Cases of Carditis at Peoria Area Hospitals, 2008-2011 For Inpatient Admissions
- Table 4.2.2-3. Number of Treated Cases of Congenital Cardiac Anomaly at Peoria Area Hospitals, 2008-2011 For Inpatient Admissions
- Table 4.2.2-4. Number of Treated Cases of Arterial Embolism at Peoria Area Hospitals, 2008-2011 For Inpatient Admissions
- Table 4.2.2-5. Number of Treated Cases of Coronary Atherosclerosis at Peoria Area Hospitals, 2008-2011 For Inpatient Admissions
- Table 4.2.2-6. Number of Treated Cases Disease of the Venous System at Peoria Area Hospitals, 2008-2011 For Inpatient Admissions
- Table 4.2.2-7. Number of Treated Cases of Dysrhythmia and Cardiac Arrest at Peoria Area Hospitals, 2008-2011 For Inpatient Admissions
- Table 4.2.2-8. Number of Treated Cases of Heart Failure at Peoria Area Hospitals, 2008-2011 For Inpatient Admissions
- Table 4.2.2-9. Number of Treated Cases of Heart Valve Disease at Peoria Area Hospitals, 2008-2011 For Inpatient Admissions

## Tri-County Community Health-Needs Assessment

- Table 4.2.2-10. Number of Treated Cases of Myocardial Infarction at Peoria Area Hospitals, 2008-2011 For Inpatient Admissions
- Table 4.2.2-11. Number of Treated Cases of Other Cardiovascular Disease at Peoria Area Hospitals, 2008-2011 For Inpatient Admissions
- Table 4.2.2-12. Number of Treated Cases of Vascular Disease at Peoria Area Hospitals, 2008-2011 For Inpatient Admissions
- Table 4.2.3-1. Number of Treated Cases of Brain Tumors and Stroke at Peoria Area Hospitals, 2008-2011 For Inpatient Admissions
- Table 4.3.1-1. Number of Treated Cases of Asthma at Peoria Area Hospitals, 2008-2011 For Inpatient Admissions
- Table 4.3.1-2. Percent of Tri-County Region Residents who have Asthma
- Table 4.3.1-3. Percent of Tri-County Region Residents with a Child in the Household with Asthma between 2007-2009
- Table 4.3.2-1. Number of Treated Cases of Pneumonia at Peoria Area Hospitals, 2008-2011 For Inpatient Admissions
- Table 4.3.3-1. Number of Treated Cases of Chronic Obstructive Pulmonary Disease at Peoria Area Hospitals, 2008-2011 For Inpatient Admissions
- Table 4.4-1. Five-Year Average Incidence Counts of Selected Cancers by County, 1989-2012
- Table 4.4-2. Five-Year Average Incidence Counts of Selected Cancers for Peoria, Tazewell, and Woodford Counties, 1989-2012
- Table 4.4-3. Top 6 Cancers by Treatment
- Table 4.4-4. Cancer by Gender
- Table 4.4.1-1. Number of Treated Cases of Breast Cancer at Peoria Area Hospitals, 2008-2011, For Inpatient Admissions
- Table 4.4.1-2. Number of Treated Cases of Lung Cancer at Peoria Area Hospitals, 2008-2011, For Inpatient Admissions
- Table 4.4.1-3. Number of Treated Cases of Prostate Cancer at Peoria Area Hospitals, 2008-2011, For Inpatient Admissions
- Table 4.4.1-4. Number of Treated Cases of Pancreatic Cancer at Peoria Area Hospitals, 2008-2011, For Inpatient Admissions
- Table 4.4.1-5. Number of Treated Cases of Colorectal Cancer at Peoria Area Hospitals, 2008-2011, For Inpatient Admissions
- Table 4.4.1-6. Number of Treated Cases of Cervical and Other Female Genital Cancer at Peoria Area Hospitals, 2008-2011, For Inpatient Admissions
- Table 4.4.2-1. Number of Treated Cases of Leukemia at Peoria Area Hospitals, 2008-2011, For Inpatient Admissions
- Table 4.5-1. Number of Treated Cases of Type II Diabetes at Peoria Area Hospitals, 2008-2011, For Inpatient Admissions
- Table 4.5-2. Number of Treated Cases of Type I Diabetes at Peoria Area Hospitals, 2008-2011, For Inpatient Admissions
- Table 4.5-3. Percent of Tri-County Region Residents who have Diabetes
- Table 4.5-4. Percent of Tri-County Region Residents who had a Blood Glucose Test in the past 12 months between 2007-2009
- Table 4.6.1-1. Chlamydia Rates per 100,000 Population, 2006-2009
- Table 4.6.1-2. Gonorrhea Rates per 100,000 Population, 2006-2009

## Tri-County Community Health-Needs Assessment

- Table 4.7.1-1. Number of Cases of Top 20 Secondary Diagnoses at Peoria Area Hospitals, Inpatient Only, 2011
- Table 4.7.1-2. Growth Rates in the Number of Cases of Top 20 Secondary Diagnoses at Peoria Area Hospitals, Inpatient Only, 2008-2011
- Table 4.8.1-1. Percentage of Deaths Attributed to Suicide in the Tri-County Region, 2008
- Table 4.8.2-1. Three-year Growth Rates for Motor Vehicle Collision Incidents within the Tri-County Region, 2009 vs. 2006
- Table 5.1-1. Top 5 Leading Causes of Death for all Races by County, 2008
- Table 5.1-2. Primary Care Physician Visits per Decedent in the Last Two Years of Life Before Death, 2003-2007
- Table 5.1-3. Specialist Care Physician Visits per Decedent in the Last Two Years of Life Before Death, 2003-2007
- Table 5.1-4. Primary Care Physician Visits per Decedent in the Last 6 Months of Life Before Death, 2003-2007
- Table 5.1-5. Specialists Care Physician Visits per Decedent in the Last 6 Months of Life Before Death, 2003-2007
- Table 6.1. Age Distribution for Overall Tri-County, Peoria County, Tazewell County, Woodford County, and Deep Poverty
- Table 6.2. Race/Ethnicity Distribution for Overall Tri-County, Peoria County, Tazewell County, Woodford County, and Deep Poverty
- Table 6.3. Highest Educational Attainment for Overall Tri-County, Peoria County, Tazewell County, Woodford County, and Deep Poverty
- Table 6.4. Income Distribution for Overall Tri-County, Peoria County, Tazewell County, and Woodford County
- Table 6.5. Living Arrangement Distribution for Overall Tri-County, Peoria County, Tazewell County, Woodford County, and Deep Poverty
- Table 6.6. Household Composition for Overall Tri-County, Peoria County, Tazewell County, Woodford County, and Deep Poverty
- Table 6.8. Gender Composition for Overall Tri-County, Peoria County, Tazewell County, Woodford County, and Deep Poverty
- Table 7.1.1. Aggregate Tri-County Frequencies for Most Important Perceived Health Problems in the Community
- Table 7.1.2. County Frequencies for Most Important Perceived Health Problems
- Table 7.1.3. Frequencies for Most Important Perceived Health Problems in the Community from Individuals Living in Poverty
- Table 7.1.4. Significant Correlations among Most Important Perceived Health Problems in the Community, Demographic Variables, and Respective Counties
- Table 7.2.1. Aggregate Tri-County Frequencies for Most Important Perceived Unhealthy Behaviors in the Community
- Table 7.2.2. County Frequencies for Most Important Perceived Unhealthy Behaviors in the Community
- Table 7.2.3. Frequencies for Most Important Perceived Unhealthy Behaviors in the Community from Individuals Living in Poverty
- Table 7.2.4. Significant Correlations among Most Important Perceived Unhealthy Behaviors in the Community, Demographic Variables, and Respective Counties

## Tri-County Community Health-Needs Assessment

- Table 7.3.1. Aggregate Tri-County Frequencies for Most Important Perceived Factors that Impact Quality of Life
- Table 7.2.2. County Frequencies for Most Important Perceived Factors that Impact Quality of Life
- Table 7.3.3. Frequencies for Most Important Perceived Factors that Impact Quality of Life from Individuals Living in Poverty
- Table 7.3.4. Significant Correlations among Most Important Perceived Factors that Impact Quality of Life, Demographic Variables, and Respective Counties
- Table 8.1.1. Aggregate Tri-County Frequencies for Choice of Medical Care
- Table 8.1.2. County Frequencies for Choice of Medical Care
- Table 8.1.3. County Frequencies for Choice of Medical Care from Individuals Living in Poverty
- Table 8.1.4. Significant Correlations among Choice of Health Care, Demographic Variables, and Respective Counties
- Table 8.2.1. Aggregate Tri-County Frequencies for Time Since Last Checkup
- Table 8.2.2. County Frequencies for Time Since Last Checkup
- Table 8.2.3. Frequencies for Time Since Last Checkup from Individuals Living in Poverty
- Table 8.2.4. Significant Correlations for Time Since Last Checkup
- Table 8.3.1. Frequencies for “Was there a time when you needed medical care but were not able to get it?” for Overall Tri-County, Peoria County, Tazewell County, Woodford County, and Individuals Living in Poverty
- Table 8.3.2. Significant Correlations for “Was there a time when you needed medical care but were not able to get it?”
- Table 8.3.3.1. Frequencies for “Why weren’t you able to get medical care?” for Aggregate Tri-County
- Table 8.3.3.2. Significant Correlations for “Was there a time when you needed medical care but were not able to get it?”
- Table 8.4.1. Frequencies for “Was there a time when you needed prescription medicine but were not able to get it?” for Overall Tri-County, Peoria County, Tazewell County, Woodford County, and Individuals Living in Poverty
- Table 8.4.2. Significant Correlations for “Was there a time in the last year when you needed prescription medication and were unable to get it?”
- Table 8.4.3. Frequencies for “Why weren’t you able to get prescription medicine?” for Aggregate Tri-County
- Table 8.4.4. Significant Correlations for Reasons Why Individuals Were Not Able to Obtain Prescription Medication in the Past Year
- Table 8.5.1. Frequencies for Time Since Last Dental Checkup for Overall Tri-County, Peoria County, Tazewell County, Woodford County, and Individuals Living in Poverty
- Table 8.5.2. Significant Correlations for Time Since Last Dental Checkup
- Table 8.5.3. Frequencies for “Was there a time when you needed dental care but were not able to get it?” for Overall Tri-County, Peoria County, Tazewell County, Woodford County, and Individuals Living in Poverty
- Table 8.5.4. Significant Correlations for “In the last year, was there a time when you needed dental care but could not get it?”

## Tri-County Community Health-Needs Assessment

Table 8.5.5	Frequencies for “Why weren’t you able to get dental care?” for Aggregate Tri-County
Table 8.6.1	Frequencies for “Was there a time when you needed counseling but were not able to get it?” for Overall Tri-County, Peoria County, Tazewell County, Woodford County, and Individuals Living in Poverty
Table 8.6.2	Significant Correlations for “In the last year, was there a time when you needed counseling but could not get it?”
Table 8.6.3	Frequencies for “Why weren’t you able to get counseling?” for Aggregate Tri-County
Table 8.6.4	Significant Correlations for Reasons Why Individuals Were Not Able to Obtain Counseling in the Past Year
Table 8.7.1	Frequencies for “Where do you get most of your medical information?” for Overall Tri-County, Peoria County, Tazewell County, Woodford County, and Individuals Living in Poverty
Table 8.8.1	Frequencies for “Do you have a personal physician?” for Overall Tri-County, Peoria County, Tazewell County, Woodford County, and Individuals Living in Poverty
Table 8.8.2	Significant Correlations among Access to a Personal Physician, Demographic Variables, and Respective Counties
Table 8.9.1	Frequencies for Insurance Coverage for Overall Tri-County, Peoria County, Tazewell County, Woodford County, and Individuals Living in Poverty
Table 9.1.1	Frequencies for “In the last week, how many times did you exercise?” for Overall Tri-County, Peoria County, Tazewell County, Woodford County, and Individuals Living in Poverty
Table 9.2.1	Frequencies for “On a typical day, how many servings of fruits and/or vegetables do you eat?” for Overall Tri-County, Peoria County, Tazewell County, Woodford County, and Individuals Living in Poverty
Table 9.2.2	Significant Correlations among Number of Servings of Fruits and Vegetables Consumed Daily, Demographic Variables, and Respective Counties
Table 9.3.1	Frequencies for “On a typical day, how many cigarettes do you smoke?” for Overall Tri-County, Peoria County, Tazewell County, Woodford County, and Individuals Living in Poverty
Table 9.3.2	Significant Correlations among Number of Cigarettes Smoked Daily, Demographic Variables, and Respective Counties
Table 9.4.1	Frequencies for “Overall, my physical health is __” for Overall Tri-County, Peoria County, Tazewell County, Woodford County, and Individuals Living in Poverty
Table 9.4.2	Significant Correlations among Overall Physical Health, Demographic Variables, and Respective Counties
Table 9.4.3	Frequencies for “Overall, my physical health is __” for Overall Tri-County, Peoria County, Tazewell County, Woodford County, and Individuals Living in Poverty
Table 9.4.4	Significant Correlations among Overall Mental Health, Demographic Variables, and Respective Counties
Table 10.2	Relationship between Community Resources and Community Needs
Figure 10.3	Importance/Urgency Matrix for Community Health Needs

## EXECUTIVE SUMMARY

The Tri-County Community Health-Needs Assessment is a collaborative undertaking by UnityPoint Health - Methodist, OSF Saint Francis Medical Center and Proctor Hospital to highlight the health needs and well being of residents in Peoria, Tazewell, and Woodford counties. Through this needs assessment, collaborative community partners have identified numerous health issues impacting individuals and families in the Central Illinois Tri-County region. Several themes are prevalent in this health-needs assessment – the demographic composition of the Tri-County region, the predictors and prevalence for diseases, leading causes of mortality, accessibility to health services and healthy behaviors.

Results from this study can be used for strategic decision-making purposes as they directly relate to the health needs of the community. The study was designed to assess issues and trends impacting the communities served by hospitals, as well as perceptions of targeted stakeholder groups. Specifically, this assessment provides a detailed analysis of: (1) Tri-County area community health needs using secondary data; and (2) an assessment of perceptions and behaviors regarding health-related challenges in the community, including accessibility to needed health care.

### PHASE I – USE OF SECONDARY DATA TO IDENTIFY NEEDS

Chapters 1-5 include a detailed analysis of secondary data to assess information regarding the health status of the community. In order to perform these analyses, information was collected from numerous secondary sources, including publically available sources as well as private sources of data. Strategic implications are discussed at the end of each chapter. Specifically, Phase I of the study highlights several critical areas of community needs:

***Demographics*** – With the changing demographics, forecasts indicate increase in chronic conditions such as diabetes, asthma, and heart disease, and obesity. Three specific demographic trends in the region will have a significant impact on health issues, including:

*Elderly Population* – Growth in the 85 and older is experiencing the highest growth rate and the 62 and older population has seen a significant increase in all three counties. Forecasts indicate that individuals over age 65 will increase by one-third by 2022.

*Teen Birth Rate* – While teen birth rates are decreasing in Peoria County, they are still significantly higher than state averages.

*Poverty* – The three-county region has seen a significant increase in families living in poverty from 2007 to 2010.

***Accessibility to Health Care*** – The lack of insurance coverage is more prevalent among socioeconomically disadvantaged groups that are often at high risk for disease and illness. Thus, a vicious cycle results where individuals who are at the highest risk for diseases are unable to receive screenings, thus perpetuating a cycle of disease. This is compounded by unhealthy lifestyles.

## Tri-County Community Health-Needs Assessment

**Obesity** – Research strongly suggests that obesity is a significant problem facing youth and adults nationally, in Illinois, and within the Tri-County region. In terms of obesity, the Tri-County area as a whole is significantly higher than the state average. Considering that Illinois has the 6th highest obesity rate in the U.S., this is an important issue.

**Risky Behavior-Substance Abuse** -- In the Tri-County region, among 8<sup>th</sup> graders, the average age at first use of alcohol, tobacco and marijuana is 13, 11.5 and 12.4 years respectively. The same average age for 12<sup>th</sup> graders is 15.9, 14 and 14.9 years respectively. Peoria County is much higher for marijuana use compared to state averages, especially among 12<sup>th</sup> graders (33% vs. 21%).

**Mental Health** -- Approximately 25% of residents in the Tri-County region reported they had experienced 1-7 days with poor mental health per month between 2007 and 2009. These percentages are greater than the State of Illinois average for the same time frame and represent a modest increase compared to 2006. Approximately 10% of Tri-county residents reported 8-30 days with poor mental health per month during the same time period. In particular, Woodford County experienced a 3.6% increase from 2006-2009.

**Morbidity Issues** – Several different diseases have seen significant growth between 2008-2011.

*Related Cardiovascular Issues* – There has been significant increase in several areas related to cardiac disease, including significant increases in hypertension, congenital cardiac anomalies, arterial embolisms, dysrhythmia and cardiac arrest, and cases of stroke.

*Asthma* – Inpatient admissions to the Peoria area hospitals including UnityPoint Health - Methodist, Saint Francis Medical Center, Proctor, and Pekin, increased by 26.7%.

*Diabetes* – Type I and Type II Diabetes are increasing and all three counties are higher than state averages.

*Lung Cancer* – While some types of cancer have experienced decreased growth rates in recent years, lung cancer has been steadily increasing.

*Sexually Transmitted Infections* – STIs are significantly higher in Peoria County, over twice the rate of the state, however trending downward.

**Mortality** – The leading causes of death include diseases of the heart, malignant neoplasm and coronary heart disease.

## PHASE II – COLLECTION, ANALYSIS AND INTERPRETATION OF PRIMARY DATA

A comprehensive understanding of targeted stakeholders was completed in Chapters 6-9. Specifically, it was important to understand how “at risk” or economically disadvantaged people perceived: (1) relative importance of health issues; (2) relative importance of unhealthy behaviors; (3) access to health care, dental care, counseling and prescription medications. Through this type of research, opportunities were identified for improving how community

## Tri-County Community Health-Needs Assessment

health needs are addressed; and insights into how perceptions are affected by demographic characteristics. Critical findings include:

***Misperceptions of community health issues*** – inconsistencies exist between people’s perception of health issues and actual data.

*Heart disease* – Residents in the Tri-County region rate heart disease relatively low compared to actual causes of mortality. Specifically, younger people and men tend to have the largest misperceptions regarding the importance of understanding heart disease in the community.

*Risky behavior -Early sexual activity* – Early sexual activity appears to be rated by survey respondents as relatively low. However, given the high rate of early sexual activity in the Tri-County region (which can lead to births among teenage mothers and STIs), there is a disconnect between perceptions and the severity of this issue.

***Perceptions of the importance of access to health services*** – Access to health services is rated as one of the highest determinants to quality of life across all categories.

***Access to Medical Services*** – Several issues relating to health service access were identified.

*Choice of Medical Care* – Only half of people living in deep poverty seek medical services at a clinic or doctor’s office. For this segment of the population, it is very common to seek medical services from an emergency department, or even more concerning is that 13% of this segment of the population will not seek any medical services at all.

*Access to Medical Care and Prescription Medications* – Over 1/3 of the population living in deep poverty indicated there was a time in the last year when they were not able to get medical care when needed. The leading causes were lack of insurance and inability to afford a copayment or deductible. Similar results were found for access to prescription medication.

*Access to Dental Care* – While significant research exists linking dental care to numerous diseases, including heart disease, less than 50% of the aggregate Tri-County population had a checkup in the last year. Specifically, men, lower income and less educated people were less likely to visit a dentist.

*Access to Counseling* -- Approximately 25% of people living in deep poverty indicated they were not able to get counseling when they needed it over the last 12 months. Leading indicators are younger people and homelessness. While affordability and insurance were the leading reasons, fear and embarrassment were also significant.

*Access to Information* – Across categories, residents of the Tri-County area get most of their medical information from doctors and the next most prevalent is the Internet.

*Type of Insurance* – Across all three counties, the most prevalent type of insurance is private or commercial; however, those living in poverty and Peoria County residents are disproportionately more reliant on Medicaid. Also for those living in poverty, 1/3 do not have any type of insurance at all.

## Tri-County Community Health-Needs Assessment

**Healthy Behaviors** – Several issues relating to healthy behaviors were identified.

*Physical Exercise* – Men, younger people and educated people are more likely to engage in physical exercise, while homeless residents are not. Although only 15% of the population engages in exercise at least 5 times a week.

*Healthy Eating* – Less than 5% of the population consumes at least the minimum recommended servings of fruits/vegetables in a day. Those that are more likely to have healthy eating habits include women, people with higher educations and more income, and older people.

*Decrease Smoking* – Smoking is on the decline, however, less educated people, men, younger people, Black residents and homeless people are still more likely to smoke.

*Self-Perceptions of Health* – In terms of self-perceptions of physical and mental health, almost 90% of the population indicated that they were in average or good physical health. Similar results were found for residents' self-perceptions of mental health.

### **PHASE III – PRIORITIZATION OF HEALTH-RELATED ISSUES**

The identification and prioritization of the most important health-related issues in the Tri-County region are identified in Chapter 10. After summarizing all of the issues in the Community Health Needs Assessment, a comprehensive analysis of existing community resources was performed to identify the efficacy to which health-related issues were being addressed. Finally, a collaborative team of leaders in the healthcare community used an importance/urgency methodology to identify the most critical issues in the area, including:

*Access to healthcare*

*Risky behaviors – Substance abuse*

*Asthma*

*Diabetes*

*Healthy behaviors*

*Lung cancer*

*Mental health*

*Obesity*

Specific criteria used to identify these issues included: (1) magnitude to the community; (2) strategic importance to the community; (3) existing community resources; (4) potential for impact; and (5) trends and future forecasts.

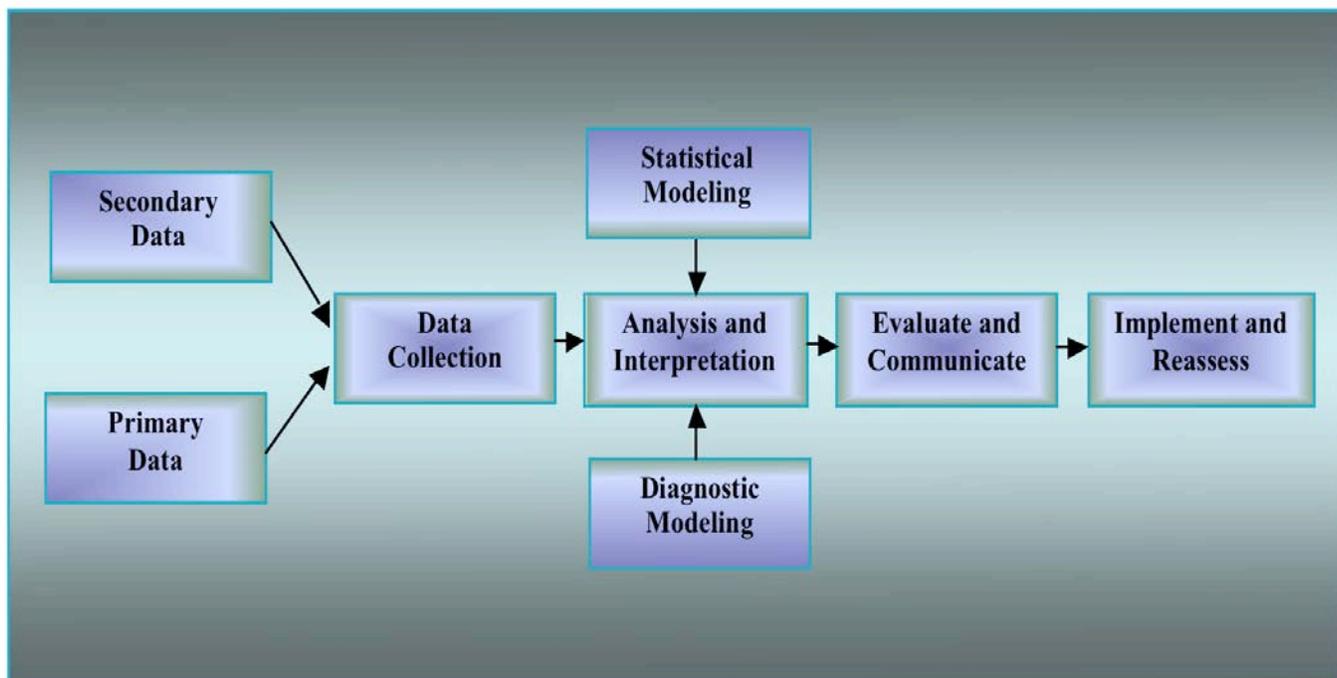
## I. INTRODUCTION

### Background

The Patient Protection and Affordable Care Act (Affordable Care Act), enacted March 23, 2010 adds new requirements on tax-exempt hospitals to conduct community health-needs assessments and to adopt implementation strategies to meet the community health needs identified through the assessments. This community health-needs assessment (CHNA) takes into account input from specific individuals who represent the broad interest of the community served by OSF/Saint Francis Medical Center, UnityPoint Health - Methodist and Proctor Hospital, including those with special knowledge of or expertise in public health. For this study, a community health-needs assessment is defined as a systematic process involving the community, to identify and analyze community health needs and assets in order to prioritize these needs, and to plan and act upon unmet community health needs. Results from this assessment will be made widely available to the public.

The structure of the CHNA is based on standards used by the Internal Revenue Service to develop Form 990, Schedule H–Hospitals, designated solely for tax-exempt hospitals. The fundamental areas of the community needs assessment are illustrated in Figure 1.

**Figure 1. Community Needs Assessment Framework**



## Tri-County Community Health-Needs Assessment

The community health-needs assessment is divided into three distinct phases. **Phase I** focuses on collection of existing secondary data relating to a comprehensive health profile and drawing strategic inferences. **Phase II** focuses on primary data collection to assess perspectives of key stakeholders, including those with special knowledge of the health community. Primary data collection includes a concerted effort to target the at-risk population in the region. **Phase III** focuses on the prioritization of needs within the community.

### **Design of the Collaborative Team: Community Engagement, Broad Representation and Special Knowledge**

In order to engage the entire community in the CHNA process, a collaborative team of health-professional experts and key community advocates was created. Members for the Collaborative team were carefully selected to ensure representation of the broad interests of the community. Specifically, team members included two representatives from each of the three Peoria hospitals, administrators from the three County Health Departments, physicians/administrators from clinics serving the at-risk population, representation from the University of Illinois College of Medicine and the Heart of Illinois United Way. Note that numerous partner and agency organizations also participated in this study. Specific discussion of these organizations can be found in the METHODS section. Engagement occurred throughout the entire process, resulting in shared ownership of the assessment. The entire collaborative team met monthly from January-October 2012. Additionally numerous meetings were held between the facilitators and specific individuals during the process.

Specifically, members of the **Collaborative Team** consisted of individuals with special knowledge of and expertise in the health care of the community. Individuals, affiliations, titles and expertise are as follows:

**Robert Anderson** MS, MT, FACHE is the Executive Vice President and Chief Operating Officer for OSF Saint Francis Medical Center. He holds a Master's Degree in Health Services Administration and his Bachelor's degree is in Medical Laboratory Technology. He has over 30 years of healthcare experience and is a Fellow in the American College of Healthcare Executives.

**Dr. Carl Asche**, PhD, has over 20 years of experience conducting research studies involving health economic evaluations and the evaluation of patient health outcomes. Carl is currently the Director of the Center for Health Outcomes Research and Research Professor of Medicine at the University of Illinois College of Medicine at Peoria.

**Todd Baker**, MBA, has worked for 24 years with Proctor Health Care Incorporated. He earned his MBA from Bradley University. He currently serves as Vice President of Strategy and Business Development and spent 19 years in the delivery of Primary and specialty care in the Peoria area as the Executive Director of the Proctor Medical Group. Other titles include Vice President, Hult Health Education Center; Secretary, Belcrest Services, Ltd/Proctor Health Systems.

**Greg Chance**, C.P.H.A , LEHP, MPH is currently employed as the Public Health Administrator for the Peoria City/County Health Department. In this position, Mr. Chance is responsible for

## Tri-County Community Health-Needs Assessment

the administration of a local governmental public health agency with a budget of \$7.1 million dollars and a staff of 90 employees. Greg has approximately 30 years of professional experience in the delivery of public health programs at the local level. Mr. Chance received his Bachelors degree from Illinois State University and his Masters of Public Health from the University of Illinois, School of Public Health. Greg has held key leadership roles in the conduct of community health needs assessments at the local and state level since 1994.

**Paul E. Macek**, is the President and CEO of Proctor Health Care Incorporated in Peoria Illinois. Prior to joining Proctor Health Care in September 2008, Paul served seven years as the President of Christian Hospitals affiliated with Barnes Jewish Christian (BJC) HealthCare in St. Louis. He also served as an adjunct professor in the Department of Public Administration & Analysis at Southern Illinois University Edwardsville. Macek received his Master's Degree in Hospital Administration from the University of Minnesota, Minneapolis and his BA in Business and Hospital Administration from Concordia College, Moorhead Minnesota. He is also a graduate of the Boeing Executive Leadership Program.

**Laurie Schierer** has served as the Administrator of the Woodford County Health Department since 2005. With a bachelors and masters degree in health education from the University of Illinois, Laurie has been active in both state and national organizations promoting public health. She currently serves as the Secretary of the Illinois Association of Public Health Administrators.

**Mr. Michael Stephan** is President of the Heart of Illinois United Way. Since Michael became President in 2000, the Heart of Illinois United Way has seen a significant increase in fund raising—from \$5.6 million to a record \$6.3 million in 2001. Under his leadership, the Challenge Grant was created, bringing together dollars from Caterpillar Inc., CEFCU, and UnityPoint Health - Methodist. He has also overseen the beginning of a five-year strategic plan to move towards fund distribution based on measurable outcomes. Michael earned a bachelor of business administration degree from James Madison University in Harrisonburg, VA.

**Dr. Gregg Stoner**, MD has been the Chief Medical Officer at Heartland Community Health Clinic in Peoria, Illinois since 2006. He is a Clinical Professor at UICOMP where he developed fellowships in Women's Health and Geriatrics and supervised a practice-based research network. He has participated in medical missions to Haiti and Peru.

**Ruth K. Snyder**, RN, MHA, CQA, has 37 years healthcare experience with a focus on operations management and improvement and currently working in Strategy and Development. She is involved in the development and/or management of several hospital based community outreach programs including: Diabetes Clinic, Wound Care Clinic, Pain Clinic, ESRD facility for hemodialysis and peritoneal dialysis, the Wellmobile, Hospice, and the "Call Center" including Nurse Advice Line, Patient Transfer Services, Patient Scheduling and an Answering Service for health care providers.

**Richard L. Thomas**, RN, MBA, has a Bachelor's Degree from Widener University and an MBA from California State University. He has 36 years of experience in healthcare administration. He serves as Executive Director of Ambulatory Services at SFMC overseeing hospital-based

## Tri-County Community Health-Needs Assessment

outpatient services at the Centers for Health, Washington Outpatient Center, Sisters' Clinic, Occupational Health, Employee Health, RiverPlex and Behavioral Health.

**Amy Tippey** is currently the Administrator of the Tazewell County Health Department. She has worked for 21 years in Public Health. In her 21 years of experience, she has worked in: substance abuse prevention, health education, youth development and enrichment programs, emergency preparedness and administration.

**Mr. Terry L. Waters** has 32 years of professional and volunteer experience related to healthcare planning and community health issues. He has served as the Vice President of Planning and Development for UnityPoint Health - Methodist for the past 28 years and has volunteered for numerous non-profit social service agencies including Peoria Association for Retarded Citizens, Parkhill Skilled Nursing Home, Central Illinois Alzheimer's Association, and Heart of Illinois United Way.

In addition to collaborative team members, the following **facilitators** managed the process and prepared the Community Health Needs Assessment. Their qualifications and expertise are as follows:

**Michelle A. Carrothers (Coordinator)** is currently the Director of Debt Management and Revenue Cycle for OSF Healthcare System, a position she has served in since 2002. Michelle has over 27 years of health care experience. Michelle obtained both a Bachelor of Science Degree and Masters of Business Administration Degree from Bradley University in Peoria, IL. She attained her CPA in 1984 and has earned her FHFMA certification in 2011. Currently, she serves on the Revenue Cycle Key Performance Indicator Task Force and the National Advisory Council for HFMA National. Michelle chaired the Illinois Hospital Association Medicaid Cost Work Group and was a member of the IHA task force that developed the statewide Community Benefit Report that is submitted to the Attorney General's Office.

**Eric J. Michel (Research Associate)** MBA, is a faculty member in Leadership at Christopher Newport University in Newport News, VA. Previously, he served on the faculty of the Foster College of Business at Bradley University in Peoria, IL. Professor Michel has coauthored over a dozen papers on leadership and organizational strategy for presentations at national conferences and for publication in academic journals. He serves as a consultant to not-for-profit and healthcare organizations in the areas of executive development and community assessment.

**Dr. Laurence G. Weinzimmer (Principal Investigator)** Ph.D., is the Caterpillar Inc. Professor of Strategic Management in the Foster College of Business at Bradley University. An internationally recognized thought leader in organizational strategy and leadership, he is a sought-after consultant to numerous Fortune 100 companies and not-for-profit organizations. Dr. Weinzimmer has authored over 100 academic papers and three books. His work appears in 15 languages, and he has been widely honored for his research accomplishments by many prestigious organizations, including the Academy of Management. Dr. Weinzimmer has served

## Tri-County Community Health-Needs Assessment

as principle investigator for numerous community assessments, including the United Way, Economic Development Council and numerous hospitals.

### Definition of the Community

In order to determine the geographic boundaries for the primary and secondary markets for OSF/Saint Francis Medical Center, UnityPoint Health - Methodist and Proctor Hospital, analyses were completed to identify what percentage of inpatient and outpatient activity was represented from specific counties. Data show that Peoria, Tazewell and Woodford counties represent over 80% of all patients for all three hospitals (as seen in Table 1).

**Table 1. Percentage of Total Patients per County**

	Peoria	Tazewell	Woodford	Total for Tri-County	Other	Total
St. Francis	49	28	5	82	18	100
Methodist	50	27	4	81	19	100
Proctor	60	21	4	85	15	100

Note that figures in Table 1 represent patients per country for the three hospitals. However to identify a most appropriate distribution of patients across the three counties, the number of patients served per hospital must also be taken into consideration. Specifically, based on Net Patient Service Revenue, Saint Francis Medical Center serves 66 percent of patients in the region, UnityPoint Health - Methodist serves 25 percent of patients in the region and Proctor Hospital serves 9 percent of patients in the regions. Subsequently, weighting the patients served by incorporating the volume per hospital, Table 2 illustrates that 51 percent of patients come from Peoria County, 27 percent of patients come from Tazewell County, and 5 percent come from Woodford County. Note that Saint Francis reported patients served from over 100 counties, yet there were not other counties that represented over 1 percent of total patients served. Therefore for this community assessment, the collaborative team defined Peoria County, Tazewell County and Woodford County as the geographic region primarily served. Please refer to Table 2 for the weighted percentages.

## Tri-County Community Health-Needs Assessment

**Table 2. Weighted Percentage of Patients per County**

	Peoria	Tazewell	Woodford	Total for Tri-County	Other	Total
St. Francis	33	18	3	54	12	66
Methodist	13	7	1	21	4	25
Proctor	5	2	1	8	1	9
Total Combined Percentage	51	27	5	83	17	100

In terms of patient categories for this CHNA, in addition to defining the community by geographic boundaries, this study will target the at-risk populations as an area of potential opportunity to improve the health of this population.

**Purpose of the Community Health-Needs Assessment**

In the initial meeting, the collaborative committee identified the purpose of this study. Specifically, this study has been designed to provide necessary information to health-care organizations, including hospitals, clinics and the health departments, in order to create strategic plans in program design, access and delivery. Results of this study will act as the platform to allow health-care organizations to orchestrate limited resources to improve management of high-priority challenges. By working together, the hospitals, clinics and health departments will use this CHNA to help improve the quality of health care in the defined community. When feasible, data are assessed longitudinally to assess changes and patterns and benchmarked with state averages.

## II. METHODS

To complete the comprehensive community health-needs assessment, multiple sources were examined. Secondary statistical data were used for the first phase of the project. Additionally, based on a sample of 1,647 survey respondents from Peoria, Tazewell and Woodford counties, phase two focused on assessing perceptions of the community health issues, unhealthy behaviors, issues with quality of life, healthy behaviors and access to health care. Data were collected to assess the importance of specific issues, as well as access to health care.

### Phase I. Secondary Data for Community Health Needs Assessment

We first used existing secondary statistical data to develop an overall assessment of the health-related issues in the community. Note that several tables were aggregated from numerous data sources. For example, educational report-card tables were compiled by collecting information from 50 individual school report cards and combining aggregated data into these tables.

Five chapters were completed based on assessment of secondary data. Each chapter contains numerous categories. Within each category, there are specific sections, including definitions, importance of categories, data and interpretations. At the end of each chapter there is a section on the key strategic implications that can be drawn from the data.

Note that most of the data used for this phase was acquired via publically available data sets. However, for specific sections of Chapter 2 and the majority of Chapter 4, the most recent data available were from 2009. Given a purpose of this assessment is to measure subsequent improvements to community health over time, using data that are three years old is not sufficient. Therefore we used COMPdata from 2008-2011 for all of our disease categories. This required manual aggregation of data from the four “Peoria-Area Hospitals” serving the Tri-County area, defined as UnityPoint Health - Methodist, OSF Saint Francis Medical Center, Proctor Hospital, as well as Pekin Hospital.

Based on several retreats, the Collaborative Team identified six primary categories of diseases, including: age related, cardiovascular, respiratory, cancer, type 2 diabetes and infections. We also identified secondary causes of diseases as well as intentional and unintentional injuries. In order to define each disease category, we used modified definitions developed by Sg2. Sg2 specializes in consulting for health care organizations. Their team of experts includes MDs, PhDs, RNs and health care leaders with extensive strategic, operational, clinical, academic, technological and financial experience.

### Phase II. Primary Data Collection

This section describes the research methods used to collect, code, verify and analyze primary data. Three specific areas include the research design used for this study: survey design, data collection and data integrity.

## A. Survey Instrument Design

Initially, all surveys used in previous health-needs assessments that we were able to identify were assessed to identify common themes and approaches to collecting community health-needs data. In all, 15 surveys were identified. By leveraging best practices from these surveys, we created our own pilot survey. To ensure that all critical areas were being addressed, the entire collaborative team was involved in survey design/approval through several fact-finding sessions. Specifically, for the community health need assessment, five specific areas were included:

**Ratings of health problems in the community** – to assess the importance of various community health concerns. Survey items included areas assessing topics such as cancer, diabetes and obesity. In all, there were 20 choices provided for survey respondents.

**Ratings of unhealthy behaviors in the community** – to assess the importance of various unhealthy behaviors. Survey items included areas assessing topics such as violence, drug abuse and smoking. In all, there were 14 choices provided for survey respondents.

**Ratings of issues with quality of life** – to assess the importance of various issues relating to quality of life in the community. Survey items included areas assessing topics such as access to health care, safer neighborhoods and effective public transportation. In all, there were nine choices provided for survey respondents.

**Accessibility to health care** – to assess the degree to which residents could have access to health care when needed. Survey items included areas assessing topics such as access to medical, dental and mental care, as well as access to prescription drugs.

**Healthy behaviors** – to assess the degree to which residents exhibited healthy behaviors. The survey focused on areas such as exercise, healthy eating habits and smoking.

Finally, demographic information was collected to assess background information necessary to segment markets in terms of the five categories discussed above.

After the initial survey was designed, a pilot study was created to test the psychometric properties and statistical validity of the survey instrument. The pilot study was conducted at the Heartland Community Health Clinic's three facilities. The Heartland Clinic was chosen as it serves the at-risk population and also has a facility that serves a large percentage of the Hispanic population. A total of 130 surveys were collected. Results from the pilot survey revealed specific items to be included/excluded in the final survey instrument. Selection criteria for the final survey included validity, reliability and frequency measures based on responses from the pilot sample. Note that these surveys were not included in the final sample. A copy of the final survey is included in Appendix 1.

## B. Sample Size

In order to identify our potential population, we first identified the percentage of the tri-county population that was living in poverty. Specifically, we multiplied the population of each county by its respective poverty rate to identify the minimum sample size to study the at-risk population. Poverty rates for Peoria, Tazewell and Woodford Counties were 15 percent, 7.8 percent and 5.9 percent respectively. The populations used for the calculations were 185,816, 132, 446 and 38,862 respectively, yielding a total of 40,497 residents living in poverty in the Tri-County area.

We assumed a normal approximation to the hypergeometric given the targeted sample size.

$$n = (Nz^2pq)/(E^2 (N-1) + z^2 pq)$$

where:

$n$  = the required sample size

$N$  = the population size

$pq$  = population proportions (set at .05)

$z$  = the value that specified the confidence interval (use 95% CI)

$E$  =desired accuracy of sample proportions (set at +/- .05)

For the total Tri-County area, the minimum sample size for those living in poverty is 381. Given the weight of the hospitals based on Net Patient Service Revenue, as discussed in the Definition of Community section, for the Tri-County area this would translate to a minimum of 267 for Peoria, 72 for Tazewell and 38 for Woodford Counties. Given that there was a need to study each county individually, in addition to the combined Tri-County area, it was necessary to collect 379 for Peoria, 371 for Tazewell and 330 for Woodford Counties for those living in poverty. Note that for *aggregated* analyses of counties, additional surveys were collected from those not living in poverty in order to identify and analyze general perspectives.

In order to satisfy sampling requirements for both those living in poverty as well as aggregate perspectives, the data collection effort for this CHNA yielded a total of 1,647 usable responses. This more than met the threshold of the desired confidence interval.

## C. Data Collection

Data were collected for all three counties. The partner organization for Peoria County was the Heart of Illinois United Way (HOIUW). The HOIUW was chosen, as its agency organizations work closely with the at-risk inner-city population in the City of Peoria. A total of 47 organizations were asked to participate. Additionally the Peoria County Farm Bureau was engaged to distribute surveys to rural areas. For Tazewell and Woodford Counties, the partner organizations were the County Health Departments.

## Tri-County Community Health-Needs Assessment

To collect data in this study, three techniques were used. First, an online version of the survey was created. The online survey produced 469 responses. Additionally paper surveys were used. Second, a paper version of the survey was distributed. This yielded another 906 surveys. However, there was also a segment of the population that had either difficulty reading and/or comprehending the survey, so structured interviews were also performed, yielding a total of 274 responses. To collect interview data, a team of seven people was used at large soup-kitchen events. In order to be sensitive to the needs of respondents, interviewers stressed the importance of letting their voices be heard, as well as assurance of confidentiality and anonymity.

To specifically target the at-risk population, surveys were distributed at all homeless shelters and soup kitchens. Specific partner organizations included the Salvation Army, the Southside Mission, Peoria Rescue Ministries, Loaves and Fish, South Side Office of Concern, FamilyCore and the Friendship House. Note that since we specifically targeted the at-risk population as part of the data collection effort, this became a stratified sample, as we did not specifically target other groups based on their socio-economic status. However, when using convenience-sampling techniques, we made a concerted effort to assure randomness in order to mitigate potential bias in the sample.

### **D. Data Integrity**

Comprehensive analyses were performed to verify the integrity of the data for this research. Without proper validation of the raw data, any interpretation of results could be inaccurate and misleading if used for decision making. Therefore, several tests were performed to ensure that the data were valid. These tests were performed before any analyses were undertaken. Data were checked for coding accuracy, using descriptive frequency statistics to verify that all data items were coded correctly. This was followed by analyses of means and standard deviations and comparison of primary data statistics to existing secondary data. Additionally, for regression models, residual analyses were performed to ensure that the data met assumptions of the underlying models. Specifically, residuals were analyzed to make sure (1) the data were normally distributed, (2) no patterns existed among residuals (e.g., heteroscedasticity) and (3) no significant outliers biased the outputs.

### **E. Analytic Techniques**

In order to ensure statistical validity, we used several different analytic techniques to assess data. Specifically, frequencies and descriptive statistics were used for identifying patterns in residents' rating of various health concerns. Additionally appropriate statistical techniques were used for identification of existing relationships between perceptions, behaviors and demographic data. Specifically, we used Pearson correlations,  $\chi^2$  tests and tetrachoric correlations when appropriate, given characteristics of the specific data being analyzed.

**PHASE I – SECONDARY DATA RESEARCH FOR COMMUNITY HEALTH NEEDS**

In this section of the community health needs assessment, there are five chapters that assess different aspects of the general community as well as specific health-related issues. All of the information in this section is taken from secondary data sources. As described in the METHODS section, some data sources are publically available and other data sources are comprised of aggregated hospital data from 2011.

The chapters are as follows:

**CHAPTER 1. DEMOGRAPHIC PROFILE****CHAPTER 2. PREVENTION****CHAPTER 3. SYMPTOMS/PREDICTORS****CHAPTER 4. DISEASES/MORBIDITY****CHAPTER 5. MORTALITY**

## CHAPTER 1. DEMOGRAPHIC PROFILE

### 1.1 Population

*Importance of the measure:* Population data characterizes the individuals residing within the jurisdictional boundaries of Peoria, Tazewell, and Woodford counties. Population data provides an overview of population growth trends and builds a foundation for additional analysis of these data.

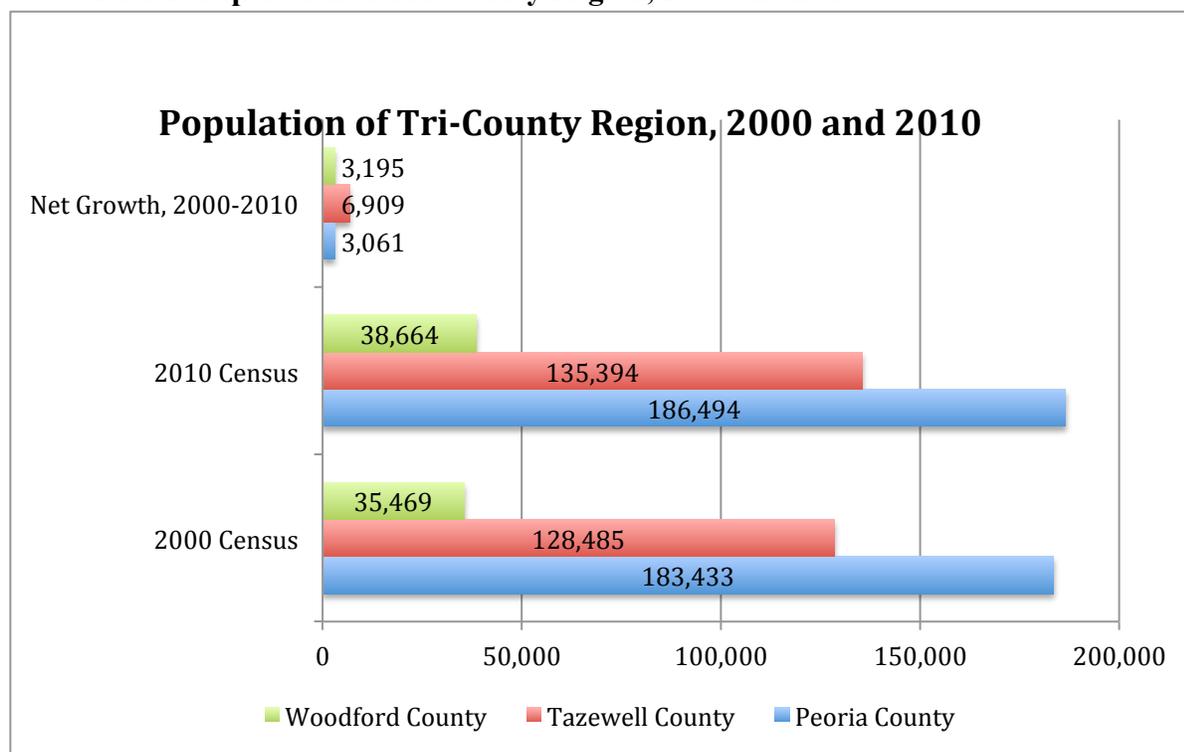
#### 1.1.1 Population by Municipality

The 2010 census of Peoria County indicated a population of 186,494 residents. Compared to the 2000 census of the Peoria County population, the 2010 census of the Peoria County population shows an increase of 3,061 residents. The vast majority (2,071) of these residents relocating to Peoria County in the last decade reside in Peoria city.

With regard to Tazewell County, the 2010 census indicated a population of 135,394 residents. Compared to the 2000 census of the Tazewell County population, the 2010 census of the Tazewell County population shows an increase of 6,909 residents. The vast majority (4,293) of these residents relocating to Tazewell County in the last decade reside in the city of Washington.

Finally, the 2010 census indicated a population of 38,664 in Woodford County. Compared to the population of Woodford County according to the 2000 census, the population of Woodford County has increased by 3,195 residents, with nearly a third of residents relocating to Woodford County in the last decade residing in Germantown Hills.

**Table 1.1.1-1 Population of Tri-County Region, 2000 and 2010**



Source: 2010 US Census; 2000 US Census

## Tri-County Community Health-Needs Assessment

**Table 1.1.1-2 Population of Municipalities in Peoria County, 2000 and 2010**

<b>County/Municipality</b>	<b>2000 Census</b>	<b>2010 Census</b>	<b>Net Growth, 2000-2010</b>
<b>Peoria County</b>	183,433	186,494	3,061
<i>Bartonville village</i>	6,310	6,471	161
<i>Bellevue village</i>	1,887	1,978	91
<i>Brimfield village</i>	933	868	-65
<i>Chillicothe city</i>	5,996	6,097	101
<i>Dunlap village</i>	926	1,386	460
<i>Elmwood city</i>	1,945	2,097	152
<i>Farmington city (part)</i>	X	0	N/A
<i>Glasford village</i>	1,076	1,022	-54
<i>Hanna City village</i>	1,013	1,225	212
<i>Kingston Mines village</i>	259	302	43
<i>Lake Camelot CDP</i>	X	1,686	N/A
<i>Mapleton village</i>	227	270	43
<i>Norwood village</i>	473	478	5
<i>Pekin city (part)</i>	0	0	0
<i>Peoria city</i>	112,936	115,007	2,071
<i>Peoria Heights village (part)</i>	6,533	6,087	-446
<i>Princeville village</i>	1,621	1,738	117
<i>Rome CDP</i>	1,776	1,738	-38
<i>West Peoria city</i>	4,762	4,458	-304

Source: 2010 US Census; 2000 US Census

**Table 1.1.1-3 Population of Municipalities in Tazewell County, 2000 and 2010**

<b>County/Municipality</b>	<b>2000 Census</b>	<b>2010 Census</b>	<b>Net Growth, 2000-2010</b>
<b>Tazewell County</b>	128,485	135,394	6,909
<i>Armington village</i>	368	343	-25
<i>Creve Coeur village</i>	5,448	5,451	3
<i>Deer Creek village (part)</i>	605	682	77
<i>Delavan city</i>	1,825	1,689	-136
<i>East Peoria city</i>	22,638	23,402	764
<i>Goodfield village (part)</i>	53	192	139
<i>Green Valley village</i>	728	709	-19
<i>Heritage Lake CDP</i>	X	1,520	N/A
<i>Hopedale village</i>	929	865	-64
<i>Mackinaw village</i>	1,452	1,950	498
<i>Marquette Heights city</i>	2,794	2,824	30
<i>Minier village</i>	1,244	1,252	8
<i>Morton village</i>	15,198	16,267	1,069
<i>North Pekin village</i>	1,574	1,573	-1
<i>Pekin city (part)</i>	33,857	34,094	237
<i>Peoria Heights village (part)</i>	0	0	0
<i>South Pekin village</i>	1,162	1,146	-16
<i>Tremont village</i>	2,029	2,236	207
<i>Washington city</i>	10,841	15,134	4,293

Source: 2010 US Census; 2000 US Census

**Table 1.1.1-4 Population of Municipalities in Woodford County, 2000 and 2010**

<b>County/Municipality</b>	<b>2000 Census</b>	<b>2010 Census</b>	<b>Net Growth, 2000-2010</b>
<b>Woodford County</b>	35,469	38,664	3,195
<i>Bay View Gardens village</i>	366	378	12
<i>Benson village</i>	408	423	15
<i>Congerville village</i>	466	474	8
<i>Deer Creek village (part)</i>	0	22	22
<i>El Paso city (part)</i>	2,695	2,810	115
<i>Eureka city</i>	4,871	5,295	424
<i>Germantown Hills village</i>	2,111	3,438	1,327
<i>Goodfield village (part)</i>	633	668	35
<i>Kappa village</i>	170	227	57
<i>Metamora village</i>	2,700	3,636	936
<i>Minonk city</i>	2,168	2,078	-90
<i>Panola village</i>	33	45	12
<i>Peoria Heights village (part)</i>	102	69	-33
<i>Roanoke village</i>	1,994	2,065	71
<i>Secor village</i>	379	373	-6
<i>Spring Bay village</i>	436	452	16
<i>Washburn village (part)</i>	1,080	1,081	1

Source: 2010 US Census; 2000 US Census

## Tri-County Community Health-Needs Assessment

*1.1.2 Growth Rates*

Data from the last three censuses (1990, 2000, 2010) indicate positive population growth for Peoria, Tazewell, and Woodford counties. Data also suggest that both Peoria and Tazewell counties have reversed the negative population growth experienced in the 1980s.

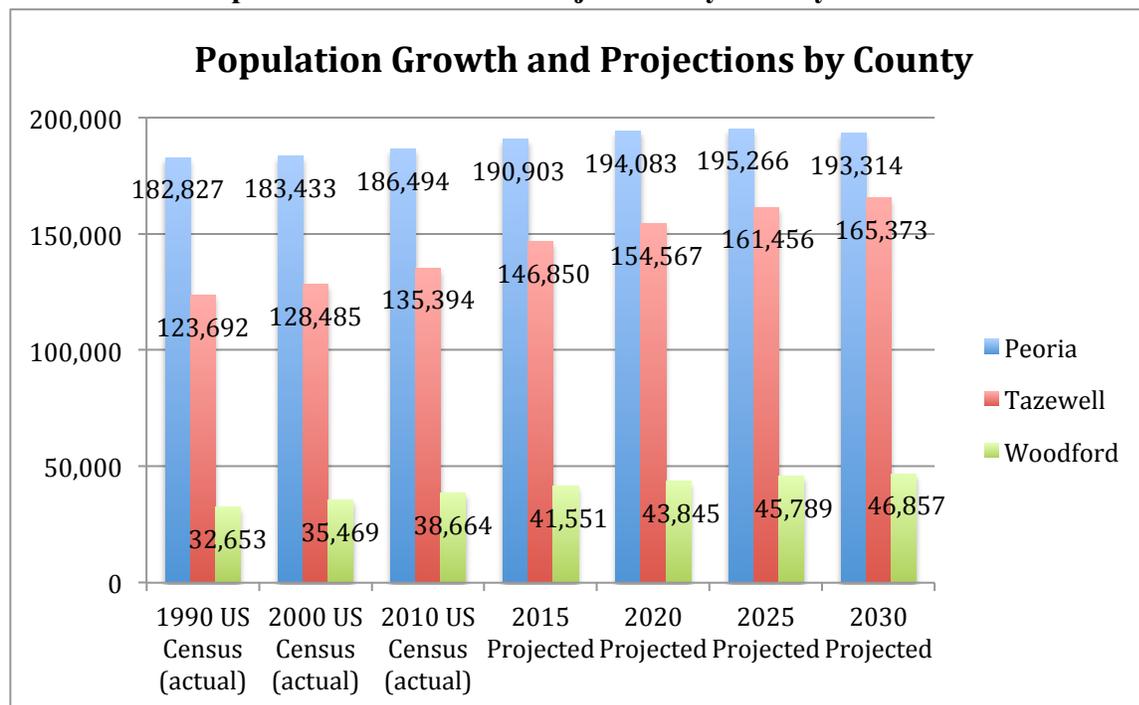
With regard to Peoria County, five municipalities experienced negative population growth between 2000 and 2010 (Brimfield, Glasford, Peoria Heights, Rome CDP, and West Peoria). Four municipalities experienced double-digit positive growth between 2000 and 2010 (Dunlap, Hanna City, Kingston Mines, and Mapleton) with Dunlap growing by 49.5% between 2000 and 2010.

In Tazewell County, six municipalities experienced negative population growth between 2000 and 2010 (Armington, Delavan, Green Valley, Hopedale, North Pekin, and South Pekin). Four municipalities experienced double-digit positive growth between 2000 and 2010 (Deer Creek, Goodfield, Mackinaw, Tremont, and Washington) with Goodfield growing by a staggering 262.3% between 2000 and 2010.

Only three municipalities in Woodford County reported negative growth between 2000 and 2010 (Minonk, Peoria Heights, and Secor). Four municipalities saw double-digit positive growth between 2000 and 2010 (Germantown Hills, Kappa, Metamora, and Panola) with strong growth in Germantown Hills (62.9%) between 2000 and 2010.

With regard to population projections for the next twenty years (2010 to 2030), the Tri-County region is expected to maintain positive population growth through 2025.

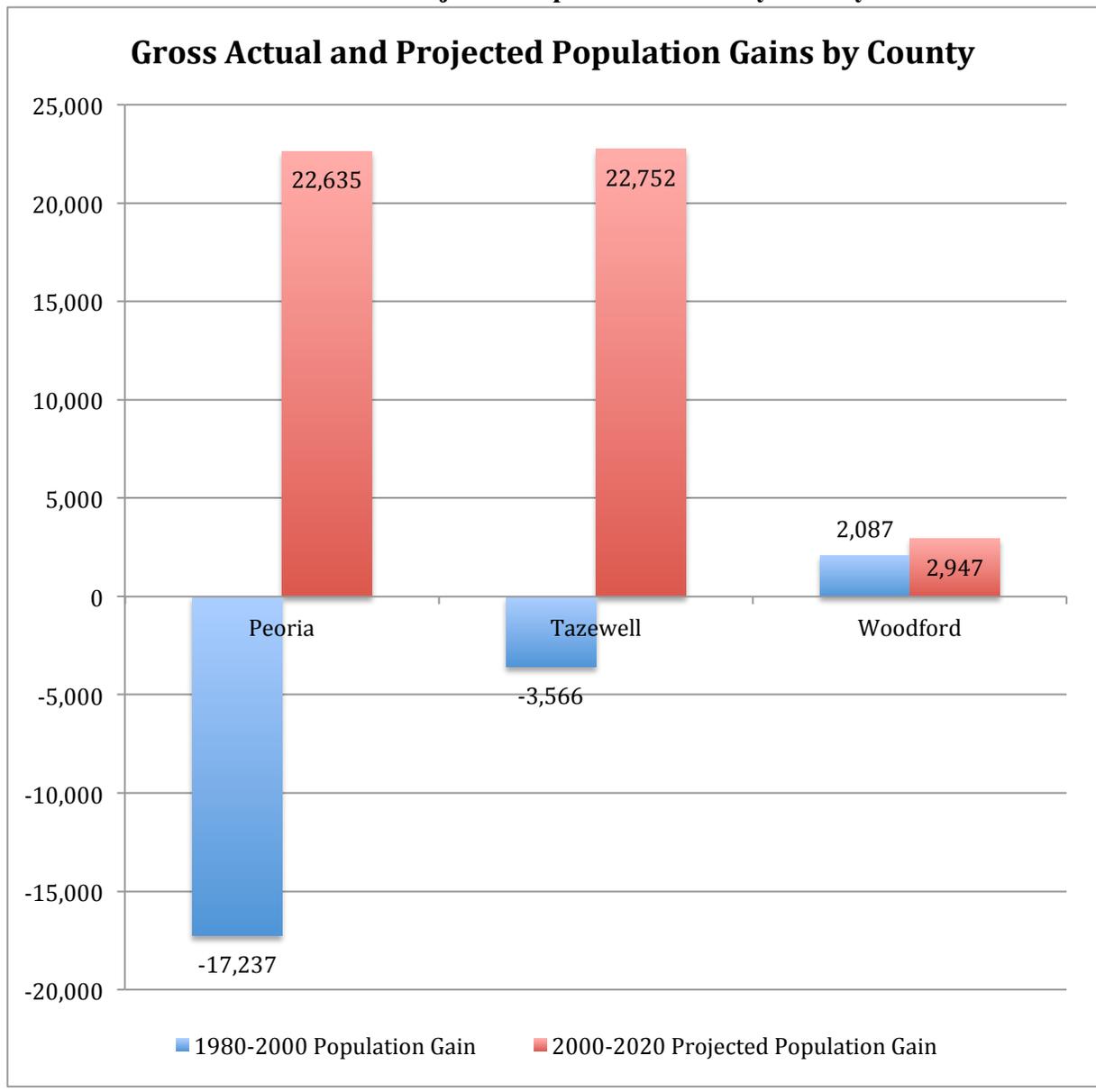
**Table 1.1.2-1 Population Growth and Projections by County**



Source: 1990, 2000, & 2010 US Census;

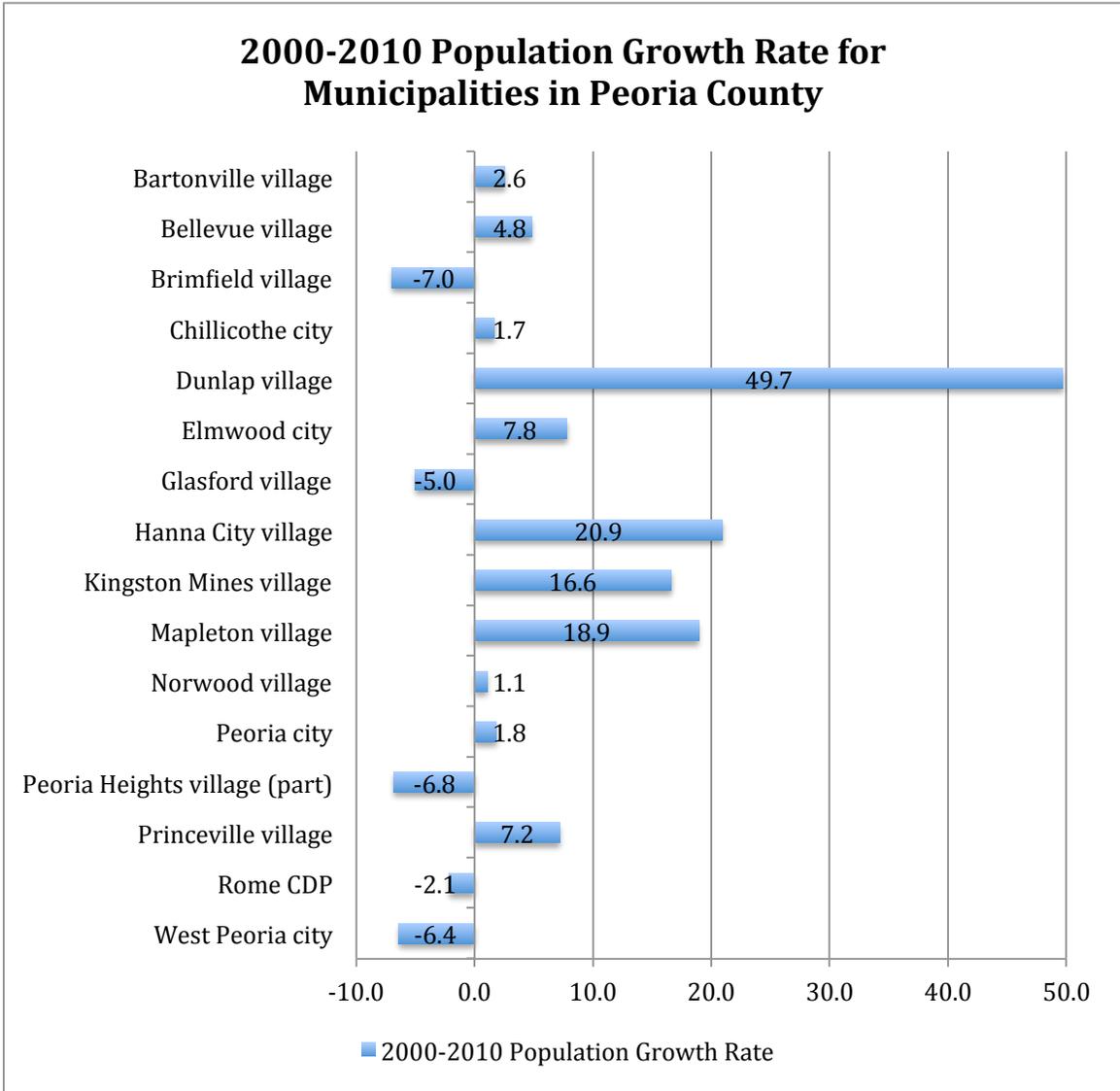
Illinois Department of Commerce & Economic Opportunity

**Table 1.1.2-2 Gross Actual and Projected Population Gains by County**



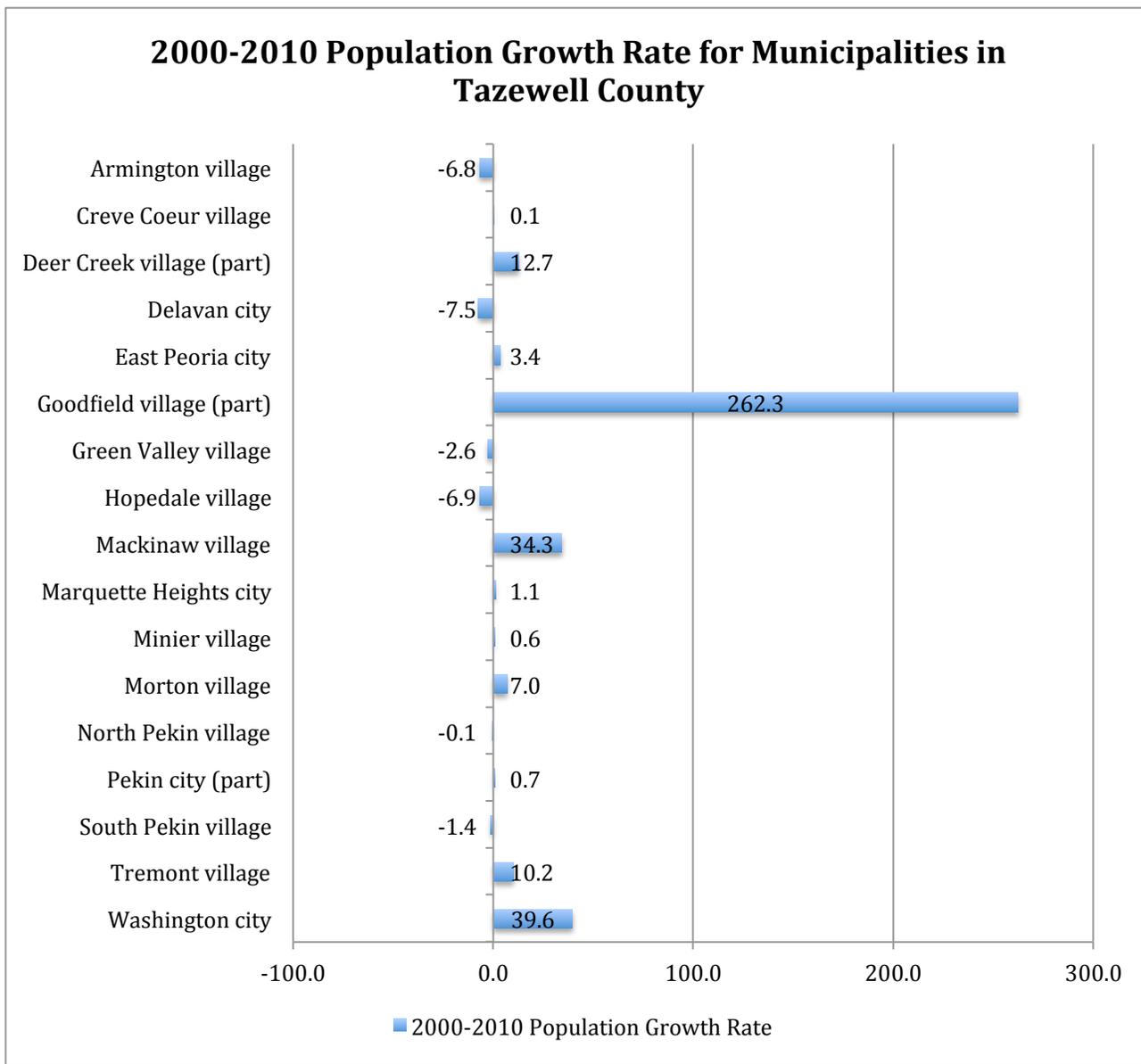
*Source: 1990, 2000, & 2010 US Census;  
Illinois Department of Commerce & Economic Opportunity*

**Table 1.1.2-3 2000-2010 Population Growth Rate for Municipalities in Peoria County**



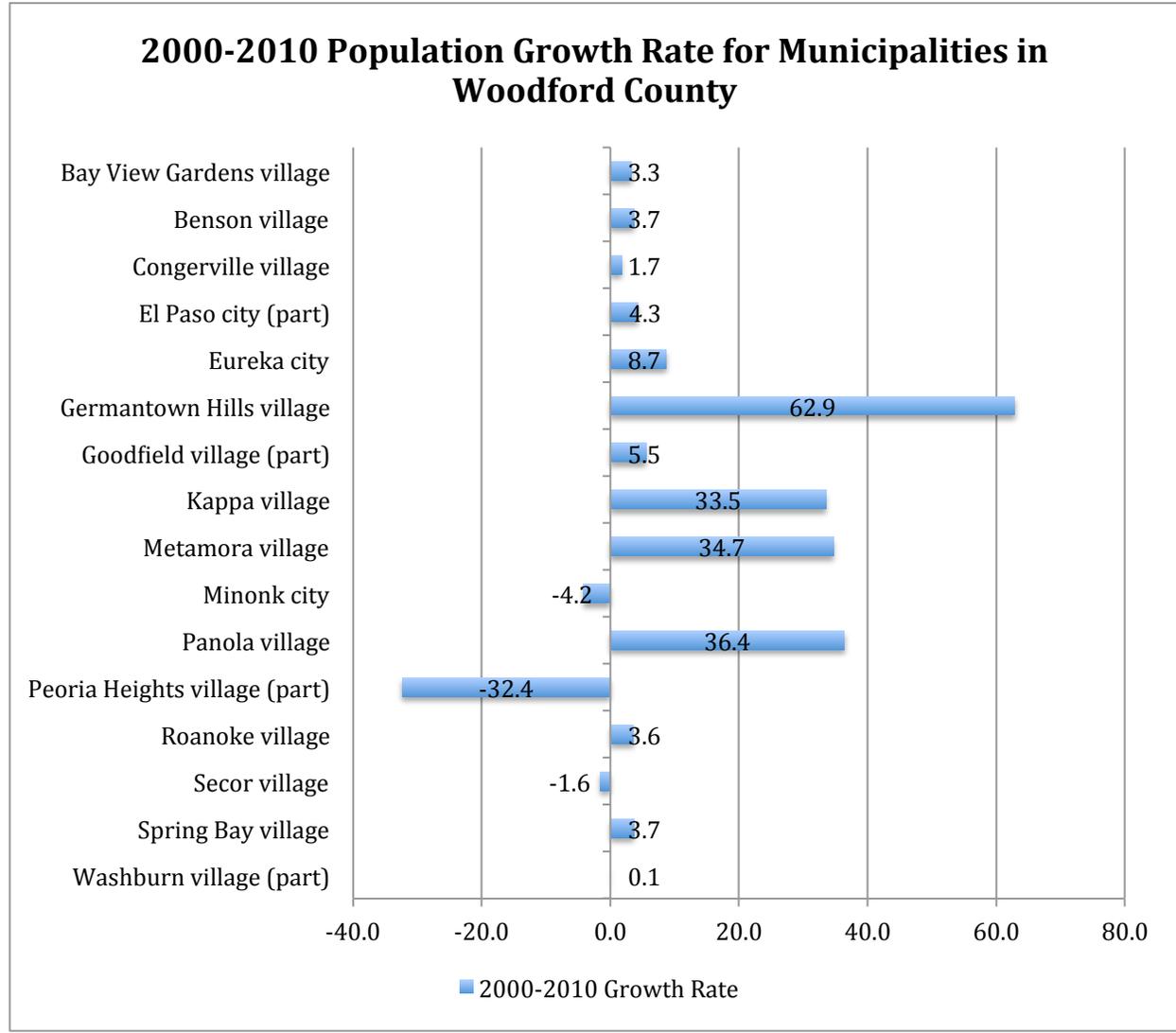
Source: 2010 US Census; 2000 US Census

**Table 1.1.2-4 2000-2010 Population Growth Rate for Municipalities in Tazewell County**



Source: 2010 US Census; 2000 US Census

**Table 1.1.2-5 2000-2010 Population Growth Rate for Municipalities in Woodford County**



Source: 2010 US Census; 2000 US Census

## Tri-County Community Health-Needs Assessment

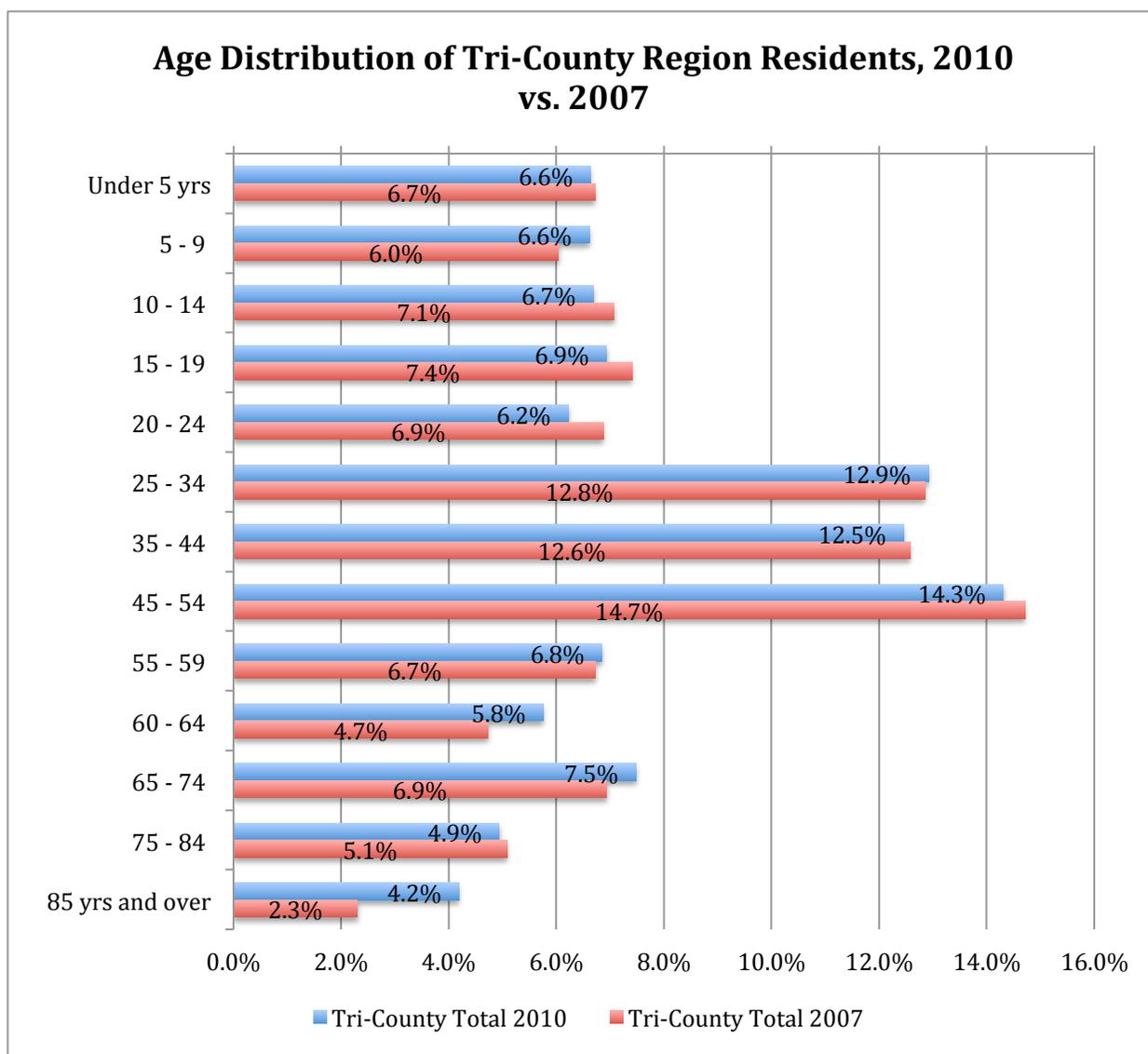
**1.2 Age, Gender and Race Distribution**

*Importance of the measure:* Population data broken down by age groups, gender, and race provides a foundation to analyze the issues and trends that impact demographic factors including economic growth and the distribution of health care services. Understanding the cultural diversity of communities is essential when considering health care infrastructure and service delivery systems.

**1.2.1 Age**

As indicated in Table 1.2-1, individuals 85 years and over is the age group experiencing the strongest growth in the Tri-County Region between 2007 and 2010, as this population increased from 2.3% of the population in 2007 to 4.2% of the population in 2010.

**Table 1.2-1 Age Distribution of Tri-County Region Residents, 2010 vs. 2007**

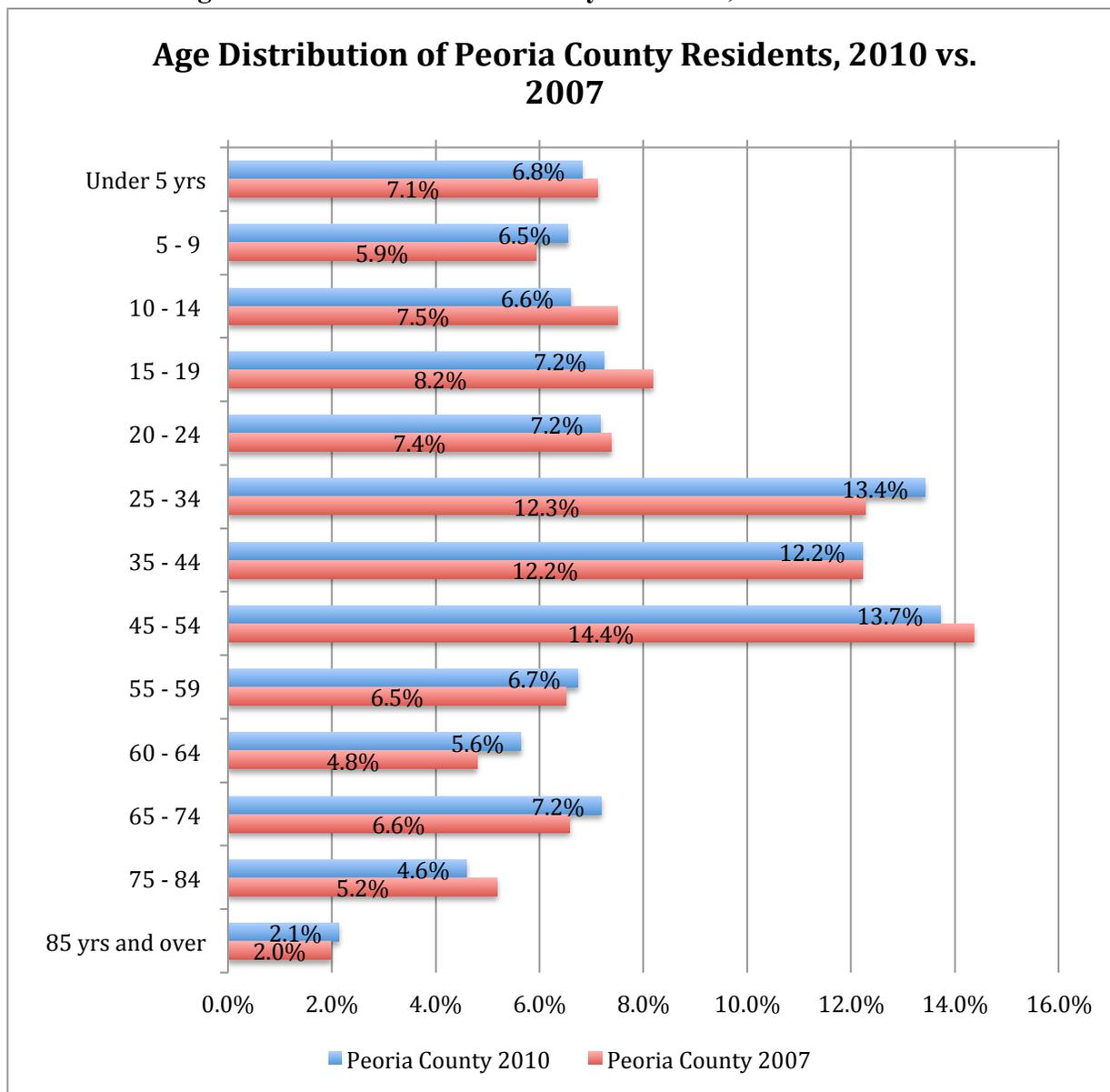


Source: 2010 US Census; 2007 American Community Survey

## Tri-County Community Health-Needs Assessment

With regard to Peoria County, the population of youth aged 10-19 comprised a smaller percentage of the total population in 2010 vs. 2007. As the baby boomer generation continues to age, the percentages of adults aged 55-74 continued to rise in 2010.

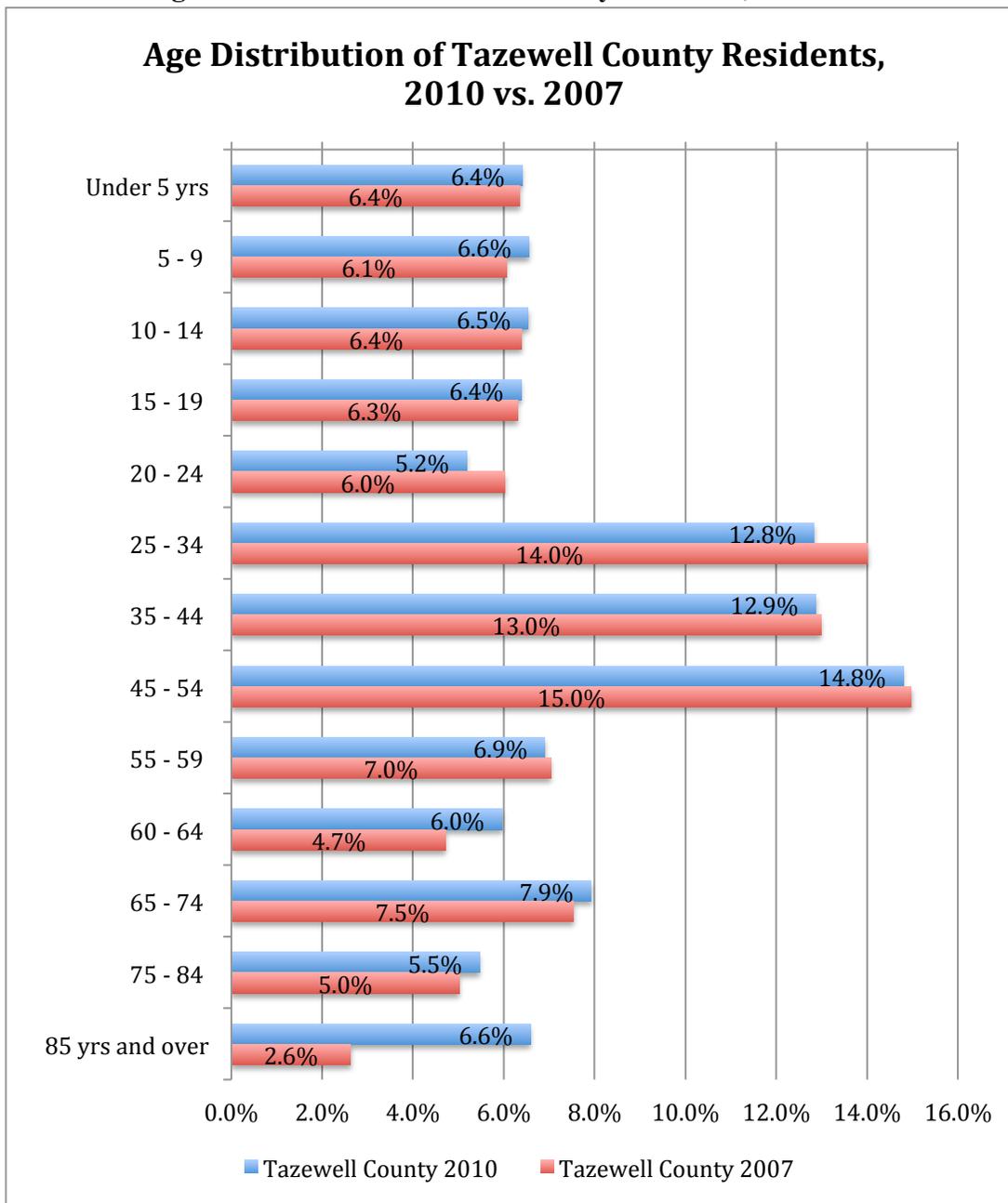
**Table 1.2-2 Age Distribution of Peoria County Residents, 2010 vs. 2007**



*Source: 2010 US Census; 2007 American Community Survey*

In Tazewell County, 2010 data indicated a dramatic increase of older individuals aged 85 and older in relation to 2007. In 2007, the percentage of individuals aged 85 and older comprised 2.6% of the population, whereas in 2010, this percentage grew to 6.6%.

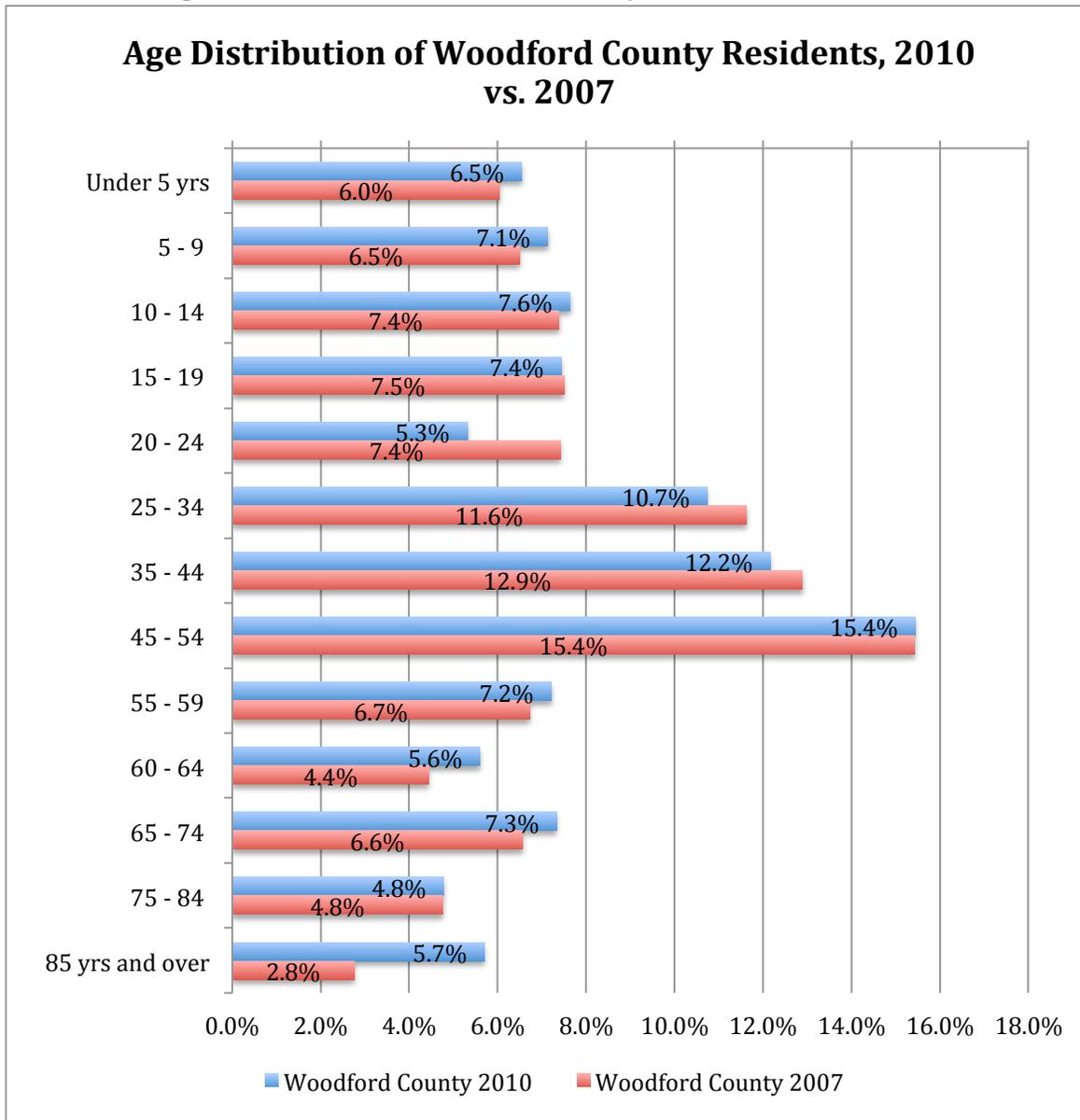
**Table 1.2-3 Age Distribution of Tazewell County Residents, 2010 vs. 2007**



Source: 2010 US Census; 2007 American Community Survey

Similarly, Woodford County also experienced a dramatic increase in the number of individuals 85 years and older. In 2007, individuals 85 years and older comprised 2.8% of the Woodford County population. In 2010, this percentage increased to 5.7%.

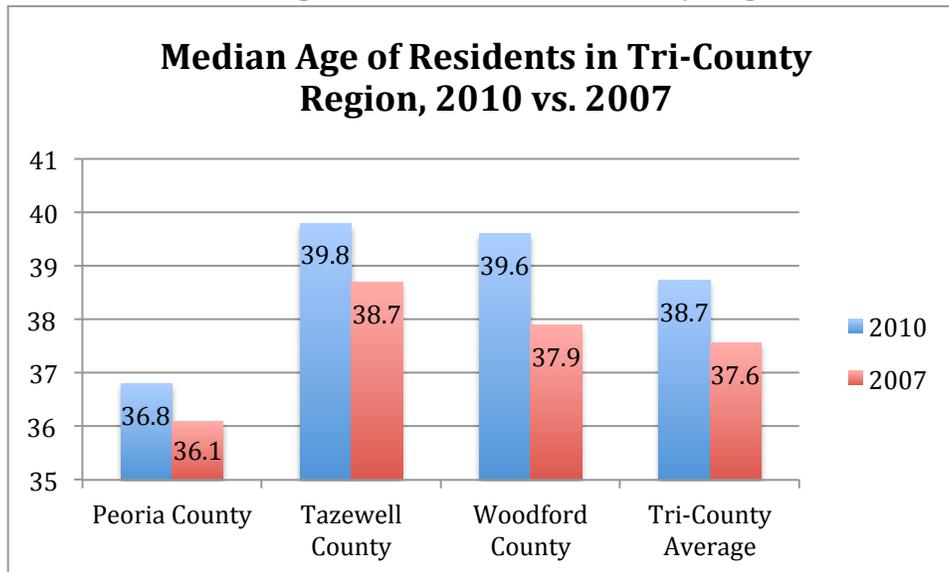
**Table 1.2-4 Age Distribution of Woodford County Residents, 2010 vs. 2007**



*Source: 2010 US Census; 2007 American Community Survey*

With the increase in the population of older individuals in the Tri-County Region, the median age of residents has also increased. The median age of residents in the Tri-County area in 2010 was 38.7 compared to 37.6 in 2007. The growth in the population of older adults in Tazewell and Woodford counties has increased the median age in these counties to nearly 40 years of age.

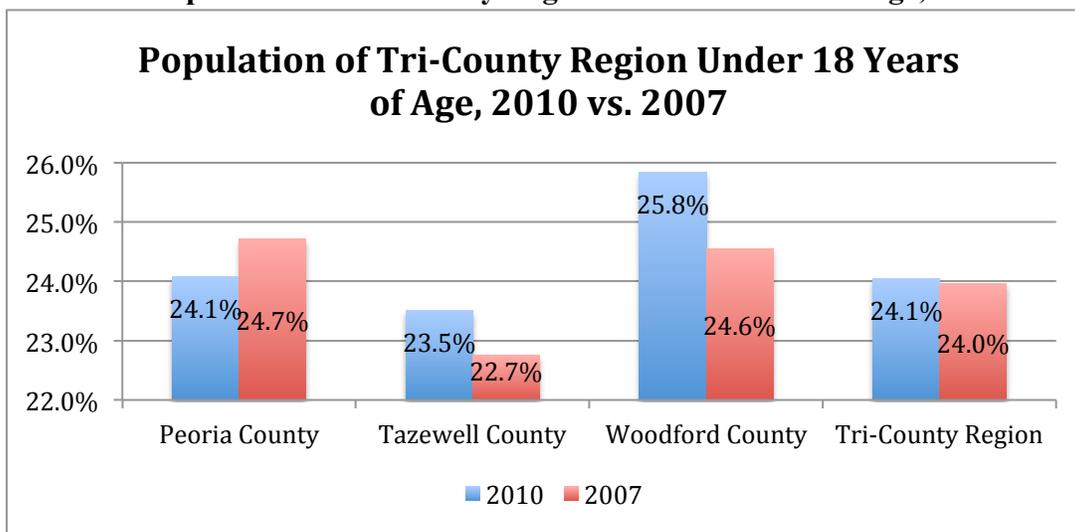
**Table 1.2-5 Median Age of Residents in Tri-County Region, 2010 vs. 2007**



*Source: 2010 US Census; 2007 American Community Survey*

Data from 2010 suggest continued growth in the populations of youths and older adults. Across the Tri-County Region, youths under 18 years of age comprise nearly a quarter of the population. While growth in the under 18 population has increased in Tazewell and Woodford Counties between 2007 and 2010, the under 18 population decreased in Peoria County from 24.7% to 24.1%.

**Table 1.2-6 Population of Tri-County Region Under 18 Years of Age, 2010 vs. 2007**

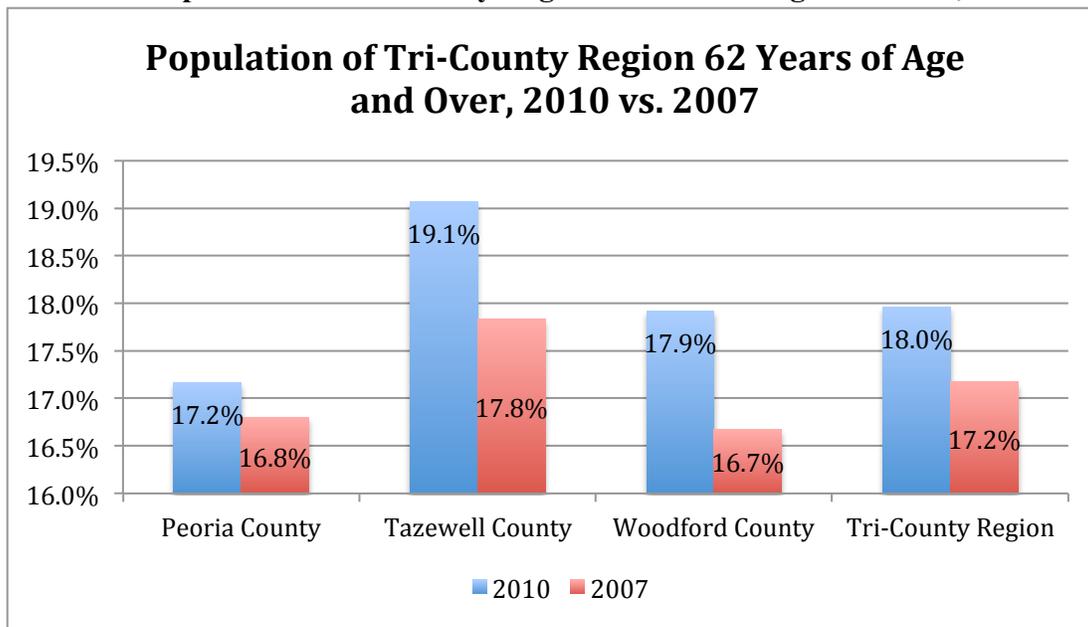


*Source: 2010 US Census; 2007 American Community Survey*

## Tri-County Community Health-Needs Assessment

The national trend concerning the aging of the baby-boomer population is reflected in the 2010 data for the Tri-County Region. Between 2007 and 2010, the percentage of older adults, age 62 and over, has increased in all three counties. Tazewell and Woodford Counties experienced the most dramatic growth with increases of 1.3% and 1.2% respectively.

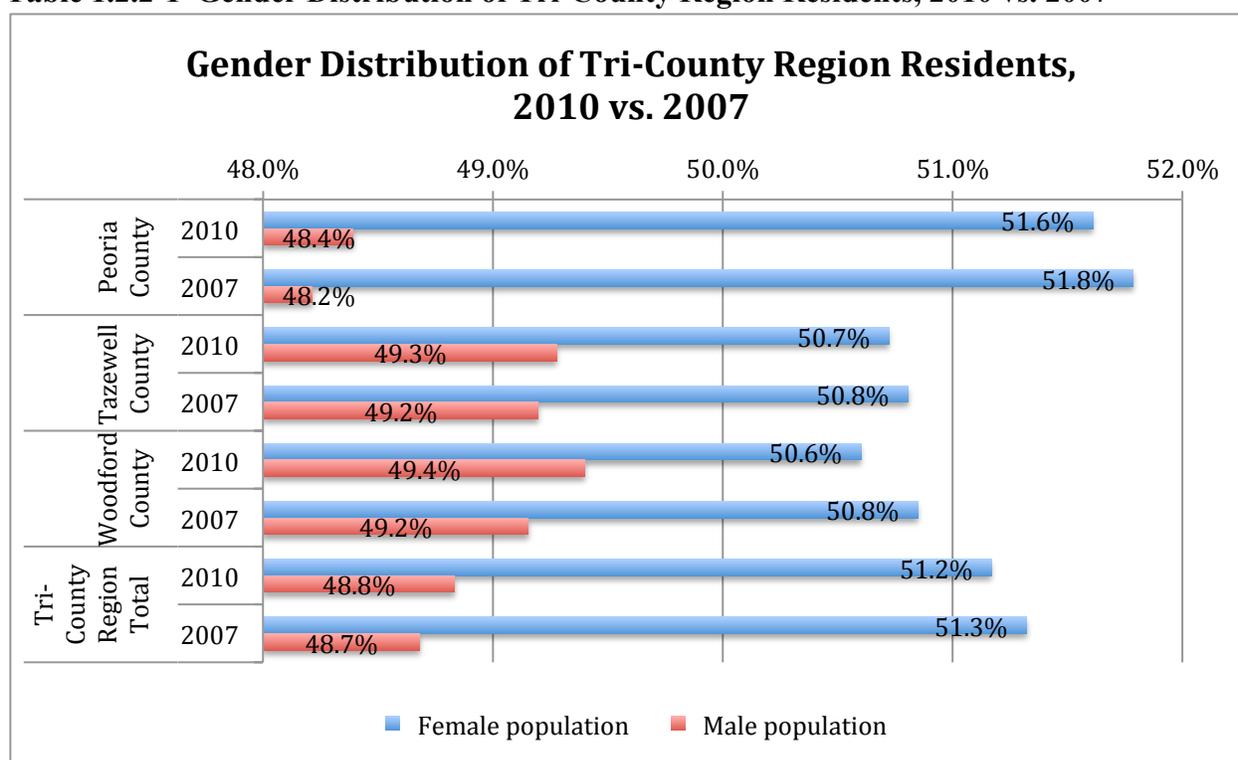
**Table 1.2-7 Population of Tri-County Region 62 Years of Age and Over, 2010 vs. 2007**



*Source: 2010 US Census; 2007 American Community Survey*

### 1.2.2 Gender

The gender distribution of the Tri-County Region residents has remained relatively consistent between 2007 and 2010. In each county and in the region as a whole, data indicates that there are more women than men.

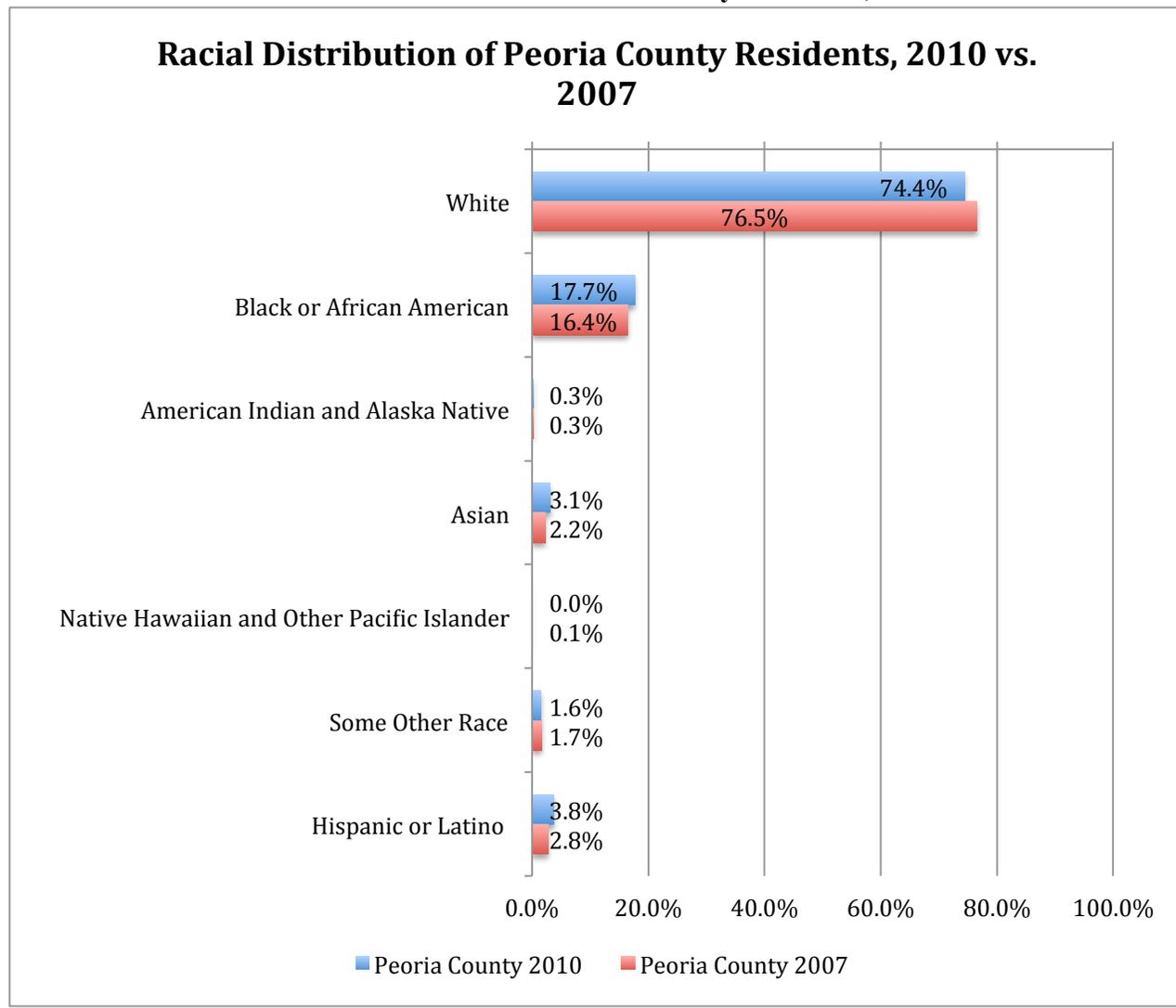
**Table 1.2.2-1 Gender Distribution of Tri-County Region Residents, 2010 vs. 2007**

*Source: 2010 US Census; 2007 American Community Survey*

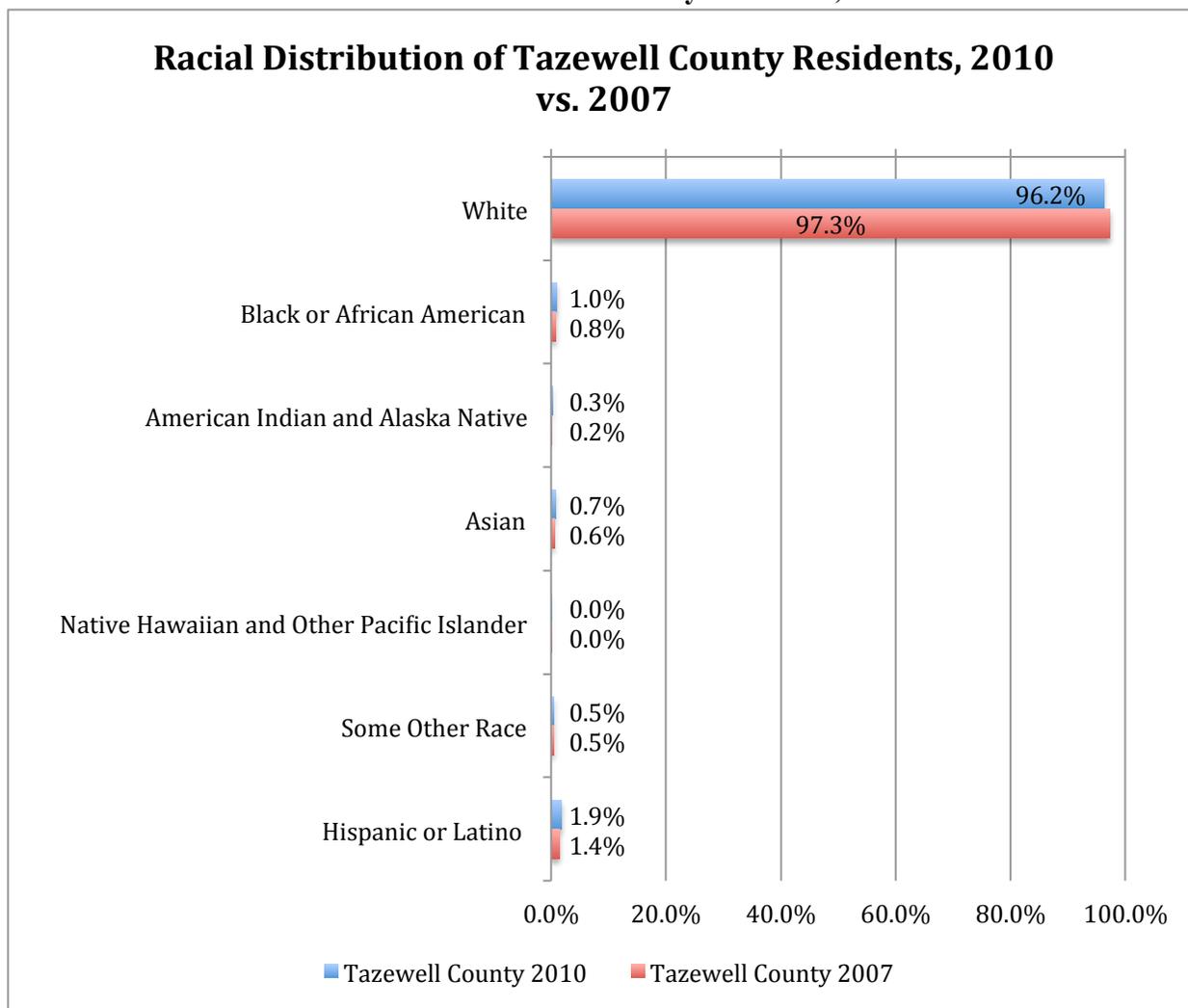
### 1.2.3 Race

With regard to race and ethnic background, the Tri-County Region is largely homogenous. Data from 2010 suggest that Whites comprise upwards of 85% of the population in the Tri-County Region. However, the non-White population of the Tri-County Region has been slowly increasing since 2007. In Peoria County, the non-White population has grown by 3.1%. In Tazewell County, the non-White population has grown by 0.9%. In Woodford County, the non-White population has grown by 0.6%.

**Table 1.2.3-1 Racial Distribution of Peoria County Residents, 2010 vs. 2007**

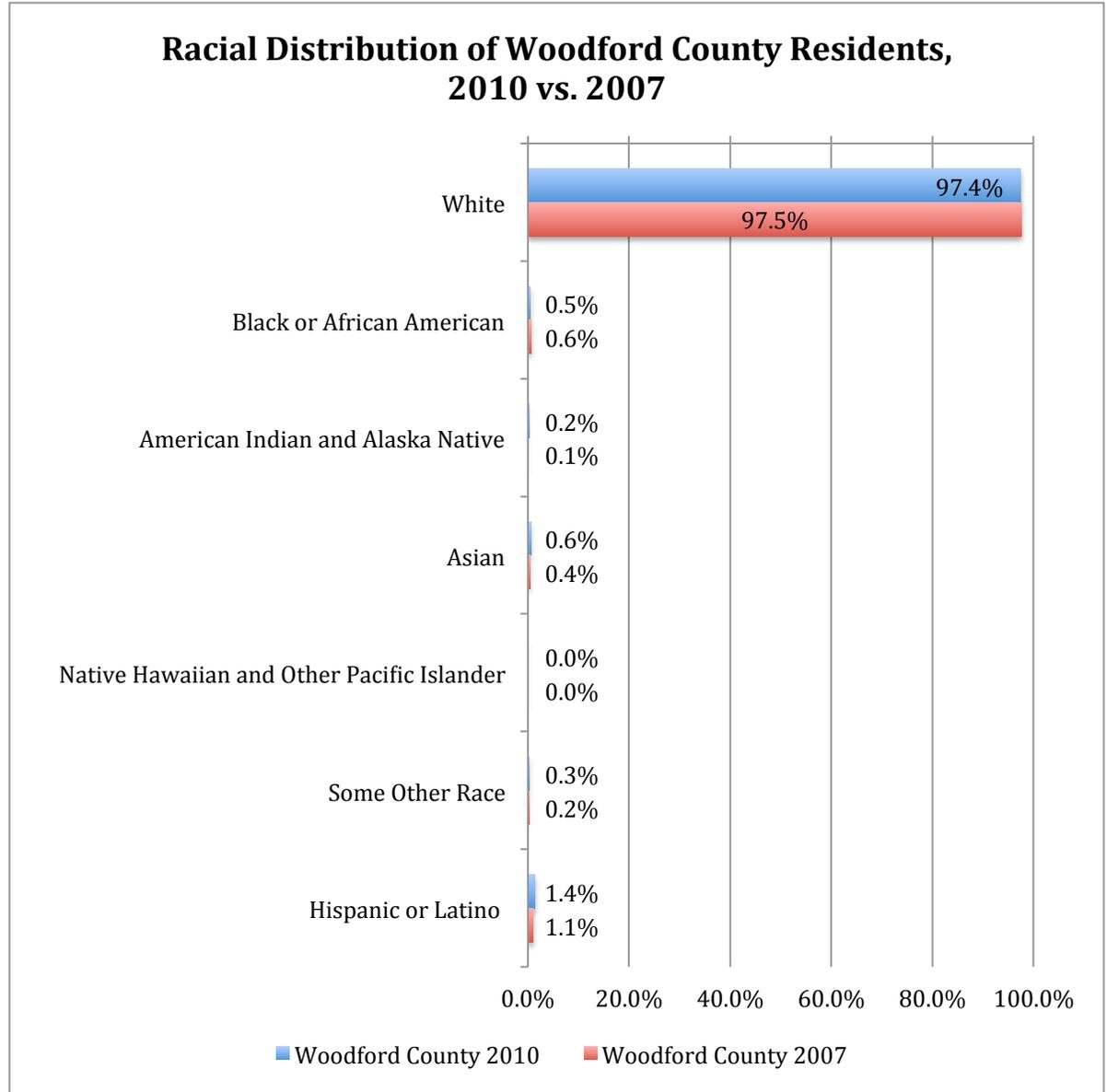


Source: 2010 US Census; 2007 American Community Survey

**Table 1.2.3-2 Racial Distribution of Tazewell County Residents, 2010 vs. 2007**

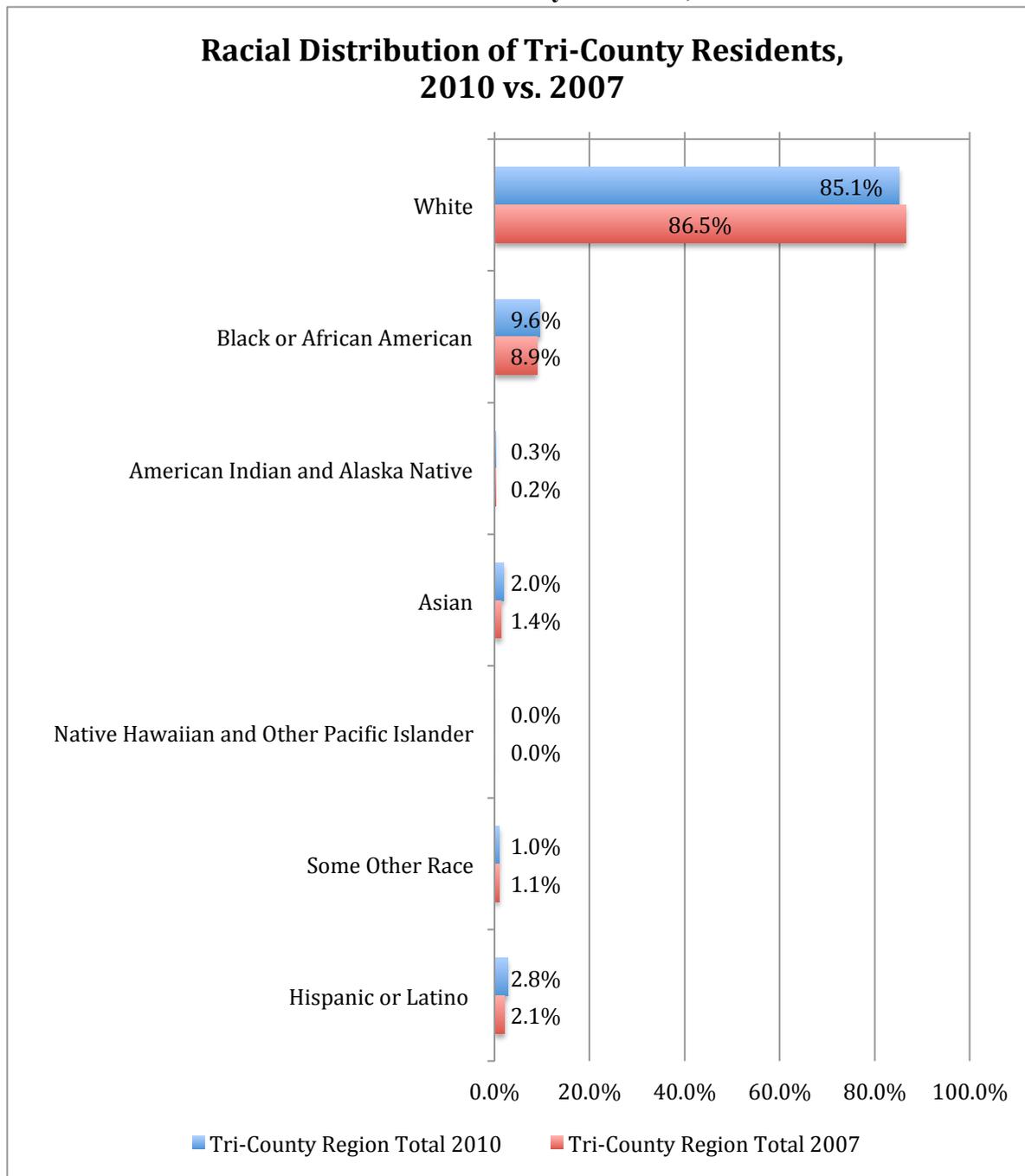
*Source: 2010 US Census; 2007 American Community Survey*

**Table 1.2.3-3 Racial Distribution of Woodford County Residents, 2010 vs. 2007**



Source: 2010 US Census; 2007 American Community Survey

**Table 1.2.3-4 Racial Distribution of Tri-County Residents, 2010 vs. 2007**



Source: 2010 US Census; 2007 American Community Survey

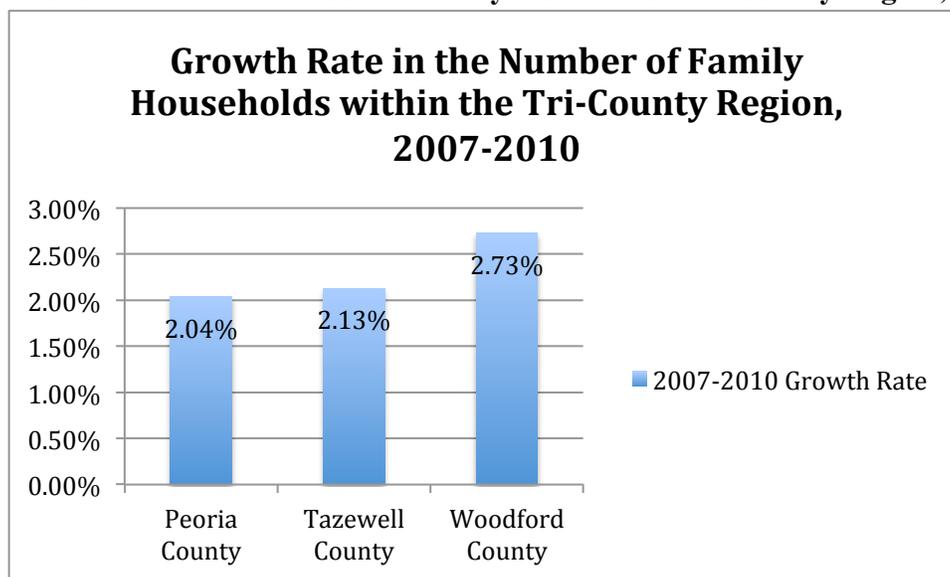
## Tri-County Community Health-Needs Assessment

### 1.3 Household/family

*Importance of the measure:* Families are the backbone of society in the Tri-County Region, as they dramatically impact the health and development of children and provide support and well-being for older adults.

As indicated in Table 1.3-1, the number of family households within the Tri-County Region has continued to increase between 2007 and 2010.

**Table 1.3-1 Growth Rate in Number of Family Households Tri-County Region, 2007-2010**



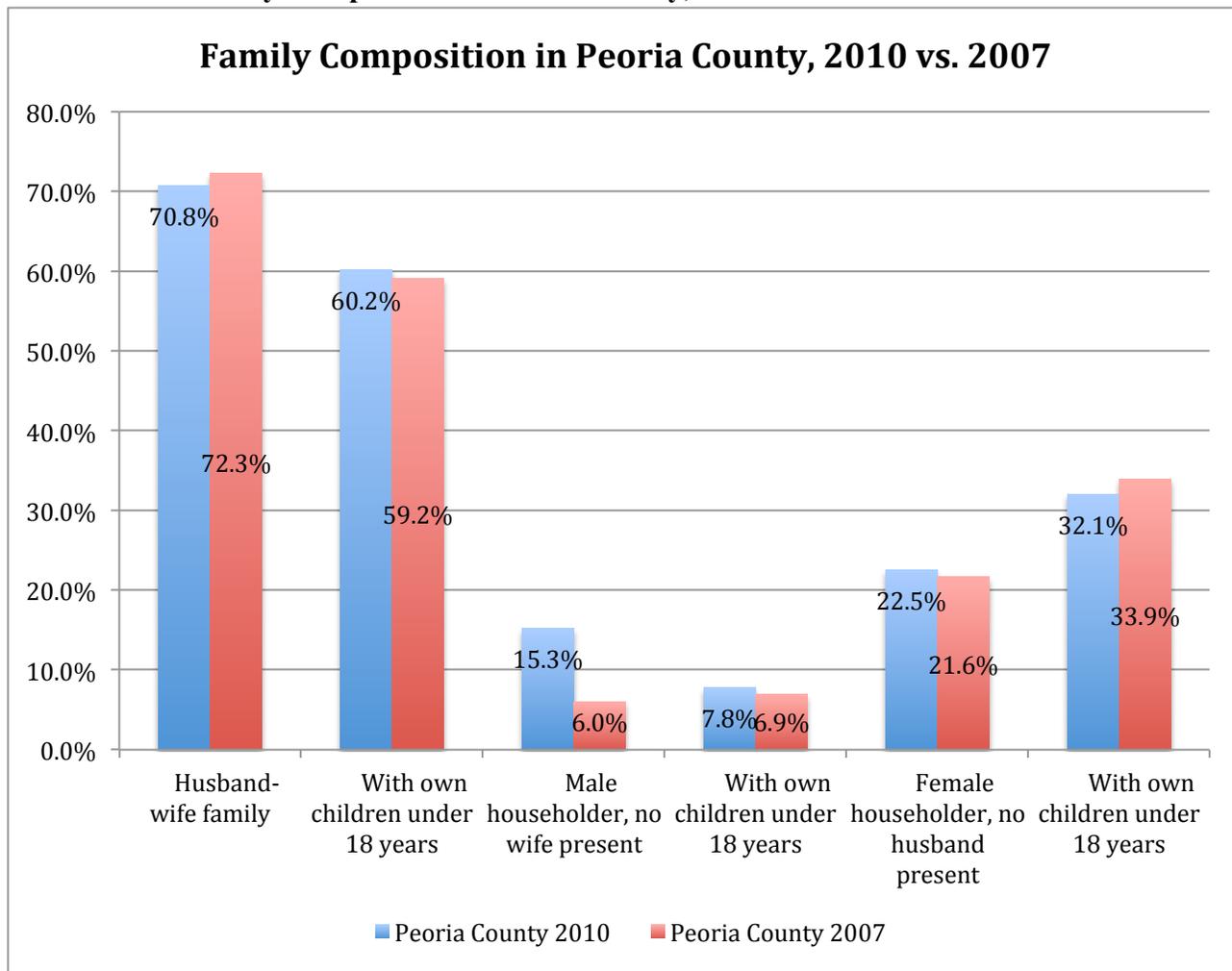
*Source: 2010 US Census; 2007 American Community Survey*

#### 1.3.1 /1.3.2 Single and Related Family

In Peoria County, data from 2010 suggest a 9.3% increase from 2007 in the number of male households with no wife present.

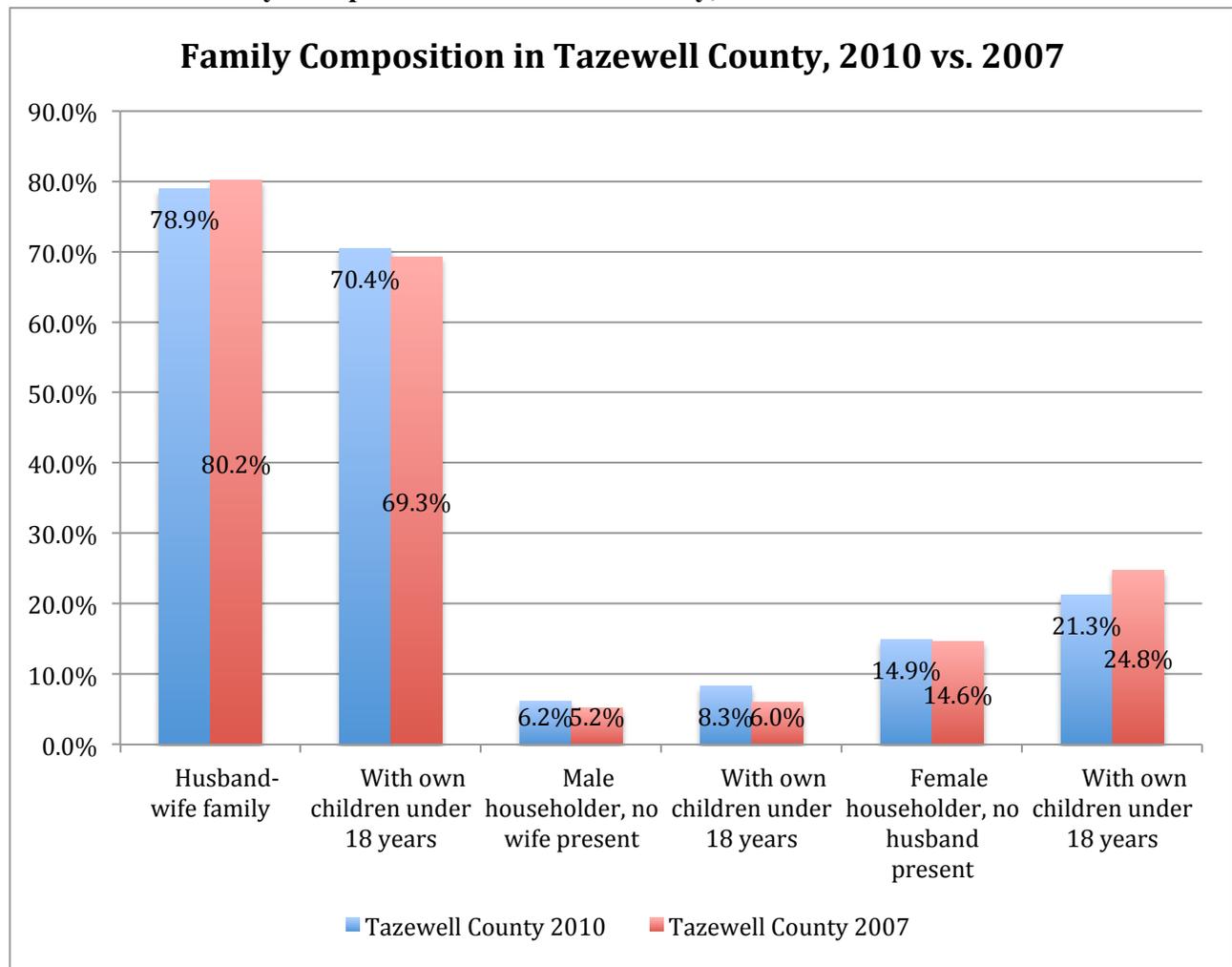
Across the Tri-County Region, the percentage of husband-wife families has decreased in both Peoria and Tazewell Counties between 2007 and 2010 by 1.5% and 1.3%, respectively, yet increased by 2.4% in Woodford County. When children under the age of 18 are considered, there has been a decrease in the percentage of children living in a family comprised of a female householder only, with no husband present in Peoria County (-1.8%) and Tazewell County (-3.5%) and an increase in Woodford County (1.1%) between 2007 and 2010.

**Table 1.3.1-1 Family Composition in Peoria County, 2010 vs. 2007**



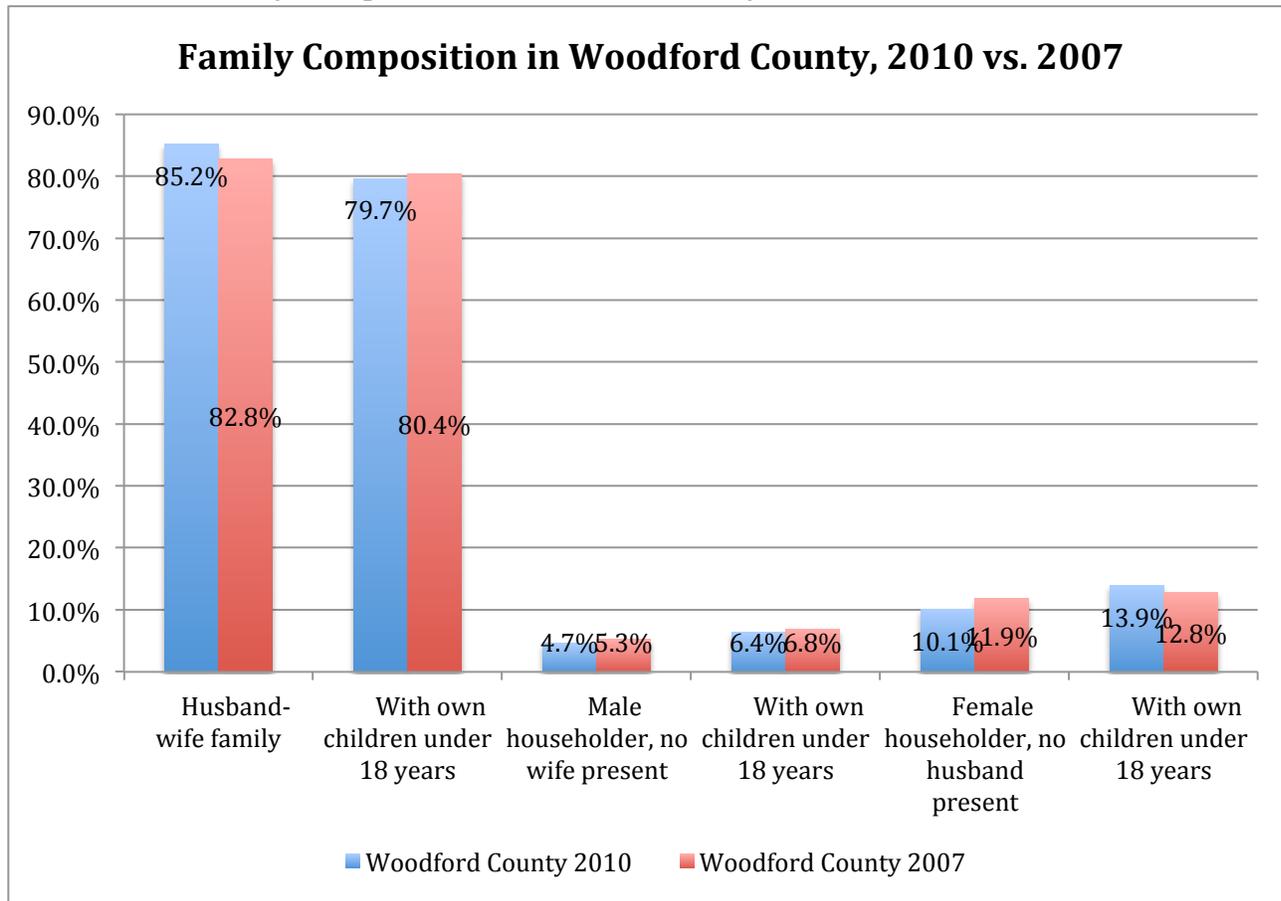
Source: 2010 US Census; 2007 American Community Survey

**Table 1.3.1-2 Family Composition in Tazewell County, 2010 vs. 2007**



Source: 2010 US Census; 2007 American Community Survey

**Table 1.3.1-3 Family Composition in Woodford County, 2010 vs. 2007**

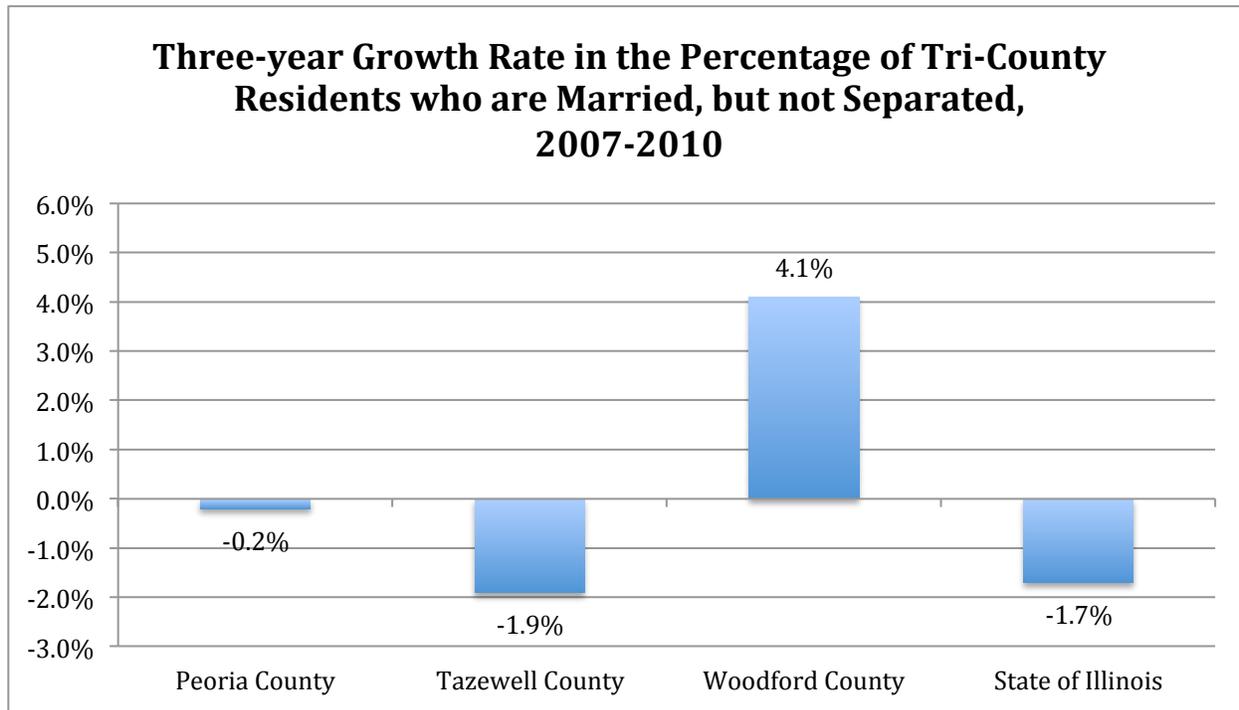


Source: 2010 US Census; 2007 American Community Survey

**1.3.3 Marital status**

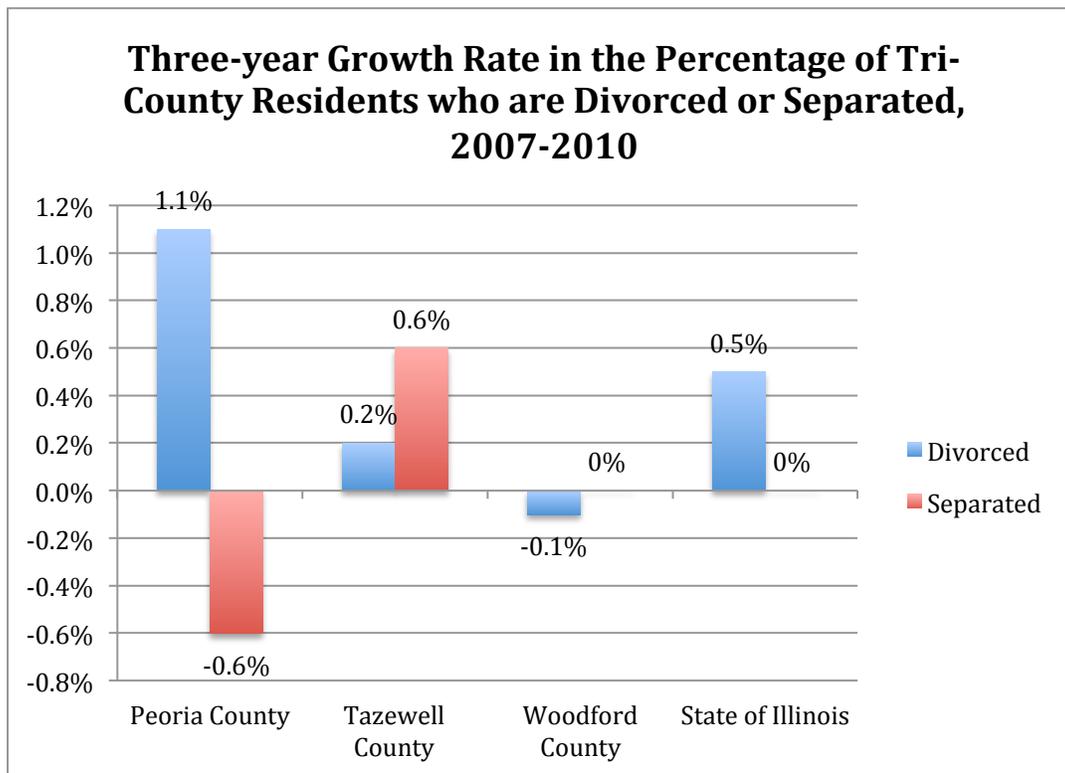
Between 2007 and 2010, Peoria County experienced a 0.2% growth rate in the percentage of residents who are married but not separated. Tazewell County also experienced negative growth (-1.9%) in line with the State of Illinois growth rate (-1.7%). Woodford County saw an increase in the percentage of married residents by 4.1%.

## Tri-County Community Health-Needs Assessment

**Table 1.3.3-1 Three-year Growth Rate in the Percentage of Tri-County Residents who are Married, but not Separated, 2007-2010**

*Source: 2010 US Census; 2007 American Community Survey*

The three-year growth rate in the percentage of Peoria County residents who are divorced (1.1%) is nearly double the State of Illinois average (0.5%). The three-year growth rate in the percentage of Tazewell County residents who are separated (0.6%) is greater than the State of Illinois average (0%).

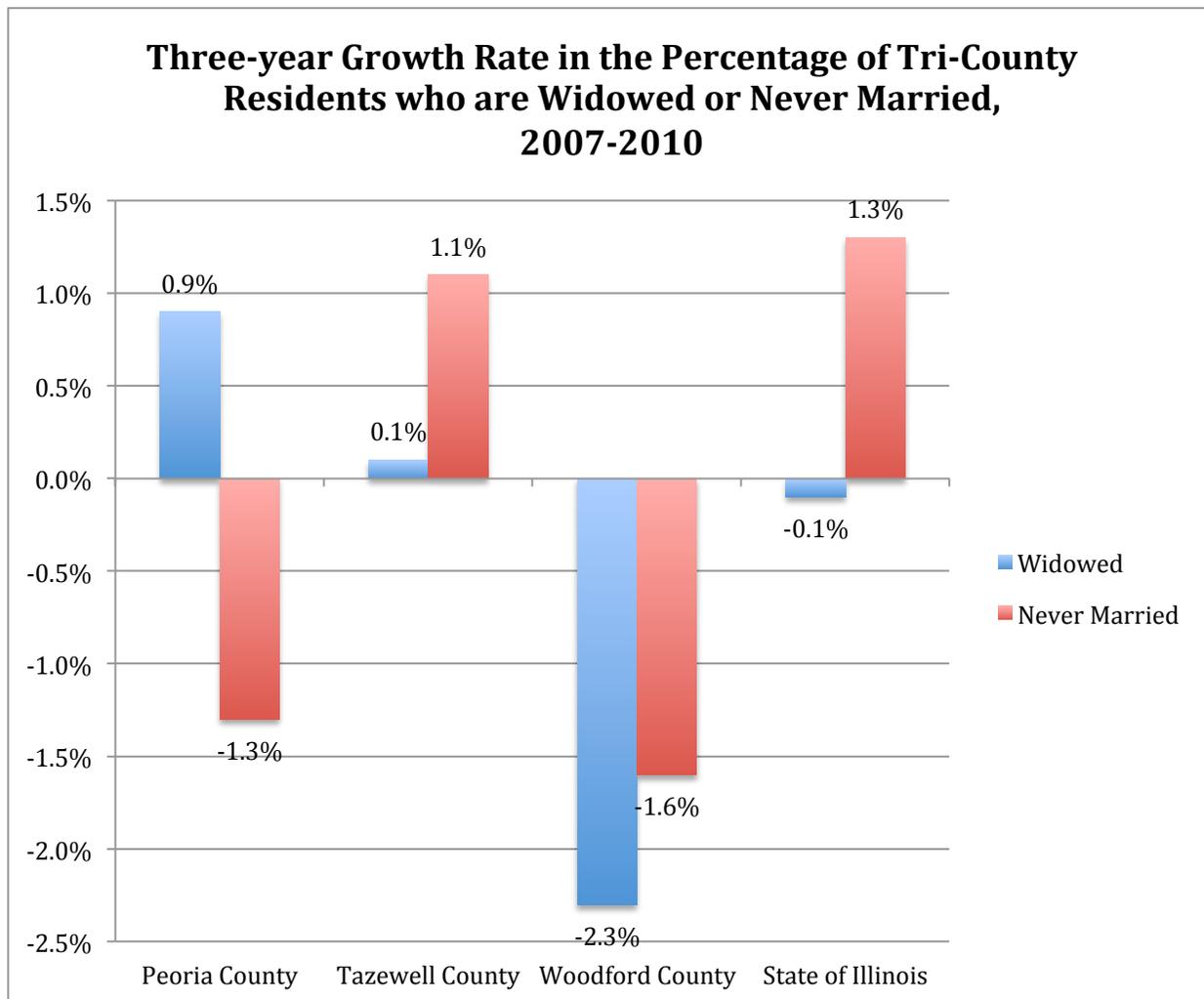
**Table 1.3.3-2 Three-year Growth Rate in the Percentage of Tri-County Residents who are Divorced or Separated, 2007-2010**

*Source: 2010 US Census; 2007 American Community Survey*

The percentage of residents in the Tri-County Region who are widowed or never married closely align with the State of Illinois averages between 2007 and 2010. The percentage change of widowed residents in Peoria and Tazewell Counties is better than the State of Illinois average, whereas the percentage change of widowed residents in Woodford County has decreased at a much greater rate (-2.3%) than the State of Illinois (-0.1%).

The percentage change of non-married residents in the Tri-County Region between 2007 and 2010 is considerably less than the State of Illinois average.

## Tri-County Community Health-Needs Assessment

**Table 1.3.3-3 Three-year Growth Rate in the Percentage of Tri-County Residents who are Widowed or Never Married, 2007-2010**

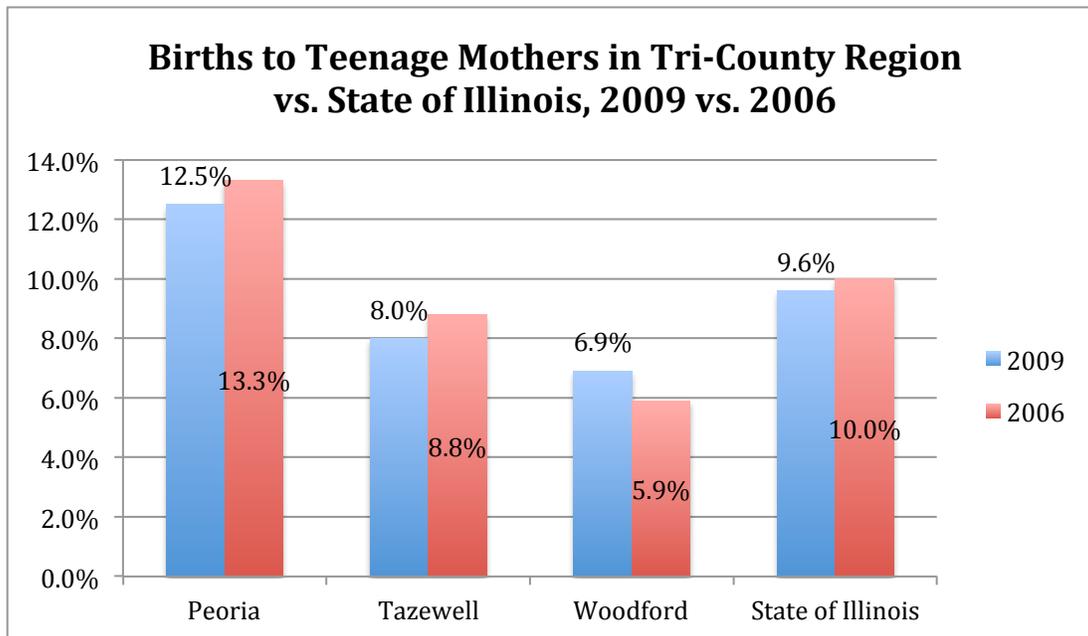
Source: 2010 US Census; 2007 American Community Survey

## Tri-County Community Health-Needs Assessment

### 1.3.4 Early Sexual Activity Leading to Births from Teenage Mothers

With regard to teenage birth rates, Tazewell and Woodford Counties have lower teen birth rates in relation to the State of Illinois for both 2006 and 2009. Peoria County, on the other hand, has a higher teen birth rate than the State of Illinois. While Peoria and Tazewell Counties had a decrease in the percentage of births to teenage mothers between 2006 and 2009, Woodford County saw a 1.0% increase during the same time frame.

**Table 1.3.4-1: Births to Teenage Mothers in Tri-County Region vs. State of Illinois, 2009 vs. 2006**



*Source: Illinois Department of Public Health*

Tri-County Community Health-Needs Assessment

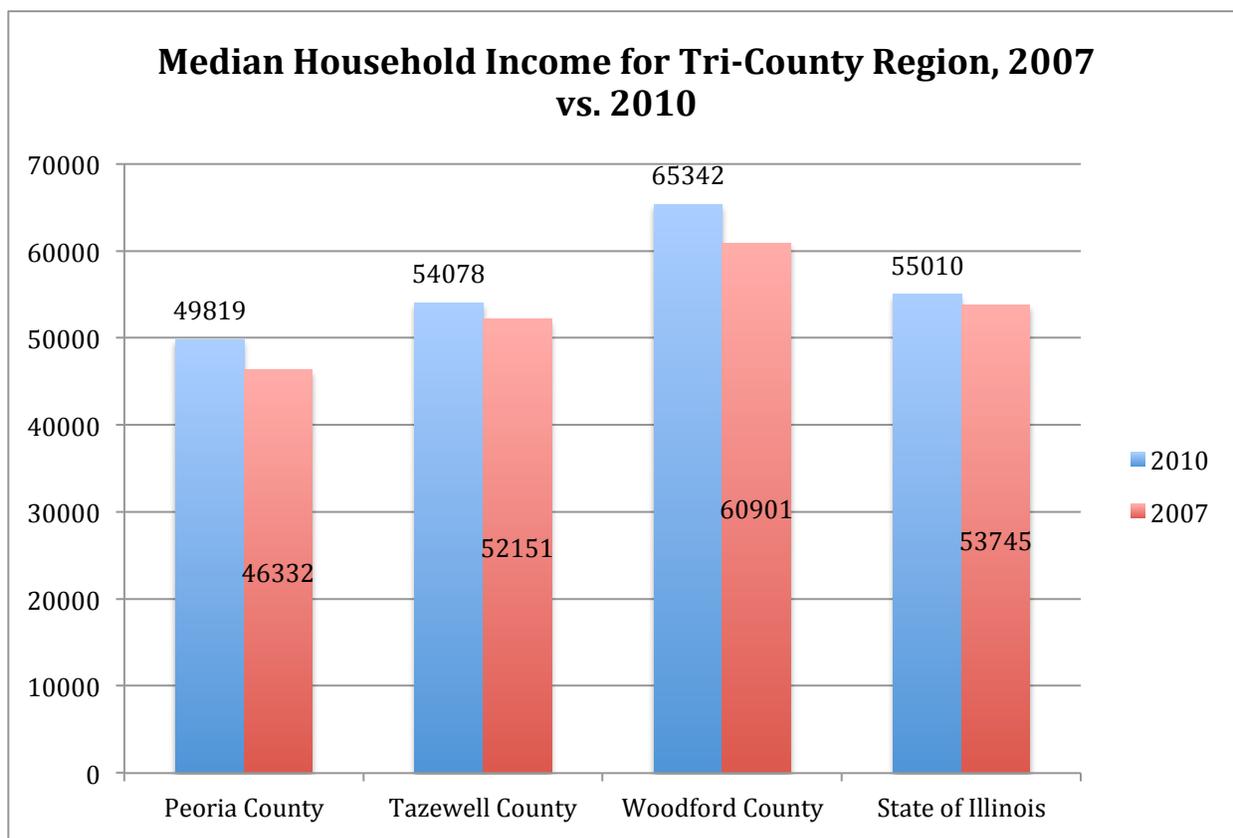
**1.4 Economic information**

*Importance of the measure:* Median income divides households into two segments with one half of households earning more than the median income and the other half earning less. Because median income is not significantly impacted by unusually high or low-income values, it is considered to be a more reliable indicator than average income. To live in poverty means to not have enough income to meet one’s basic needs. Accordingly, poverty is associated with numerous chronic social, health, education, and employment conditions.

*1.4.1 Median income level*

For 2007 and 2010, the median household income in Peoria County lagged behind the State of Illinois median household income. Within the Tri-County Region, Woodford County had a significantly higher median income level than either Peoria or Tazewell County.

**Table 1.4.1-1: Median Household Income for Tri-County Region, 2007 vs. 2010**



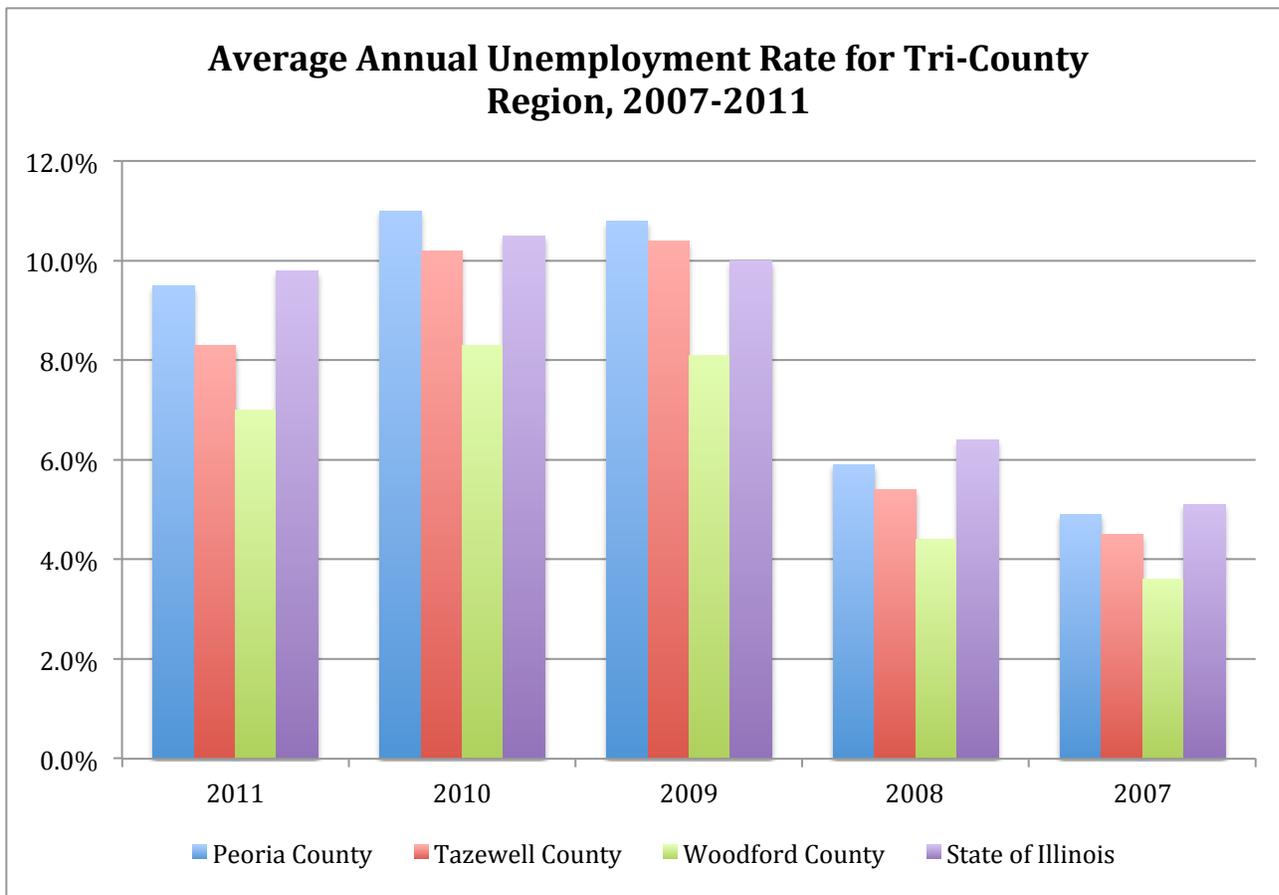
Source: 2007 & 2010 American Community Survey

Tri-County Community Health-Needs Assessment

1.4.2 Unemployment

The Tri-County Region unemployment rates parallel both the State of Illinois and national trends. Unemployment in Peoria, Tazewell, and Woodford Counties was less than the state average until 2009, when Peoria and Tazewell Counties surpassed Illinois unemployment percentages for 2009 and 2010. Recent data from 2011 suggest that unemployment in Peoria and Tazewell Counties has decreased and now is less than the state average.

**Table 1.4.2-1: Average Annual Unemployment Rate for Tri-County Region, 2007-2011**

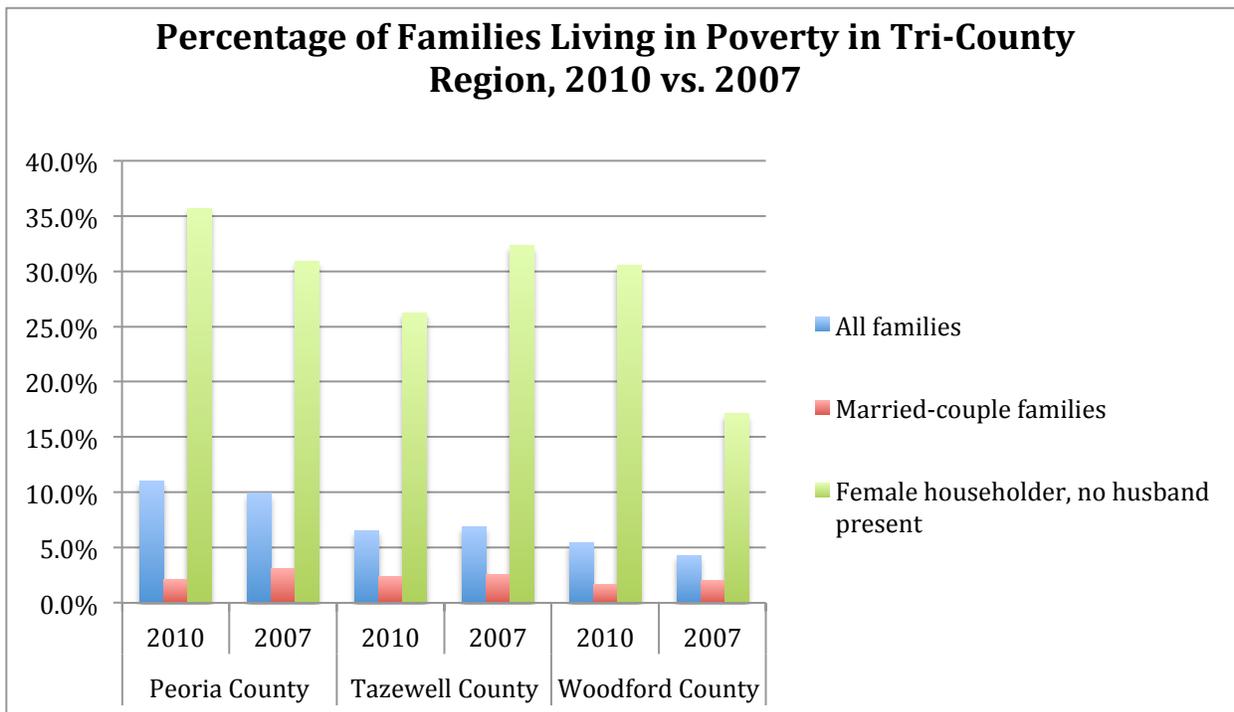


Source: Bureau of Labor Statistics

*1.4.3 Families in poverty*

Poverty has a significant impact on the development of children and youth. Poverty rates in each of the three counties comprising the Tri-County Region are significantly higher for single-mother led households compared to married-couple families and all families. In Peoria and Woodford Counties, the percentage of single-mother led households living in poverty increased between 2007 and 2010.

**Table 1.4.3-1: Percentage of Families Living in Poverty in Tri-County, 2010 vs. 2007**



Source: 2010 and 2007 American Community Survey

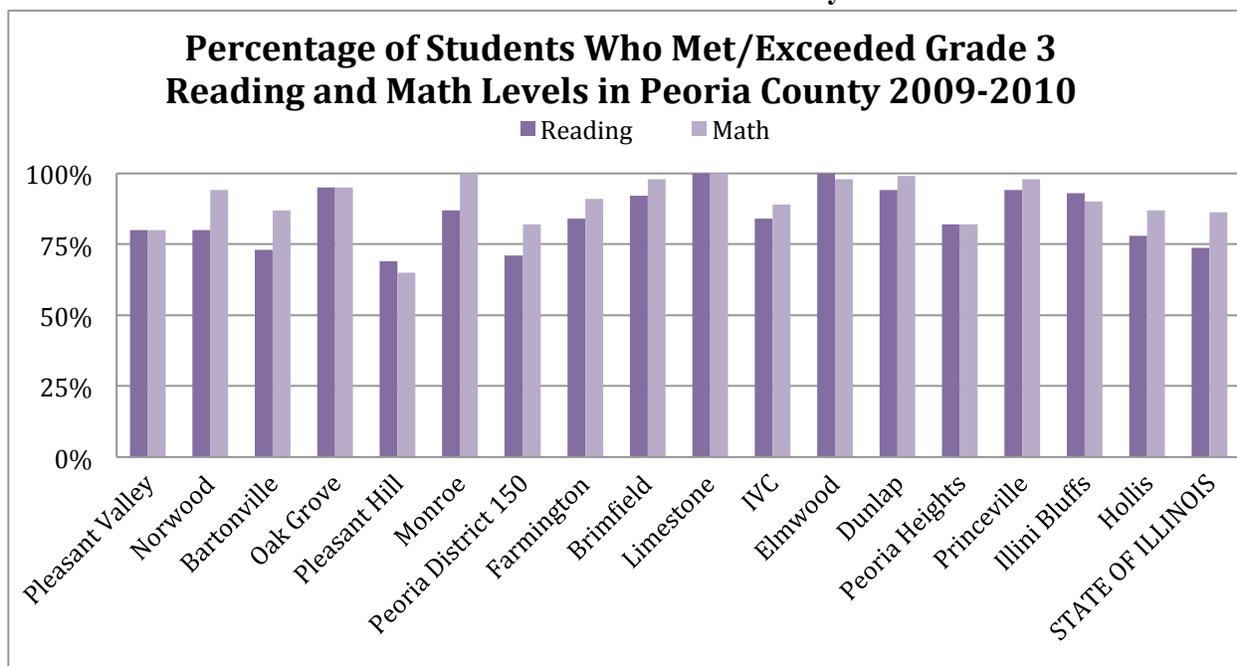
### 1.5 Education

*Importance of the measure:* According to the National Center for Educational Statistics, “the better educated a person is, the more likely that person is to report being in ‘excellent’ or ‘very good’ health, regardless of income” (NCES, 2005). Educational attainment and reading/math scores are well researched, with findings strongly related to an individual’s propensity to earn a higher salary, gain better employment, and foster multifaceted success in life. As such, research suggests that the higher the level of educational attainment and the more successful children are in school, the better one’s health will be and the greater likelihood of one selecting healthy lifestyle choices.

#### 1.5.1 3<sup>rd</sup>/8<sup>th</sup> grade reading and math

In 2009-2010, most of the school districts in Peoria County had higher averages than the State of Illinois averages. However, Peoria District 150 and Pleasant Hill underperformed the State in terms of both reading and math for 3<sup>rd</sup> graders. Bartonville was below average in reading; Pleasant Valley and Peoria Heights were below average in math.

**Table 1.5.1-1 Grade 3 Student Achievement in Peoria County 2009-2010**

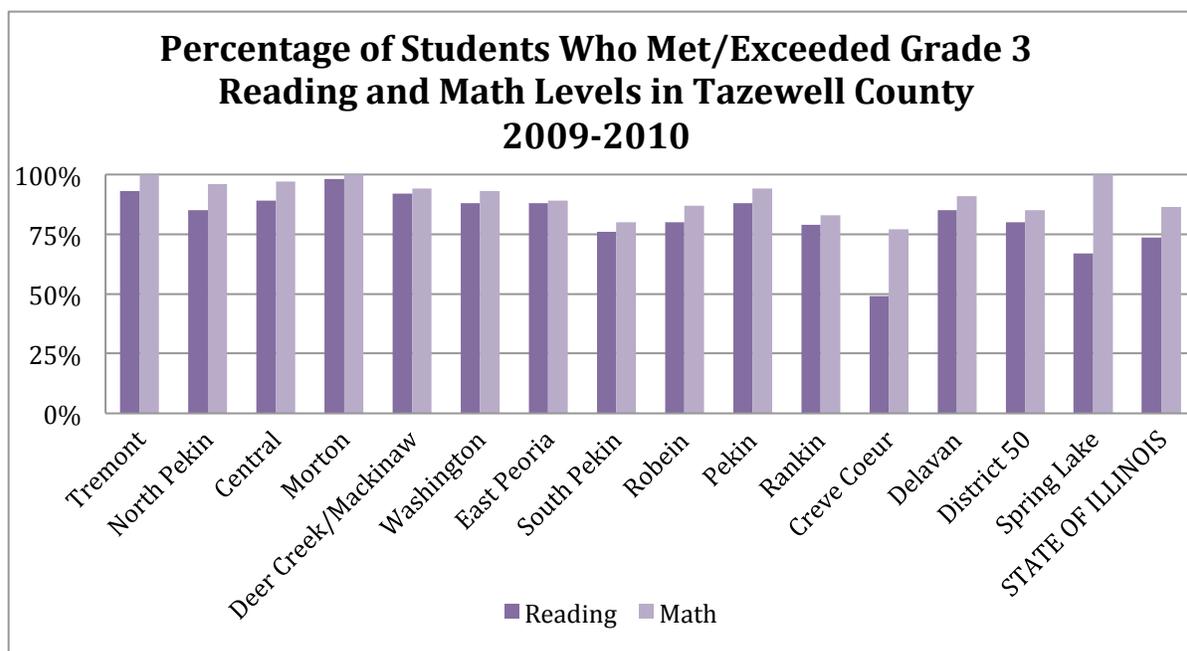


Source: Illinois State Board of Education, School Year 2010 District Report Card Summary

## Tri-County Community Health-Needs Assessment

Most of the school districts in Tazewell County exceeded the State of Illinois averages for 3<sup>rd</sup> grade reading and math. There were, however, some school districts that performed below the state average. The lowest was Creve Coeur SD 76, which underperformed the State of Illinois in both reading and math, where reading was significantly lower. Spring Lake CCSD 606 is below the state average in reading, and Washington District 50, Rankin CSD 98, and South Pekin SD 137 are underperforming in math.

**Table 1.5.1-2 Grade 3 Student Achievement in Tazewell County 2009-2010**

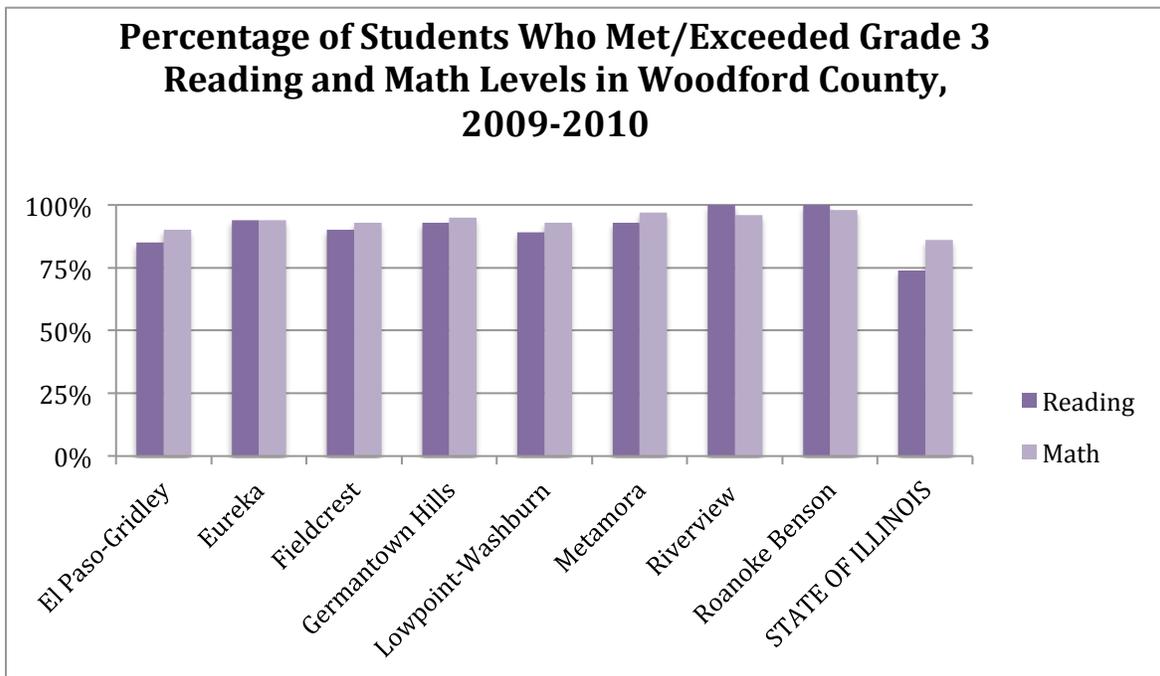


Source: Illinois State Board of Education, School Year 2010 District Report Card Summary

Tri-County Community Health-Needs Assessment

In Woodford County, none of the school districts fell below the State of Illinois average in terms of reading or math at the 3<sup>rd</sup> grade level.

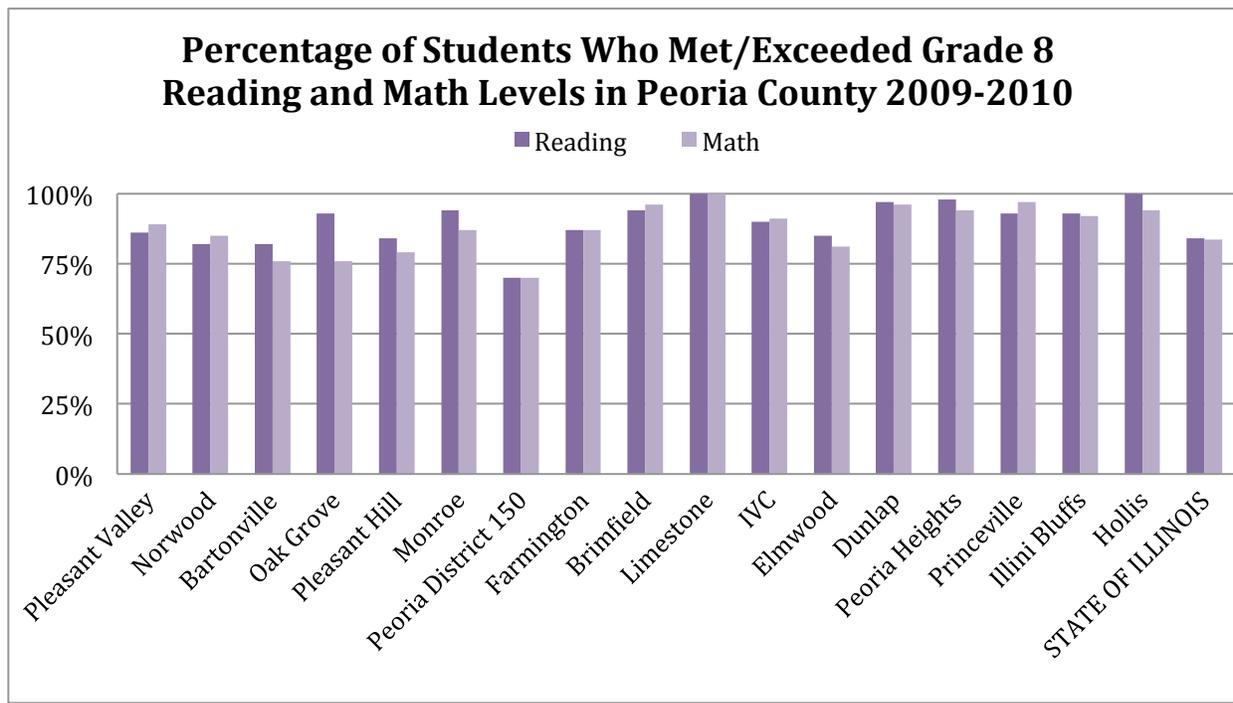
**Table 1.5.1-3 Grade 3 Student Achievement in Woodford County 2009-2010**



Source: Illinois State Board of Education, School Year 2010 District Report Card Summary

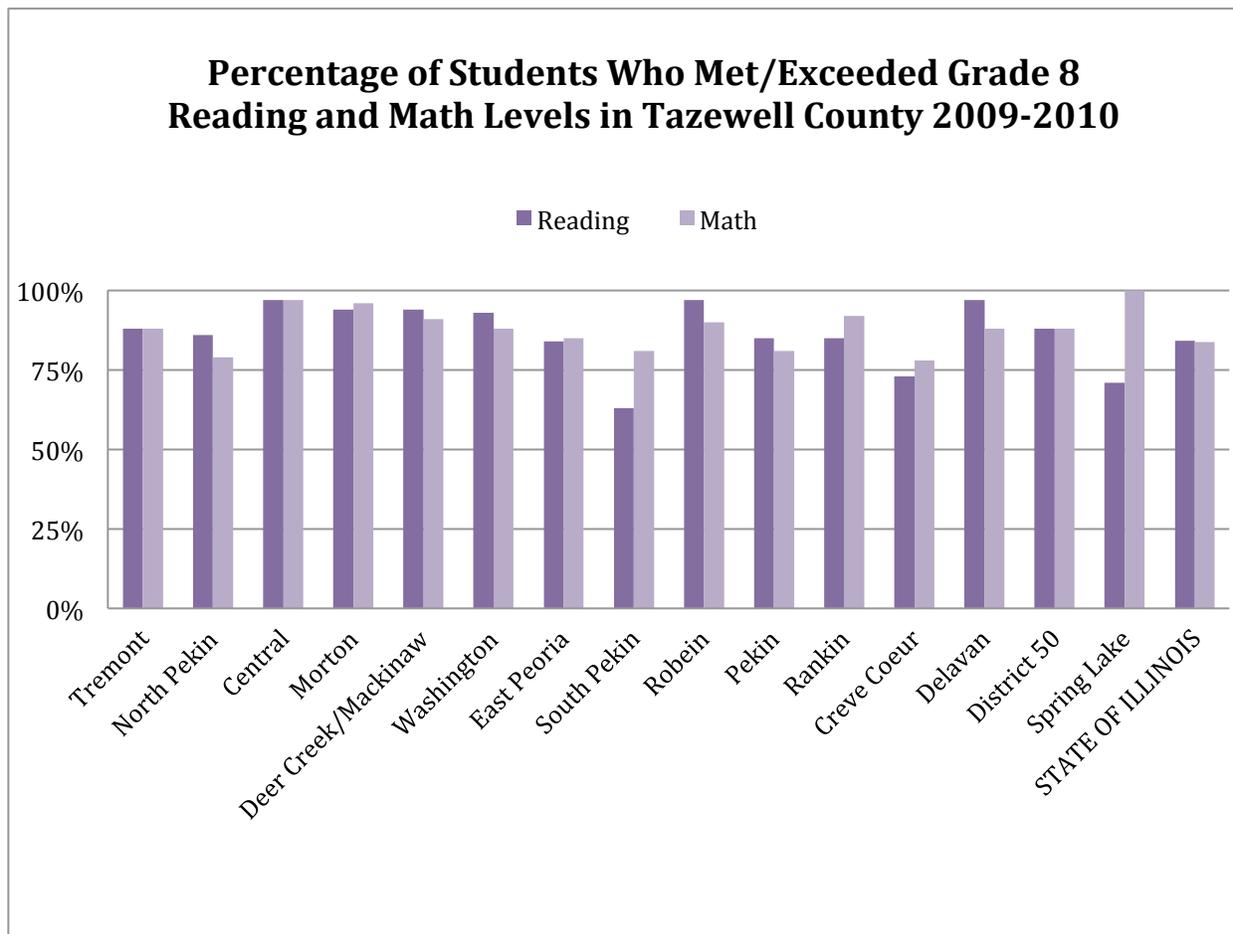
The results of 8<sup>th</sup> graders from Peoria County showed three school districts that fell below the State of Illinois averages in terms of both reading and math (District 150, Pleasant Hill and Bartonville). Norwood lagged behind in reading, and Oak Grove and Elmwood in math.

**Table 1.5.1-4 Grade 8 Student Achievement in Peoria County 2009-2010**



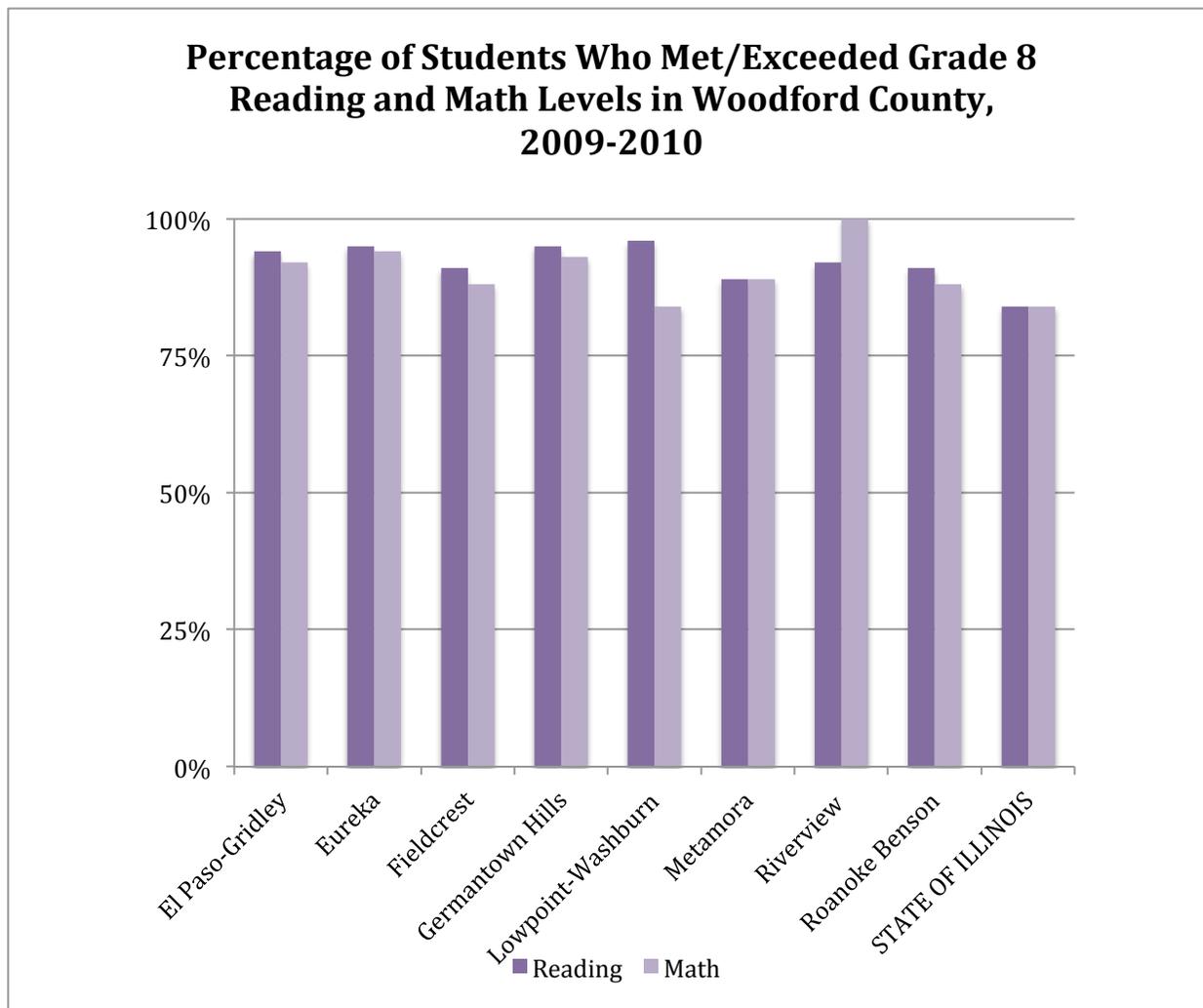
Source: Illinois State Board of Education, School Year 2010 District Report Card Summary

Similarly, most of the Tazewell County school districts exceeded the State of Illinois average for 8<sup>th</sup> grade in reading and math, again with exception of Creve Coeur and South Pekin, which underperformed the state in both reading and math. Spring Lake was below the average in terms of reading, while Pekin and North Pekin were below average in terms of math.

**Table 1.5.1-5 Grade 8 Student Achievement in Tazewell County 2009-2010**

*Source: Illinois State Board of Education, School Year 2010 District Report Card Summary*

In Woodford County, none of the school districts fell below the State of Illinois average in terms of reading or math at the 8<sup>th</sup> grade level.

**Table 1.5.1-6 Grade 8 Student Achievement in Woodford County 2009-2010**

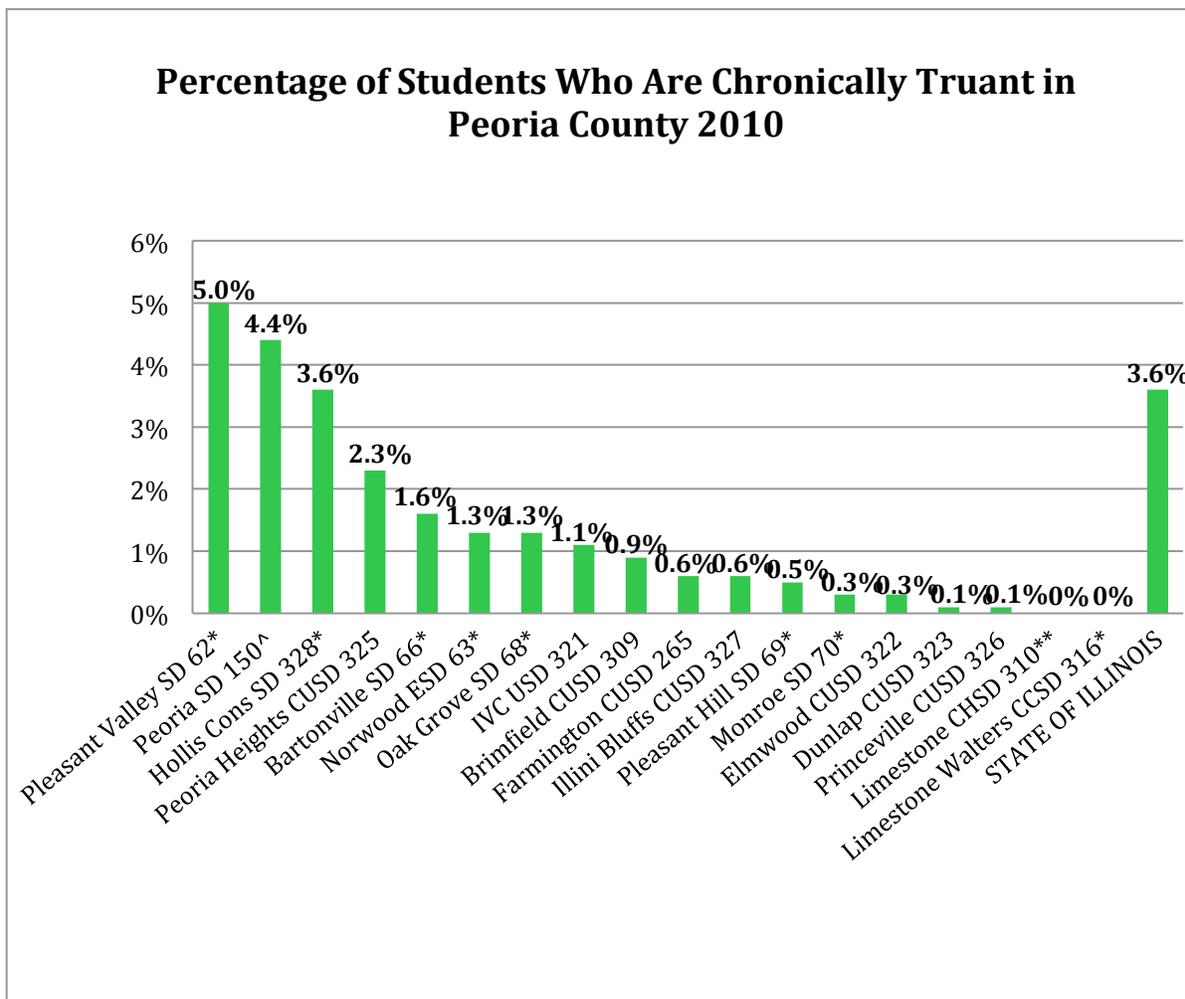
Source: Illinois State Board of Education, School Year 2010 District Report Card Summary

Tri-County Community Health-Needs Assessment

1.5.2 Truancy

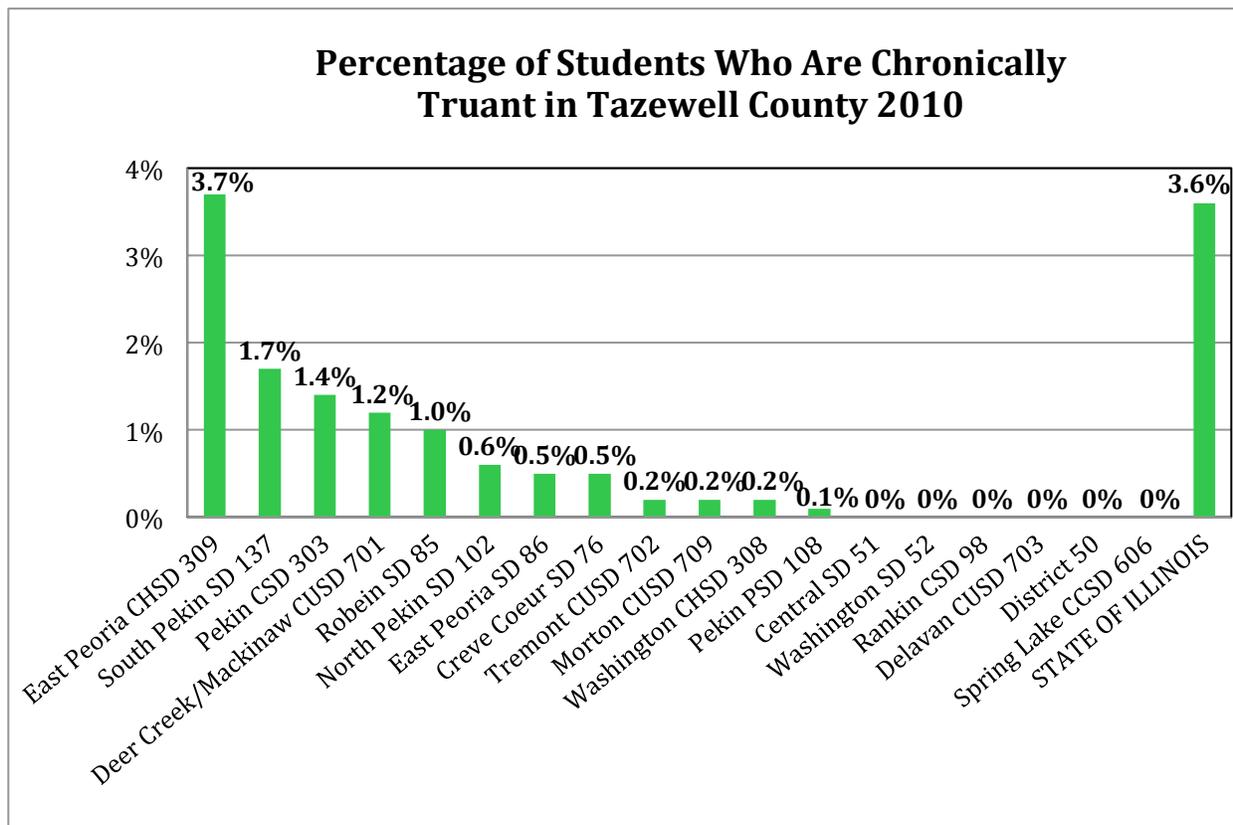
Chronic truancy is a major challenge to the academic progress of children and young adults. The causes of truancy vary considerably for young children; however, truancy of middle- and high-school students is more likely a result of the inappropriate behavior and decisions of individual students. Primary school truancy often results from decisions and actions of the parents or caregivers of the children rather than the students. The school districts with the highest truancy rates in the Tri-County Region that exceed the State average are East Peoria CHSD 309, Pleasant Valley, Peoria District 150 and Hollis Cons.

Table 1.5.2-1 Truancy in School Districts of Peoria County in 2010



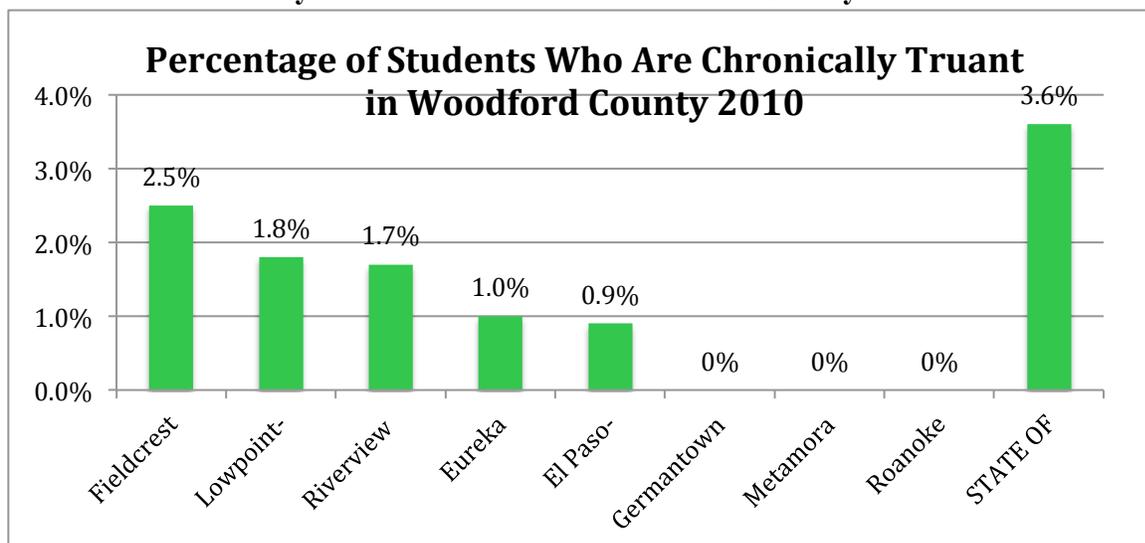
Source: Illinois State Board of Education, School Year 2010 District Report Card Summary

**Table 1.5.2-2 Truancy in School Districts of Tazewell County in 2010**



Source: Illinois State Board of Education, School Year 2010 District Report Card Summary

**Table 1.5.2-3 Truancy in School Districts of Woodford County in 2010**



Source: Illinois State Board of Education, School Year 2010 District Report Card Summary

## Tri-County Community Health-Needs Assessment

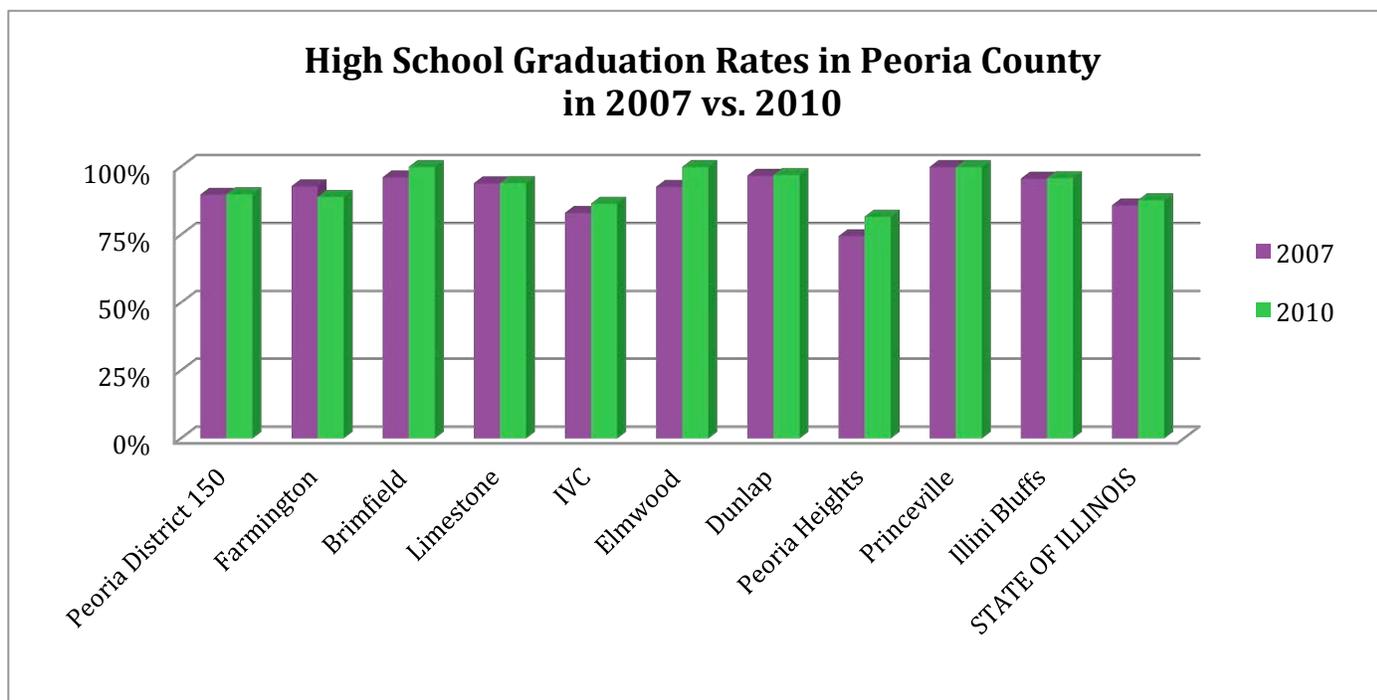
*1.5.3 High School graduation rates*

High school graduation rates in 2007 and 2010 in Peoria County are above the state average (which is 85.9% and 87.8% for years 2007 and 2010, respectively), with the exception of the Peoria Heights and Illinois Valley Central school districts. Also, similar to the state average, the overall percentage of high school graduates in Peoria County improved slightly over the past three years.

Tazewell County high school graduation rates are much higher than the state average except for the East Peoria school district in 2007 (84.6%) and the Pekin school district in 2010 (87.5%). Similarly, as in Peoria County and on the state level, the overall percentage of high school graduates has been increasing in the recent years.

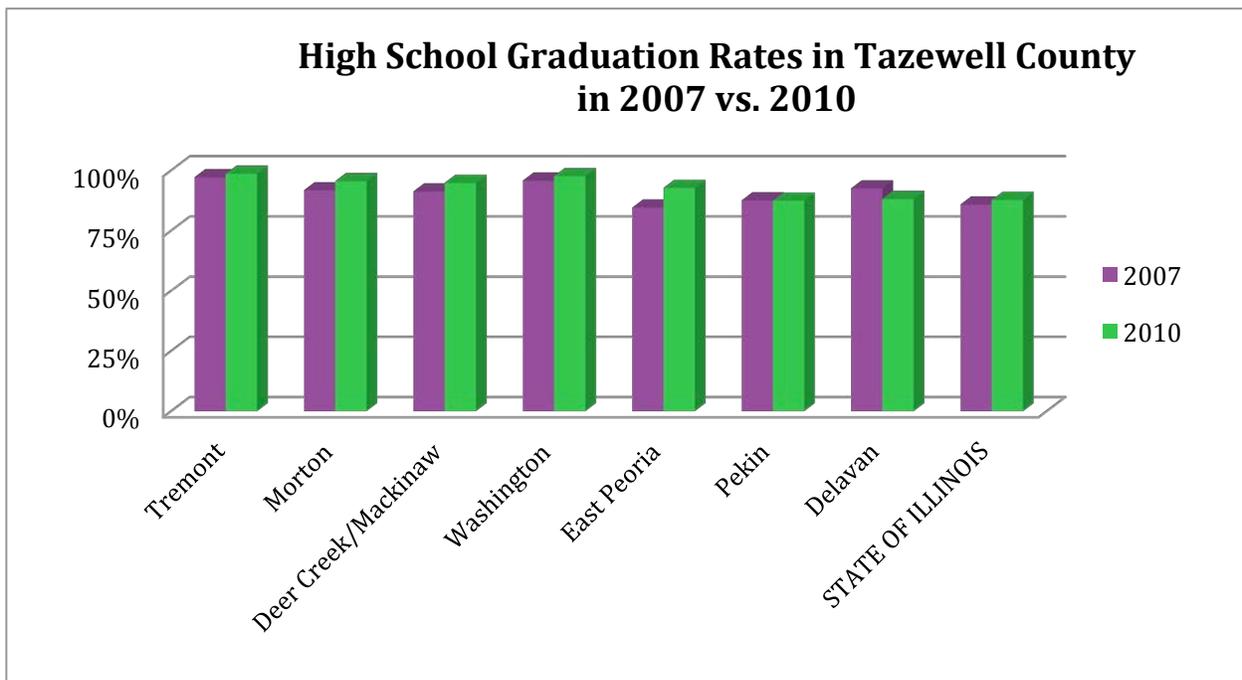
For Woodford County, only Roanoke-Benson school district was slightly below the state average in 2010.

**Table 1.5.3-1 High School Graduation Rates in Peoria County, 2007 vs. 2010**



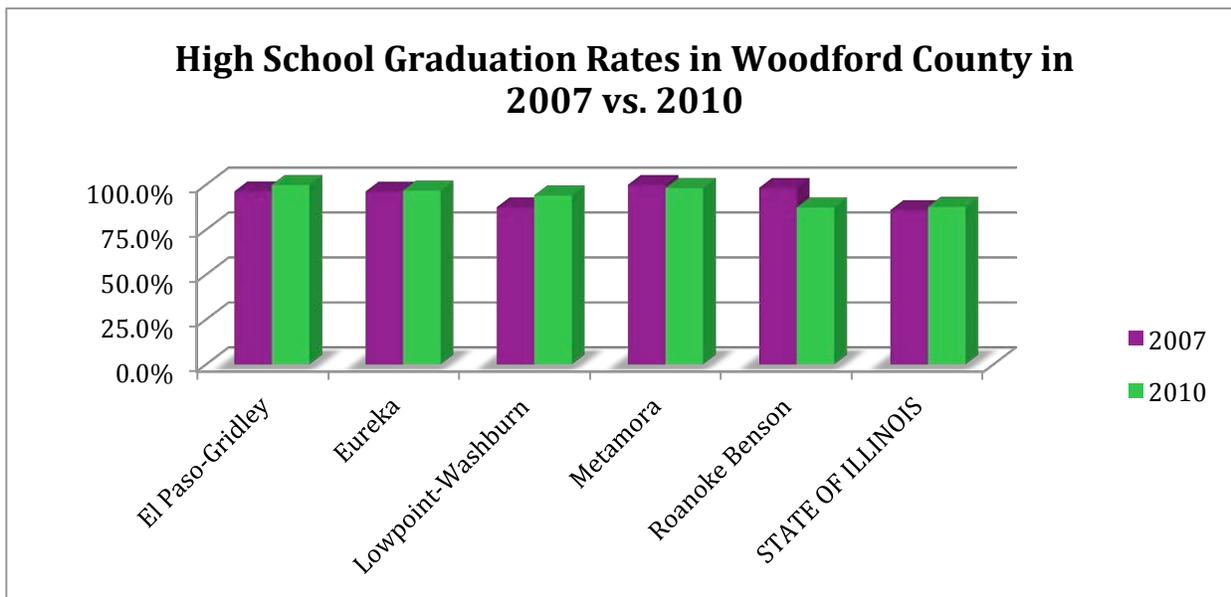
Source: Illinois State Board of Education, School Year 2007 & 2010 District Report Card Summary

**Table 1.5.3-2 High School Graduation Rates in Tazewell County, 2007 vs. 2010**



Source: Illinois State Board of Education, School Year 2007 & 2010 District Report Card Summary

**Table 1.5.3-3 High School Graduation Rates in Woodford County, 2007 vs. 2010**



Source: Illinois State Board of Education, School Year 2007 & 2010 District Report Card Summary

## Tri-County Community Health-Needs Assessment

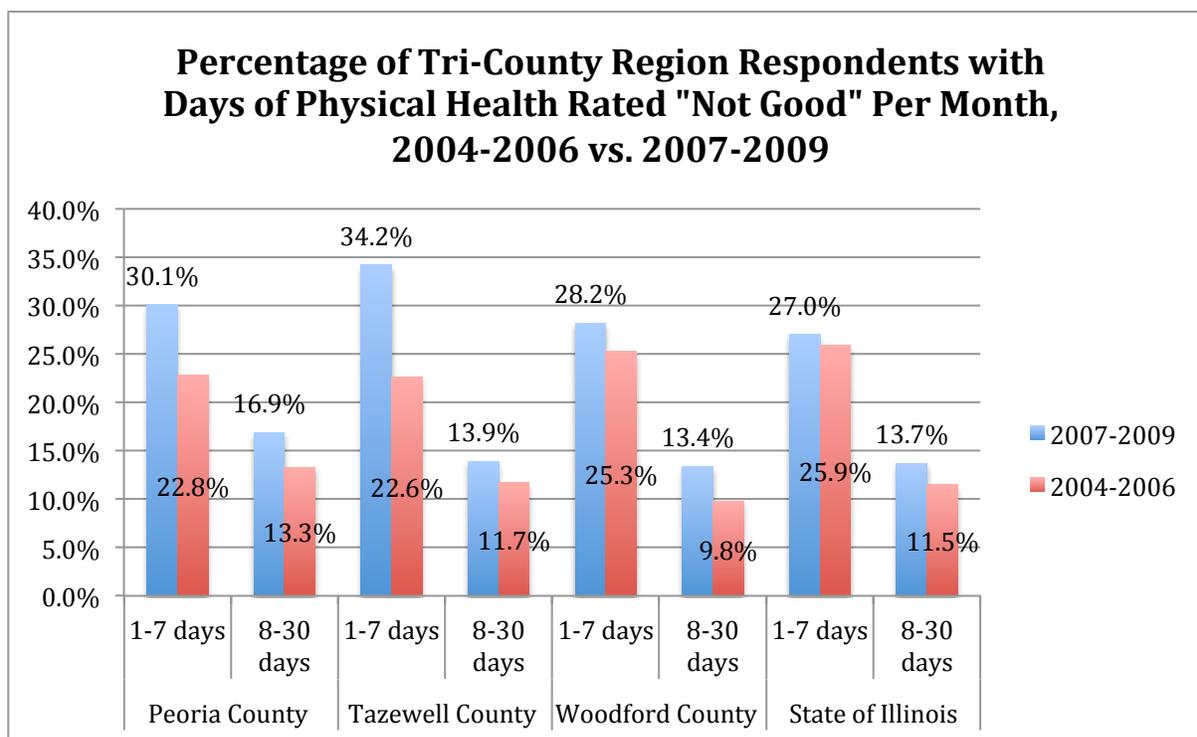
**1.6 People with Disabilities**

*Importance of the measure:* According to the US Census Bureau, a disability can be a long-lasting physical, mental or emotional condition. This condition can make it difficult for a person to do activities such as walking, climbing stairs, dressing, bathing, learning, or remembering. This condition can also impede a person from being independent, from being able to go outside the home alone or to work at a job or business. This condition can also impact a person's ability to achieve an education and can influence a person's ability to access appropriate health care.

**1.6.1 Physical**

Approximately 30% of residents in Peoria, Tazewell, and Woodford Counties reported they had experienced 1-7 days with poor physical health per month between 2007 and 2009. These percentages are greater than the State of Illinois average for the same time frame. With regard to residents experiencing 8-30 days with poor physical health per month, Woodford County residents were below the state average while Peoria County and Tazewell County residents were slightly above for the same time frame.

**Table 1.6.1-1 Percentage of Tri-County Region Respondents with Days of Physical Health Rated "Not Good" Per Month, 2004-2006 vs. 2007-2009**



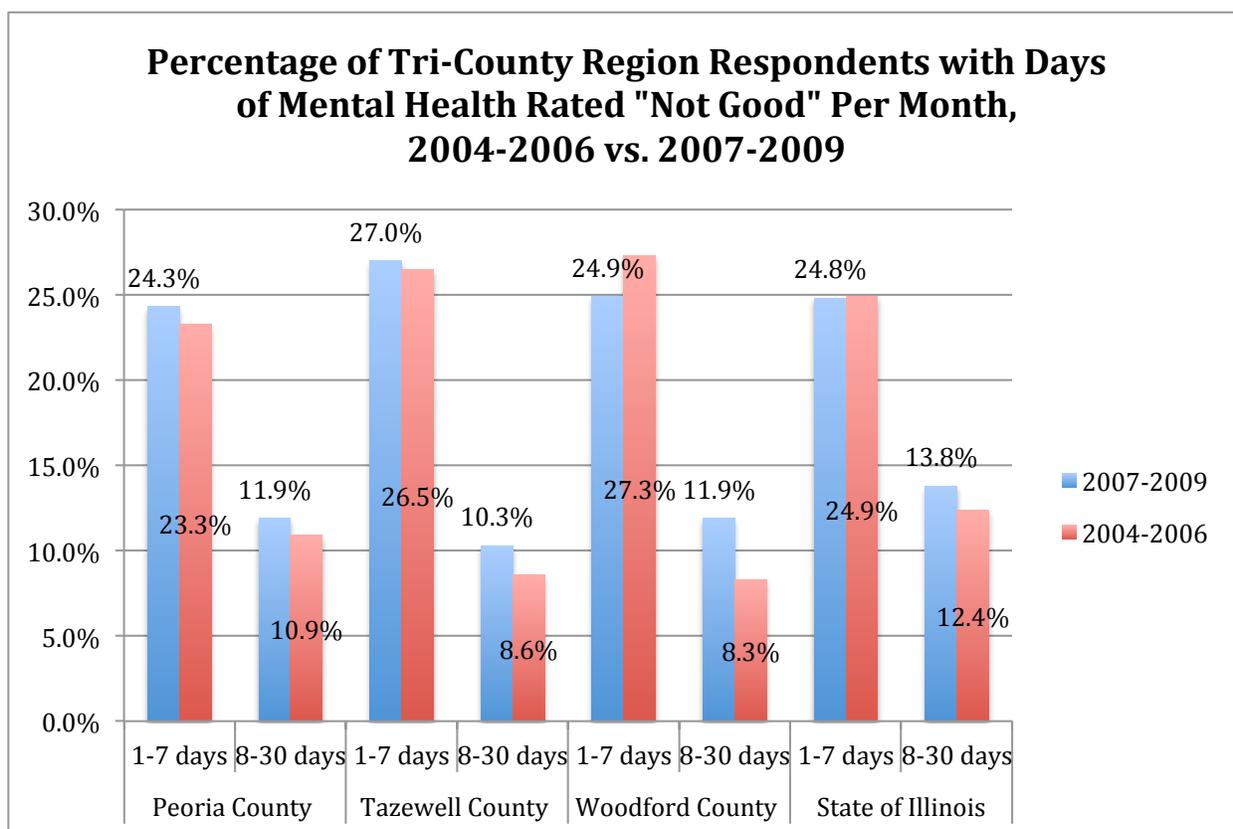
Source: Illinois Behavioral Risk Factor Surveillance System

## Tri-County Community Health-Needs Assessment

*1.6.2 Mental*

Approximately 25% of residents in Peoria, Tazewell, and Woodford Counties reported they had experienced 1-7 days with poor mental health per month between 2007 and 2009. These percentages are greater than the State of Illinois average for the same time frame. With regard to residents experiencing 8-30 days with poor mental health per month, residents from all three counties were below the state average for the same time frame.

**Table 1.6.1-2 Percentage of Tri-County Region Respondents with Days of Mental Health Rated "Not Good" Per Month, 2004-2006 vs. 2007-2009**



*Source: Illinois Behavioral Risk Factor Surveillance System*

**Demographic Profile: Strategic Implications*****Changing demographics and health care:***

Recent data in May 2012 from the Kaiser Family Foundation<sup>1</sup> and Congressional Budget Office<sup>2</sup> suggest that the number of individuals 65 years and older in the United States will increase by one-third between 2012 and 2022. With the changing demographics, it is anticipated an increase in chronic conditions such as diabetes, asthma, and heart disease, and obesity will contribute to the growing cost of health care<sup>3</sup>. In addition, advances in medical technology and medicine may enable individuals to live longer, thus requiring extensive medical care.

These national trends are prevalent in the State of Illinois and Peoria Tri-County Region as seen in Chapter 1. Of particular note, the population of individuals 85 years of age and over increased by nearly 3% in Woodford County between 2007 and 2010. As individuals age and live with disabilities, it greatly impacts the degree of self-sufficiency and medical care required to maintain satisfactory well-being. With the changing demographics resulting from the aging of baby boomers, it is anticipated the Peoria Tri-County Region will experience an increase in the number of elderly individuals living with disabilities and chronic conditions.

***Educational attainment and health care:***

For over two decades, empirical research strongly suggests a positive relationship between education and health<sup>4,5,6,7</sup> (Adams, 2002; House et. al, 1990; Ross & Wu, 1995; Sander, 1999). The predominant way education impacts better health is through enhancing the decision-making capabilities of an individual. In this way, when an individual is better educated, he or she tends to have a better understanding of symptoms, be better equipped to explain symptoms to a doctor, and make better choices with regard to individual health inputs. Accordingly, more effective treatments and positive outcomes result later in life.

A symbiotic relationship exists between health and education. Consider that healthier children miss fewer days of school and are more "ready to learn." Success in school begins prior to kindergarten as new research on cognitive development shows the importance of health, nutrition, and intellectual stimulation during the first years of life. To be prepared to learn in kindergarten, children need pre-literacy skills. They must also be able to make and keep friends, develop positive relationships with adults, and feel a sense of opportunity and excitement for the world around them. As their child's first teacher, much of this responsibility falls upon parents.

Research tells us the most reliable predictor of educational success for children is whether they are reading at grade level by the end of 3rd grade. Note that according to data presented in Chapter 1, while most school districts are above the State of Illinois averages, certain school districts (e.g., Creve Coeur, Spring Lake, and Peoria District 150) are below 3<sup>rd</sup> grade reading state averages.

According to research, a child from a low-income family who completes algebra has virtually the same chance of going to college as a child from an upper-income family who passes the course. Thus, it is not about the math, it's about learning to problem solve.

## Tri-County Community Health-Needs Assessment

### ***Economic well-being and health care:***

Educational attainment also impacts economic well-being. Research suggests that the more education obtained by individuals, the better jobs these individuals earn<sup>8</sup>. Better jobs yield greater earning and benefits, including health insurance. Furthermore, if educated individuals are unemployed, research suggests that these individuals are unemployed for shorter durations than less educated individuals<sup>9</sup>. For many individuals, insurance coverage is a primary consideration when evaluating whether or not to seek medical treatment. Using health care appropriately, instead of the ER in non-emergencies, is better for patients and lowers cost of health care to society. Accordingly, the uninsured are less likely to access preventive care or seek early treatment of illness and therefore may miss more time at work. Similarly, it is difficult to hold a job when a person is not healthy.

Unemployment leads to poverty and has far-reaching impacts within society. Poverty disproportionately impacts families and children. Note in Table 1.4.3-1 that between 2007 and 2010, families living in poverty in Peoria County have increased almost 5%. These considerations are compounded by the fact that over 35% of single mothers in Peoria County are living in a state of poverty. Additionally, early sexual activity can contribute to child poverty. As seen in Table 1.3.4-1, the rates for births to teenage mothers in Peoria County are still significantly higher than the State average. In addition, Woodford County denoted a 1% increase in the rates for births to teenage mothers between 2007 and 2010.

**Endnotes for Chapter 1**

<sup>1</sup> Kaiser Family Foundation, “Health Care Costs: Key Information on Health Care Costs and Their Impact,” May 2012.

<sup>2</sup> Congressional Budget Office, *CBO’s 2011 Long-Term Budget Outlook*, June 2011, p.ix, [http://www.cbo.gov/ftpdocs/122xx/doc12212/06-21-Long-Term\\_Budget\\_Outlook.pdf](http://www.cbo.gov/ftpdocs/122xx/doc12212/06-21-Long-Term_Budget_Outlook.pdf)

<sup>3</sup> Kaiser Family Foundation, “Health Care Costs: Key Information on Health Care Costs and Their Impact,” May 2012.

<sup>4</sup> Adams, S.J. (2002). Educational attainment and health: Evidence from a sample of older adults. *Education Economics*, 10(1), 97-109.

<sup>5</sup> House, J., Kessler, R., Herzog, A., Mero, R., Kinney, A. & Breslow, M. (1990). Age, socioeconomic status, and health. *The Milbank Quarterly*, 68, 383-411.

<sup>6</sup> Ross, C. & Wu, C. (1995). The links between education and health. *American Sociological Review*, 60, 719-745.

<sup>7</sup> Sander, W. (1999). Cognitive ability, schooling, and the demand for alcohol by young adults, *Education Economics*, 7, 53-66.

<sup>8</sup> Willis, R. (1986). Wage determinants: a survey and reinterpretation of human capital earnings functions. In: Ashenfelter, O. & Layard, R. (Eds). *Handbook of Labor Economics*, Volume I (Amsterdam, North-Holland Publishing Company).

<sup>9</sup> Moen, E. (1999). Education, ranking, and competition for jobs. *Journal of Labor Economics*, 17, 694-723.

## CHAPTER 2. PREVENTION

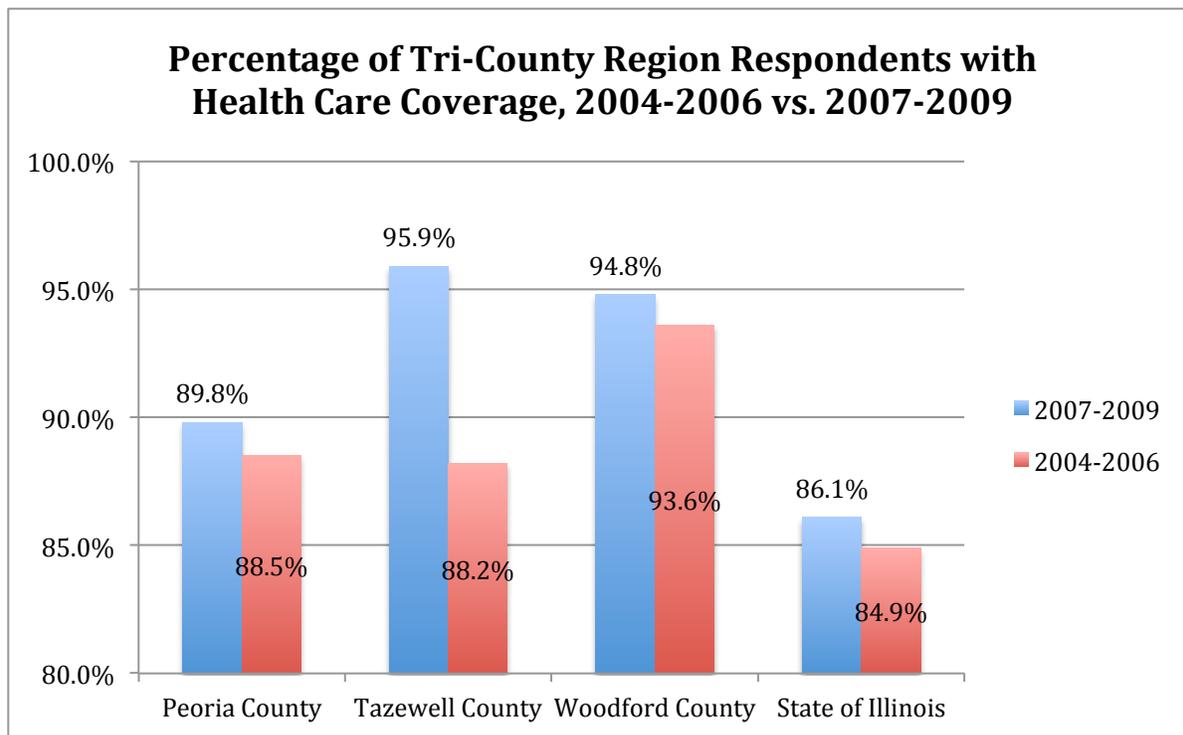
### 2.1 Accessibility

*Importance of the measure:* It is critical for health care services to be accessible to the constituencies who will take advantage of its benefits. Therefore, accessibility to health care must address both the financial costs associated with health care and the supply and demand of medical services.

#### 2.1.1 Insurance Coverage

With regard to medical insurance coverage, data gathered from the Illinois Behavioral Risk Factor Surveillance System suggest that residents in the Tri-County Region possess health care coverage at a higher percentage than the State of Illinois average. Whereas the percentage of Peoria County, Woodford County, and the State of Illinois respondents with health care coverage grew at a similar rate between 2004-2006 and 2007-2009, the percentage of Tazewell County respondents with health care coverage grew by 7.5% during the same time frame.

**Table 2.1.1-1 Percentage of Tri-County Region Respondents with Health Care Coverage, 2004-2006 vs. 2007-2009**

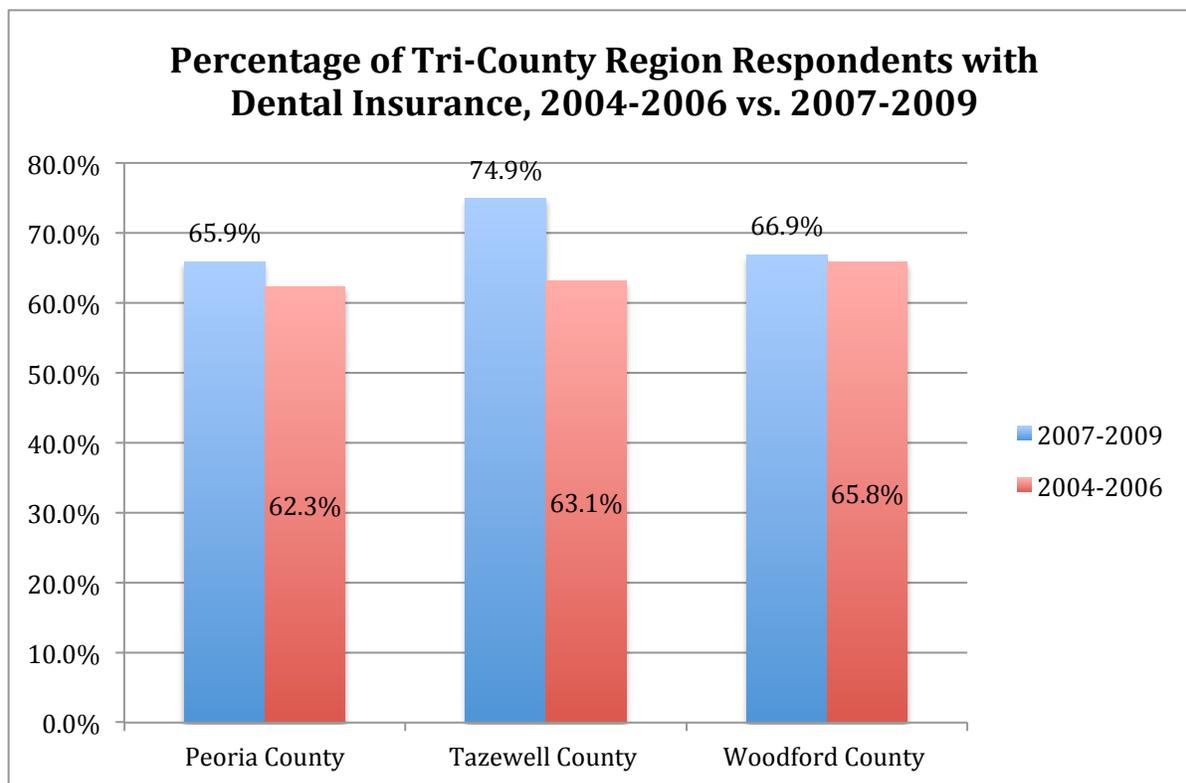


*Source: Illinois Behavioral Risk Factor Surveillance System*

## Tri-County Community Health-Needs Assessment

With regard to dental insurance, data suggest the percentage of Tazewell County residents with dental insurance coverage is growing at a faster rate than the percentage of Peoria County or Woodford County residents with dental insurance. The most recent data from the Illinois BRFSS indicate 74.9% of Tazewell County residents possessed dental insurance coverage in 2007-2009 compared to 65.9% of Peoria County residents and 66.9% of Woodford County residents.

**Table 2.1.1-2 Percentage of Tri-County Region Respondents with Dental Insurance, 2004-2006 vs. 2007-2009**

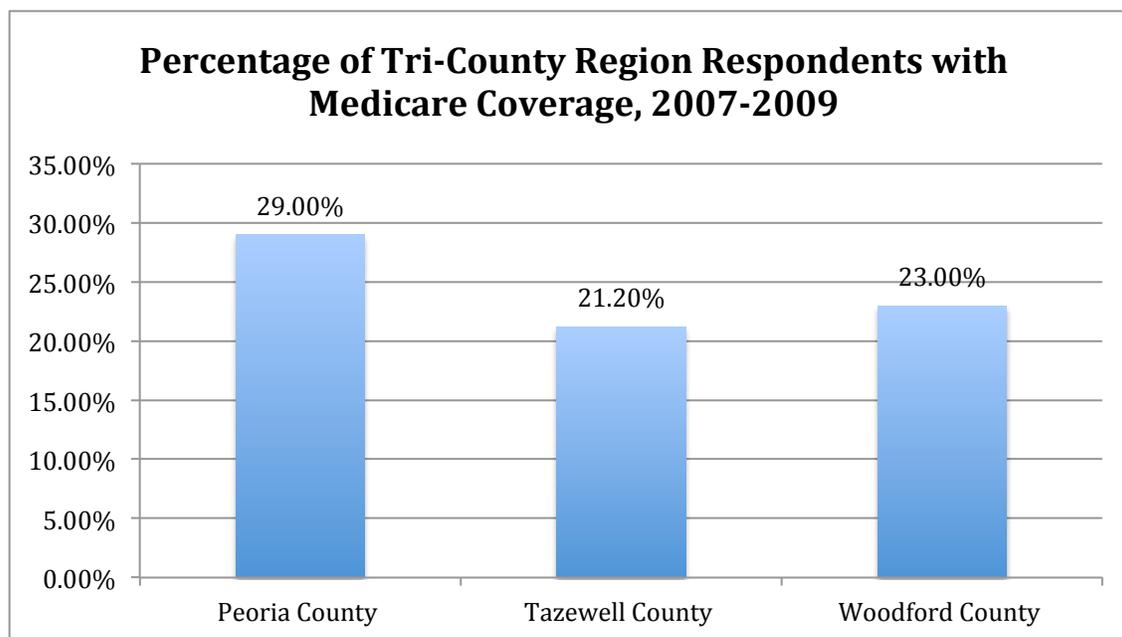


*Source: Illinois Behavioral Risk Factor Surveillance System*

## Tri-County Community Health-Needs Assessment

With regard to Medicare Coverage, a higher percentage of Peoria County respondents indicate they utilize Medicare as their primary insurance coverage than in Tazewell or Woodford Counties. Despite having a lower median age for residents, 29% of Peoria County residents receive Medicare coverage.

**Table 2.1.1-3 Percentage of Tri-County Region Respondents with Medicare Coverage, 2007-2009**



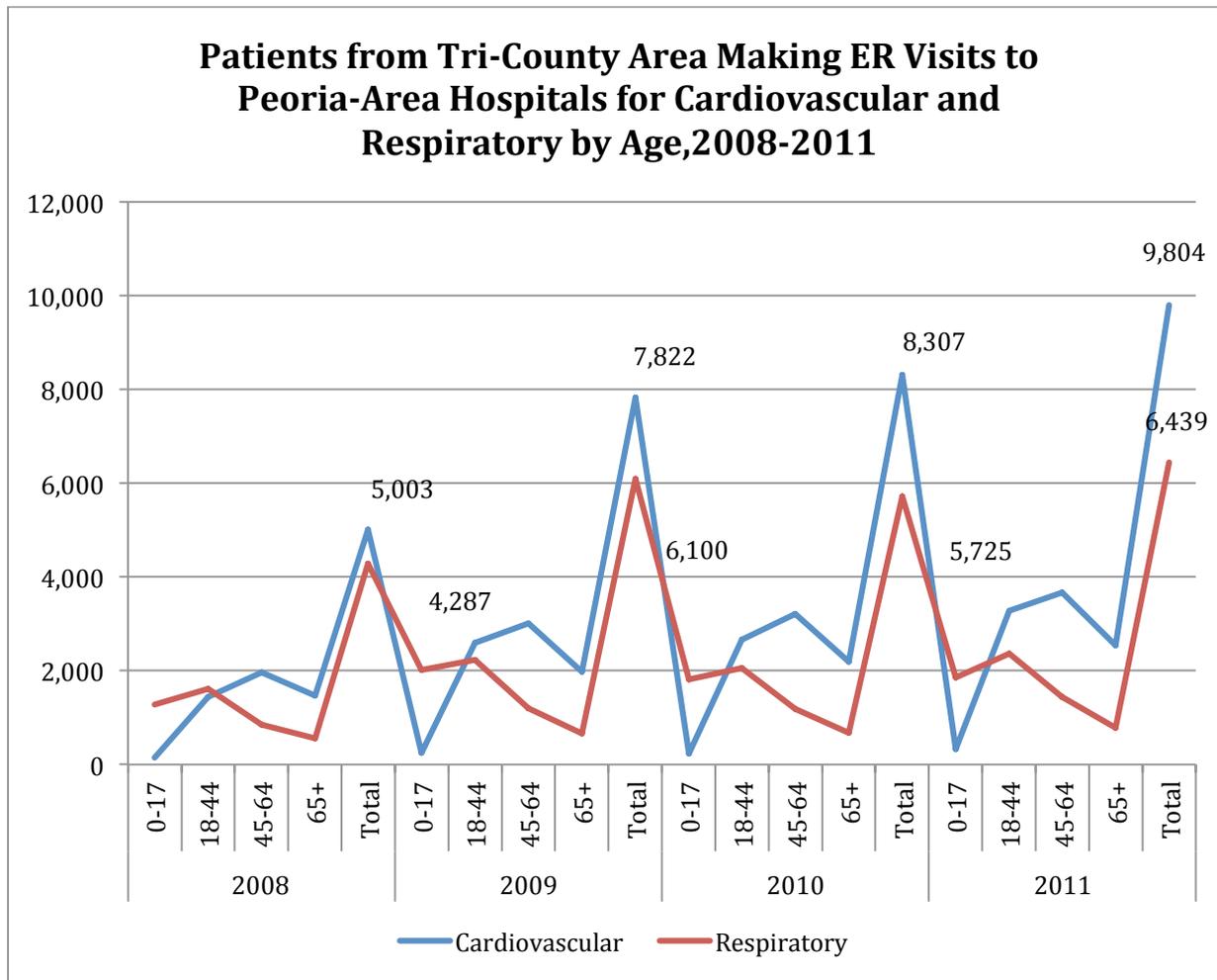
*Source: Illinois Behavioral Risk Factor Surveillance System*

### 2.1.2 Access and utilization

Physician capacity can be measured using various metrics. One commonly utilized method is to evaluate what percentage of individuals have a usual health care provider. A usual health care provider signifies that these individuals are more likely to partake in wellness check-ups and less likely to utilize emergency room visits as their primary health care service.

Tables 2.1.2-1 and 2.1.2-2 reflect the number of emergency room visits by condition. Of particular note, the number of emergency room visits for cardiovascular conditions has increased for the Peoria-area hospitals (defined as UnityPoint Health - Methodist, Pekin Hospital, Proctor Hospital and Saint Francis Medical Center) by 96% between 2008 and 2011. The number of emergency room visits for respiratory conditions, including, asthma, has increased by 50% during the same time frame. Emergency room visits attributed to cancer have decreased precipitously from a high of 888 in 2008 to only 58 in 2011. Over the same time frame, emergency room visits attributed to diabetes (+97%) and infectious diseases (+94%) have increased while visits attributed to brain tumor/stroke (-45%) have decreased. Note however that as of 2010, Prompt Care was no longer counted as ER visits. It now falls under physician office visits. This may impact year-to-year changes, so growth rates should be interpreted with caution.

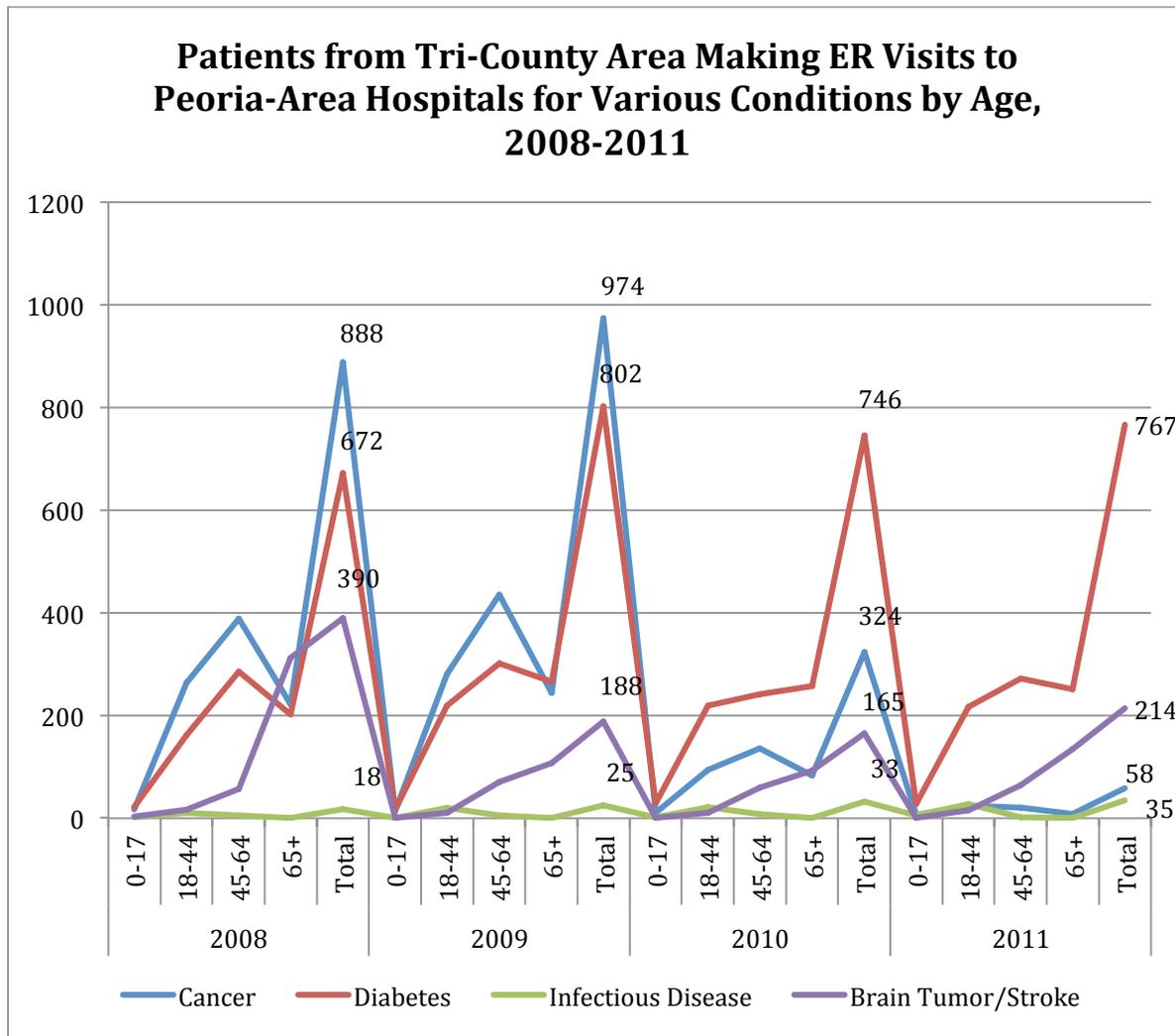
**Table 2.1.2-1 Patients from Tri-County Area Making ER Visits to Peoria-Area Hospitals for Cardiovascular and Respiratory by Age, 2008-2011**



Source: COMPData 2012

Tri-County Community Health-Needs Assessment

**Table 2.1.2-2 Patients from Tri-County Area Making ER Visits to Peoria-Area Hospitals for Various Conditions by Age, 2008-2011**

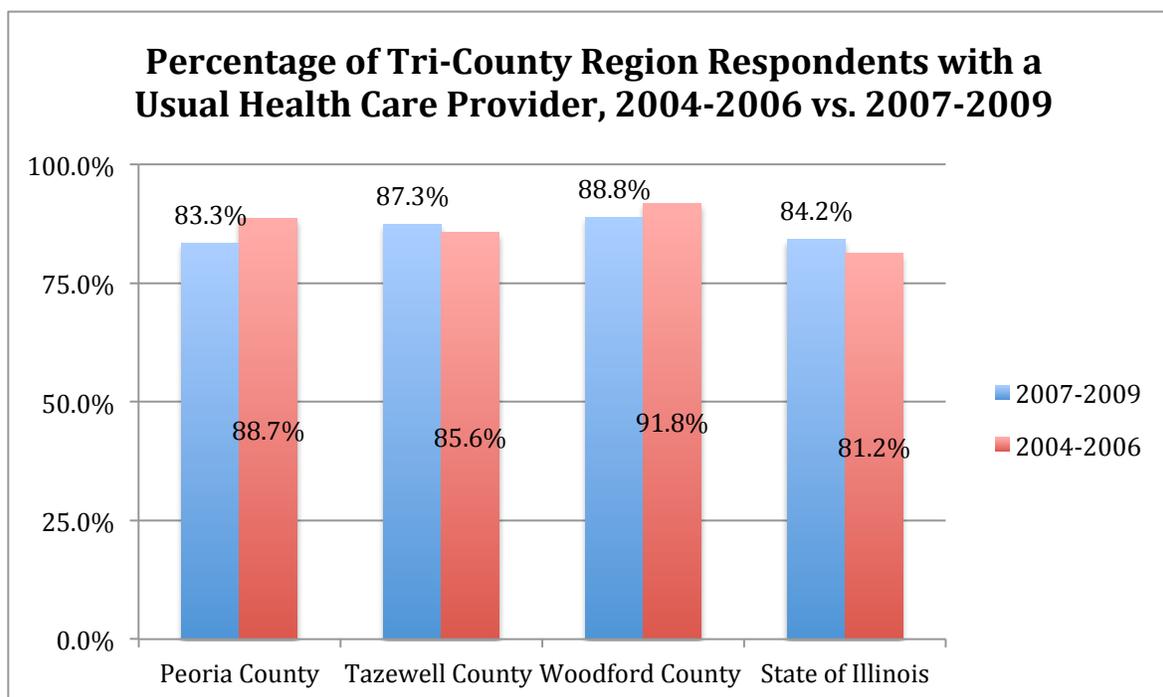


Source: COMPData 2012

## Tri-County Community Health-Needs Assessment

In the Tri-County Region, the most recent data indicate approximately 85% of residents utilize a regular health care provider. Between 2004-2006 and 2007-2009, the percentage of residents in Peoria County and Woodford County reporting a usual health care provider decreased by 5.4% and 3.0% respectively. On the contrary, the percentage of State of Illinois residents increased by 3.0% during the same time frame.

**Table 2.1.2-3 Percentage of Tri-County Region Respondents with a Usual Health Care Provider, 2004-2006 vs. 2007-2009**

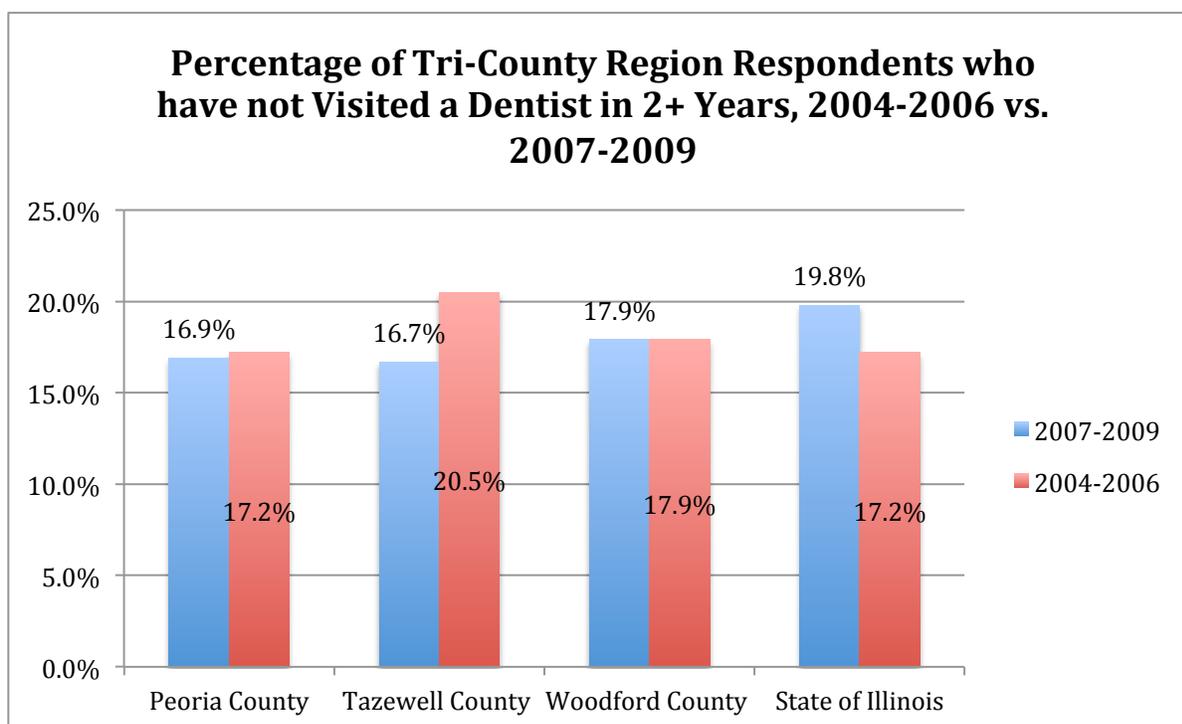


*Source: Illinois Behavioral Risk Factor Surveillance System*

## Tri-County Community Health-Needs Assessment

Another metric to gain insight into the capacity of physicians is the percentage of residents who have not visited physicians within two years. With regard to the capacity of dentists in the Tri-County Region, Peoria, Tazewell, and Woodford Counties lag significantly behind the State of Illinois average for 2007-2009. Furthermore, Peoria and Tazewell Counties denoted negative growth in the percentage of respondents who have not visited a dentist in two or more years and Woodford County remained unchanged at 17.9% from 2004-2006. This stands in stark contrast to the 2.6% positive growth rate for the State of Illinois as a whole.

**Table 2.1.2-4 Percentage of Tri-County Region Respondents who have not Visited a Dentist in 2+ Years, 2004-2006 vs. 2007-2009**



*Source: Illinois Behavioral Risk Factor Surveillance System*

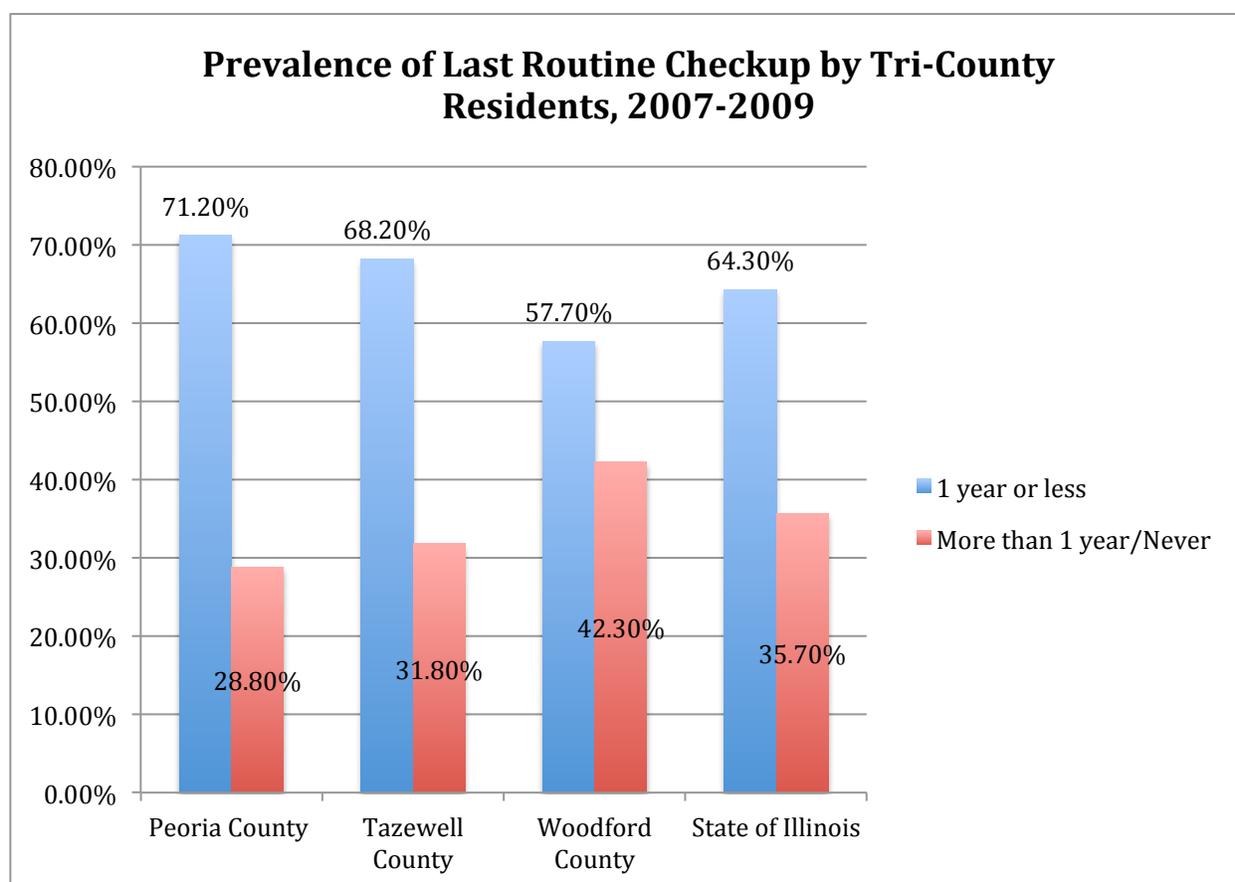
## 2.2 Wellness

*Importance of the measure:* Preventative health care measures, including scheduling routine well-visits, engaging in a healthy lifestyle, and undertaking screenings for diseases, are essential to combating morbidity and mortality and help reduce health care costs.

### 2.2.1 Check up

Numerous health problems can be minimized when detected early. Therefore regularly scheduled routine checkups can be very important. According to the latest data from the Illinois BRFSS, approximately 70% of residents in the Tri-County Region report having had a routine checkup within the last year. Whereas residents in Peoria County and Tazewell County rate above the State of Illinois average (64.3%), Woodford County residents rate below (57.7%) the state average. In addition, 42.3% of Woodford County residents report that it has been more than one year since their last check-up or they have never had one. This statistic is above the State of Illinois average.

**Table 2.2.1-1: Prevalence of Last Routine Checkup by Tri-County Residents, 2007-2009**



*Source: Illinois Behavioral Risk Factor Surveillance System*

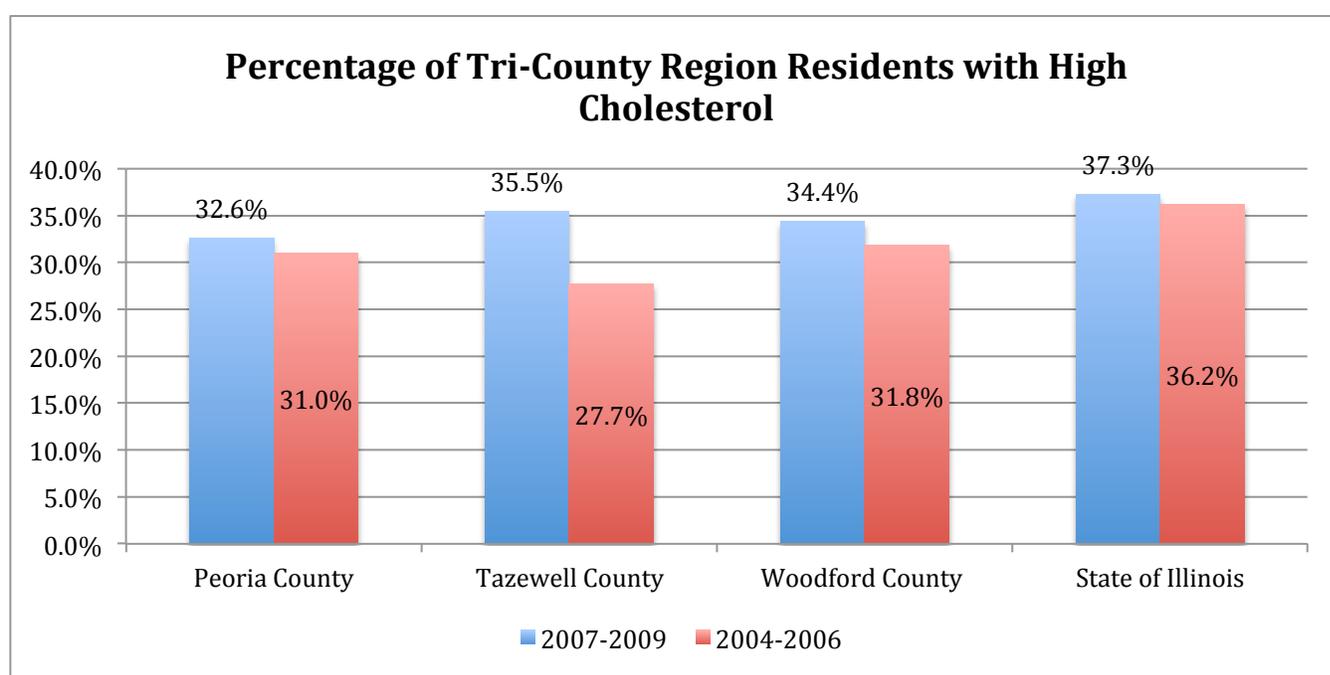
## Tri-County Community Health-Needs Assessment

### 2.2.2 Early detection

Residents in the Tri-County Region report varying prevalence of high cholesterol. The percentage of residents who report they have high cholesterol is lower in each of the three counties than the State of Illinois average of 37.3%. However, the growth rate from 2004-2006 to 2007-2009 for the State of Illinois was 1.2%. The growth rates in the percentage of residents reporting high blood pressure increased in Peoria County (1.6%), Tazewell County (7.8%), and Woodford County (2.6%), all three considerably higher than the state average.

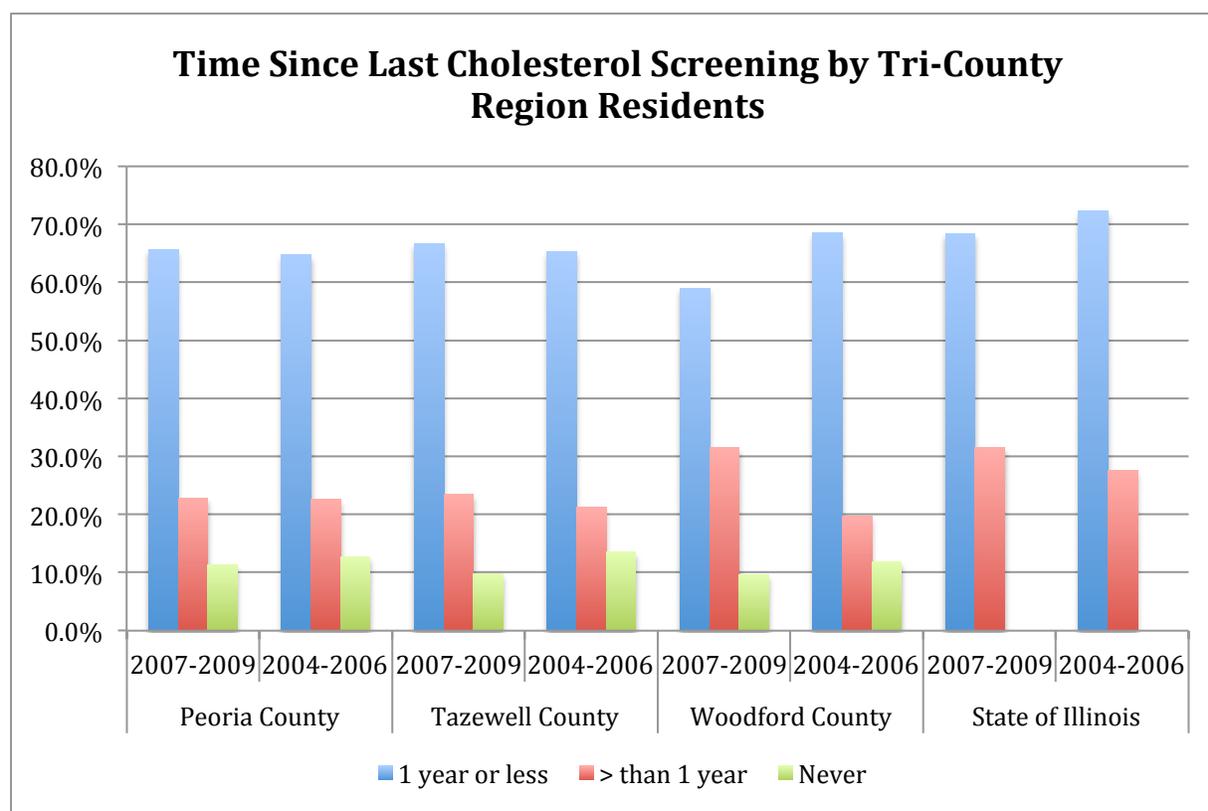
In addition, approximately 60% of residents in the Tri-County Region report having had a cholesterol screening within the last year. These data for 2007-2009 are lower than the State of Illinois average of 68.4%.

**Table 2.2.2-1: Percentage of Tri-County Region Residents with High Cholesterol**



*Source: Illinois Behavioral Risk Factor Surveillance System*

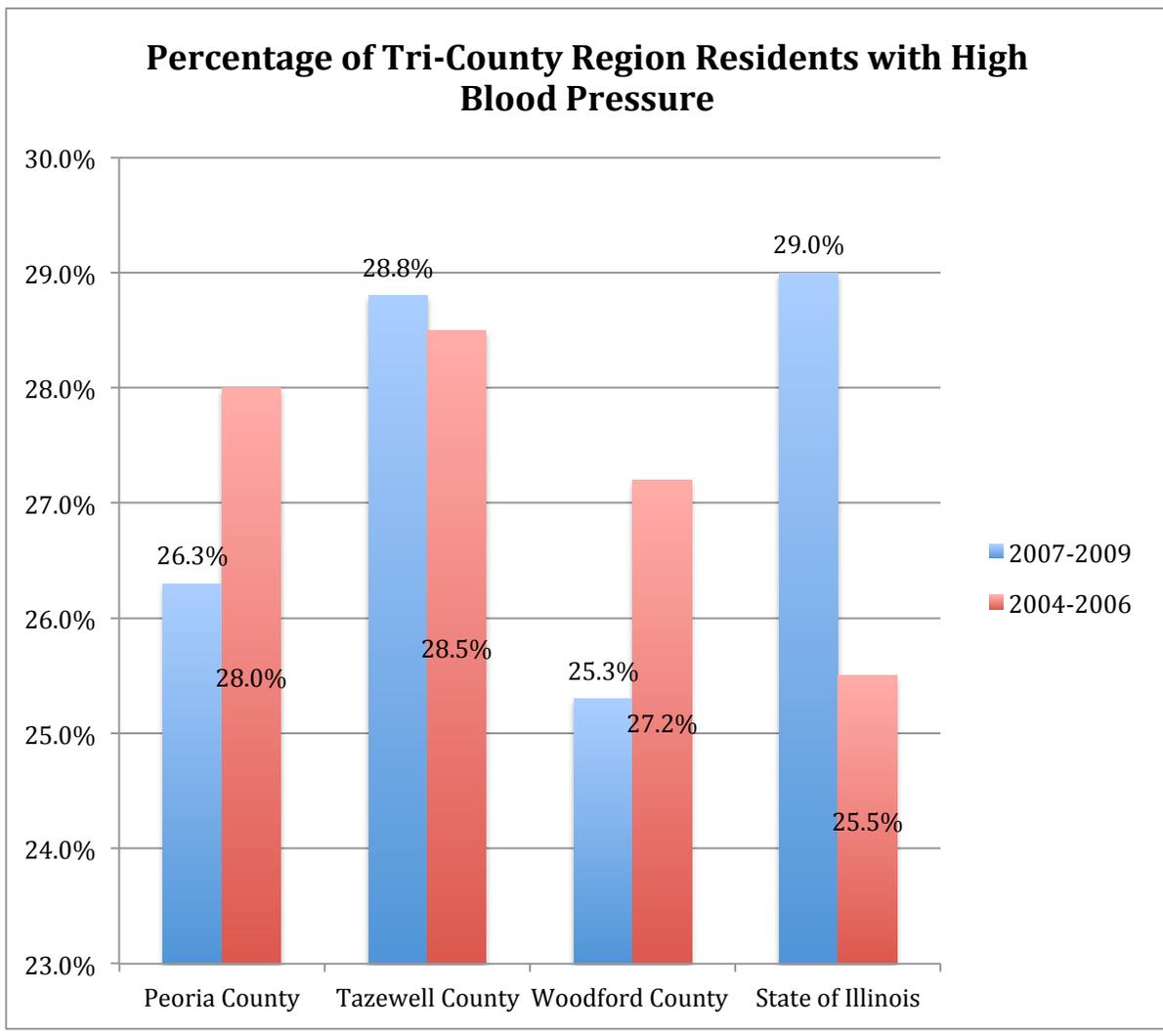
## Tri-County Community Health-Needs Assessment

**Table 2.2.2-2: Time Since Last Cholesterol Screening by Tri-County Region Residents**

*Source: Illinois Behavioral Risk Factor Surveillance System*

With regard to high blood pressure, the residents in the tri-counties report a lower percentage of individuals with high blood pressure than residents in the State of Illinois as a whole for 2007-2009. It is also encouraging that as the percentage of individuals with high blood pressure increased by 3.5% across the State of Illinois, the same percentage decreased in Peoria and Woodford Counties and increased by only 0.3% in Tazewell County during the same time period.

**Table 2.2.2-3: Percentage of Tri-County Region Residents with High Blood Pressure**



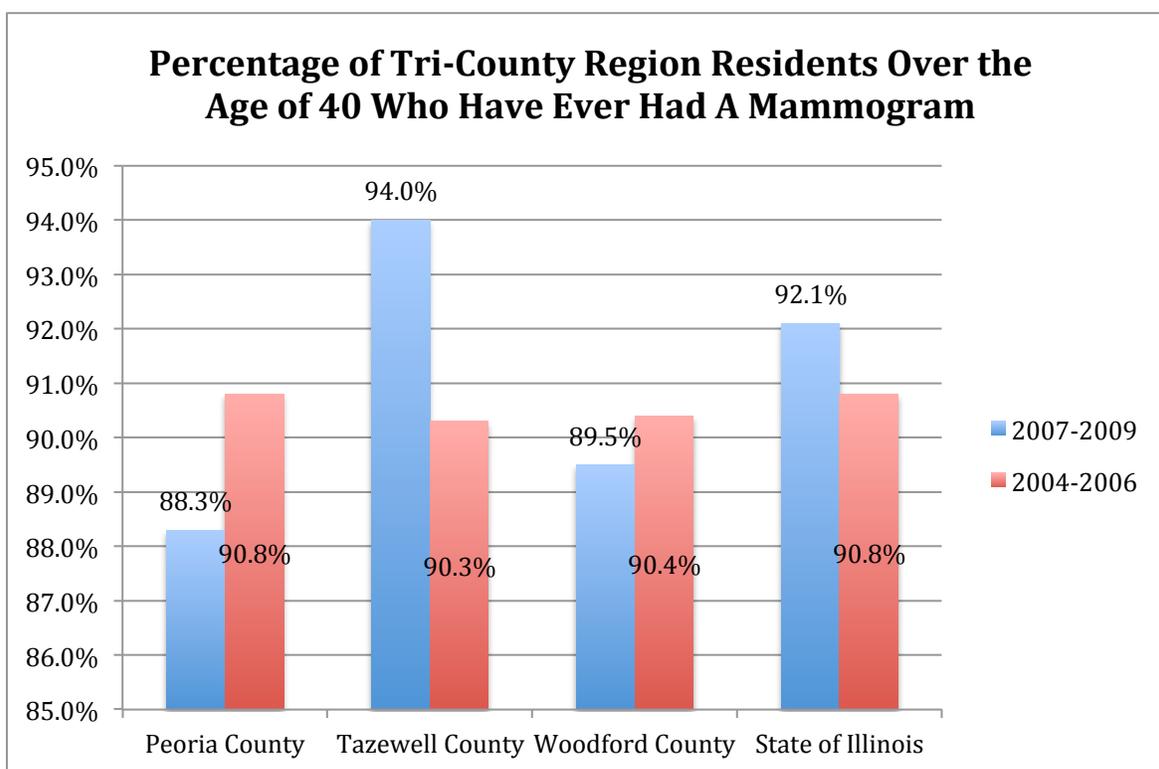
*Source: Illinois Behavioral Risk Factor Surveillance System*

## Tri-County Community Health-Needs Assessment

Mammograms and PSA tests help to screen individuals for breast and prostate cancers. With regard to mammograms, 88.3% of individuals over the age of 40 in Peoria County and 89.5% of individuals over the age of 40 in Woodford County report that they have had a mammogram at some point in their life. These data are significantly lower than the State of Illinois average of 92.1%. Furthermore, whereas the percentage of Illinois residents increased by 1.3% between 2004-2006 and 2007-2009, the percentage of Peoria County residents decreased by 2.5% and the percentage of Woodford County residents decreased by 0.9%.

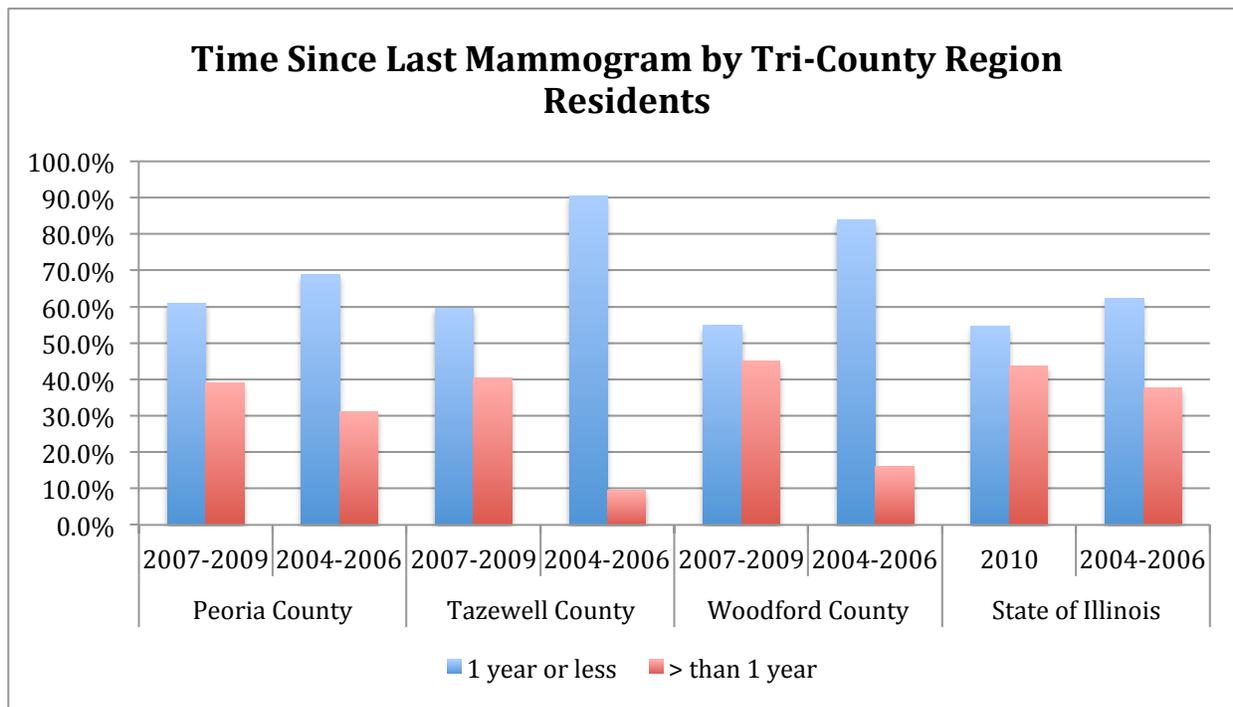
With regard to the time elapsed since one's last mammogram, residents from Tazewell County reported a 30% decrease between 2004-2006 and 2007-2009 for mammograms within one year or less. This statistic is significantly greater than the State of Illinois average (-7.7%).

**Table 2.2.2-4 Percentage of Tri-County Region Residents Over the Age of 40 Who Have Ever Had A Mammogram**



*Source: Illinois Behavioral Risk Factor Surveillance System*

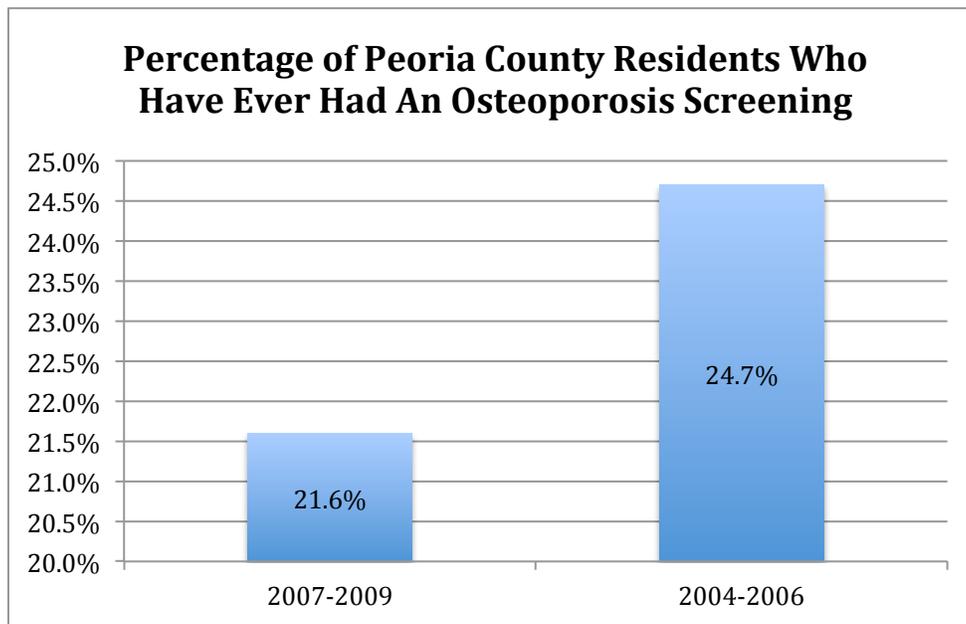
**Table 2.2.2-5 Time Since Last Mammogram by Tri-County Region Residents**



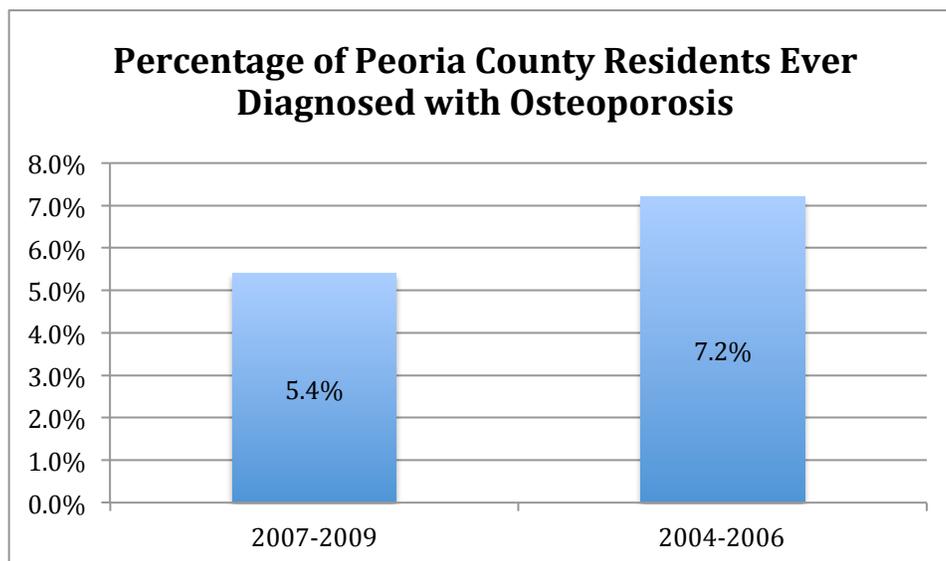
*Source: Illinois Behavioral Risk Factor Surveillance System*

With regard to T-scores or osteoporosis indicators, data from the Illinois BRFSS indicate a decrease of 3.1% in the percentage of Peoria County residents who have ever had an osteoporosis screening between 2004-2006 and 2007-2009. Furthermore, 5.4% of Peoria County residents have been diagnosed with osteoporosis, down from 7.2% in 2004-2006.

## Tri-County Community Health-Needs Assessment

**Table 2.2.2-6 Percentage of Peoria County Residents Who Have Ever Had An Osteoporosis Screening**

Source: Illinois Behavioral Risk Factor Surveillance System

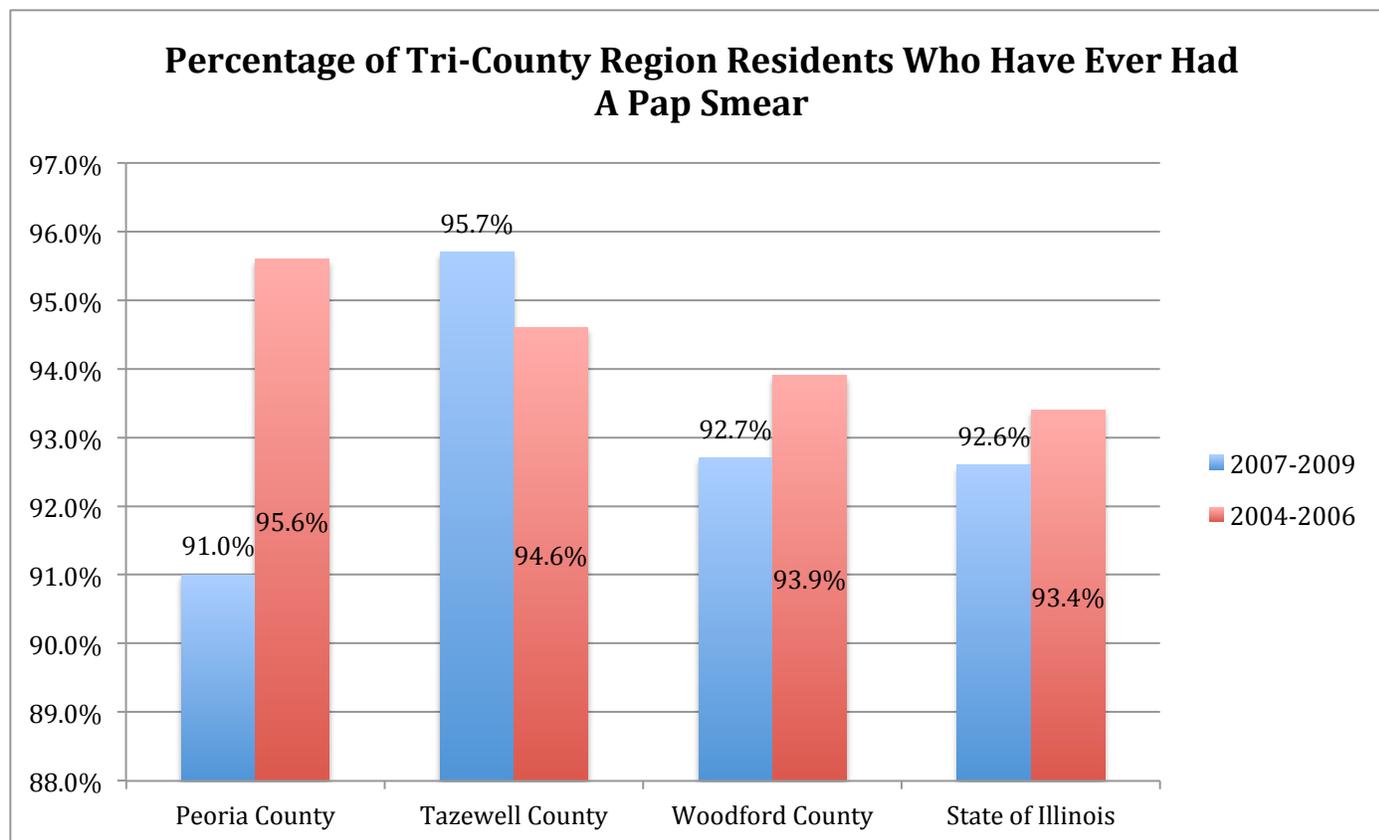
**Table 2.2.2-7 Percentage of Peoria County Residents Ever Diagnosed with Osteoporosis**

Source: Illinois Behavioral Risk Factor Surveillance System

## Tri-County Community Health-Needs Assessment

Research suggests pap smears are important in detecting pre-cancerous cells in the uterus and cervix. Data from the 2007-2009 Illinois BRFSS indicate that 95.7% of Tazewell County residents and 92.7% of Woodford County residents have ever had a pap smear. These percentages are greater than the State of Illinois average (92.6%). Peoria County residents report that 91.0% have ever had a pap smear, 1.6 percentage points lower than the State of Illinois average. Between 2004-2006 and 2007-2009, the percentage of Peoria County residents who had ever had a pap smear decreased 4.6%.

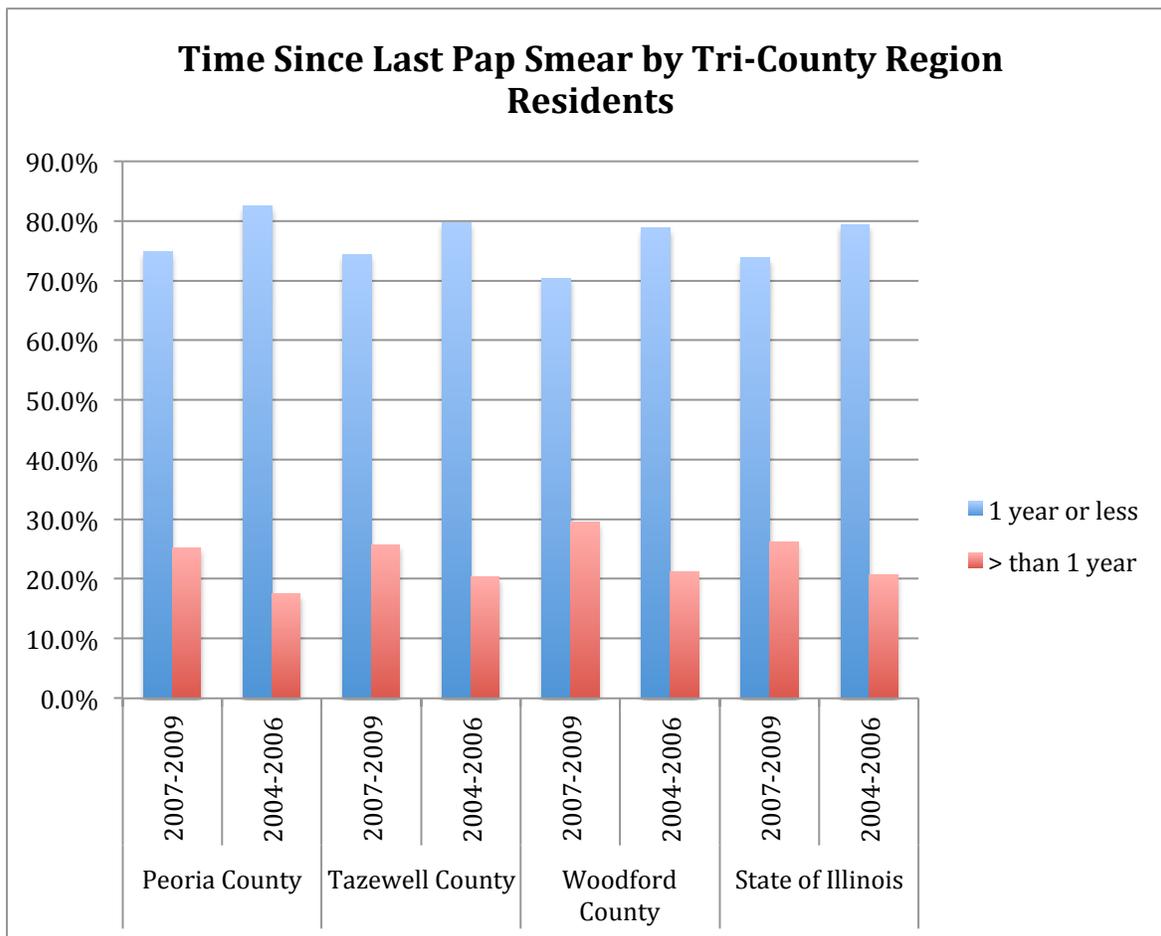
**Table 2.2.2-8 Percentage of Peoria County Residents Who Have Ever Had A Pap Smear**



*Source: Illinois Behavioral Risk Factor Surveillance System*

With regard to the time elapsed since one's last pap smear, residents from Woodford County reported a 8.4% decrease between 2004-2006 and 2007-2009 for pap smears within one year or less. This statistic is significantly greater than the State of Illinois average (-5.5%).

**Table 2.2.2-9 Time Since Last Pap Smear by Tri-County Region Residents**



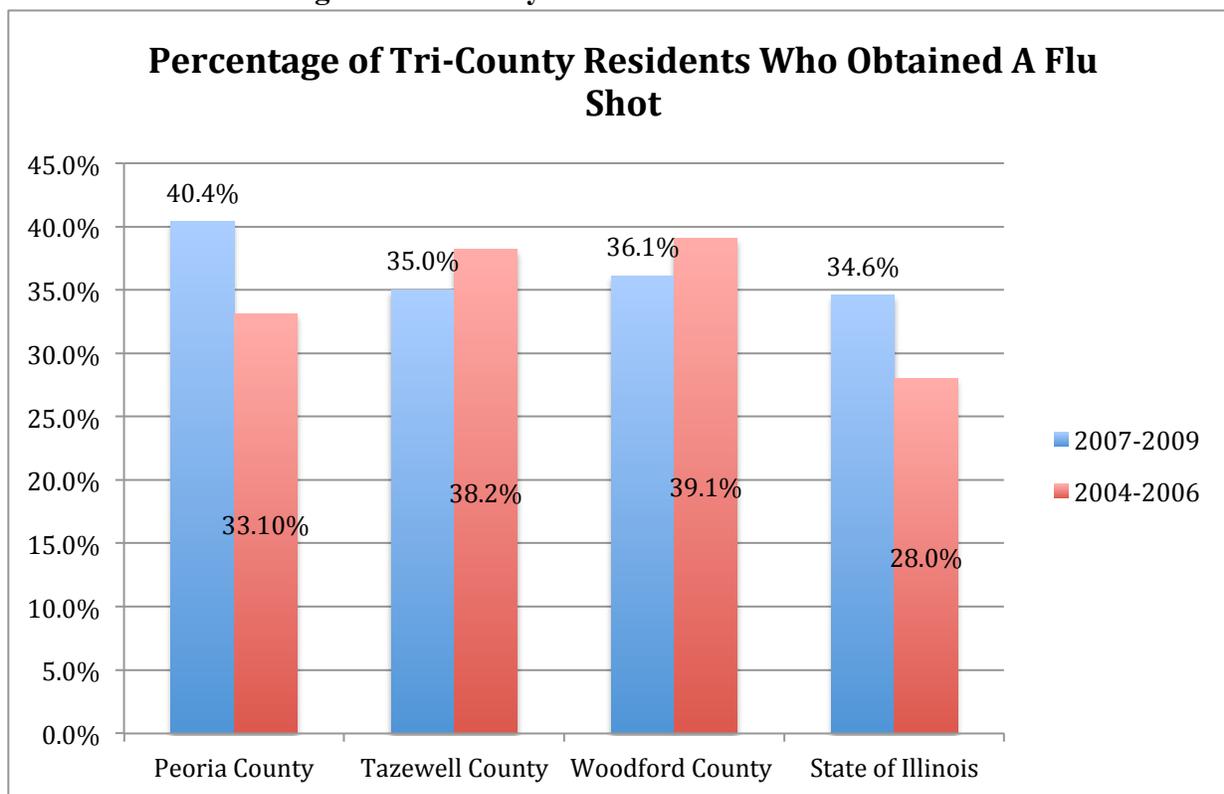
Source: Illinois Behavioral Risk Factor Surveillance System

Tri-County Community Health-Needs Assessment

2.2.3 Immunizations

The overall health of a community is impacted by preventative measures including immunizations and vaccinations. The percentage of people who have had a flu shot in the past year is approximately 35% both in the Peoria Tri-County area, as well as the State of Illinois, although the state average is slightly lower than the Tri-County average. The percentage of residents in Peoria County who obtained a flu shot is greater than the state average (34.6%). While both the State of Illinois and Peoria County experienced positive growth between 2004-2006 and 2007-2009, Tazewell County and Woodford County experienced negative growth in the percentage of residents who obtained a flu shot (3.2% and 3.0%, respectively).

**Table 2.2.3-1 Percentage of Tri-County Residents Who Obtained A Flu Shot**

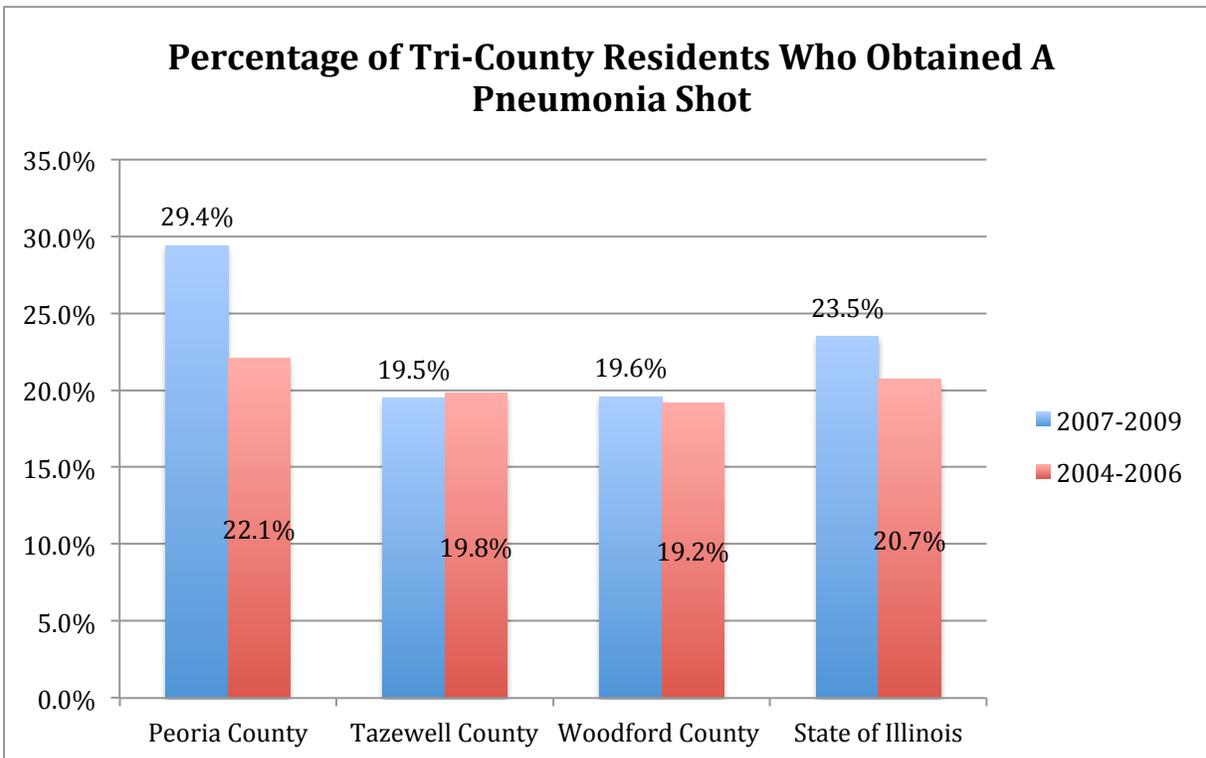


Source: Illinois Behavioral Risk Factor Surveillance System

## Tri-County Community Health-Needs Assessment

Pneumonia shots are even less frequent with the highest prevalence in Peoria County (29.4%). Approximately 19.5% of residents in Tazewell and Woodford Counties have received a pneumonia shot.

**Table 2.2.3-2 Percentage of Tri-County Residents Who Obtained A Pneumonia Shot**



*Source: Illinois Behavioral Risk Factor Surveillance System*

## Tri-County Community Health-Needs Assessment

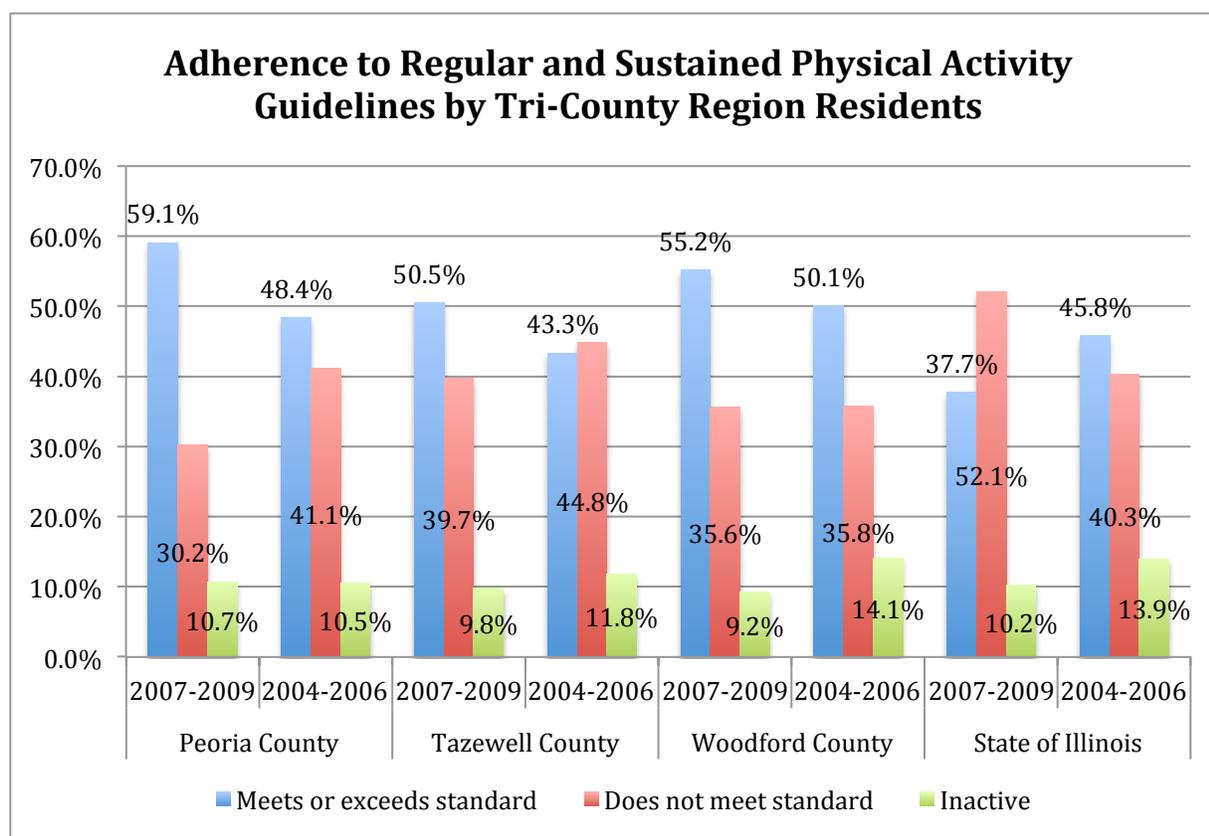
## 2.2.4 Healthy lifestyle

A healthy lifestyle, comprised of regular physical activity and nutritious diet, has been shown to increase physical, mental, and emotional well-being.

Residents in the Tri-County Region adhere to regular sustained physical activity guidelines at a higher propensity than the State of Illinois average (37.7%). The most recent data from 2007-2009 indicate that 59.1% of Peoria County residents, 50.5% of Tazewell County residents, and 55.2% of Woodford County residents meet or exceed the regular and sustained physical activity guidelines.

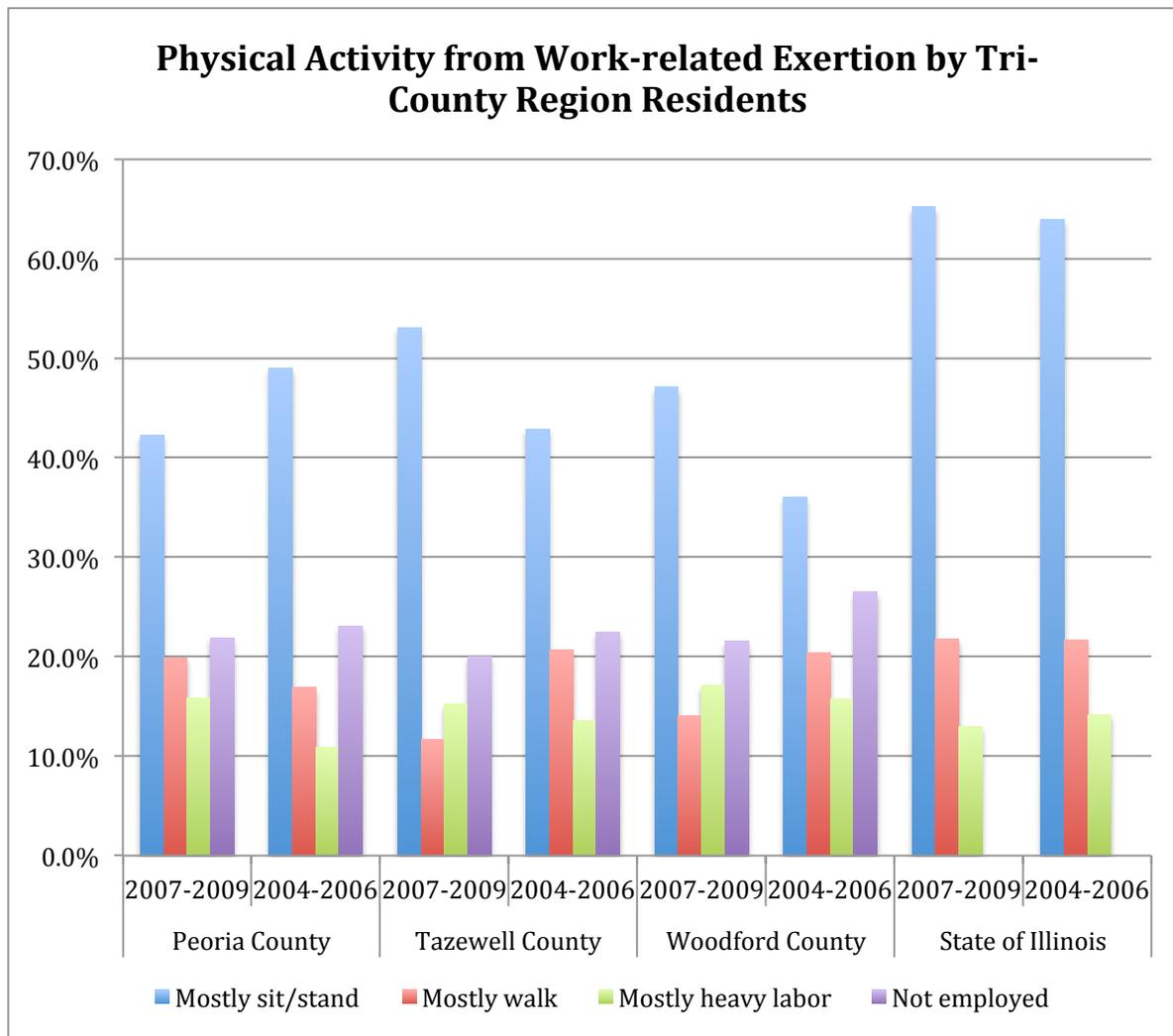
With regard to work-related activity, upwards of 50% of Tri-County residents mostly sit or stand to execute their job tasks. The specific percentages in 2007-2009 for Peoria County (42.3%), Tazewell County (53.1%), and Woodford County (47.1%) are significantly lower than the State of Illinois average of 65.2%.

**Table 2.2.4-1 Adherence to Regular and Sustained Physical Activity Guidelines by Tri County Region Residents**



Source: Illinois Behavioral Risk Factor Surveillance System

**Table 2.2.4-2 Physical Activity from Work-related Exertion by Tri-County Region Residents**

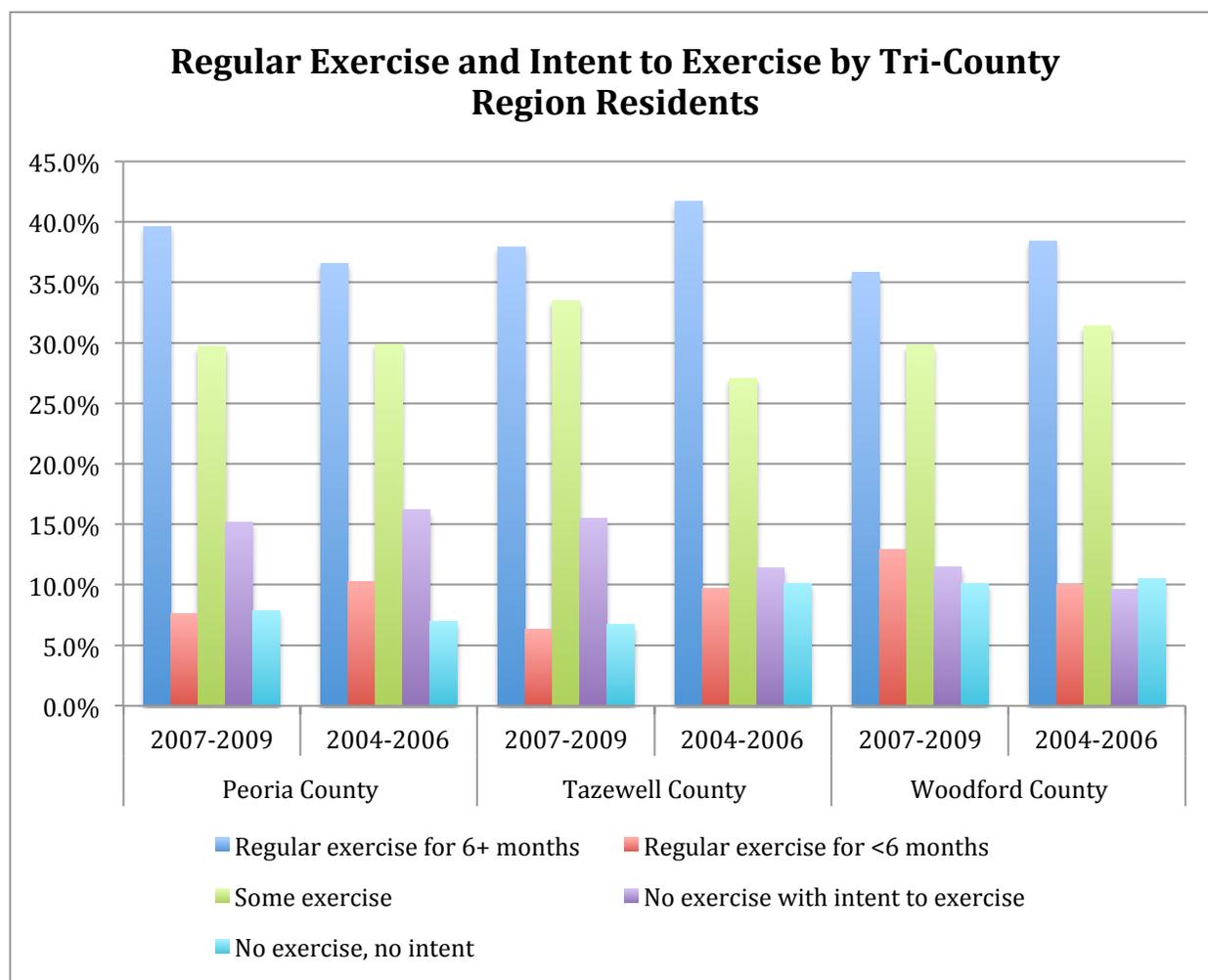


Source: Illinois Behavioral Risk Factor Surveillance System

## Tri-County Community Health-Needs Assessment

When evaluating physical activity, it is important to evaluate the values behind one's decision to exercise. Table 2.2.4-3 illustrates the intentions toward exercise held by residents in the Tri-County region. According to recent data, approximately 15% of the residents in Peoria and Tazewell Counties have the intent to exercise but do not actually follow through with exercising. In Woodford County, only 11.5% of residents have the intent to exercise but do not actually follow through with exercising. The percentages of individuals in Woodford and Peoria Counties who do not exercise and do not have any desire to exercise have remained relatively constant between the periods of 2004-2006 and 2007-2009, however the same percentage of individuals in Tazewell County has decreased from 10.1% to 6.7% during the same time frame.

**Table 2.2.4-3 Regular Exercise and Intent to Exercise by Tri-County Region Residents**

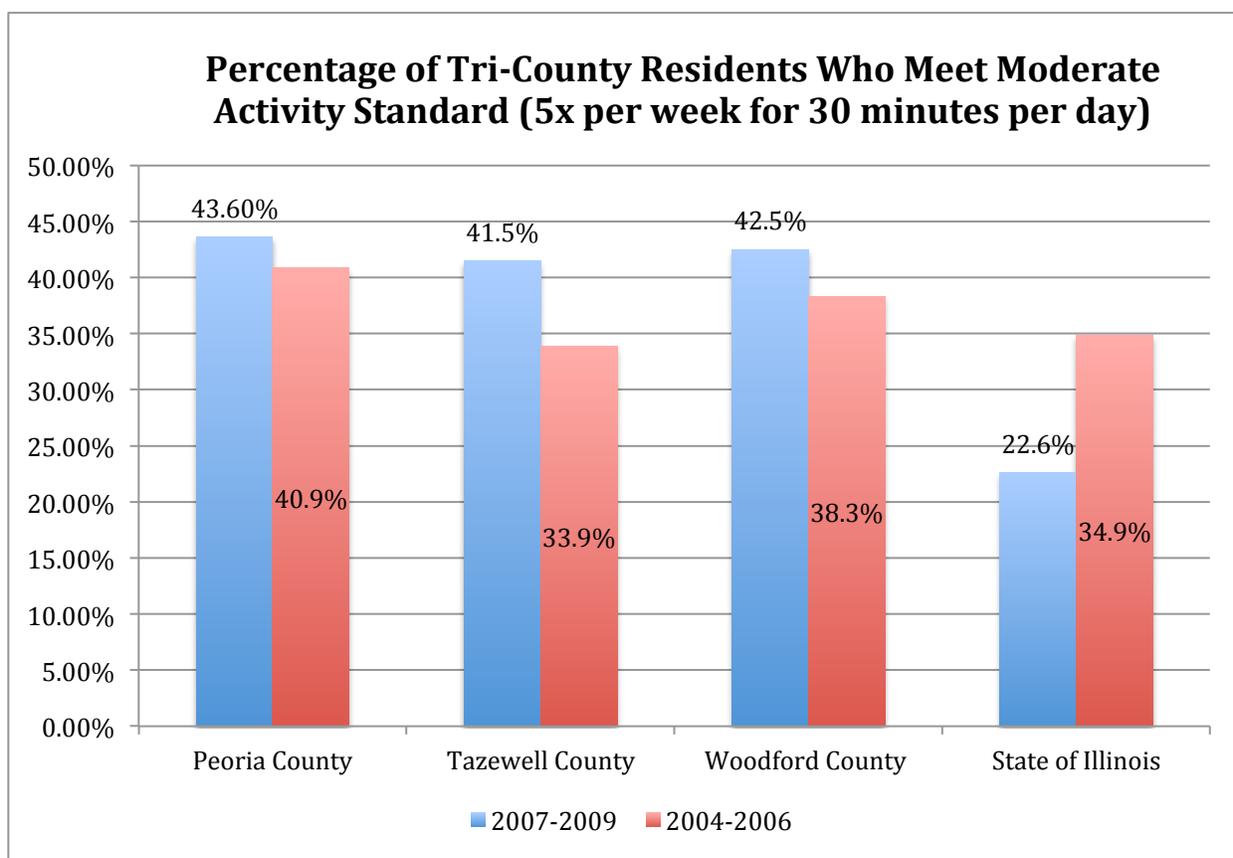


Source: Illinois Behavioral Risk Factor Surveillance System

## Tri-County Community Health-Needs Assessment

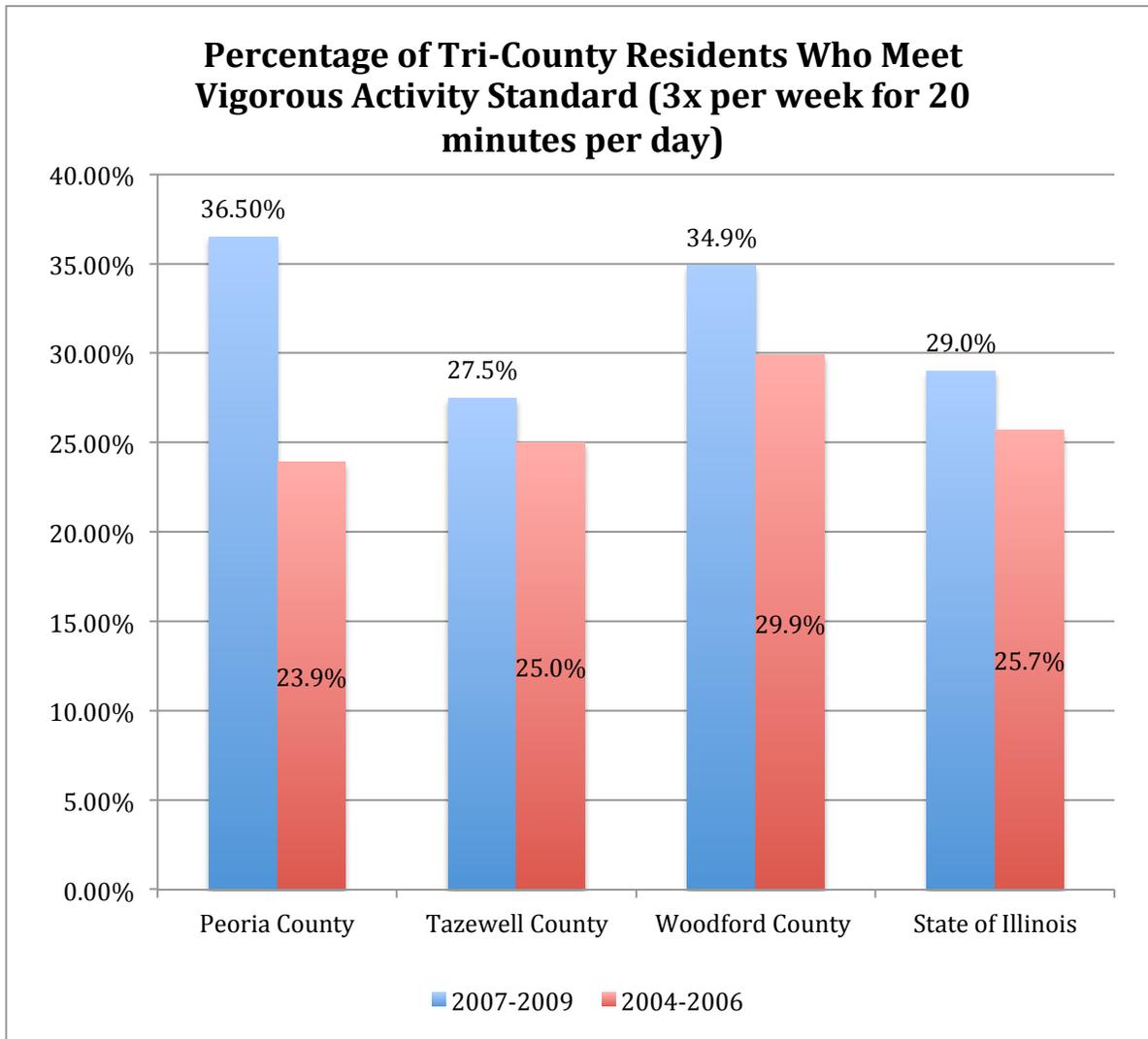
When evaluating physical activity, the intensity and duration of the exercise is important. Residents in the Tri-County Region report approximately 42% of individuals meet the moderate activity standard compared to 22.6% of individuals in the State of Illinois as a whole. The moderate activity standard (based on heart rate) is defined as five, 30-minute sessions per week. With regard to the vigorous activity standard, defined as three, 20-minute sessions per week, Peoria and Woodford County residents eclipse the State of Illinois average, however, Tazewell County residents slightly lag behind.

**Table 2.2.4-4 Percentage of Tri-County Residents Who Meet Moderate Activity Standard (5x per week for 30 minutes per day)**



*Source: Illinois Behavioral Risk Factor Surveillance System*

**Table 2.2.4-5 Percentage of Tri-County Residents Who Meet Vigorous Activity Standard (3x per week for 20 minutes per day)**

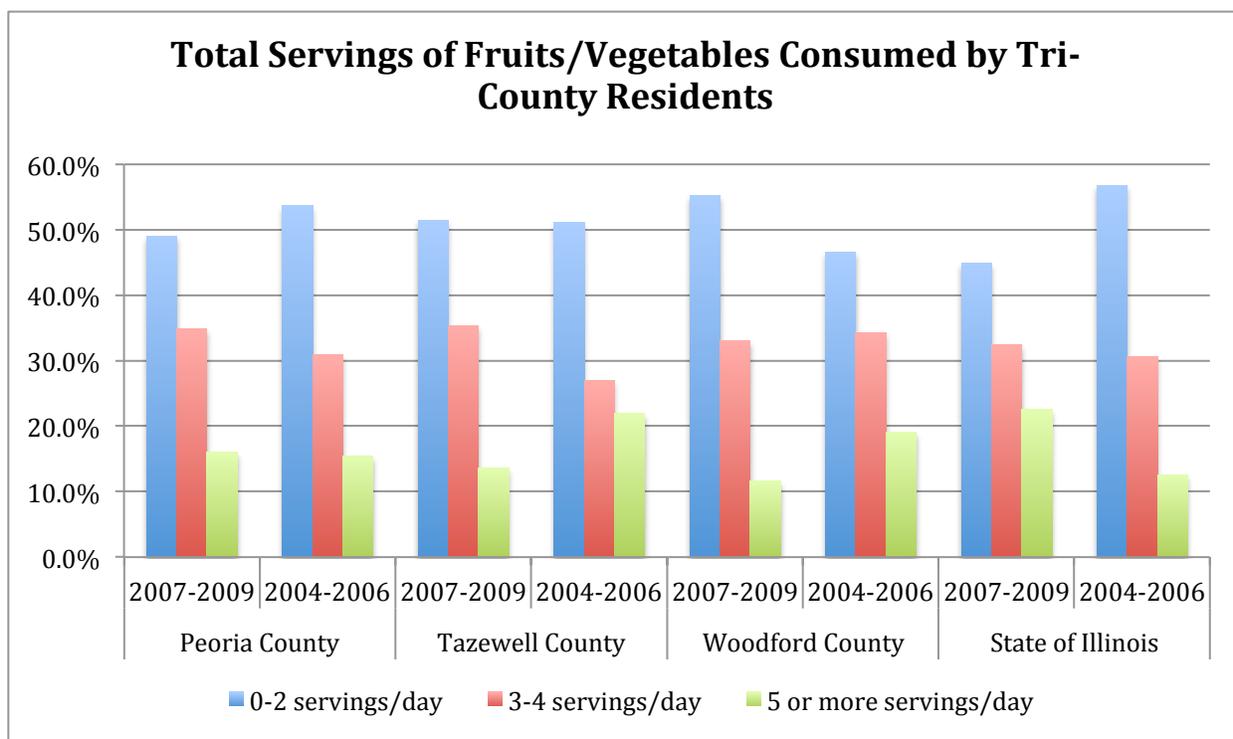


*Source: Illinois Behavioral Risk Factor Surveillance System*

## Tri-County Community Health-Needs Assessment

Nutrition and diet are critical to preventative care. A large percentage of Tri-County Region residents report low consumption (0-2 servings per day) of fruits and vegetables. In 2007-2009, these percentages ranged from 49.0% in Peoria County, 51.5% in Tazewell County, and 55.2% in Woodford County. All of these percentages are significantly higher than the State of Illinois average of 44.9% for the same measure.

**Table 2.2.4-6 Total Servings of Fruits/Vegetables Consumed by Tri-County Residents**



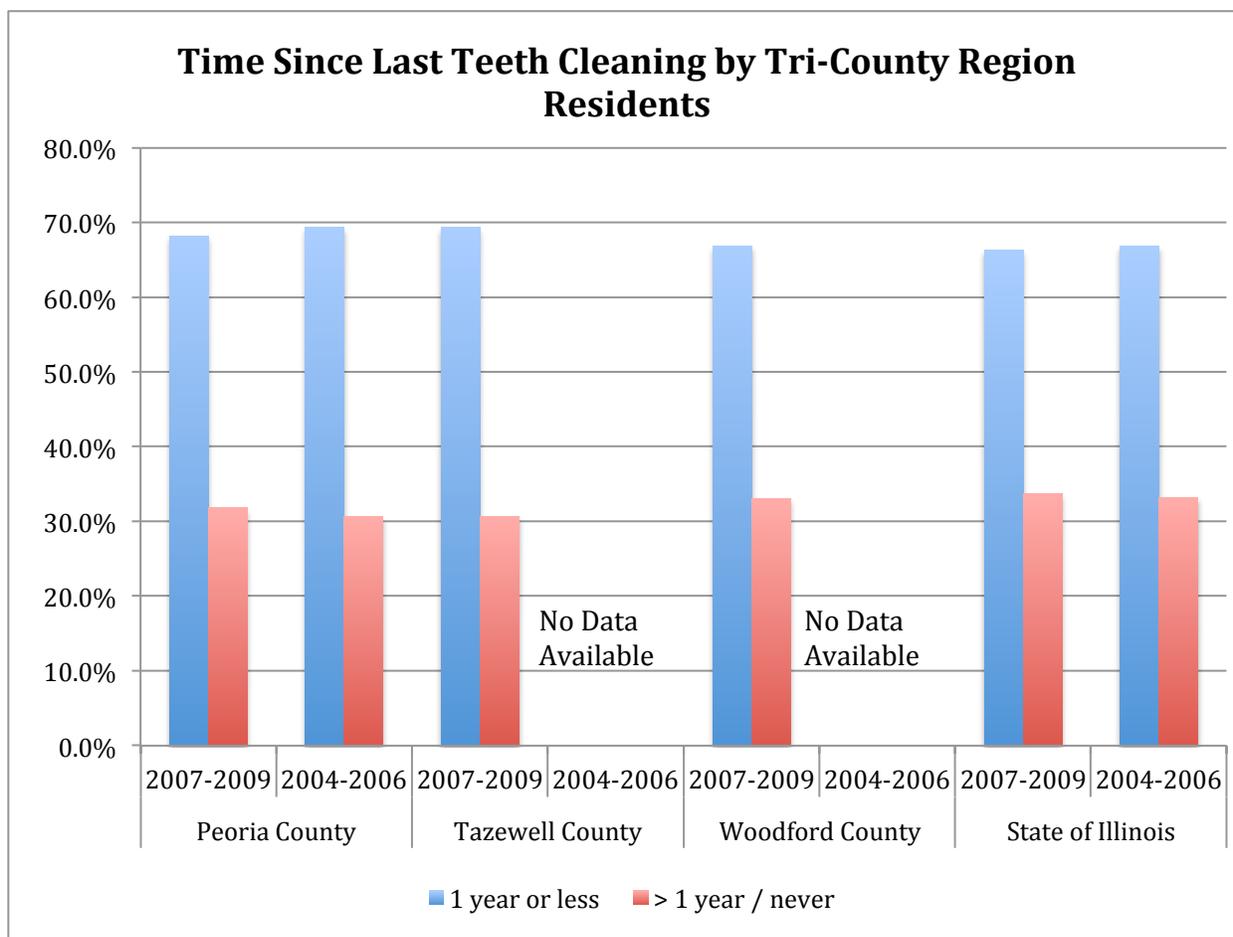
*Source: Illinois Behavioral Risk Factor Surveillance System*

## Tri-County Community Health-Needs Assessment

## 2.2.5 Oral Health

Research suggests that poor oral hygiene leads to more serious medical concerns. For the 2007-2009 time frame, nearly 70% of Tri-County Region residents had their teeth cleaned within the last year. The percentages for each county are higher than that of the State of Illinois average. Note that the Illinois BRFSS did not collect these data for Tazewell and Woodford Counties from 2004-2006.

**Table 2.2.5-1 Time Since Last Teeth Cleaning by Tri-County Region Residents**



Source: Illinois Behavioral Risk Factor Surveillance System

## Tri-County Community Health-Needs Assessment

### **Prevention: Strategic Implications**

#### ***Increase health care insurance coverage:***

Research suggests that private health insurance companies cover nearly 1/3 of the national health expenditures. According to the Kaiser Family Foundation, private health insurance companies comprised 32.7% of the health expenditures in the United States for 2010.<sup>1</sup> While this percentage has held constant around 32% since 1990, it marks an increase of approximately 11% since 1960. Medicare covered approximately 20.2% of national health expenditures in 2010, up nearly 4% since 2000. In addition, data suggest the out-of-pocket expenses incurred by individuals has steadily decreased, from a high of 33.4% of national health care expenditures in 1970 to 14.7% in 2000, and now 11.6% in 2010. The data are clear: Americans are paying less for out-of-pocket health care expenditures and relying more and more on private or public insurance policies to shoulder the financial burdens of health care. Private funds provided approximately 55% of health care payments in 2010 compared to 45% from federal and local government funds.<sup>2</sup>

The rising cost of health care services has resulted in a significant number of families cutting back on care and electing to postpone or cancel treatments. A 2011 Kaiser Health Tracking Poll found that 50% of Americans have cut back on medical treatments in the past 12 months based on cost concerns.<sup>3</sup> Furthermore, 40% reported being “very worried” about having to shoulder more of the financial burden for their health care. Data seem to reinforce this concern, as health insurance premiums have consistently outpaced inflation and the growth in worker earnings.

In the Tri-County Region, nearly 1/3 of residents rely on Medicare coverage as their primary insurance coverage. Recent data as presented in Table 2.1.1-1 suggest nearly 90% of Peoria County residents, 96% of Tazewell County residents, and 95% of Woodford County residents possess medical health care coverage. These percentages are well above the 86% response rate for the State of Illinois. Dental insurance coverage, as seen in Table 2.1.1-2, is less broad across Tri-County Region residents, as only 66% of Peoria County residents, 75% of Tazewell County residents, and 67% Woodford County residents possess dental insurance coverage.

#### ***Increase the prevalence of preventative health care screens:***

There appears to be a relationship between individuals who have health insurance and individuals who take advantage of preventative health care screenings. Research for over twenty years suggests that the strongest predictors of failure to receive screening tests was lack of insurance coverage.<sup>4</sup> Furthermore, research suggests that lack of insurance coverage is more prevalent among socioeconomically disadvantaged groups that are often at high risk for disease and illness.<sup>5</sup> Thus, a vicious cycle results where individuals who are at the highest risk for diseases are unable to receiving screening, thus perpetuating a cycle of disease and high health care expenditures.

Screening guidelines from the United States Preventative Services Task Force offer insight on appropriate preventative care and screenings for youth, adults, and older individuals.<sup>6</sup>

## Tri-County Community Health-Needs Assessment

Adherence to these guidelines provides data-driven benchmarks from physicians in the fields of primary care and preventative medicine. Above all, it is critical for physicians and patients to engage in thorough evaluation of treatment options and engage in high-quality shared decision-making regarding treatment options.<sup>7</sup>

Routine physicals are essential to detecting adverse medical conditions. As seen in Table 2.2.1-1, residents in Peoria County and Tazewell County exceed the State of Illinois average, however, residents in Woodford County are 7% off the state average. Research suggests many rural communities have dramatic medical professional shortages.<sup>8</sup>

With regard to immunizations, the Center for Disease Control's Advisory Committee on Immunization Practices recommends everyone 6 months and older receive a flu vaccination every year.<sup>9</sup> While each of the three counties in the Tri-County Region exceeds the state average with regard to the percentage of residents who obtained a flu shot, the percentage is still considerably lower than the recommendations from the CDC.

### ***Endnotes for Chapter 2***

<sup>1</sup> Kaiser Family Foundation, "Health Care Costs: Key Information on Health Care Costs and Their Impact," May 2012.

<sup>2</sup> Ibid.

<sup>3</sup> Kaiser Family Foundation, Kaiser Health Tracking Poll, *Toplines*, August 10-15, 2011, pp.16-18, <http://www.kff.org/kaiserpolls/8217.cfm>.

<sup>4</sup> U.S. Department of Health and Human Services, Agency for Healthcare Research and Quality, *National Healthcare Disparities Report*, 2005.

<sup>5</sup> U.S. Department of Health and Human Services, *Healthy People 2010*. Retrieved from <http://www.healthypeople.gov/>

<sup>6</sup> U.S. Preventative Screening Task Force, *Recommendations for Adults, Adolescents, and Children*. Retrieved from <http://www.uspreventiveservicestaskforce.org>

<sup>7</sup> Ibid.

<sup>8</sup> Bailey, J.M. (2010, July). Health Care Reform, What's In It? *Rural Communities and Rural Medical Care*.

<sup>9</sup> Centers for Disease Control and Prevention, Advisory Committee for Immunization Practices, *Comprehensive Recommendations*. Retrieved from <http://www.cdc.gov/vaccines/pubs/ACIP-list.htm>

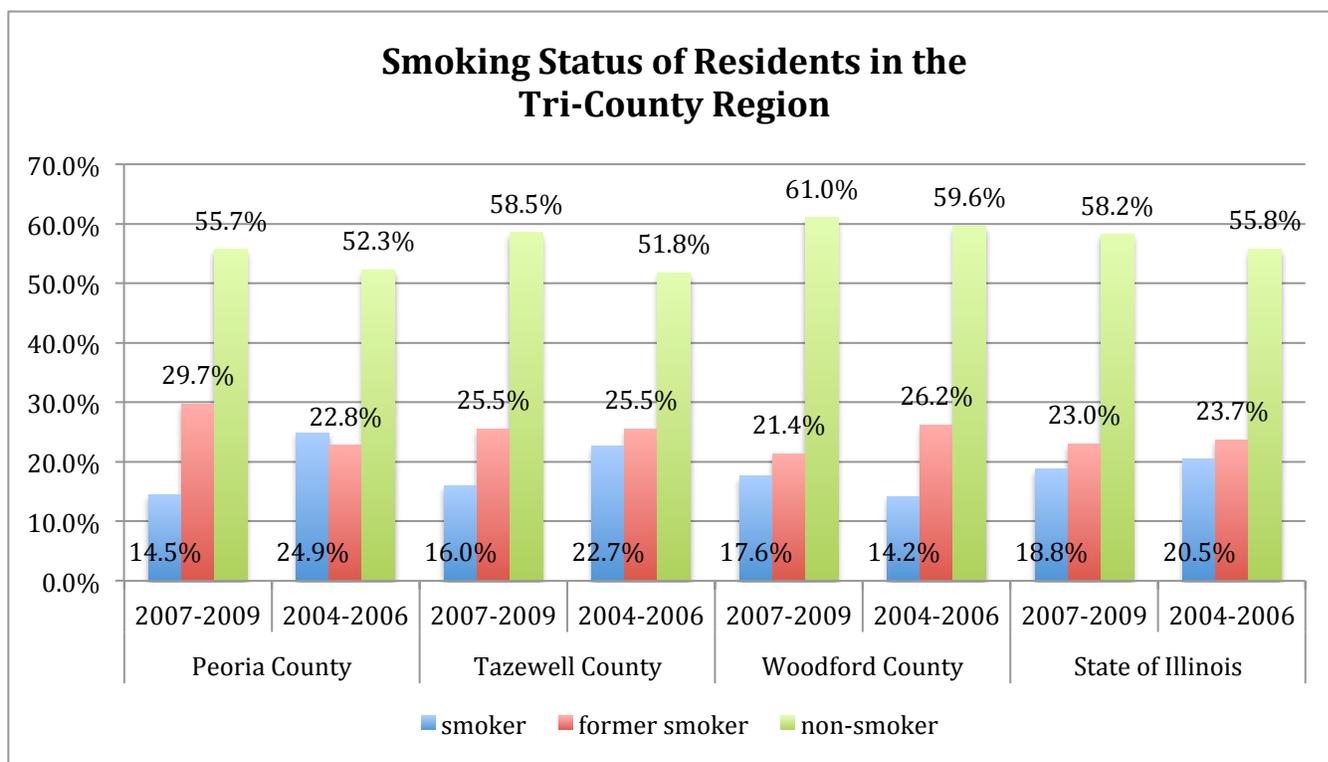
### CHAPTER 3. SYMPTOMS AND PREDICTORS

#### 3.1 Tobacco Use

*Importance of the measure:* In order to appropriately allocate health care resources, a thorough analysis of the leading indicators regarding morbidity and disease must be conducted. In this way, health care services and personnel can target affected populations more effectively. Research suggests tobacco use facilitates a wide variety of adverse medical conditions.

Smoking significantly impacts the health status of individuals. Smoking rates have declined in Peoria and Tazewell Counties, which is consistent with all residents within Illinois. In Woodford County, the percentage of smokers has risen slightly since 2004-2006. Over half of residents within the Tri-County region classify themselves as non-smokers, whereas approximately a quarter of residents are former smokers.

**Table 3.1-1: Smoking Status of Residents in the Tri-County Region**

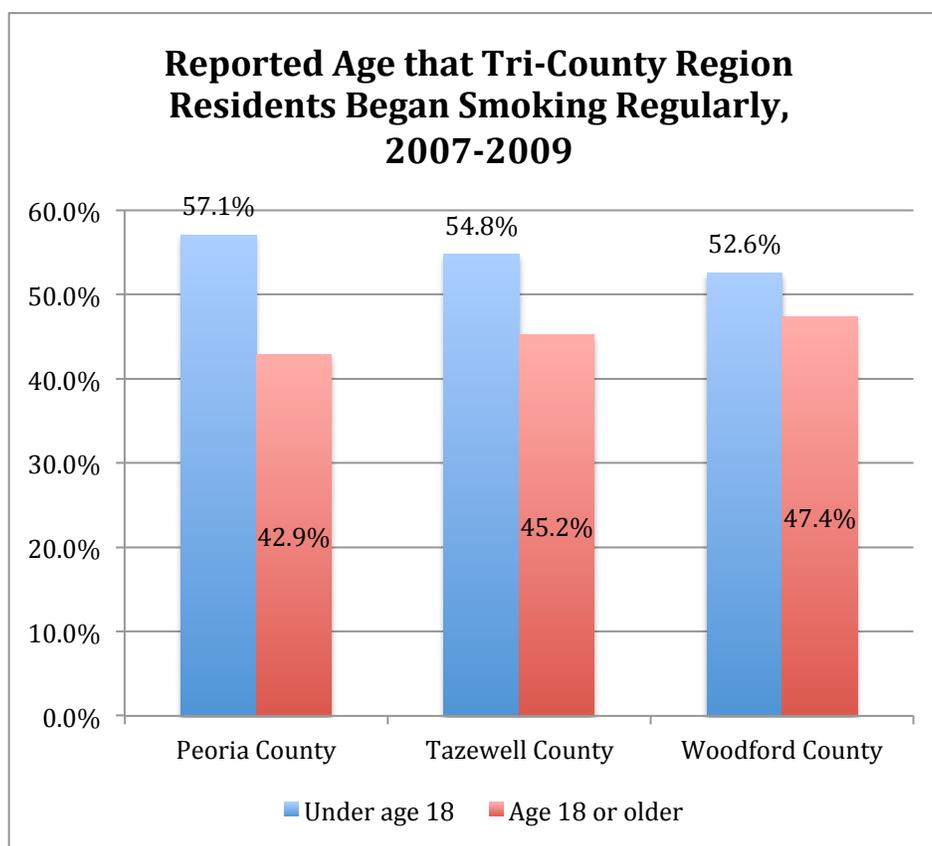


Source: Illinois Behavioral Risk Factor Surveillance System

## Tri-County Community Health-Needs Assessment

Many individuals begin smoking tobacco as teenagers. Over half of residents in Peoria, Tazewell, and Woodford Counties began smoking regularly before the age of 18.

**Table 3.1-2: Reported Age that Tri-County Region Residents Began Smoking Regularly, 2007-2009**

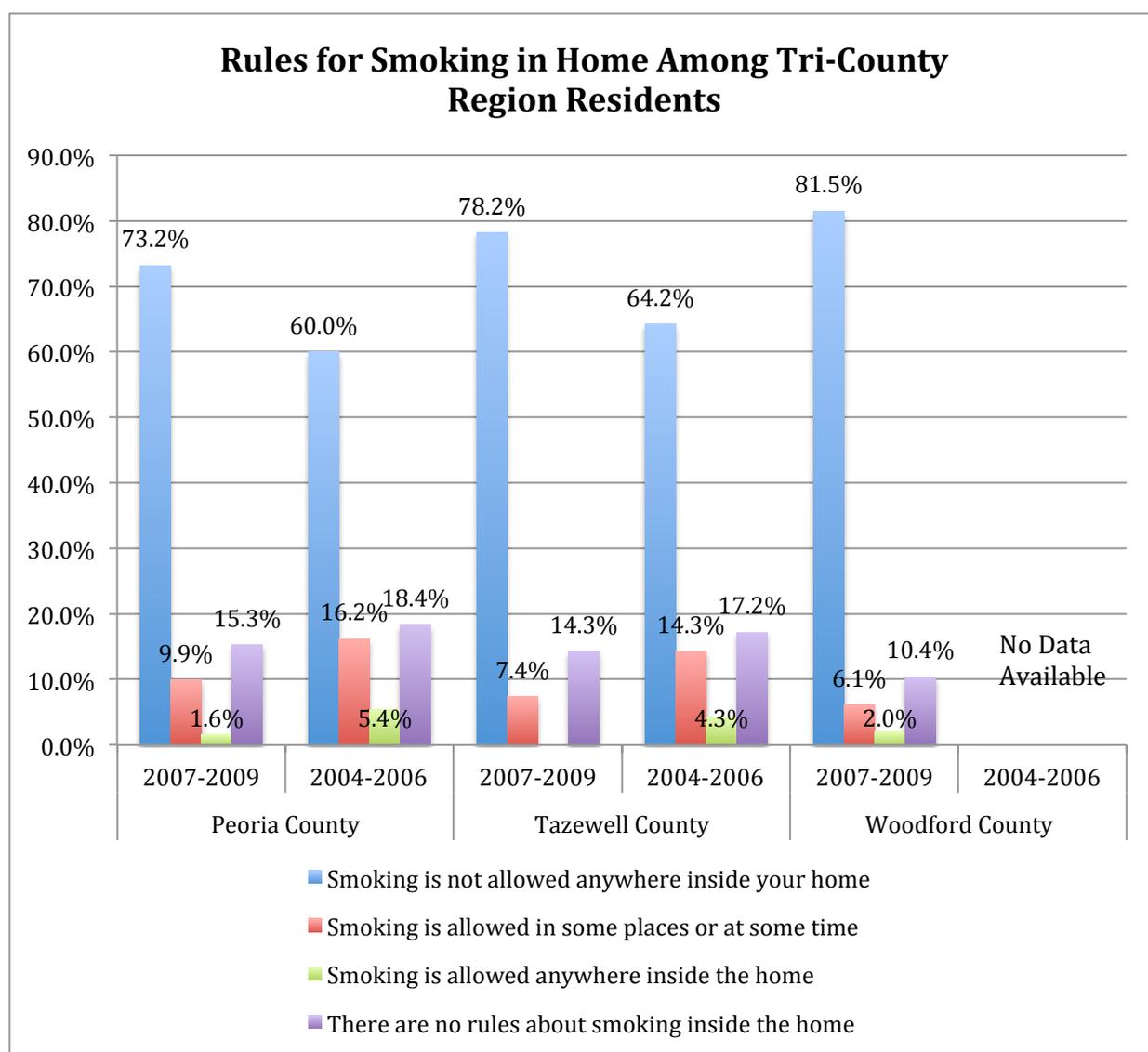


*Source: Illinois Behavioral Risk Factor Surveillance System*

## Tri-County Community Health-Needs Assessment

Individuals have different rules regarding smoking in their homes. The rates of Peoria and Tazewell Counties residents who do not allow any smoking inside the home have increased from 60% to 73.2% and 64.2% to 78.2%, respectively. Additionally, the percent of Peoria and Tazewell County residents allowing smoking in some places or anywhere inside the home have decreased in recent years. In 2007-2009, 81.5% of Woodford County residents did not allow any smoking inside their homes, and 6.1% allowed smoking in some places. Data on rules pertaining to smoking are not available for Woodford County prior to 2007. Many Tri-County residents (between 10.4% and 15.3%) did not have any rules about smoking in the home in 2007-2009. Note that the Illinois BRFSS did not collect these data for Woodford County from 2004-2006.

**Table 3.1-3: Rules for Smoking in Home Among Tri-County Region Residents**

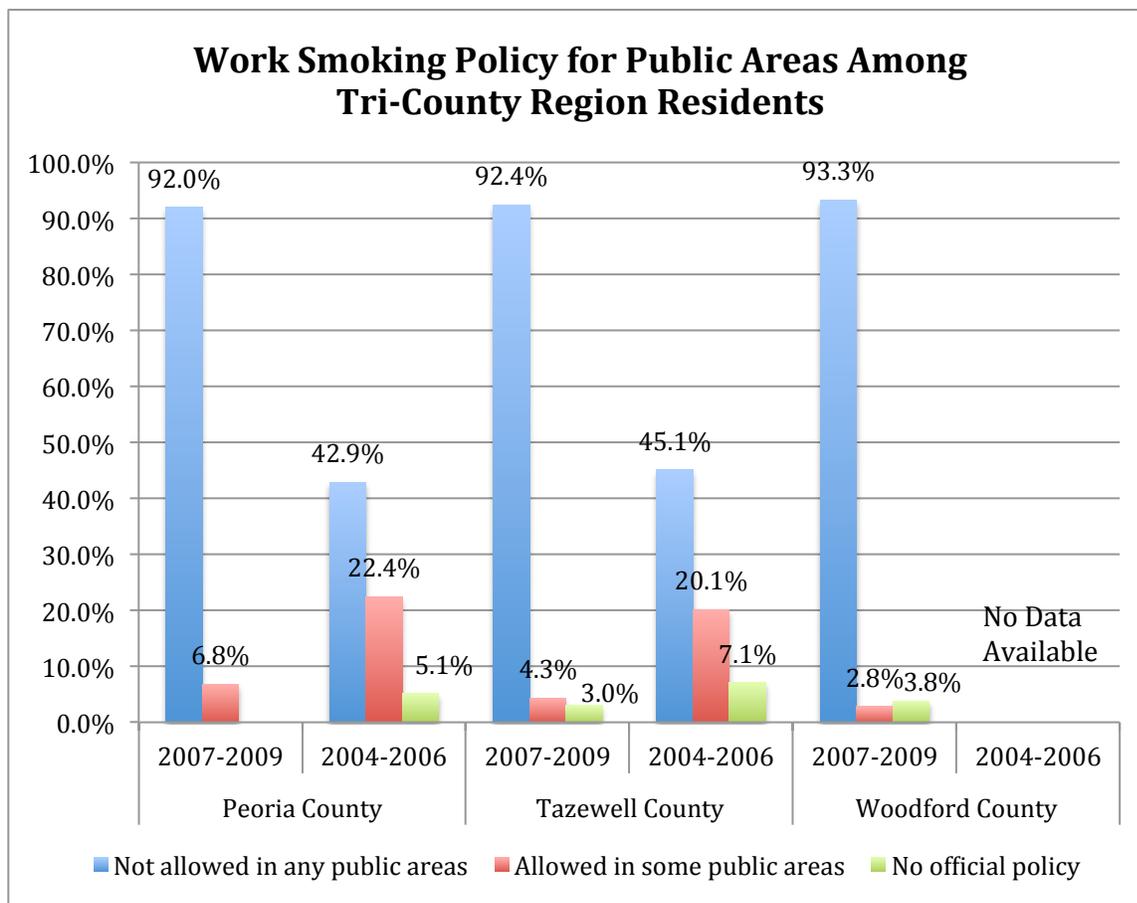


Source: Illinois Behavioral Risk Factor Surveillance System

## Tri-County Community Health-Needs Assessment

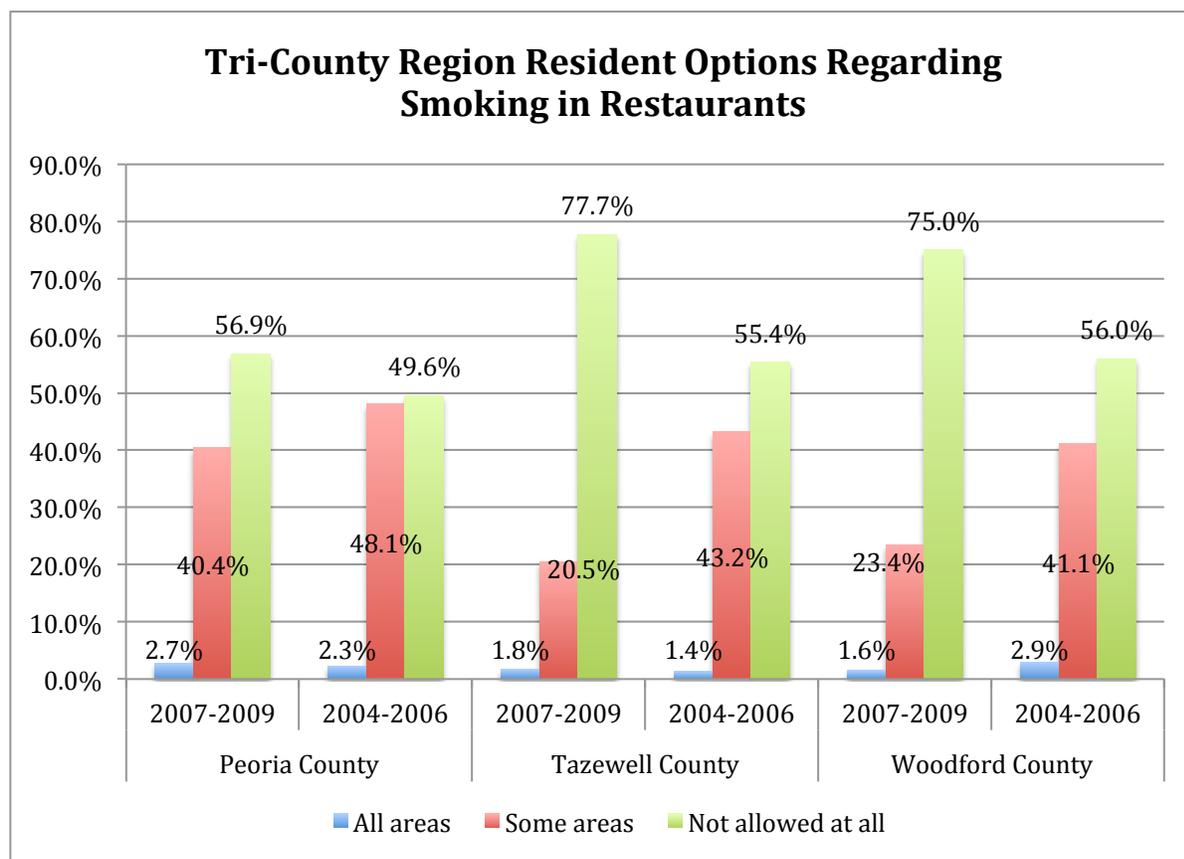
Workplaces have different policies regarding smoking in public areas. There has been a 50% increase in the number of residents in Peoria and Tazewell Counties who are not allowed to smoke in any public work areas. In the entire Tri-County area, over 92% of residents are not allowed to smoke in any public work areas. Additionally, the percent of Peoria and Tazewell County residents allowed to smoke in some public work areas has decreased approximately 15% in recent years.

**Table 3.1-4: Smoking Policy for Work Areas of Tri-County Region Residents, 2007-2009**



Source: Illinois Behavioral Risk Factor Surveillance System

Residents within the Tri-County Region have different views regarding smoking in restaurants. In all three counties, the majority of residents believe smoking should not be allowed at all in restaurants. This percent has increased in the recent years. Additionally, fewer residents believe smoking should be allowed in some areas in restaurants than in previous years. Less than three percent of residents in all three counties believe smoking should be allowed in all areas of restaurants.

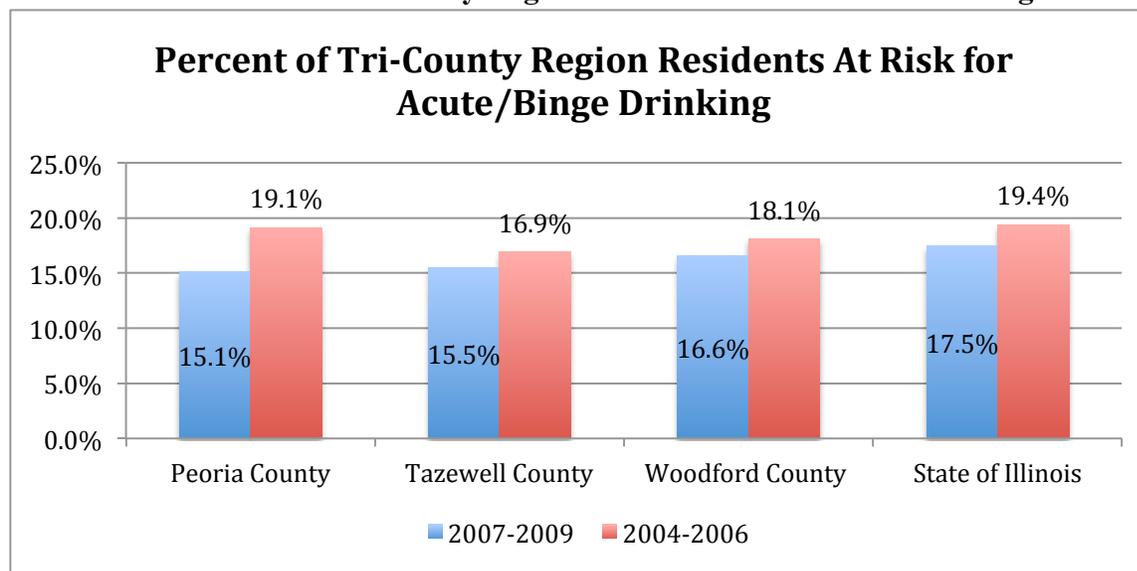
**Table 3.1-5: Tri-County Region Resident Options Regarding Smoking in Restaurants**

Source: Illinois Behavioral Risk Factor Surveillance System

### 3.2 Drug and Alcohol Abuse

*Importance of the measure:* Alcohol and drugs impair decision-making, often leading to adverse consequences and outcomes. Research suggests that alcohol is a gateway drug for youths, leading to increased usage of substances in adult years. Accordingly, the values and behaviors toward substance usage by high school students is a leading indicator of adult substance abuse in later years.

Compared to the State of Illinois average (17.5%), Peoria, Tazewell, and Woodford Counties have a lower percentage of residents at risk for acute or binge drinking.

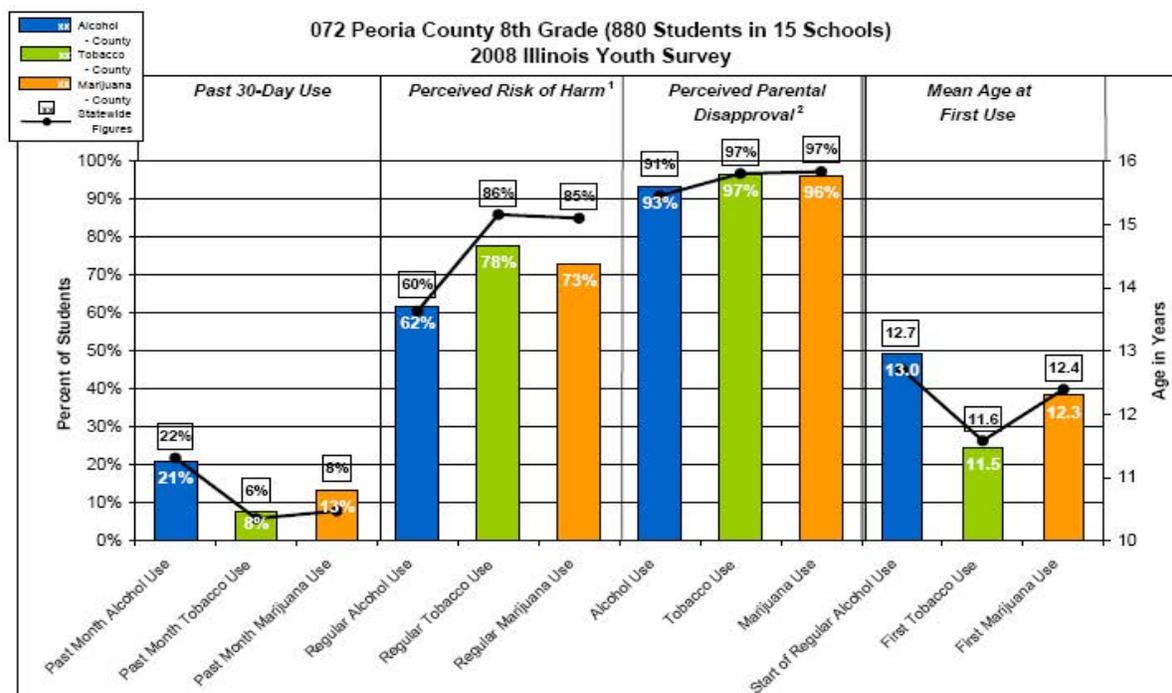
**Table 3.2-1: Percent of Tri-County Region Residents at Risk for Acute/Binge Drinking**

Source: Illinois Behavioral Risk Factor Surveillance System

Data from the 2008 Illinois Youth Survey, which measures illegal substance use (alcohol, tobacco, and other drugs – mainly marijuana) among adolescents, suggest emerging trends for adult substance usage. Across the three counties of Peoria, Tazewell and Woodford, among 8<sup>th</sup> graders, the average age at first use of alcohol, tobacco and marijuana is 13, 11.5 and 12.4 years respectively. The same average age for 12<sup>th</sup> graders is 15.9, 14 and 14.9 years respectively. In Peoria County, the substance usage is approximately the same as the state level for alcohol and tobacco use but is much higher for marijuana use, especially among 12<sup>th</sup> graders (33% vs. 21%). There is also a significantly lower mean age of first tobacco use among 12<sup>th</sup> graders compared to the state level (13.4 years vs. 14.1 years). Tazewell County has rates similar to state averages across illegal substance use. For alcohol use, Tazewell County demonstrates even lower usage rates when compared to state levels (16% vs. 22% for the 8<sup>th</sup> graders; and 36% vs. 50% for the 12<sup>th</sup> graders). Woodford County is similar to Tazewell County.

Tri-County Community Health-Needs Assessment

**Table 3.2-2: Reported Substance Abuse Usage of Peoria County 8th Graders, 2008**

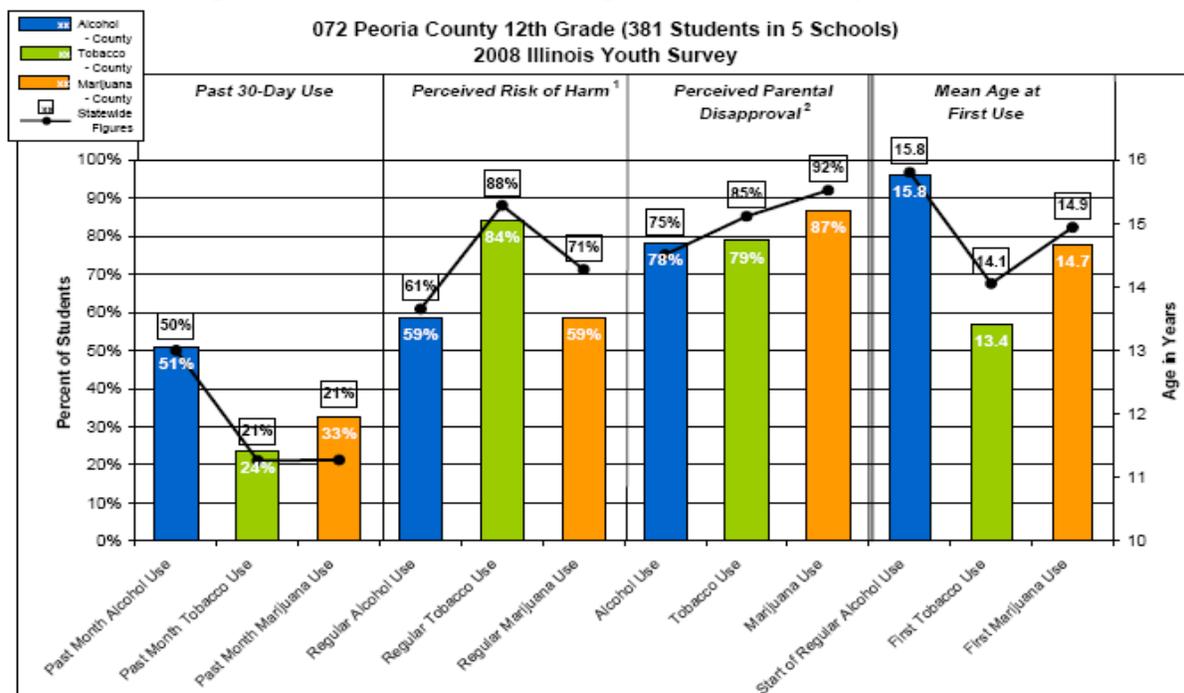


<sup>1</sup>Perceived Risk of Harm: Percent who responded "Moderate Risk" or "Great Risk" of harm.

<sup>2</sup>Perceived Parental Disapproval: Percent who responded "Wrong" or "Very Wrong" attitude of parents toward youth use of substance.

Source: [http://iys.cprd.illinois.edu/PDFs/2008\\_CountyCharts\\_Full\\_Report.pdf](http://iys.cprd.illinois.edu/PDFs/2008_CountyCharts_Full_Report.pdf)

**Table 3.2-3: Reported Substance Abuse Usage of Peoria County 12th Graders, 2008**



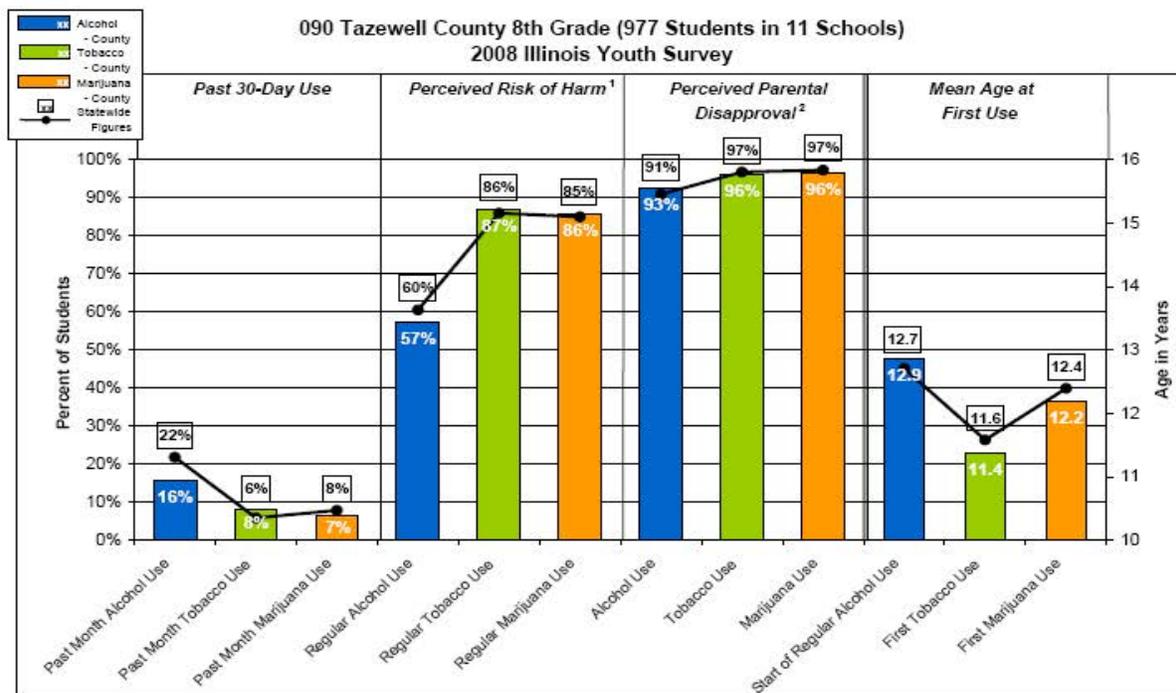
<sup>1</sup>Perceived Risk of Harm: Percent who responded "Moderate Risk" or "Great Risk" of harm.

<sup>2</sup>Perceived Parental Disapproval: Percent who responded "Wrong" or "Very Wrong" attitude of parents toward youth use of substance.

Source: [http://iys.cprd.illinois.edu/PDFs/2008\\_CountyCharts\\_Full\\_Report.pdf](http://iys.cprd.illinois.edu/PDFs/2008_CountyCharts_Full_Report.pdf)

Tri-County Community Health-Needs Assessment

**Table 3.2-4: Reported Substance Abuse Usage of Tazewell County 8th Graders, 2008**

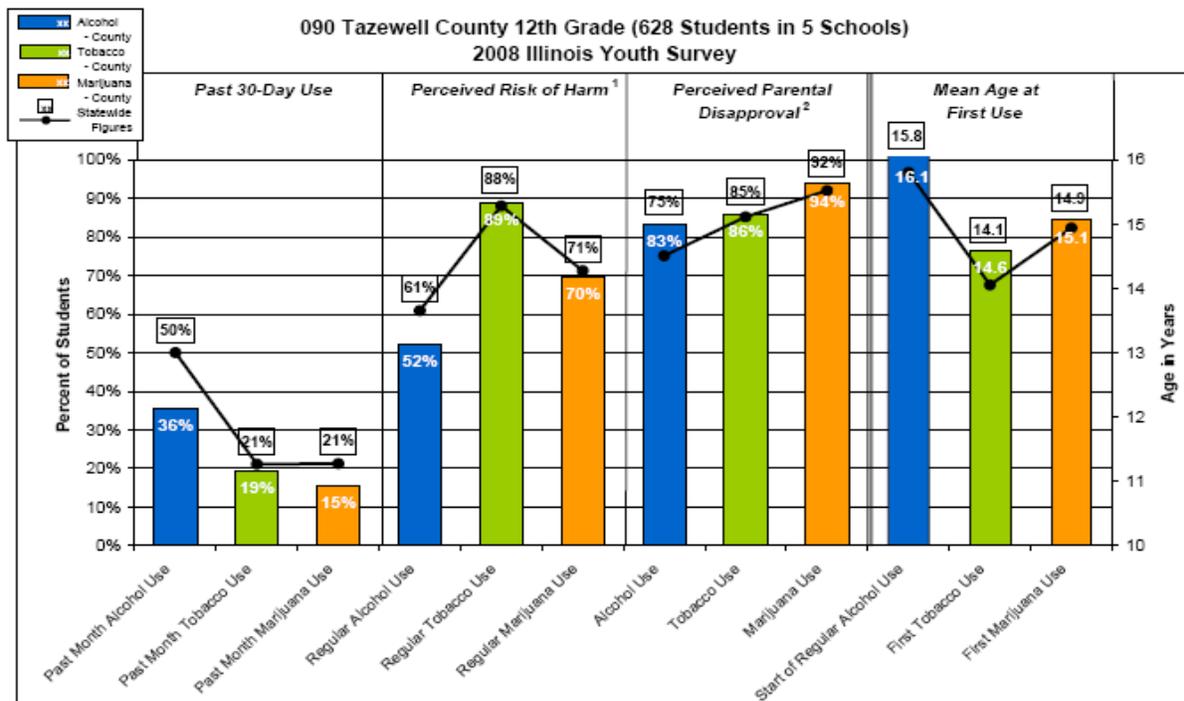


<sup>1</sup>Perceived Risk of Harm: Percent who responded "Moderate Risk" or "Great Risk" of harm.

<sup>2</sup>Perceived Parental Disapproval: Percent who responded "Wrong" or "Very Wrong" attitude of parents toward youth use of substance.

Source: [http://iys.cprd.illinois.edu/PDFs/2008\\_CountyCharts\\_Full\\_Report.pdf](http://iys.cprd.illinois.edu/PDFs/2008_CountyCharts_Full_Report.pdf)

**Table 3.2-5: Reported Substance Abuse Usage of Tazewell County 12th Graders, 2008**



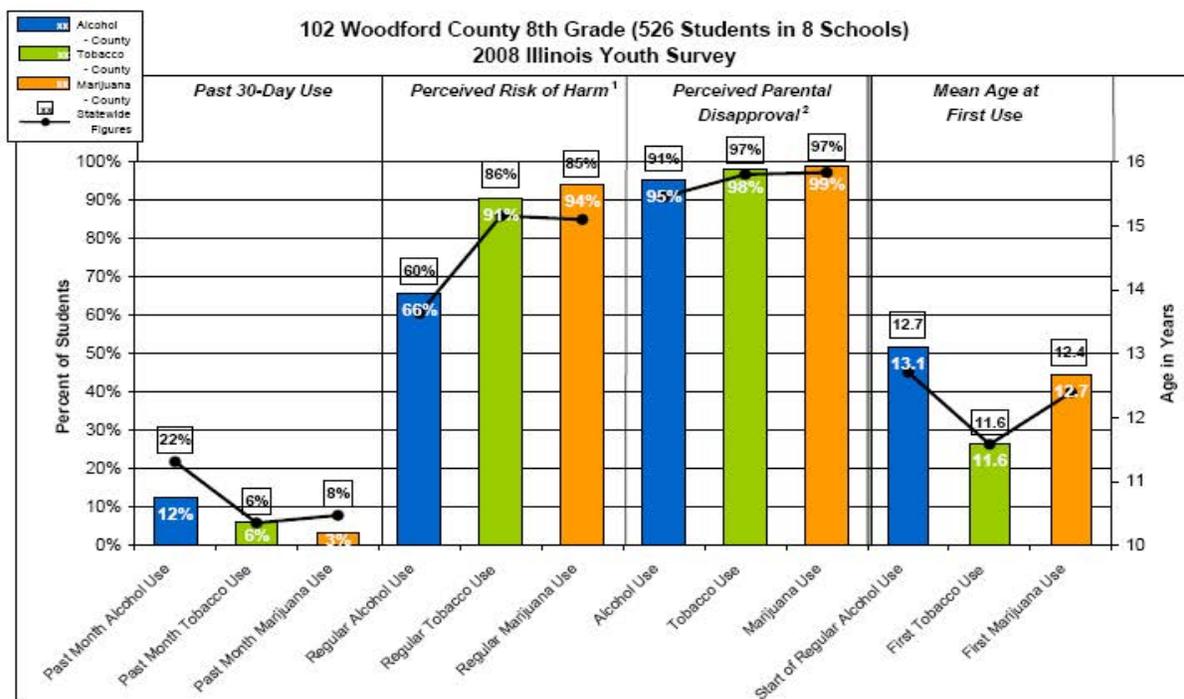
<sup>1</sup>Perceived Risk of Harm: Percent who responded "Moderate Risk" or "Great Risk" of harm.

<sup>2</sup>Perceived Parental Disapproval: Percent who responded "Wrong" or "Very Wrong" attitude of parents toward youth use of substance.

Source: [http://iys.cprd.illinois.edu/PDFs/2008\\_CountyCharts\\_Full\\_Report.pdf](http://iys.cprd.illinois.edu/PDFs/2008_CountyCharts_Full_Report.pdf)

Tri-County Community Health-Needs Assessment

**Table 3.2-6: Reported Substance Abuse Usage of Woodford County 8th Graders, 2008**

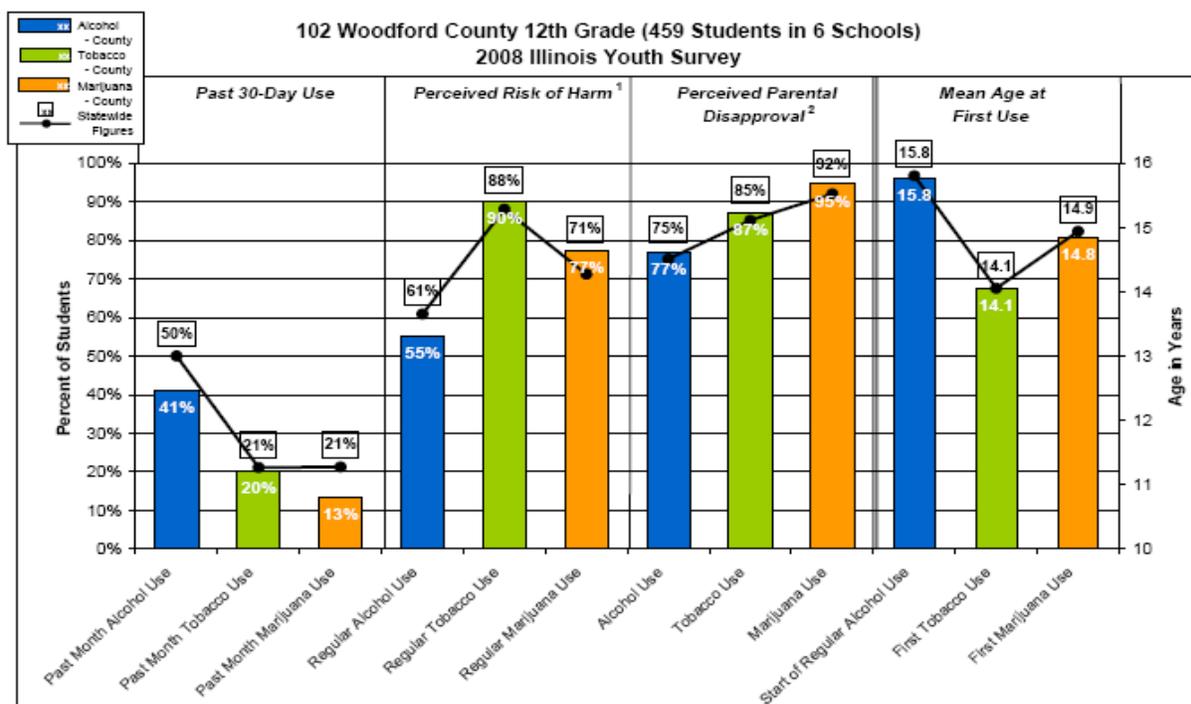


<sup>1</sup>Perceived Risk of Harm: Percent who responded "Moderate Risk" or "Great Risk" of harm.

<sup>2</sup>Perceived Parental Disapproval: Percent who responded "Wrong" or "Very Wrong" attitude of parents toward youth use of substance.

Source: [http://iys.cprd.illinois.edu/PDFs/2008\\_CountyCharts\\_Full\\_Report.pdf](http://iys.cprd.illinois.edu/PDFs/2008_CountyCharts_Full_Report.pdf)

**Table 3.2-7: Reported Substance Abuse Usage of Woodford County 12th Graders, 2008**



<sup>1</sup>Perceived Risk of Harm: Percent who responded "Moderate Risk" or "Great Risk" of harm.

<sup>2</sup>Perceived Parental Disapproval: Percent who responded "Wrong" or "Very Wrong" attitude of parents toward youth use of substance.

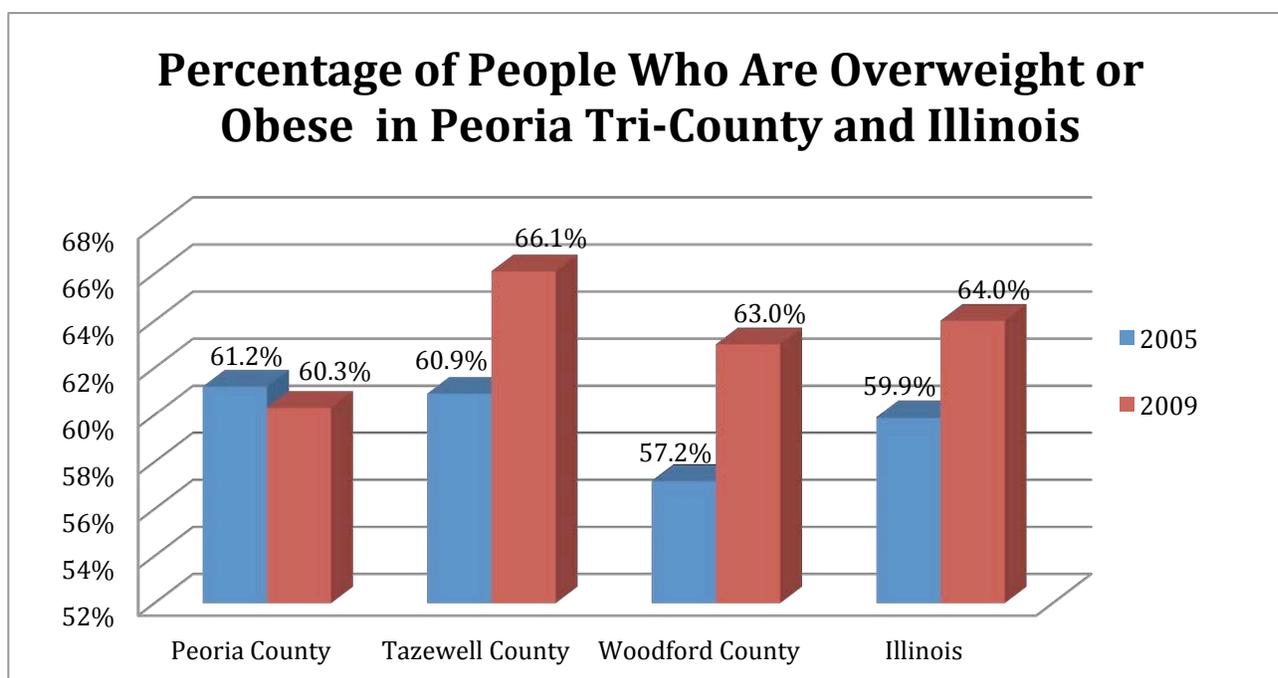
Source: [http://iys.cprd.illinois.edu/PDFs/2008\\_CountyCharts\\_Full\\_Report.pdf](http://iys.cprd.illinois.edu/PDFs/2008_CountyCharts_Full_Report.pdf)

### 3.3 Overweight and Obesity

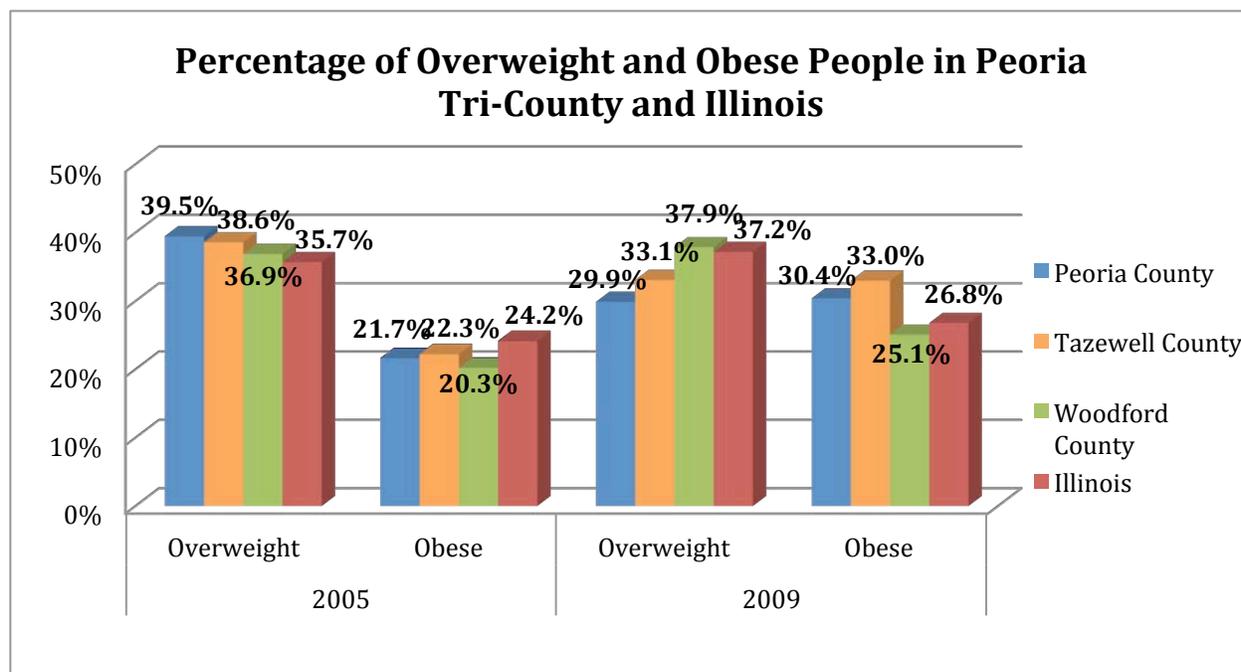
*Importance of the measure:* Individuals who are overweight and obese place greater stress on internal organs, thus increasing the propensity to utilize health services.

In terms of obesity and being overweight, Table 3.3-1 shows that except for Peoria County, the number of people who have trouble with their weight has increased over the four years from 2005 to 2009. Note specifically that while the number of overweight people remained relatively the same, the percentage of obese people experienced a significant increase as illustrated in Table 3.3-2.

**Table 3.3-1: Percentage of People Diagnosed with Overweight or Obesity in Peoria Tri-County and Illinois**

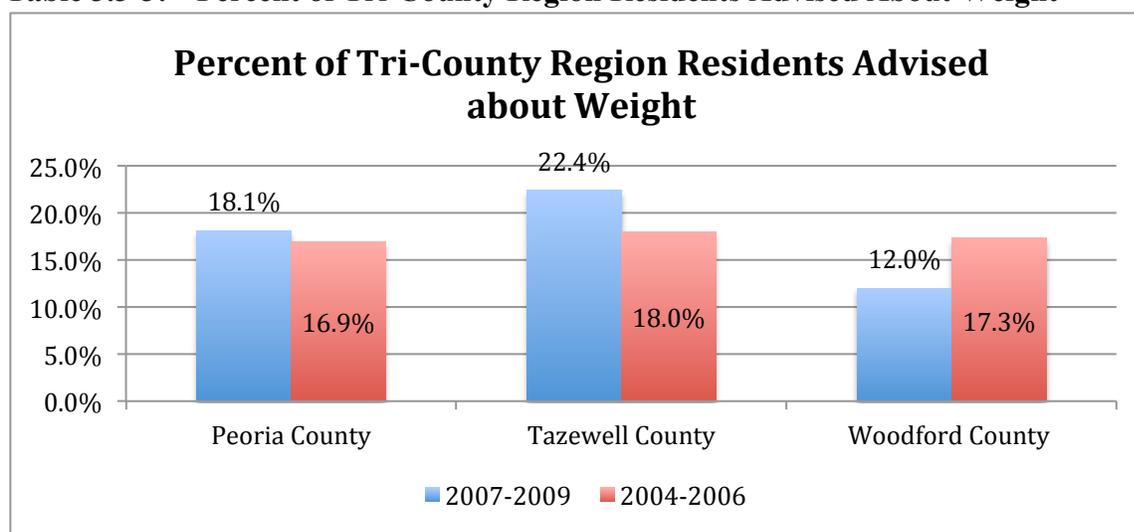


*Source: Illinois Behavioral Risk Factor Surveillance System*

**Table 3.3-2: Overweight and Obesity in Peoria Tri-County and Illinois**

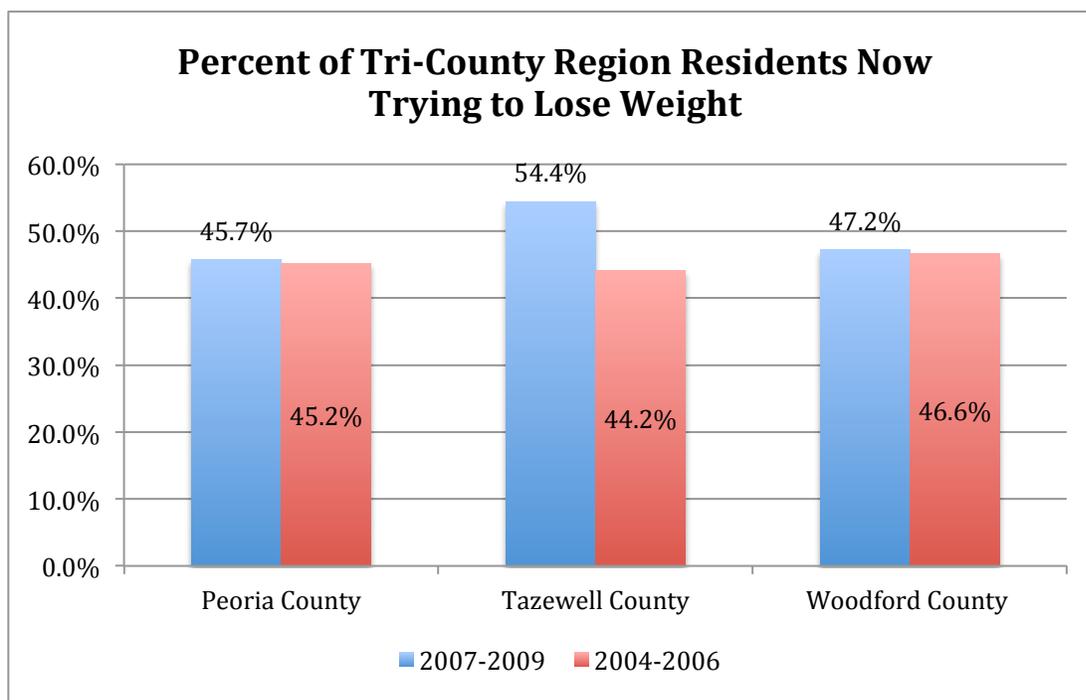
Source: Illinois Behavioral Risk Factor Surveillance System

With regard to those individuals advised by a medical professional about their weight, there is wide disparity among the three counties. 18.1% of residents in Peoria County, 22.4% in Tazewell County, and 12.0% in Woodford County have been advised about their weight during the 2007-2009 time frame. In Table 3.3-4, nearly half of Tri-County Region residents are attempting to lose weight and Table 3.3-5 illustrates the percentage of Tri-County Region residents attempting to maintain their current weight.

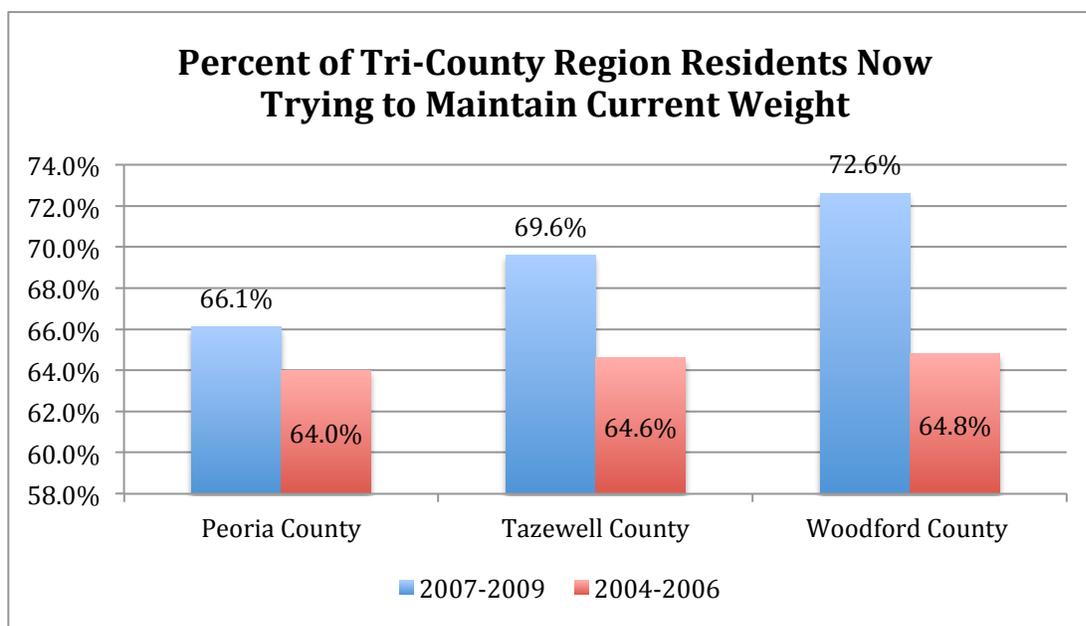
**Table 3.3-3: Percent of Tri-County Region Residents Advised About Weight**

Source: Illinois Behavioral Risk Factor Surveillance System

## Tri-County Community Health-Needs Assessment

**Table 3.3-4: Percent of Tri-County Region Residents Now Trying to Lose Weight**

Source: Illinois Behavioral Risk Factor Surveillance System

**Table 3.3-5: Percent of Tri-County Region Residents Now Trying to Maintain Current Weight**

Source: Illinois Behavioral Risk Factor Surveillance System

**Symptoms/Predictors: Strategic Implications*****Effectively combating youth obesity:***

Research strongly suggests that obesity is a significant problem facing youth and adults nationally, in Illinois, and within the Tri-County Region. The US Surgeon General has characterized obesity as “the fastest-growing, most threatening disease in America today.”<sup>1</sup> According to the Obesity Prevention Initiative from the Illinois General Assembly, 20% of Illinois children are obese<sup>2</sup>. Data from 2010 indicate 62% of Illinois adults are obese or overweight, with a disproportionate number of obese or overweight individuals living in rural areas. The financial burden of overweight and obese individuals is staggering, as the estimated annual medical costs attributed to obesity in Illinois for 1998-2000 exceeded 3.4 billion dollars, ranking Illinois 6<sup>th</sup> in the nation for obesity-attributed medical costs<sup>3</sup>.

With children, research has linked obesity to numerous chronic diseases including Type II diabetes<sup>4</sup>, hypertension, high blood pressure, and asthma. Adverse physical health side effects of obesity include orthopedic problems with weakened joints and lower bone density<sup>5</sup>. Detrimental mental health side effects include low self-esteem, poor body image, symptoms of depression and suicide ideation<sup>6</sup>. Obesity impacts educational performance as studies suggest that overweight students miss one day of school per month on average and school absenteeism of obese children is six times higher than that of non-obese children<sup>7</sup>.

With adults, obesity has far-reaching consequences. Testimony to the Illinois General Assembly indicated that obesity-related illnesses contribute to worker absenteeism, slow workflow, and high worker compensation rates.<sup>8</sup> A Duke University study on the effects of obesity in the workforce noted 13 times more missed work days by obese employees than non-obese employees. Nationwide, lack of physical activity and poor nutrition contribute to an estimated 300,000 preventable deaths per year.

Within the Tri-County Region, leading indicators suggest obesity is a growing concern. With regard to nutrition, evidence suggests residents in the Tri-County region are not eating enough fruits and vegetables. Table 2.2.4-6 indicates that between 2007 and 2009, only 16% of Peoria County residents, 13.6% of Tazewell County residents, and 11.6% of Woodford County residents consumed 5 or more servings of fruits and vegetables per day. These figures are considerably less than the 22.6% of Illinois residents who eat more than 5 servings per day. Furthermore, approximately 50% of Tri-County residents consume 0-2 servings of fruits and vegetables per day.

Research indicates physical activity helps to prevent illness and obesity<sup>9</sup>. Data regarding the values toward exercise and the actual time spent exercising may contribute to obesity in the Tri-County Region. For example, data from the Center for Disease Control indicate that 66% of children walked or biked to school in 1973. By 2000, that figure had decreased to only 13%.<sup>10</sup> As seen in Table 2.2.4-4, residents in the Tri-County Region report approximately 42% of individuals meet the moderate activity standard compared to 22.6% of individuals in the State of Illinois as a whole. However, this means 58% of residents do not meet the moderate activity standard.

***Aggressively addressing youth substance abuse:***

The use of tobacco, alcohol, and other drugs is a significant contributor to the escalating costs of health care service delivery. According to the Center for Disease Control, tobacco use is the leading preventable cause of death in the United States.<sup>11</sup> On a societal level, alcohol, tobacco, and other drug use leads to accidents, violent behavior, emotional trauma, and assaults. It is estimated that drug-induced related risky behavior needlessly drains community resources such as police intervention, emergency services, and criminal justice costs.

The Surgeon General contends that “alcohol remains the most heavily abused substance by America’s youth.”<sup>12</sup> Dr. Peter Monti, Director of the Center for Alcohol and Addiction Studies at Brown University notes that alcohol disrupts the continued growth of an adolescent’s brain and “impacts the brain’s ability to learn life skills.”<sup>13</sup> Studies show that an adolescent needs to only drink half as much alcohol as an adult to suffer similar adverse brain effects.<sup>14</sup> Research shows that cigarette smoking as a teenager leads to higher risks for lung cancer as an adult, reduces the rates of lung growth, and the maximum level of lung function that could be achieved.<sup>15</sup>

Financially, underage drinking is estimated to cost the nation upwards of \$62 billion dollars annually in deaths, injuries, and other economic losses.<sup>16</sup> A Columbia University study examining the impacts of substance abuse in mid-sized cities and rural America suggested that tobacco use was more prevalent in mid-sized cities and rural areas than large metropolitan areas; specifically, young adults in mid-sized cities and rural areas were 30% more likely than adults in larger cities to have smoked a cigarette in the last month.<sup>17</sup>

In the Tri-County Region, smoking rates have declined since 2004-2006 and are now lower than the state of Illinois average as indicated in Table 3.1-1. Rates for residents at risk for acute or binge drinking are also now lower than the state average (Table 3.2-1).

**Endnotes for Chapter 3**

<sup>1</sup> *Childhood Obesity: An epidemic is gripping California and the nation: How did we get here? What do we do now?* Advertising supplement to The New York Times, Kaiser Permanente, UC San Francisco Medical School, UCLA Medical School, January 2006.

<sup>2</sup> *Obesity Prevention Initiative Act (PA 96-0155): A Report to the Illinois General Assembly*, Illinois Department of Public Health, December 2010.

<sup>3</sup> Ibid.

<sup>4</sup> Crawford, P., Mitchell, T., & Ikeda, J. (2000). *Childhood Overweight: A Fact Sheet for Professionals*, UCB/Cooperative Extension University of California-Berkeley.

<sup>5</sup> Xiang, H. (2005). Obesity and Risk of Nonfatal Unintentional Injuries, *American Journal of Preventative Medicine*, 29,1, 41-45.

## Tri-County Community Health-Needs Assessment

<sup>6</sup> U.S. Department of Health and Human Services, *Healthy People 2010*. Retrieved from <http://www.healthypeople.gov/>

<sup>7</sup> Schwimmer, J.B., Burwinkle, T.M., & Varni, J.W. (2003). Health-Related Quality of Life of Severely Obese Children and Adolescents. *Journal of the American Medical Association*. 289(14), 1818.

<sup>8</sup> *Obesity Prevention Initiative Act (PA 96-0155): A Report to the Illinois General Assembly*, Illinois Department of Public Health, December 2010.

<sup>9</sup> *The Learning Connection: The Value of Improving Nutrition and Physical Activity in Our Schools*. Retrieved from <http://www.actionforhealthykids.org>

<sup>10</sup> U.S. Center for Disease Control and Prevention, *Youth Physical Activity: The Role of Families*. Retrieved from <http://www.cdc.gov/healthyyouth>

<sup>11</sup> U.S. Center for Disease Control and Prevention, *Smoking and Tobacco Use: Data and Statistics*. Retrieved from <http://www.cdc.gov/tobacco>

<sup>12</sup> U.S. Department of Health and Human Services. *The Surgeon General's Call to Action to Prevent and Reduce Underage Drinking*. Rockville, MD: U.S. Department of Health and Human Services; 2007. Retrieved from <http://www.surgeongeneral.gov/topics/underagedrinking/>

<sup>13</sup> Monti, P.M., et al. (2005). Adolescence: Booze, Brains, and Behavior. *Alcoholism: Clinical and Experimental Research*. 29, 2, 207-220.

<sup>14</sup> American Medical Association, *Harmful Consequences of Alcohol Use on the Brains of Children*.

<sup>15</sup> *Preventing Tobacco Use Among Young People, Executive Summary, A Report of the Surgeon General*, 1994, Ch. 1.

<sup>16</sup> Pacific Institute for Research and Evaluation, *State Underage Drinking Fact Sheets*, 2004.

<sup>17</sup> The National Center on Addiction and Substance Abuse at Columbia University, *Adolescent Substance Use: America's #1 Public Health Problem*, June 2011.

## CHAPTER 4. DISEASES/MORBIDITY

Note in this chapter, given the lack of recent disease/morbidity data from existing secondary data sources, much of the data used in this chapter was manually gathered from four hospitals, including OSF/Saint Francis Medical Center, UnityPoint Health - Methodist, Proctor Hospital and Pekin Hospital. Even though Pekin Hospital is not involved in this CHNA, it still serves the region. Consequently, given the unit of analysis is the three-county area, data from Pekin Hospital needed to be included when aggregating hospital-level data.

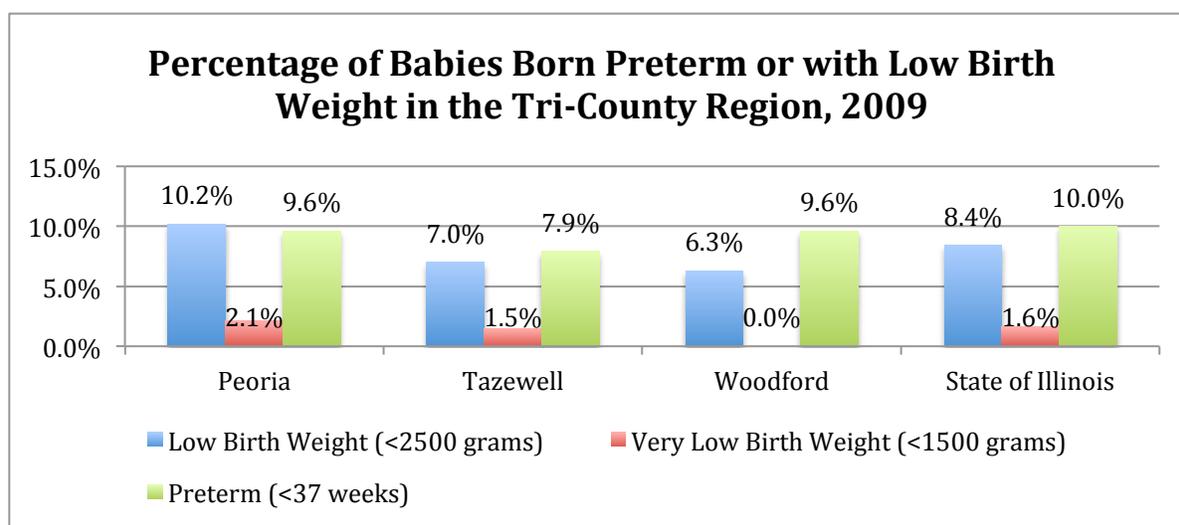
### 4.1 Age related

*Importance of the measure:* Age related statistics regarding morbidity gain insight into the prevalence of disease within two vulnerable populations – the very young and the very old. Health care services designed to meet the needs of these populations are very expensive and therefore, a thorough understanding of the leading indicators for these populations helps with managing service delivery costs.

#### 4.1.1 Low birth weight rates

Low birth rate is defined as the percentage of infants born below 2,500 grams or 5.5 pounds. Very low birth rate is defined as the percentage of infants born below 1,500 grams or 3.3 pounds. In contrast, the average newborn weighs about 7 pounds. The percentage of babies born with low, very low, and preterm birth weights in Tazewell and Woodford Counties was less than the State of Illinois average. However, in Peoria County, the percentage of babies born with low birth weight was 1.8% above the State of Illinois average and the percentage of babies born with very low birth weight was 0.5% above the state average for 2009.

**Table 4.1.1-1: Percentage of Babies Born Preterm or with Low Birth Weight in the Tri-County Region, 2009**



Source: Illinois Department of Public Health

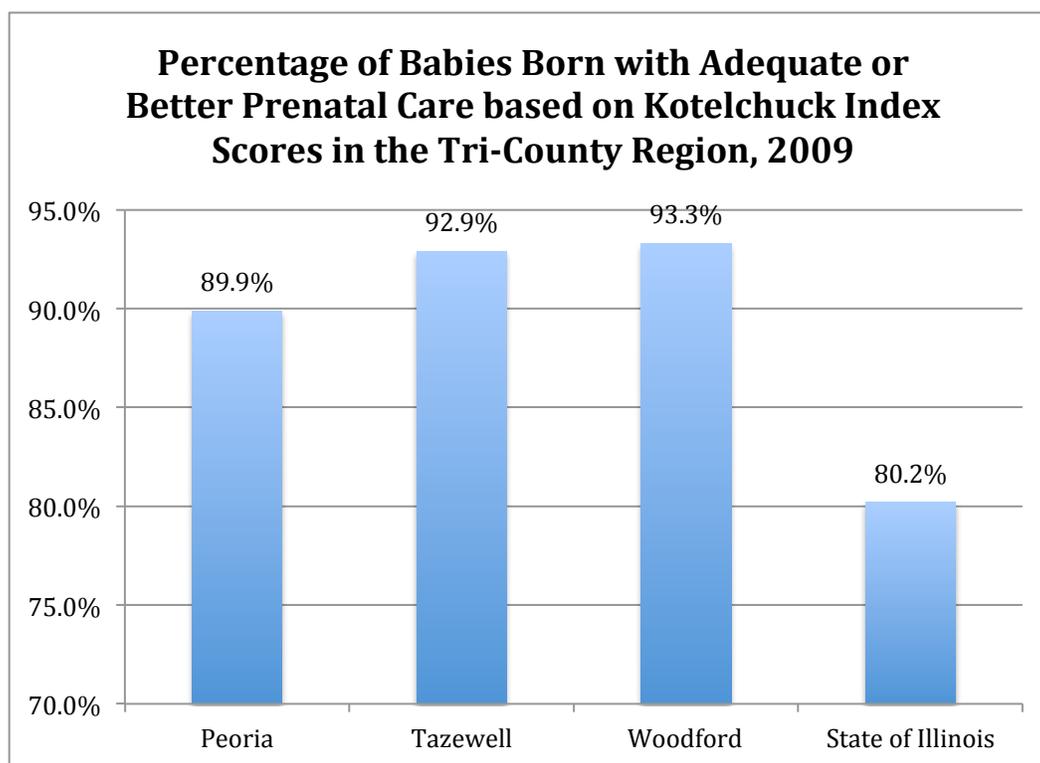
## Tri-County Community Health-Needs Assessment

*4.1.2 Initiation of prenatal care*

Prenatal care is comprehensive medical care provided for the mother and fetus, which includes screening and treatment for medical conditions as well as identification and interventions for behavioral risk factors associated with adverse birth outcomes. Kotelchuck Index Scores are used to determine the quantity of prenatal visits received between initiation of services and delivery. Adequate (80%-109% of expected visits) and Adequate Plus (receiving 110% of recommended services) of received services is compared to the number of expected visits for the period when care began and the delivery date.

Babies born in 2009 in the Tri-County Region greatly exceed the State of Illinois average of 80.2% of babies born with “Adequate” or “Adequate Plus.”

**Table 4.1.2-1: Percentage of Babies Born with Adequate or Better Prenatal Care based on Kotelchuck Index Scores in the Tri-County Region, 2009**



*Source: Illinois Department of Public Health*

## Tri-County Community Health-Needs Assessment

**4.2 Cardiovascular***Importance of the measure:*

Cardiovascular disease is defined as all diseases of the heart and blood vessels, including ischemic (also known as coronary) heart disease, cerebrovascular disease, congestive heart failure, hypertensive disease, and atherosclerosis.

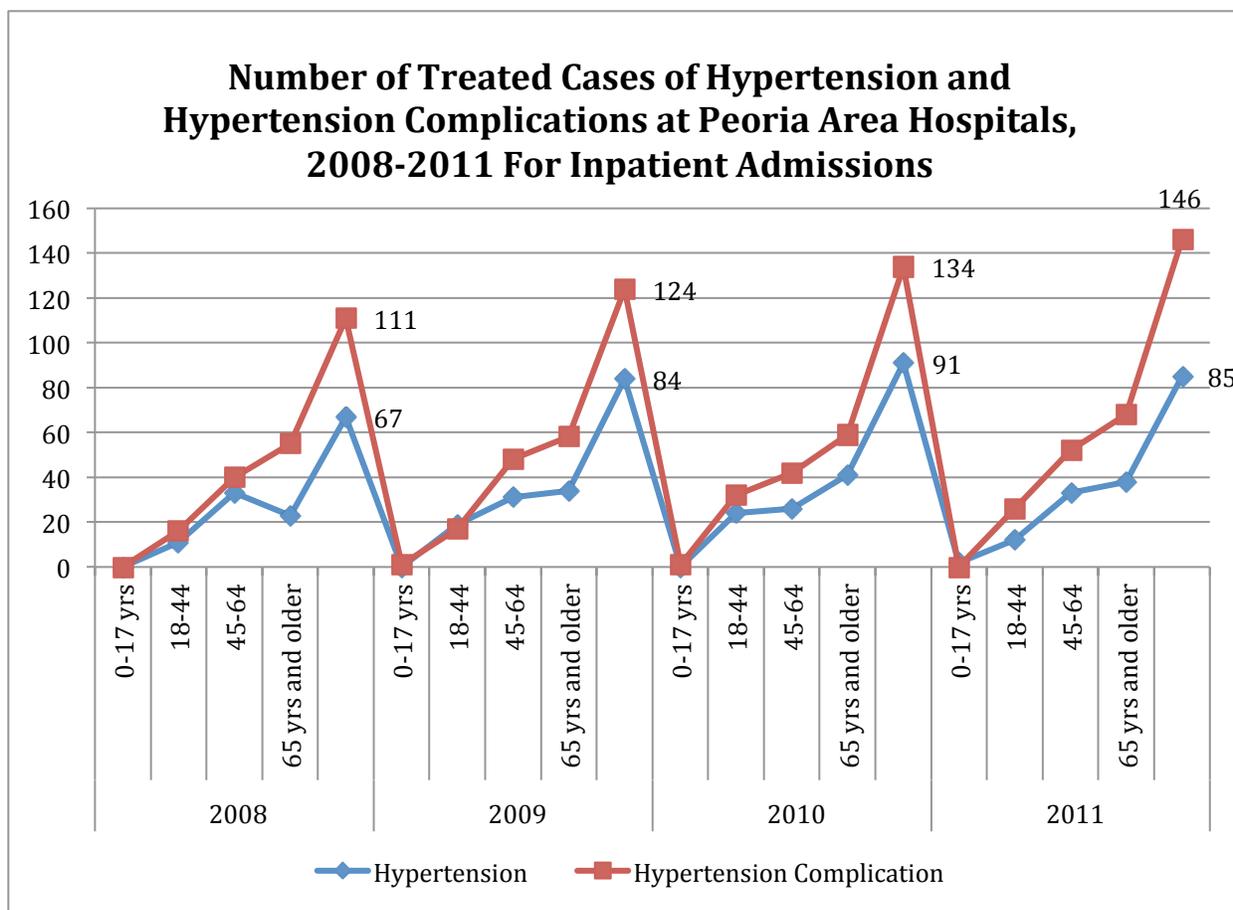
**4.2.1 Hypertension**

High blood pressure, which is also known as hypertension, is dangerous because it forces the heart to work extra hard to pump blood out to the rest of the body and contributes to the development of the hardening of the arteries and heart failure.

Cases of hypertension complication at the four Peoria area hospitals have increased by 31.5% between 2008 and 2011 for inpatient admissions. Cases of hypertension have increased by 26.8% during the same time.

Of particular interest, cases of hypertension in individuals 65 years of age and older have increased by 65.2% in the same time frame for inpatient admissions.

**Table 4.2.1-1 Number of Treated Cases of Hypertension and Hypertension Complications at Peoria Area Hospitals, 2008-2011 For Inpatient Admissions**



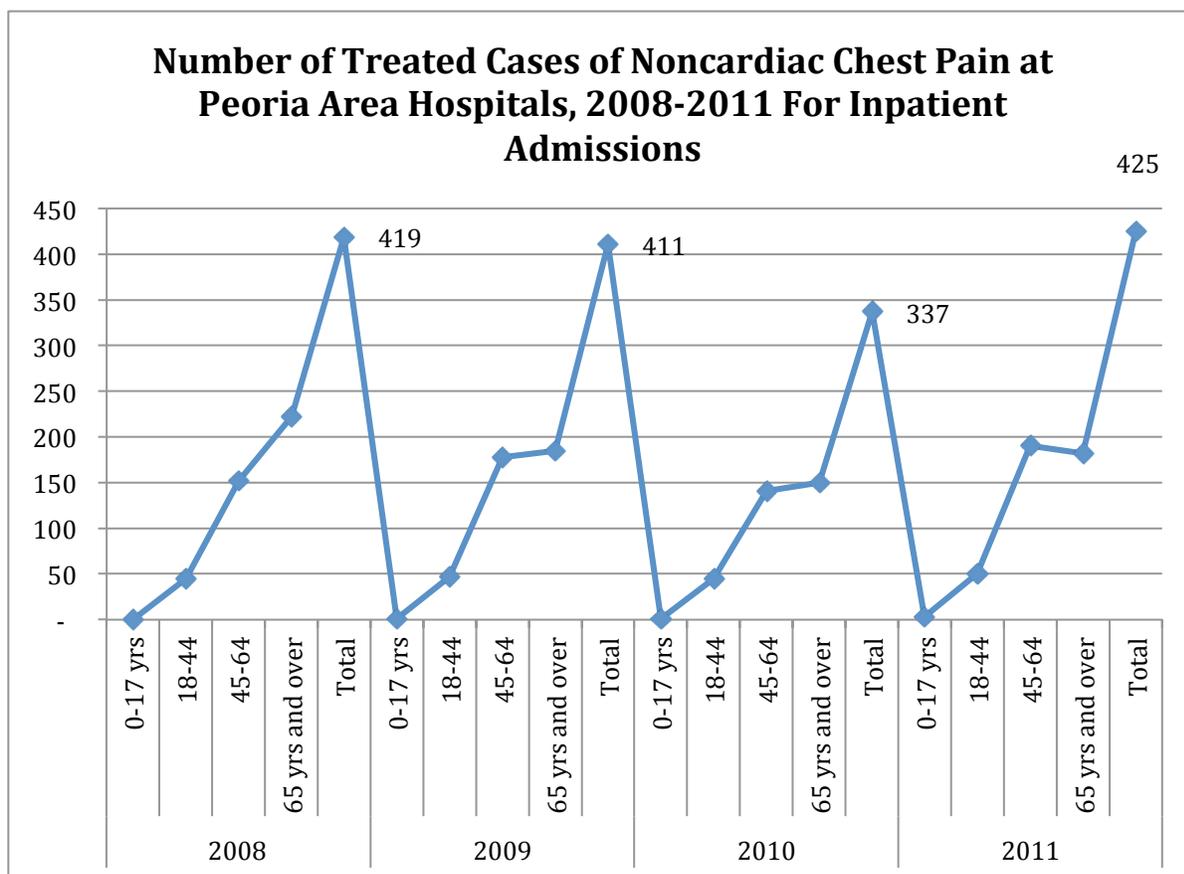
Source: COMPdata 2012

Tri-County Community Health-Needs Assessment

4.2.2 Coronary artery

There has been a 1.4% increase in the number of treated cases of noncardiac chest pain at the four Peoria-area hospitals in the Tri-County Region between 2008-2011 for inpatient admissions. While the number of cases for individuals age 65 years and over has decreased 16.0%, the number of cases for individuals aged 45-64 has increased 25%.

**Table 4.2.2-1 Number of Treated Cases of Noncardiac Chest Pain at Peoria Area Hospitals, 2008-2011 For Inpatient Admissions**



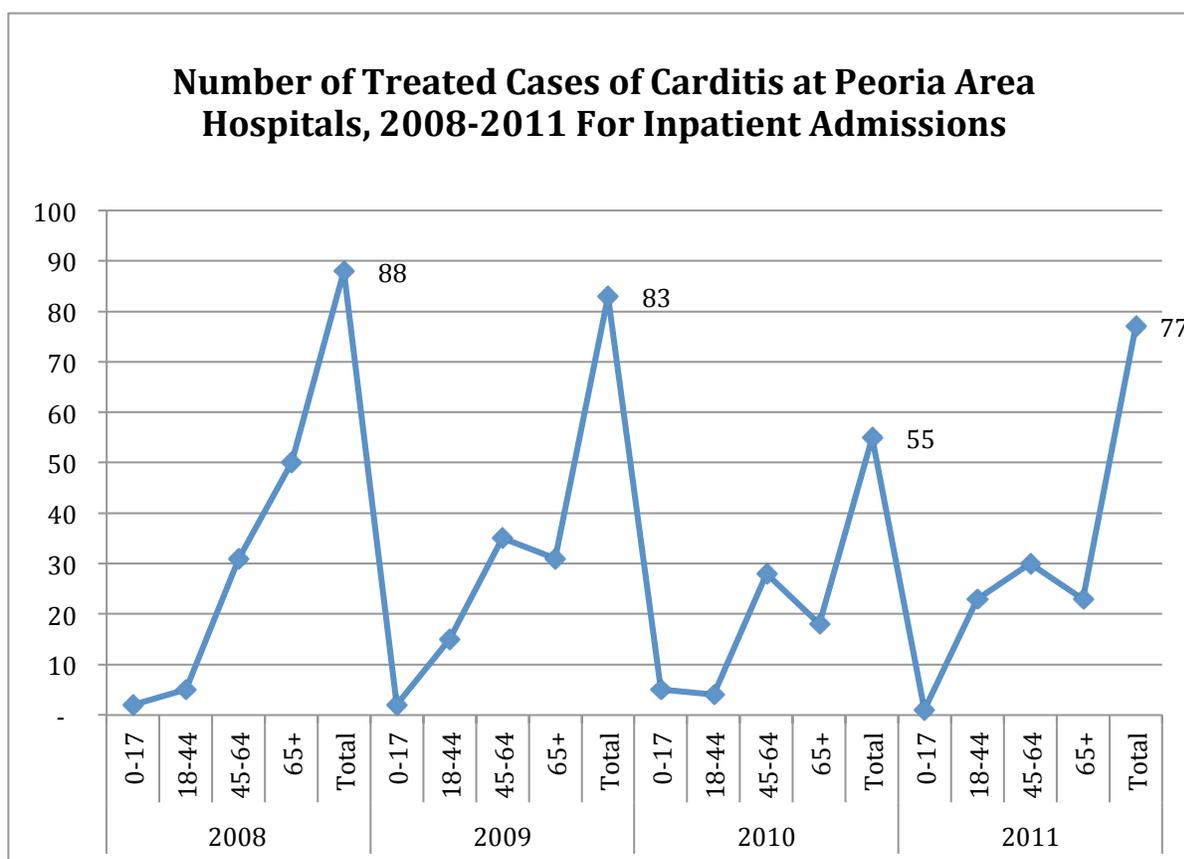
Source: COMPdata 2012

## Tri-County Community Health-Needs Assessment

Cases of carditis at the four Peoria-area hospitals in the Tri-County Region have decreased by 12.5% between 2008 and 2011 for inpatient admissions.

Of particular interest, cases of carditis in individuals 65 years of age and older have decreased by 54.0% and cases of carditis in individuals age 18 to 44 have increased by 360% during the same time frame for inpatient admissions.

**Table 4.2.2-2 Number of Treated Cases of Carditis at Peoria Area Hospitals, 2008-2011 For Inpatient Admissions**

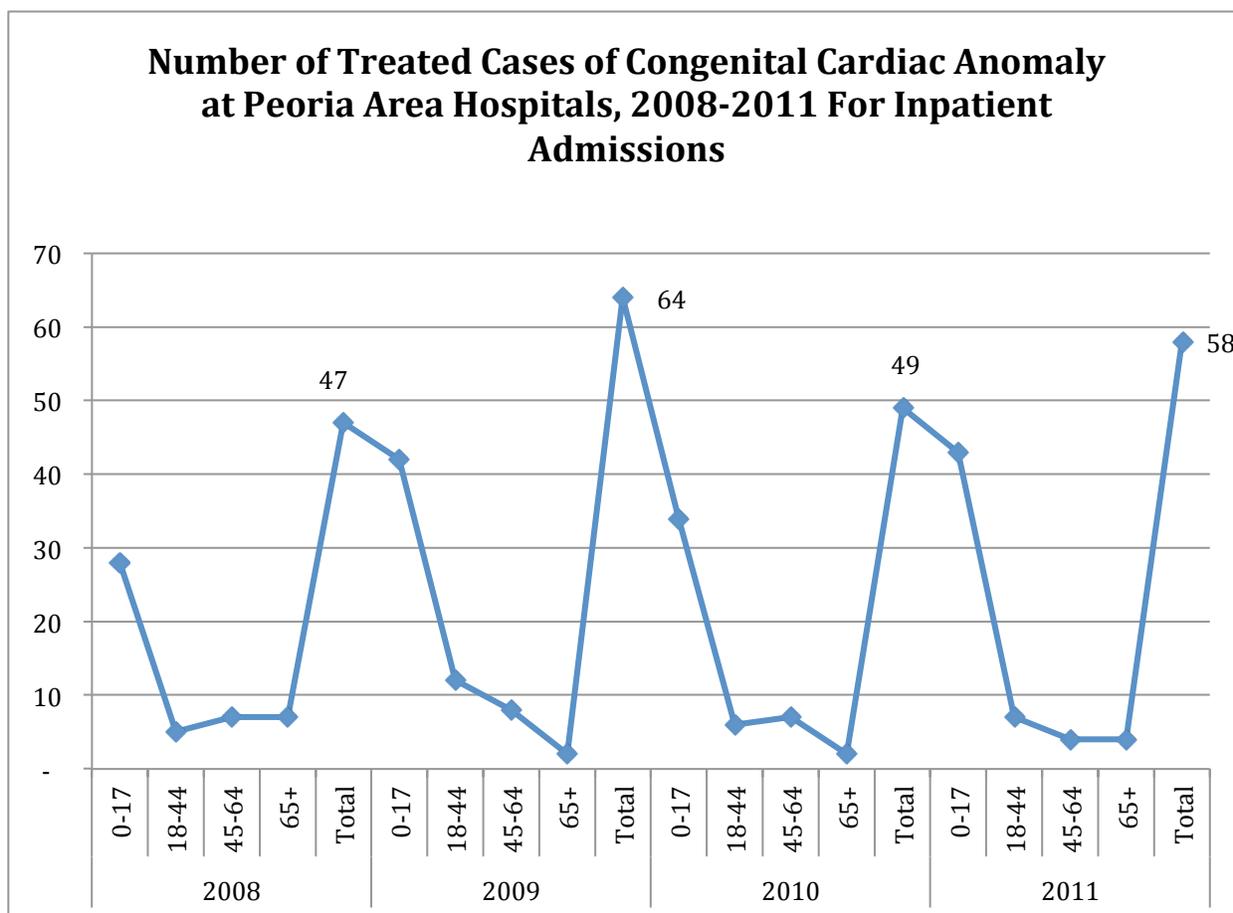


Source: COMPdata 2012

## Tri-County Community Health-Needs Assessment

There has been a 23.4% increase in the number of treated cases of congenital cardiac anomaly at the four Peoria-area hospitals between 2008-2011 for inpatient admissions. The number of cases for individuals aged 0-17 has increased 53.5%.

**Table 4.2.2-3 Number of Treated Cases of Congenital Cardiac Anomaly at Peoria Area Hospitals, 2008-2011 For Inpatient Admissions**



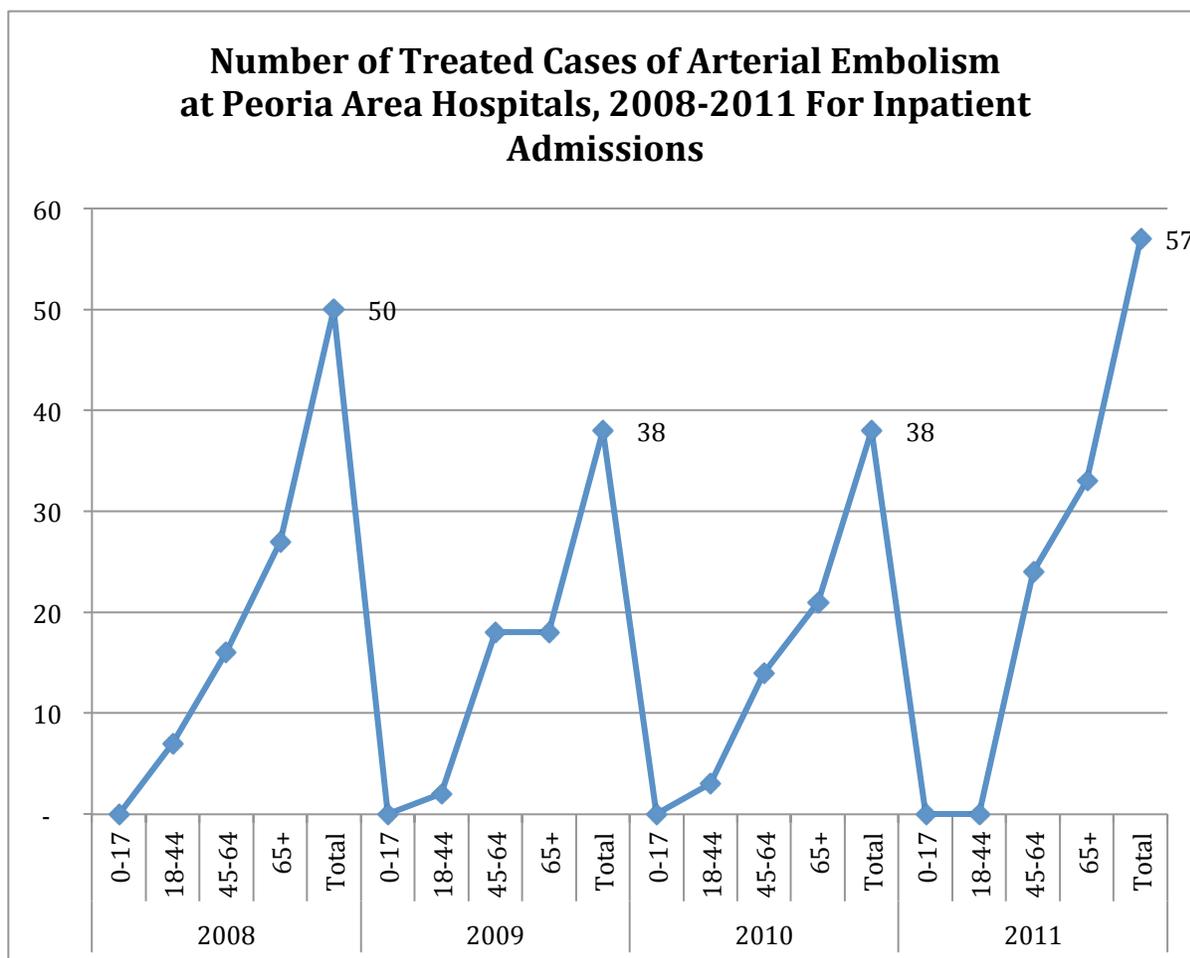
Source: COMPdata 2012

Tri-County Community Health-Needs Assessment

Cases of arterial embolism at the four Peoria-area hospitals have increased by 14.0% between 2008 and 2011 for inpatient admissions.

Of particular interest, cases of arterial embolism in individuals 65 years of age and older have increased by 22.0% and cases in individuals age 45 to 64 have increased by 50% during the same time frame for inpatient admissions.

**Table 4.2.2-4 Number of Treated Cases of Arterial Embolism at Peoria Area Hospitals, 2008-2011 For Inpatient Admissions**

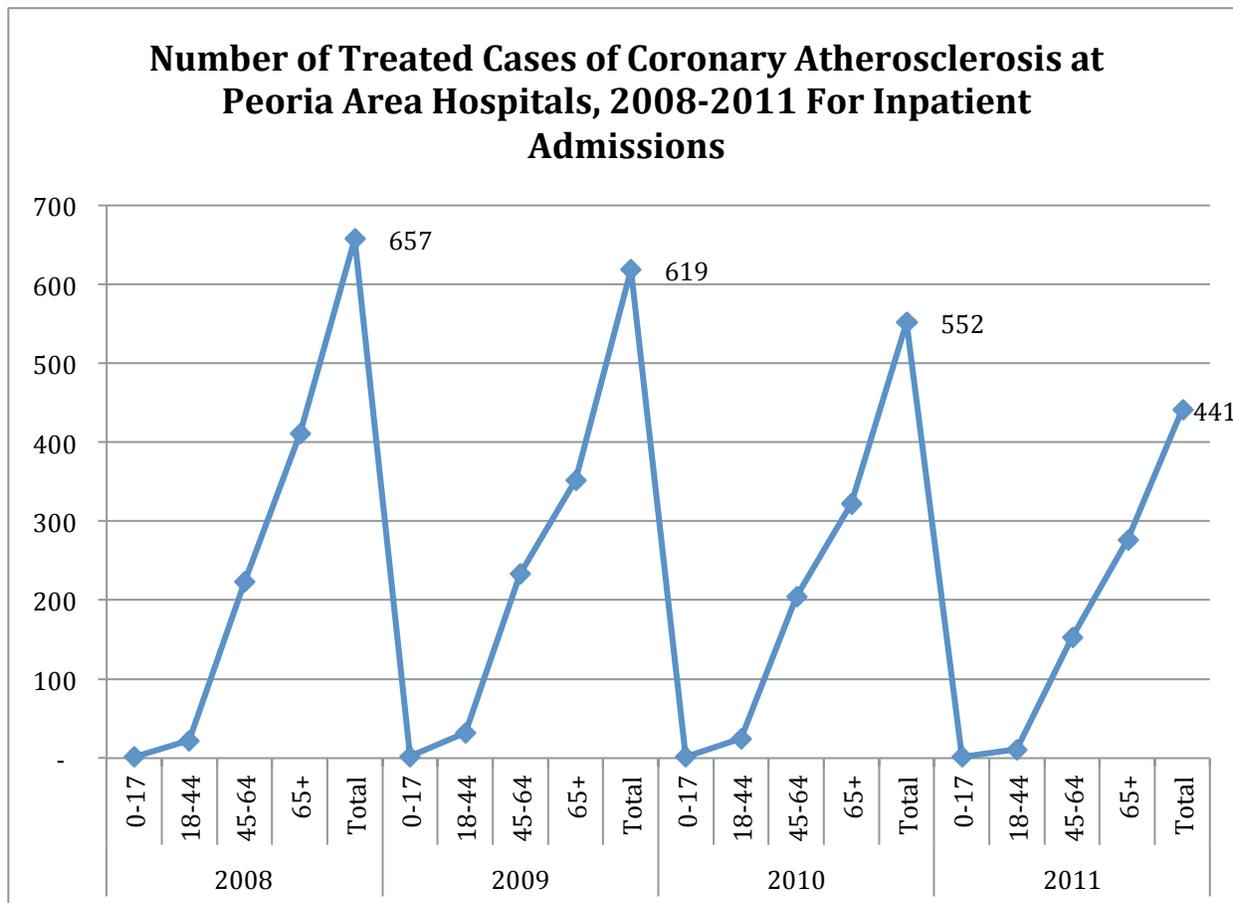


Source: COMPdata 2012

## Tri-County Community Health-Needs Assessment

There has been a 32.8% decrease in the number of treated cases of coronary atherosclerosis at the four Peoria-area hospitals between 2008-2011 for inpatient admissions. The number of cases for individuals aged 65 and older also decreased 32.8% for inpatient admissions.

**Table 4.2.2-5 Number of Treated Cases of Coronary Atherosclerosis at Peoria Area Hospitals, 2008-2011 For Inpatient Admissions**

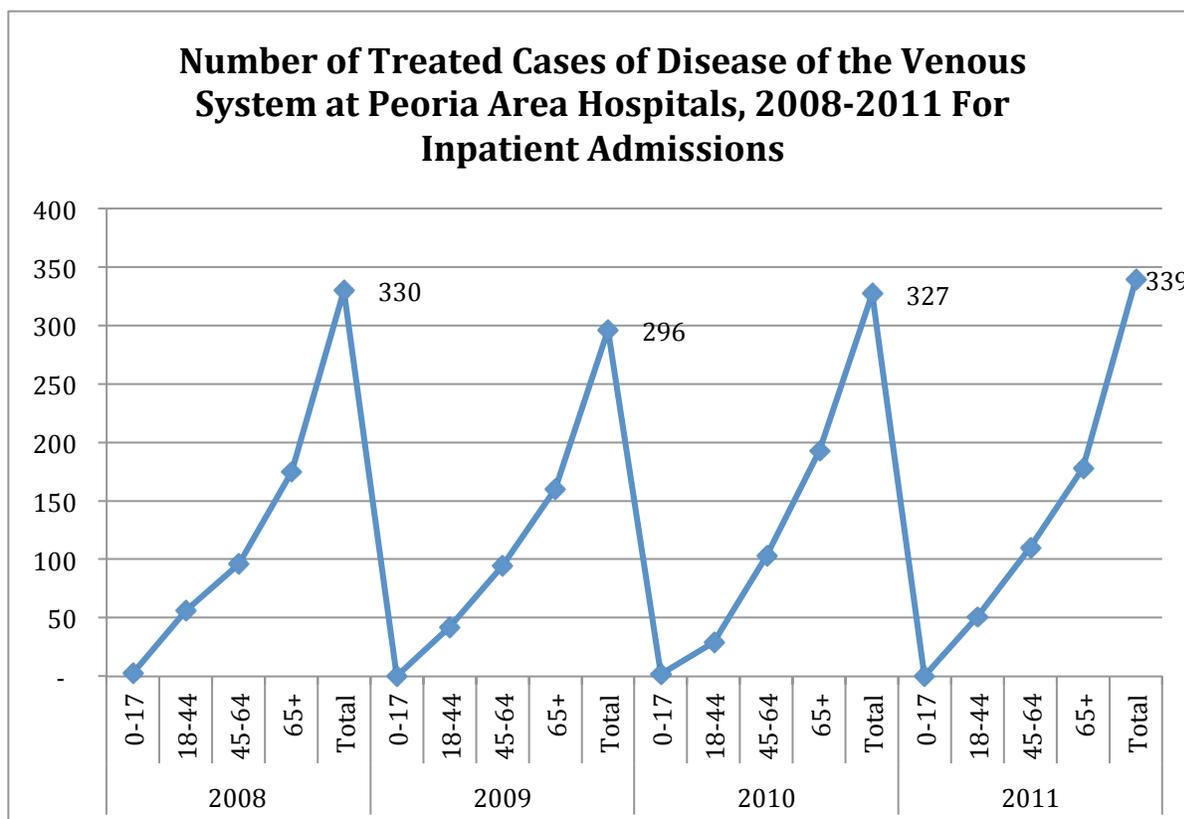


Source: COMPdata 2012

## Tri-County Community Health-Needs Assessment

Cases of disease of the venous system at the four Peoria-area hospitals have increased by 2.7% between 2008 and 2011 for inpatient admissions. Cases of disease of the venous system are fastest growing in individuals aged 45-64, as the number of cases increased 14.5% during the same time frame for inpatient admissions.

**Table 4.2.2-6 Number of Treated Cases Disease of the Venous System at Peoria Area Hospitals, 2008-2011 For Inpatient Admissions**



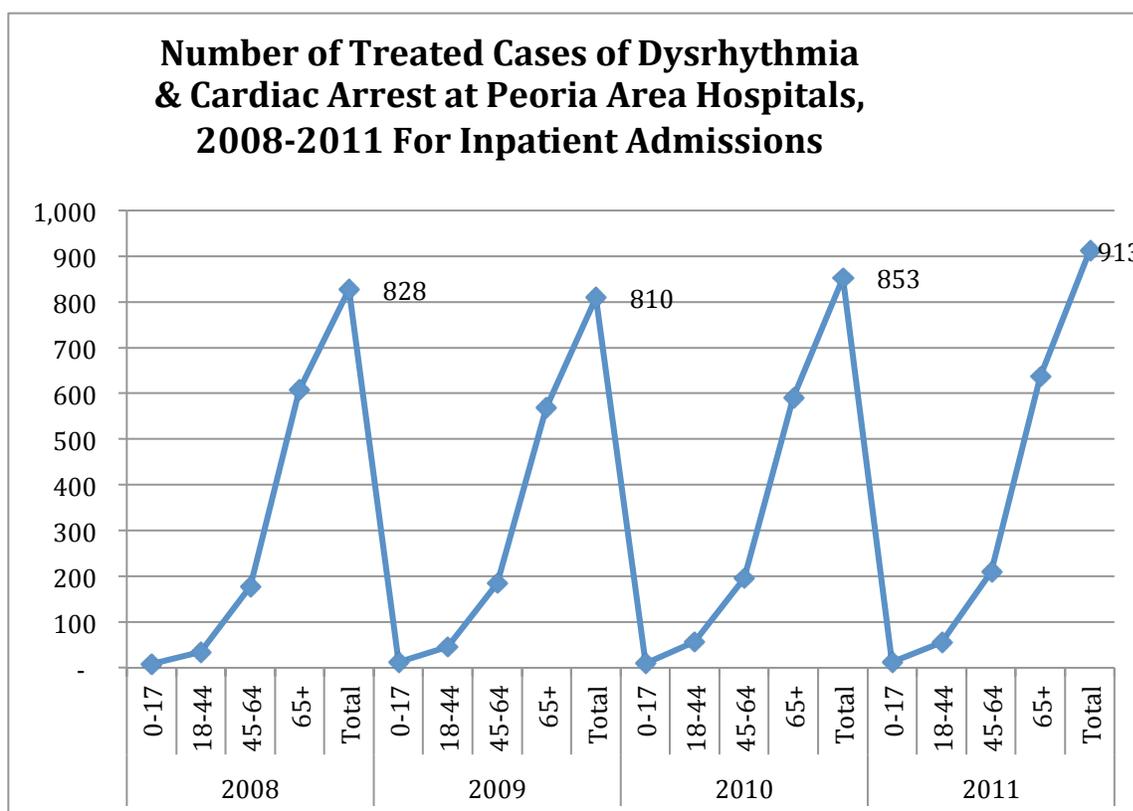
Source: COMPdata 2012

## Tri-County Community Health-Needs Assessment

Cases of dysrhythmia and cardiac arrest at the four Peoria-area hospitals have increased by 10.2% between 2008 and 2011 for inpatient admissions.

Of particular interest, cases of dysrhythmia and cardiac arrest in individuals age 45 to 64 have increased by 17.4% and cases in individuals 18 to 44 years of age increased 61.7% during the same time frame for inpatient admissions.

**Table 4.2.2-7 Number of Treated Cases of Dysrhythmia and Cardiac Arrest at Peoria Area Hospitals, 2008-2011 For Inpatient Admissions**

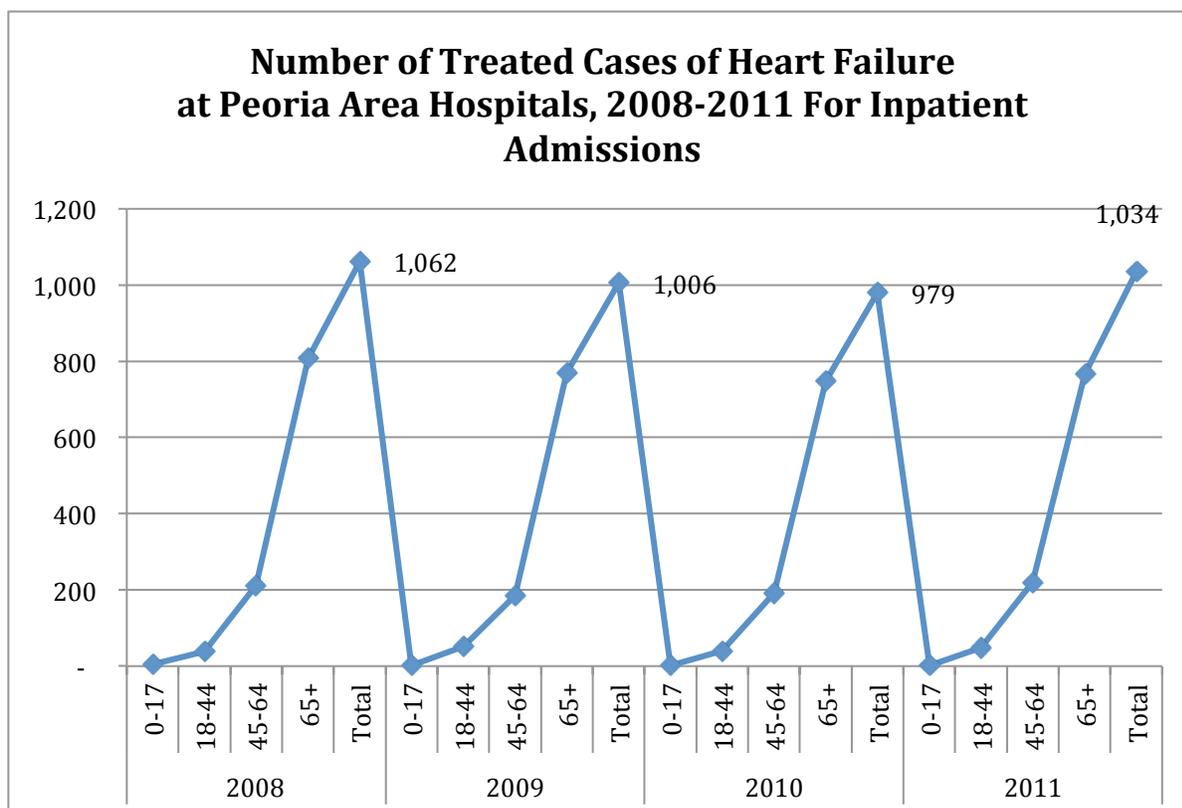


Source: COMPdata 2012

## Tri-County Community Health-Needs Assessment

There has been a 2.6% decrease in the number of treated cases of heart failure at the four Peoria-area hospitals between 2008-2011 for inpatient admissions. The number of cases for individuals aged 18-44 years of age increased by 26.3% for inpatient admissions.

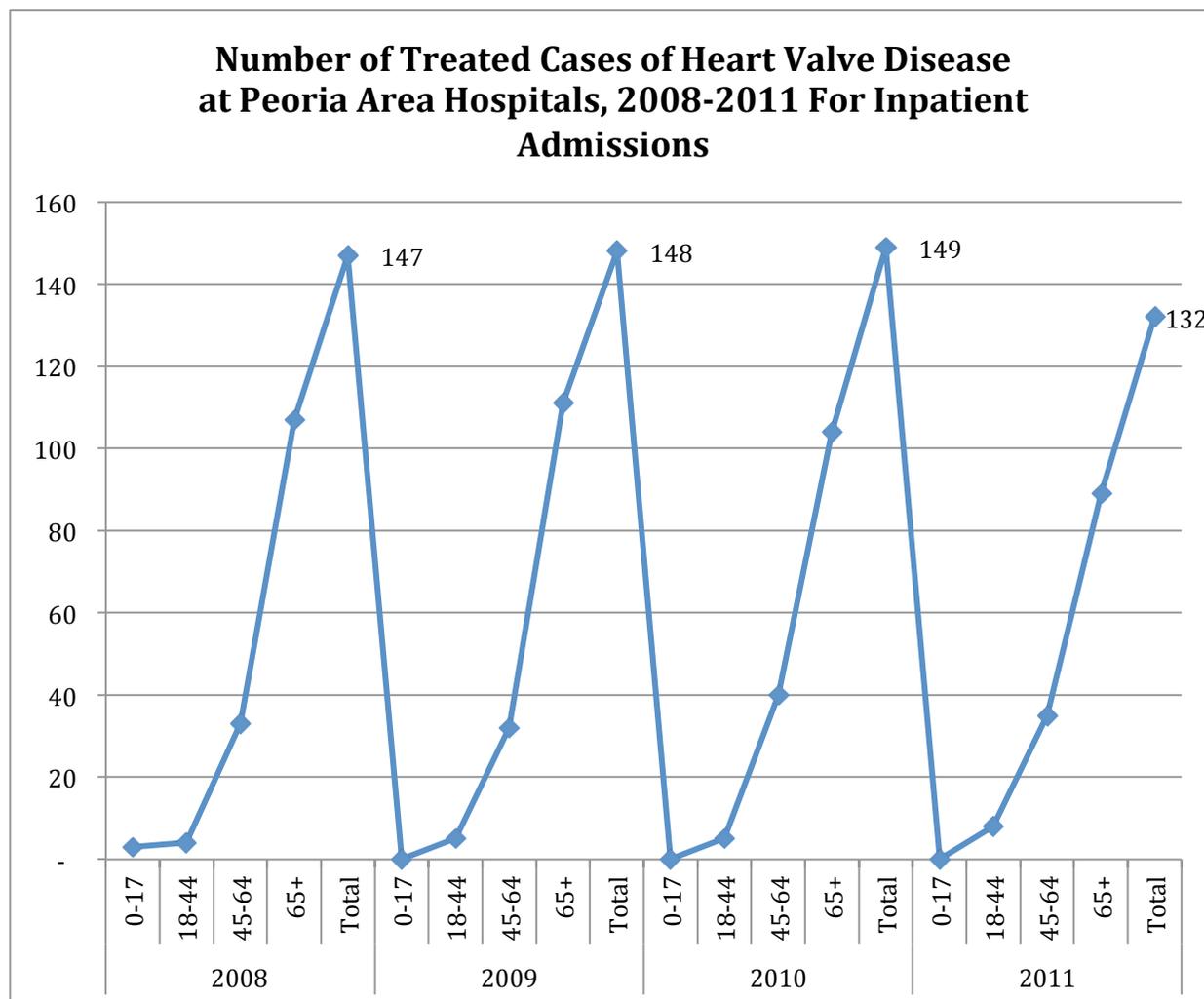
**Table 4.2.2-8 Number of Treated Cases of Heart Failure at Peoria Area Hospitals, 2008-2011 For Inpatient Admissions**



Source: COMPdata 2012

Cases of heart valve disease at the four Peoria-area hospitals have decreased by 10.2% between 2008 and 2011 for inpatient admissions.

Of particular interest, cases of heart valve disease in individuals age 65 and older have decreased by 16.8% for inpatient admissions.

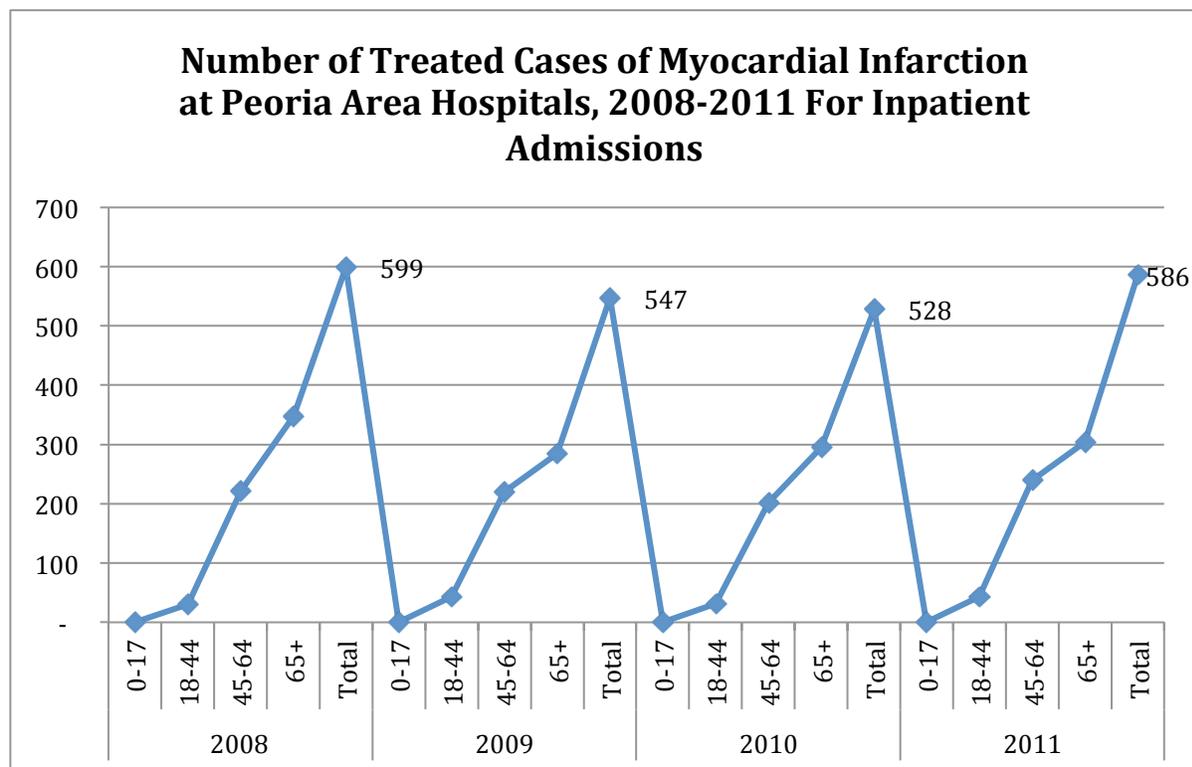
**Table 4.2.2-9 Number of Treated Cases of Heart Valve Disease at Peoria Area Hospitals, 2008-2011 For Inpatient Admissions**

Source: COMPdata 2012

Cases of myocardial infarction at the four Peoria-area hospitals have decreased by 2.1% between 2008 and 2011 for inpatient admissions.

Of particular interest, cases of myocardial infarction in individuals aged 45 to 64 have increased by 8.1% during the same time frame for inpatient admissions.

## Tri-County Community Health-Needs Assessment

**Table 4.2.2-10 Number of Treated Cases of Myocardial Infarction at Peoria Area Hospitals, 2008-2011 For Inpatient Admissions**

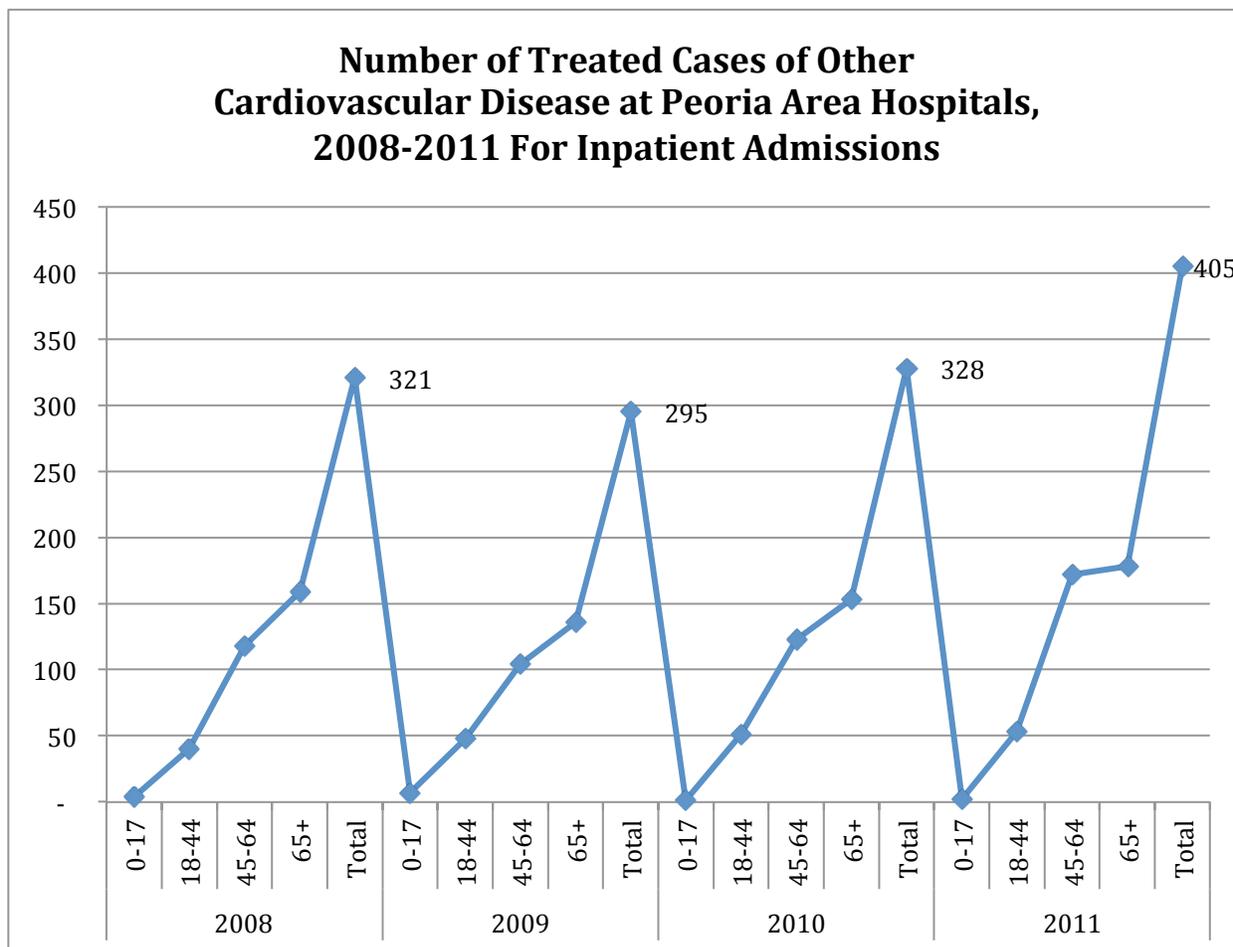
Source: COMPdata 2012

## Tri-County Community Health-Needs Assessment

Cases of other cardiovascular disease at the four Peoria-area hospitals have increased by 26.1% between 2008 and 2011 for inpatient admissions.

Of particular interest, cases of other cardiovascular disease in individuals aged 45 to 64 have increased by 45.7% during the same time frame for inpatient admissions.

**Table 4.2.2-11 Number of Treated Cases of Other Cardiovascular Disease at Peoria Area Hospitals, 2008-2011 For Inpatient Admissions**



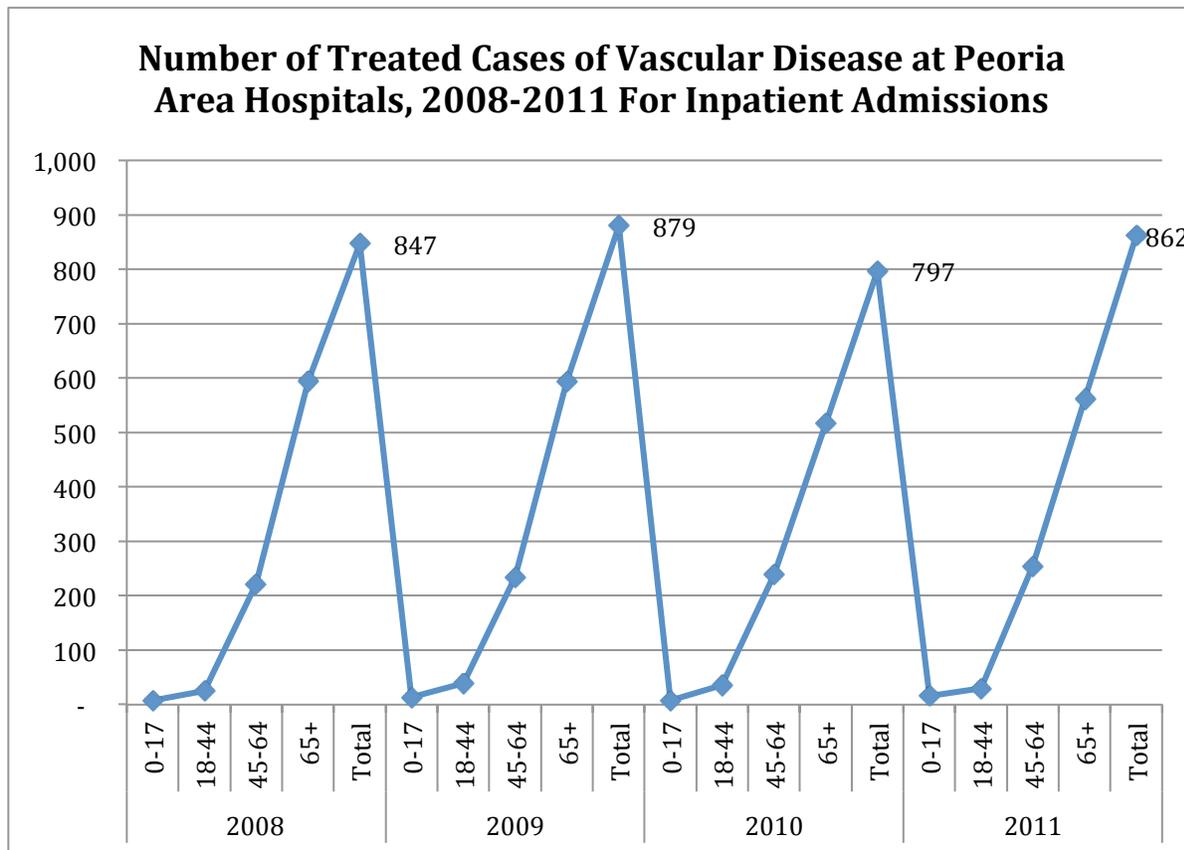
Source: COMPdata 2012

Tri-County Community Health-Needs Assessment

Cases of vascular disease at the four Peoria-area hospitals have increased by 1.7% between 2008 and 2011 for inpatient admissions.

Of particular interest, cases of vascular disease in individuals aged 45 to 64 have increased by 14.9% during the same time frame for inpatient admissions.

**Table 4.2.2-12 Number of Treated Cases of Vascular Disease at Peoria Area Hospitals, 2008-2011 For Inpatient Admissions**



Source: COMPdata 2012

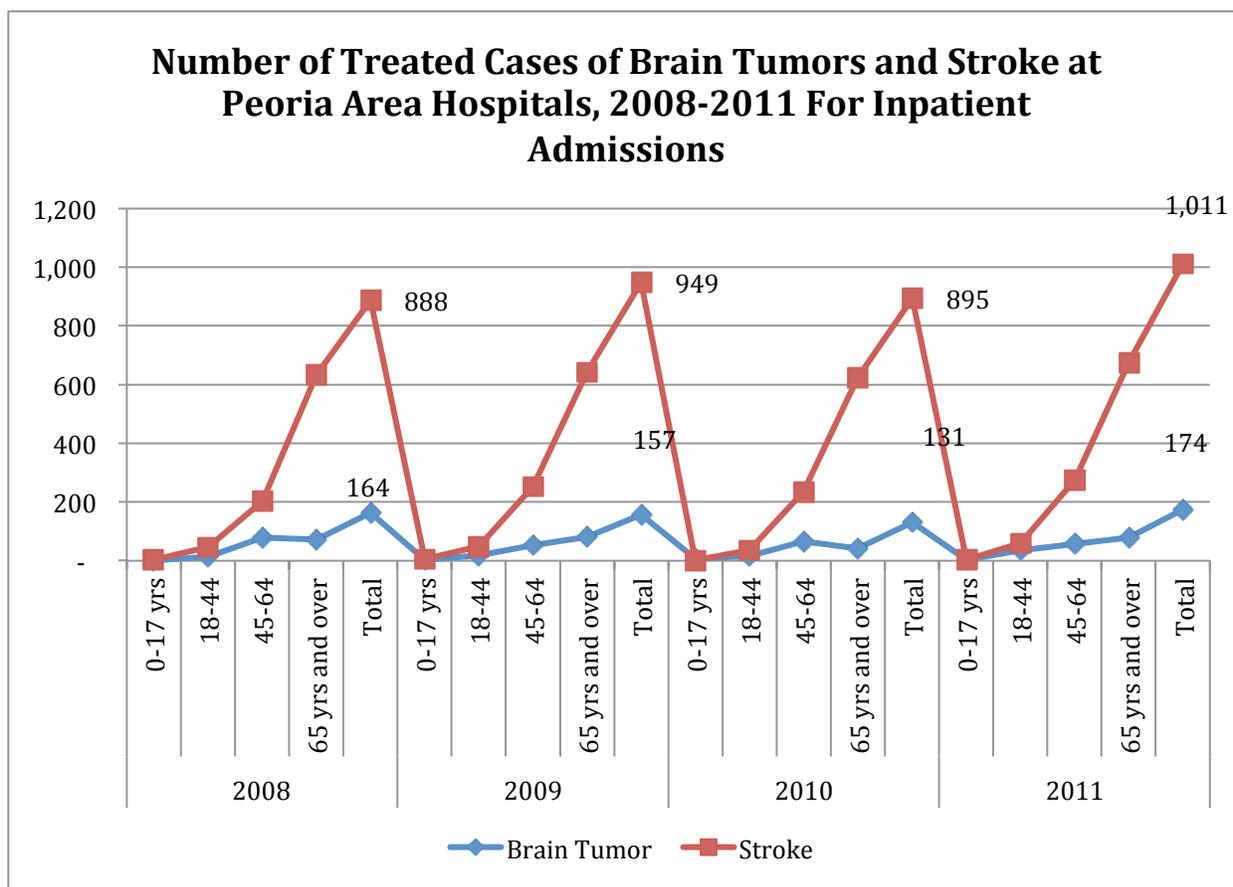
## Tri-County Community Health-Needs Assessment

## 4.2.3 Stroke

Cases of stroke at the four Peoria-area hospitals have increased by 13.8% between 2008 and 2011 for inpatient admissions. Cases of brain tumor have increased by 6.0% during the same time for inpatient admissions.

Of particular interest, cases of stroke in individuals 45-64 years of age have increased by 34.4% in the same time frame for inpatient admissions.

**Table 4.2.3-1 Number of Treated Cases of Brain Tumors and Stroke at Peoria Area Hospitals, 2008-2011 For Inpatient Admissions**



Source: COMPdata 2012

## Tri-County Community Health-Needs Assessment

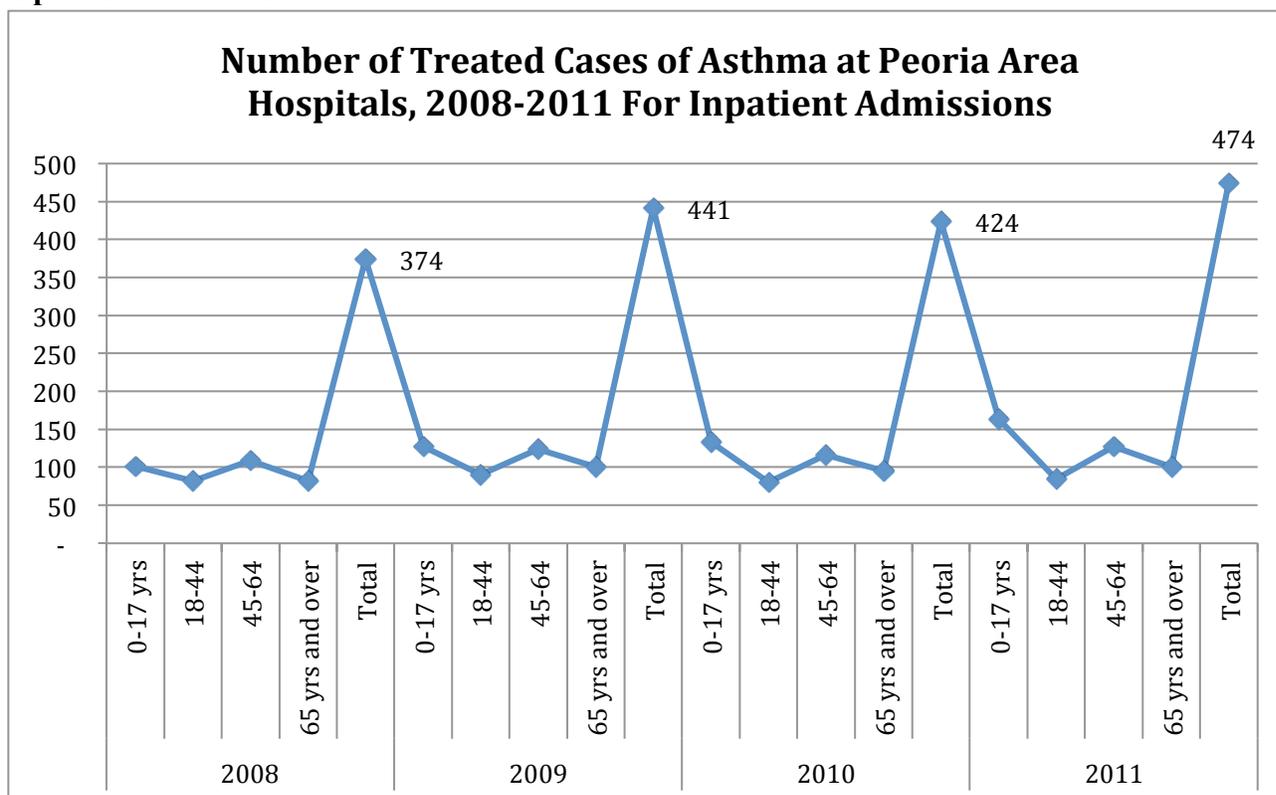
**4.3 Respiratory***Importance of the measure:*

Disease of the respiratory system includes acute upper respiratory infections such as influenza, pneumonia, bronchitis, asthma, emphysema, and Chronic Obstructive Pulmonary Disease (COPD). These conditions are characterized by breathlessness, wheezing, chronic coughing, frequent respiratory infections, and chest tightness. Many respiratory conditions can be successfully controlled with medical supervision and treatment. However, children and adults who do not have access to adequate medical care are likely to experience repeated serious episodes, trips to the emergency room and absences from school and work. Hospitalization rates illustrate the worst episodes of respiratory diseases and are a proxy measure for inadequate treatment.

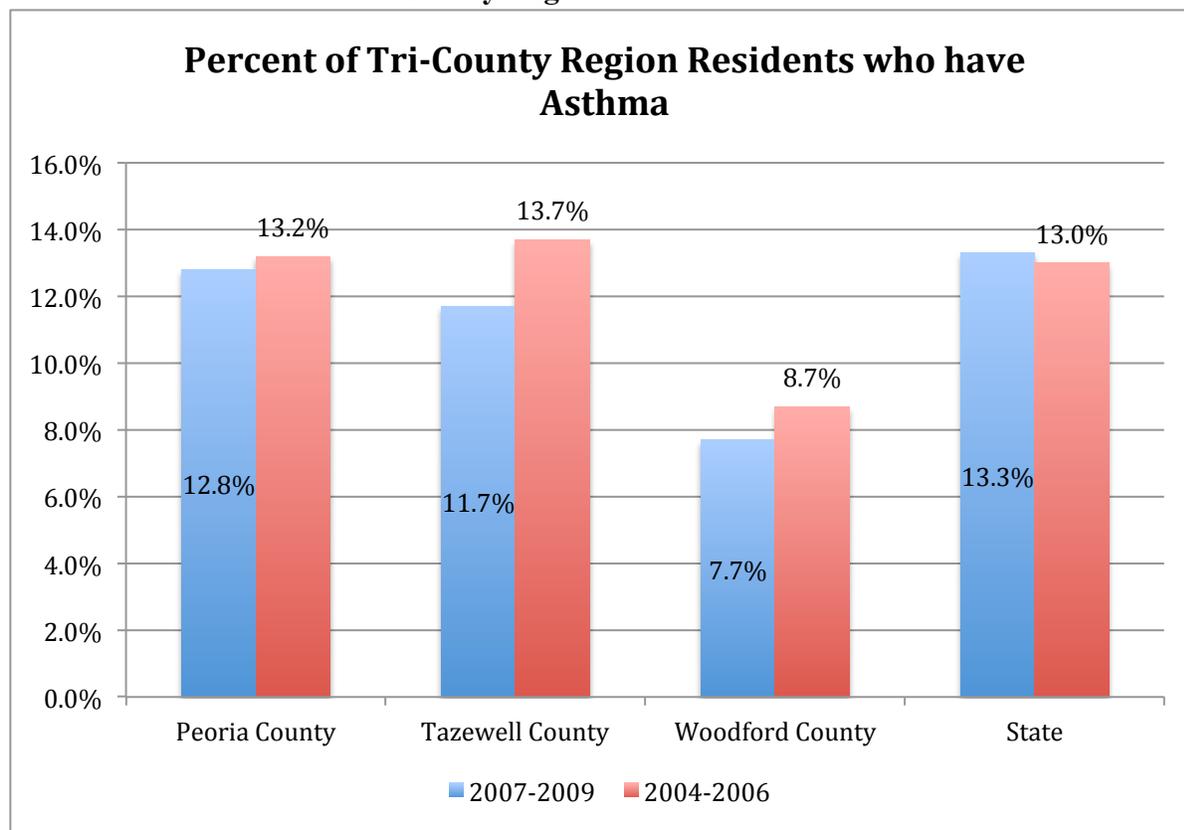
**4.3.1 Asthma**

Treated cases of asthma at the four Peoria-area hospitals have increased by 26.7% between 2008 and 2011 for inpatient admissions. Of particular interest, cases of asthma in individuals 0-17 years of age have increased 61.3% for inpatient admissions. According to the Illinois BRFSS, asthma rates in the Tri-County Region are lower than the average rate for the State of Illinois.

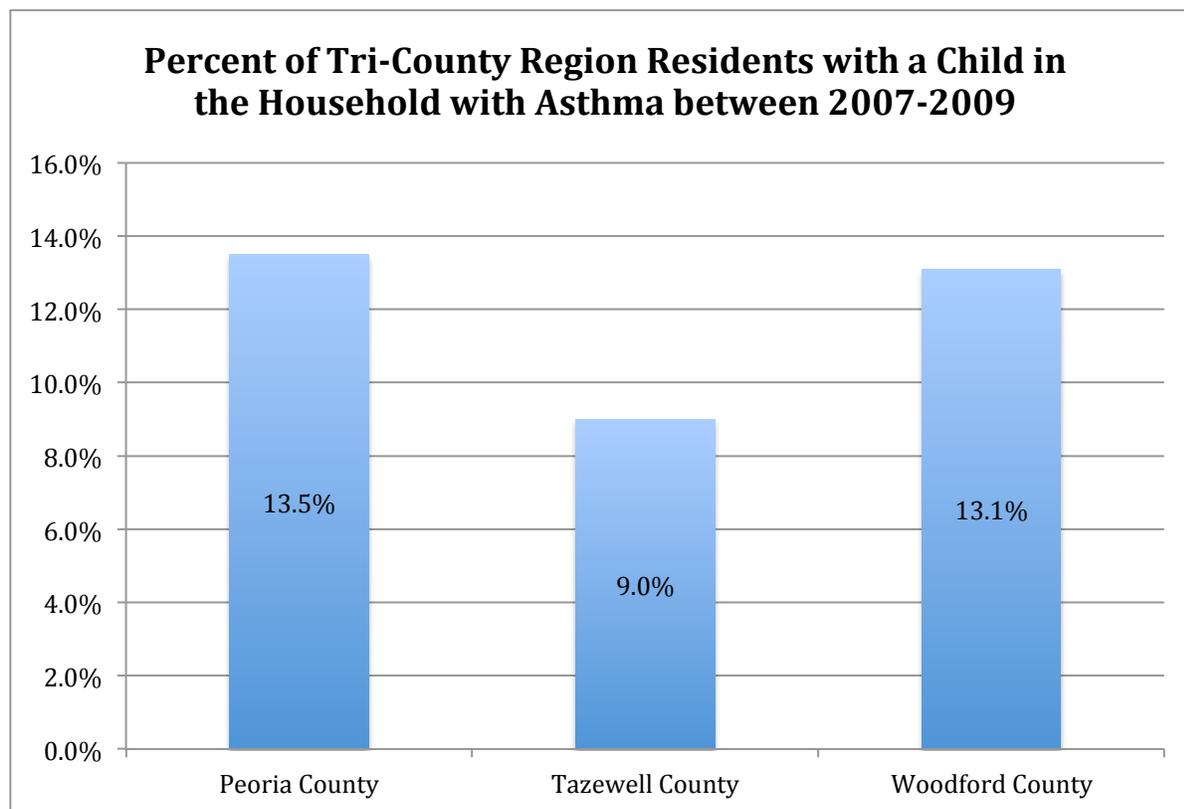
**Table 4.3.1-1 Number of Treated Cases of Asthma at Peoria Area Hospitals, 2008-2011 For Inpatient Admissions**



Source: COMPdata 2012

**Table 4.3.1-2 Percent of Tri-County Region Residents who have Asthma**

*Source: Illinois Department of Public Health*

**Table 4.3.1-3 Percent of Tri-County Region Residents with a Child in the Household with Asthma between 2007-2009**

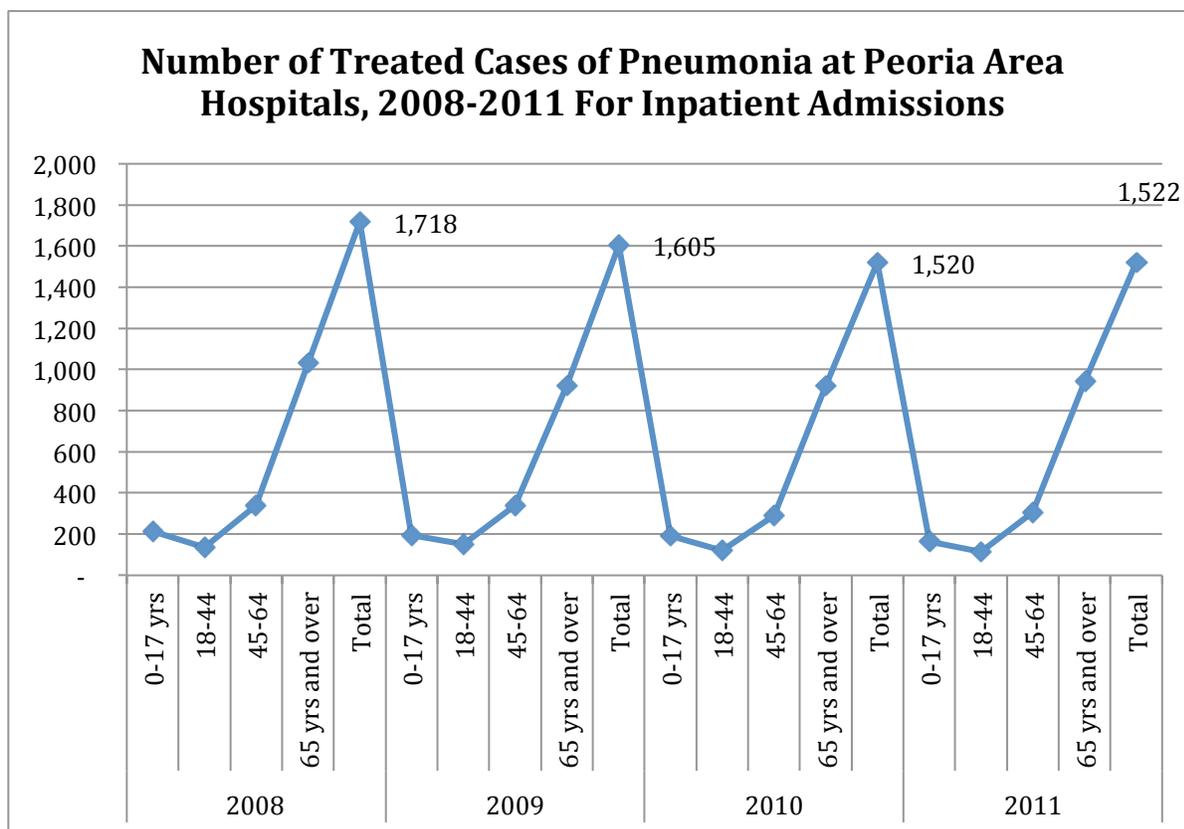
*Source: Illinois Department of Public Health*

Tri-County Community Health-Needs Assessment

4.3.2 Pneumonia

Cases of pneumonia at the four Peoria-area hospitals have decreased by 11.4% between 2008 and 2011 for inpatient admissions.

**Table 4.3.2-1 Number of Treated Cases of Pneumonia at Peoria Area Hospitals, 2008-2011 For Inpatient Admissions**



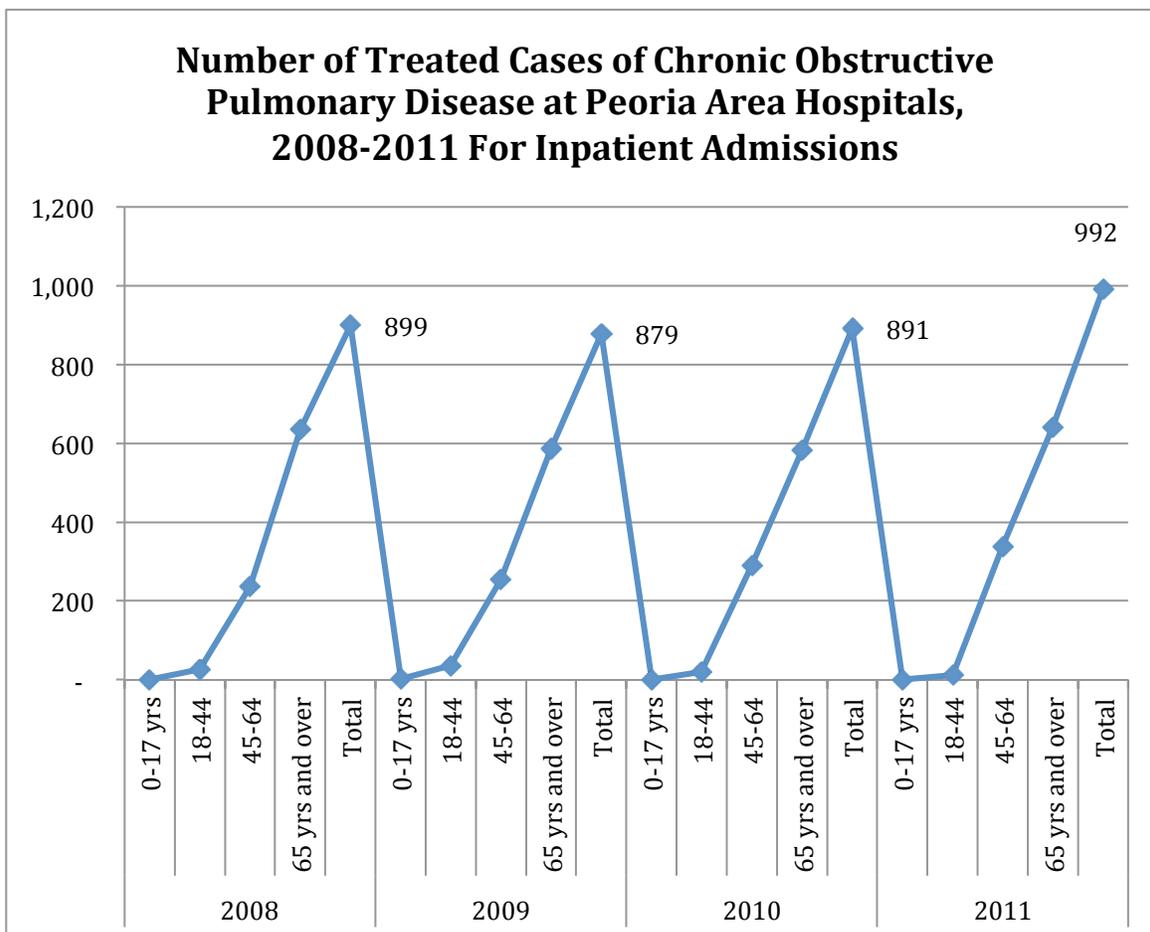
Source: COMPdata 2012

## Tri-County Community Health-Needs Assessment

## 4.3.3 COPD

There has been a 10.3% increase in the number of treated cases of COPD at the four Peoria-area hospitals between 2008-2011 for inpatient admissions. The number of cases for individuals aged 45 to 64 has increased 42.6% for inpatient admissions.

**Table 4.3.3-1 Number of Treated Cases of Chronic Obstructive Pulmonary Disease at Peoria Area Hospitals, 2008-2011 For Inpatient Admissions**



Source: COMPdata 2012

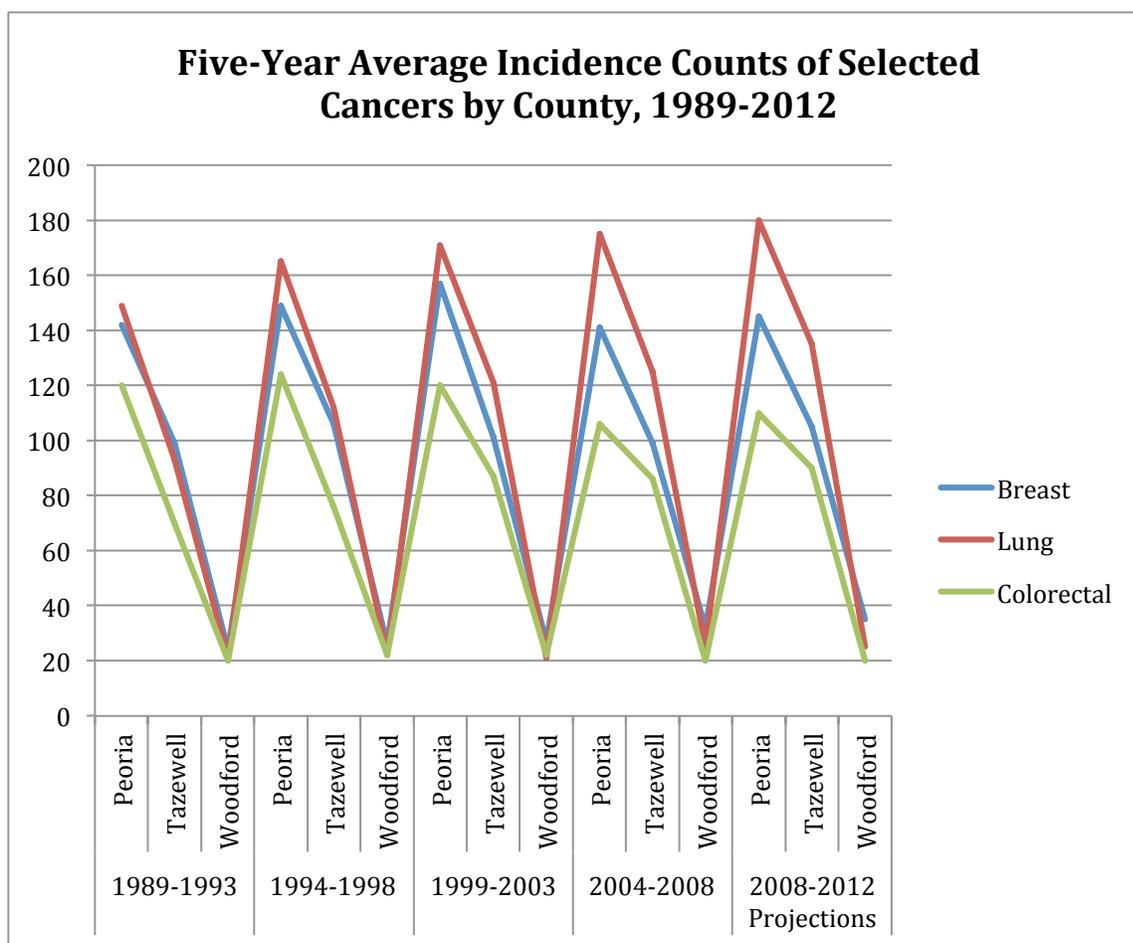
Tri-County Community Health-Needs Assessment

**4.4 Cancer**

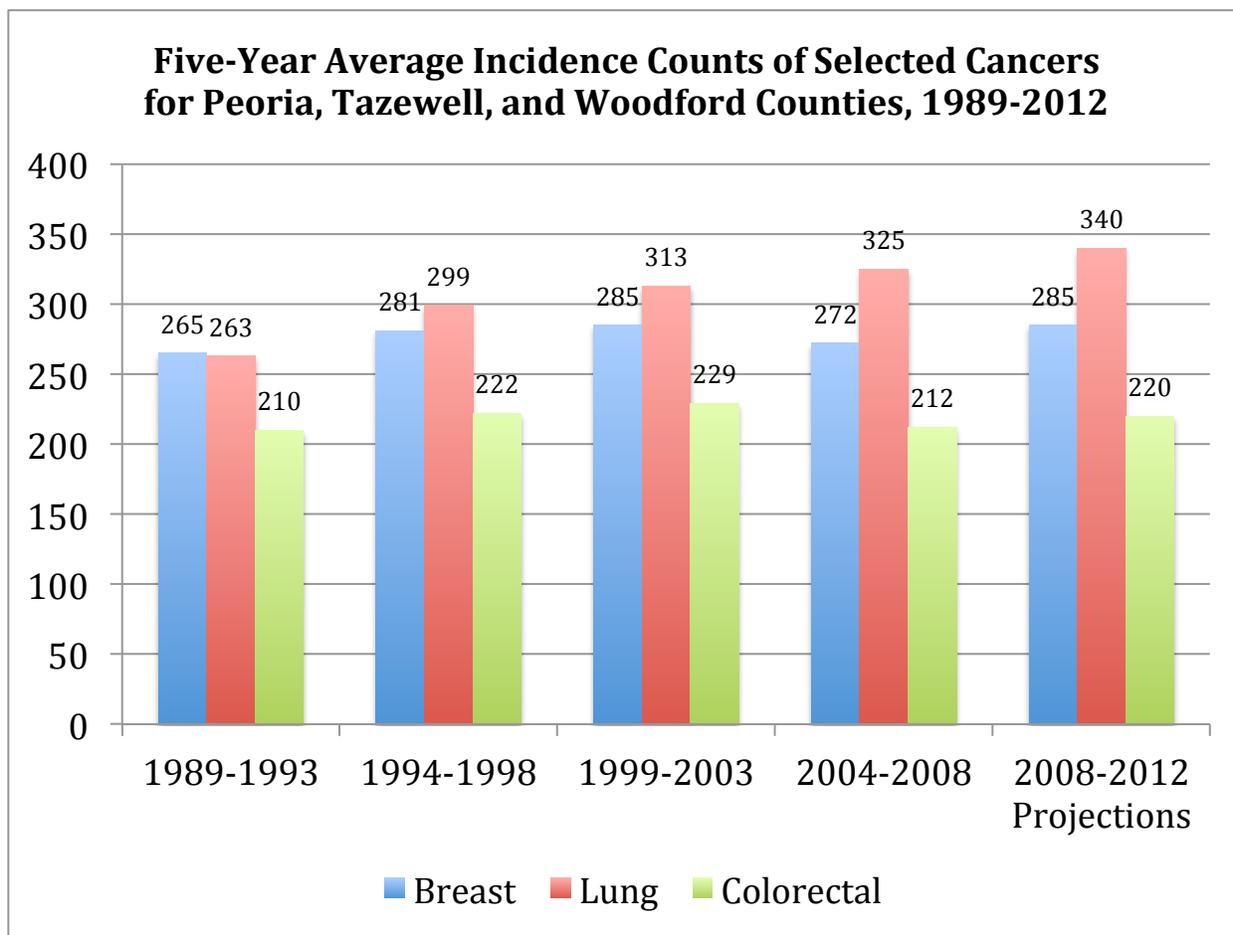
*Importance of the measure:* Cancer is caused by the abnormal growth of cells in the body and many causes of cancer have been identified. Generally, each type of cancer has its own symptoms, outlook for cure, and methods for treatment. Cancer is one of the leading causes of death in the Tri-County Region.

Tables 4.4-1 and 4.4-2 provide longitudinal data on the incidence counts of breast, lung, and colorectal cancers in the Tri-County region. Tables 4.4-3 and 4.4-4 offer insight into the number of treated cases of the top 6 cancers by treatment in the Tri-County Region by age and percentage breakdown by gender.

**Table 4.4-1 Five-Year Average Incidence Counts of Selected Cancers by County, 1989-2012**

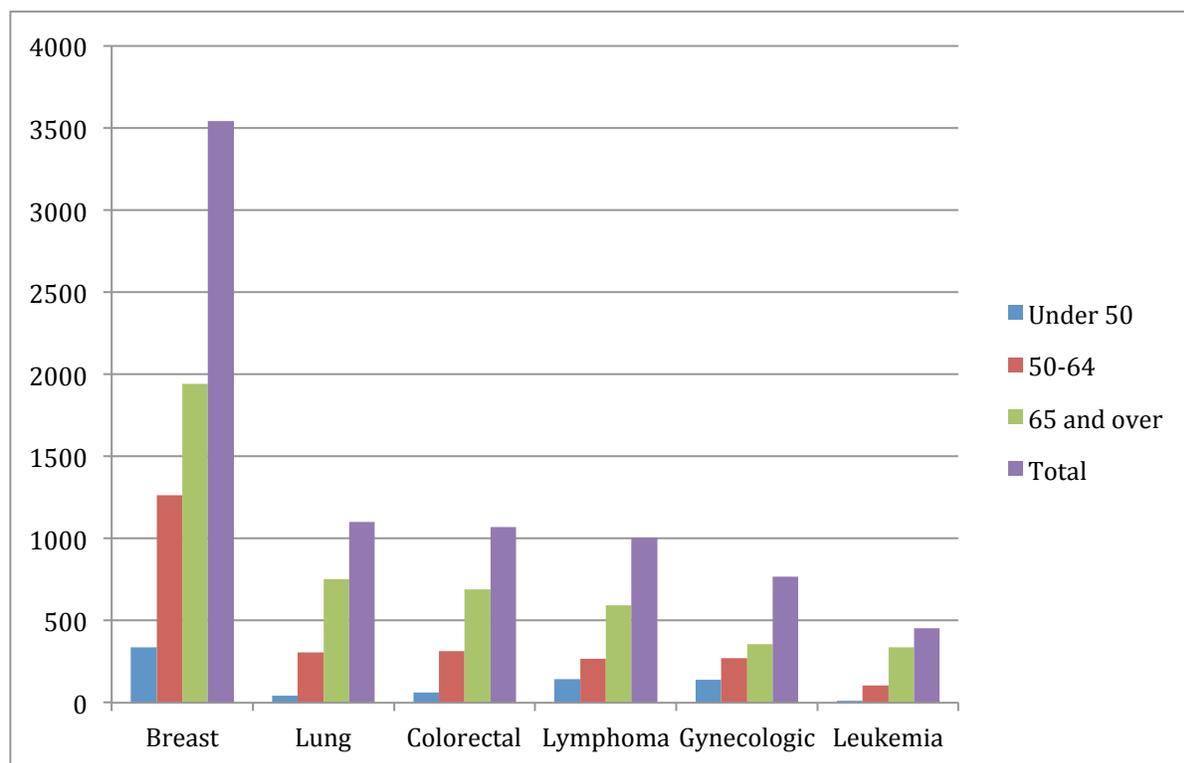


Source: IL Department of Public Health

**Table 4.4-2 Five-Year Average Incidence Counts of Selected Cancers for Peoria, Tazewell, and Woodford Counties, 1989-2012**

Source: IL Department of Public Health

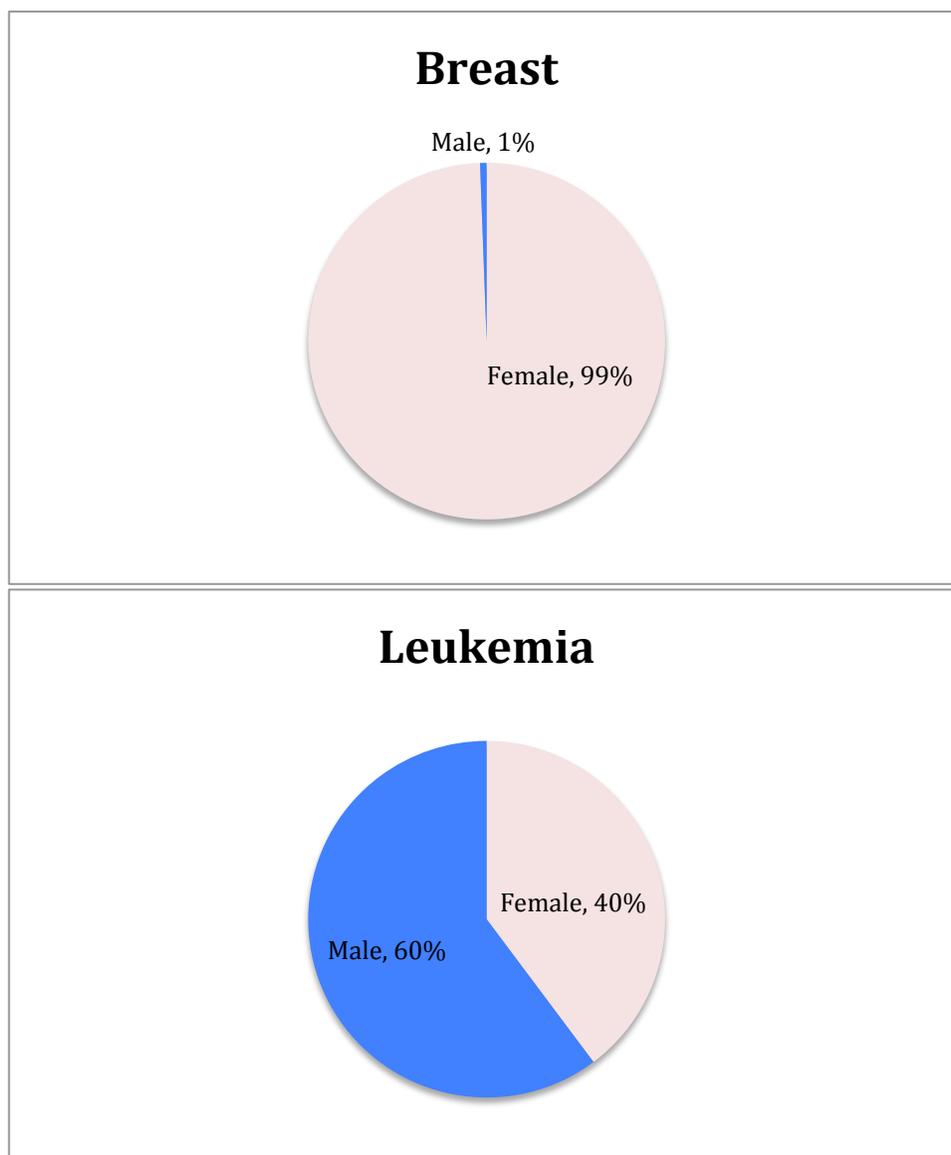
## Tri-County Community Health-Needs Assessment

**Table 4.4-3 Top 6 Cancers by Treatment**

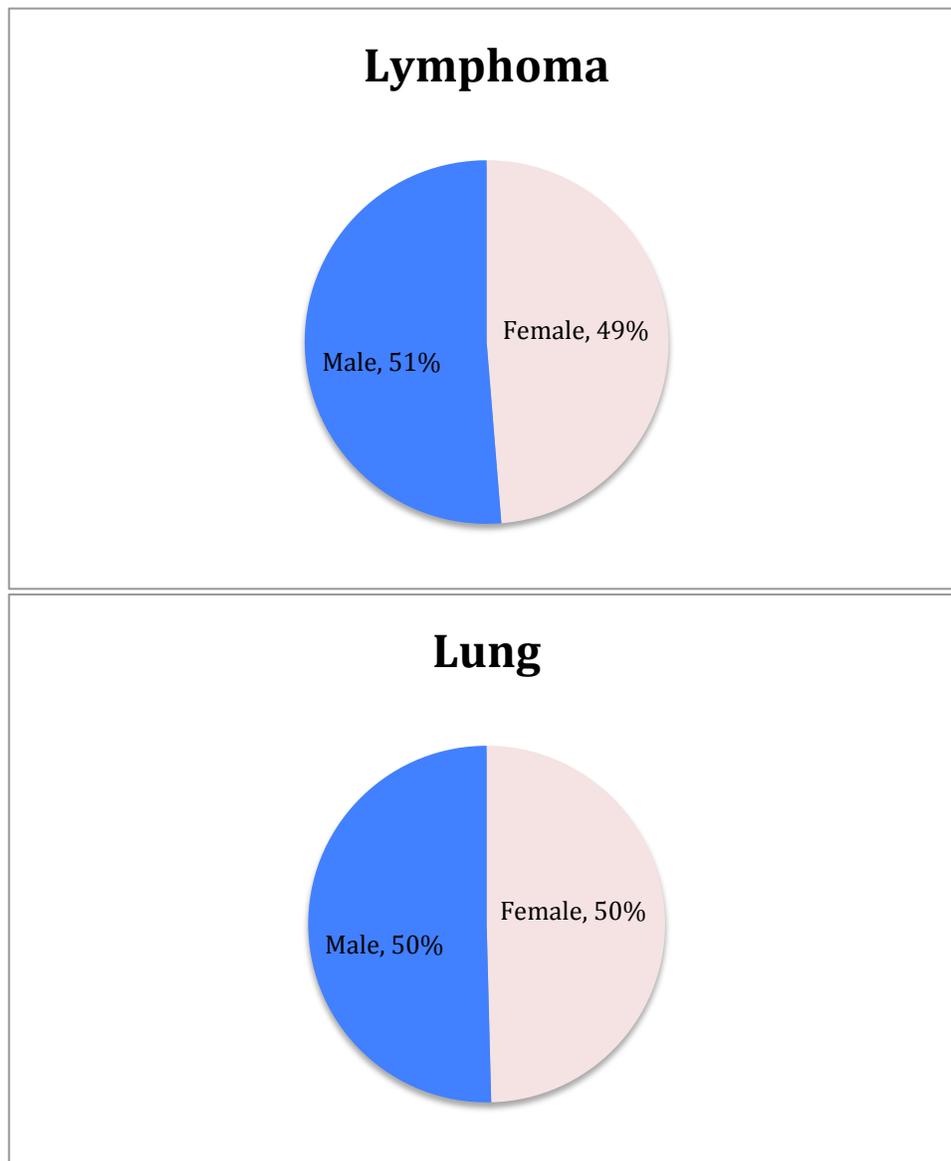
Source: *IL Cancer Care, 2011*

## Tri-County Community Health-Needs Assessment

Table 4.4-4 Cancer by Gender

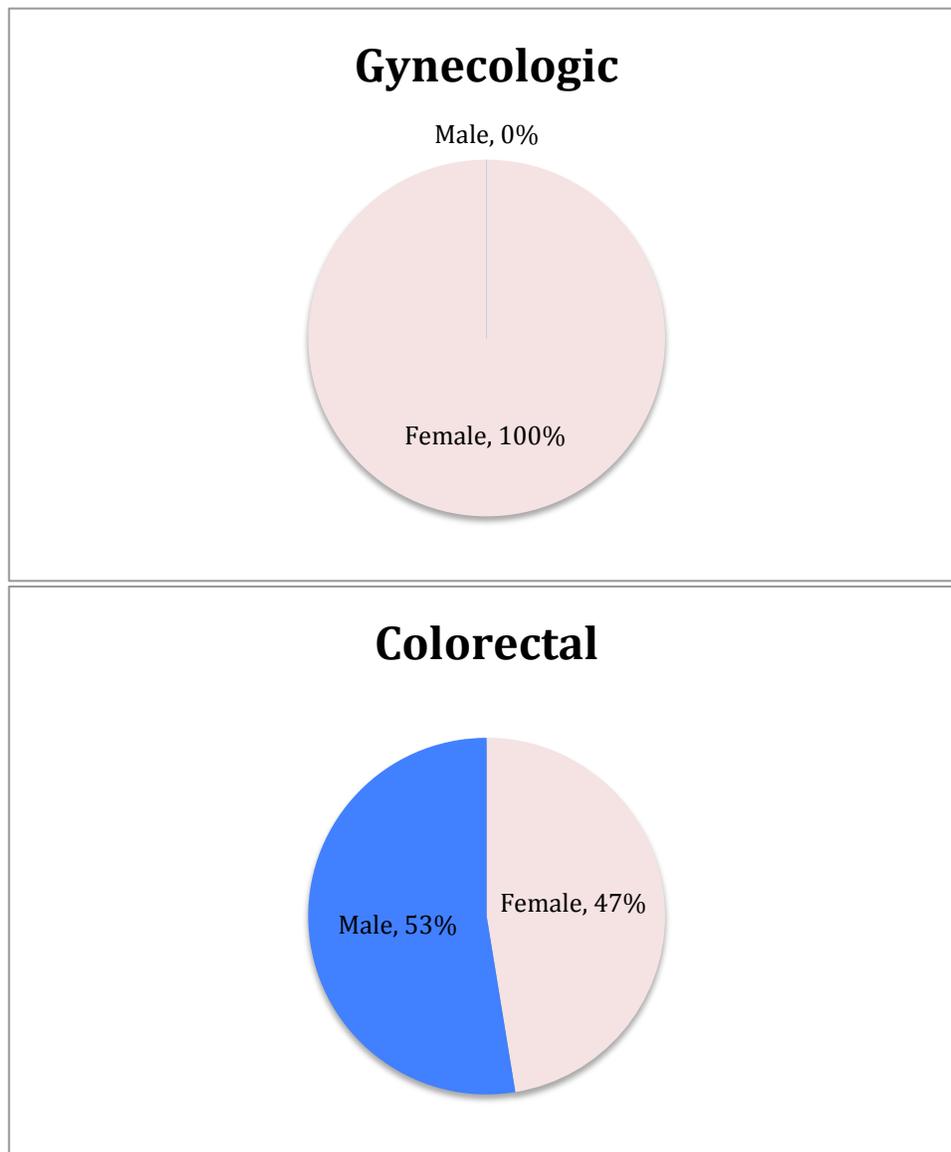


Source: IL Cancer Care, 2011



*Source: IL Cancer Care, 2011*

## Tri-County Community Health-Needs Assessment



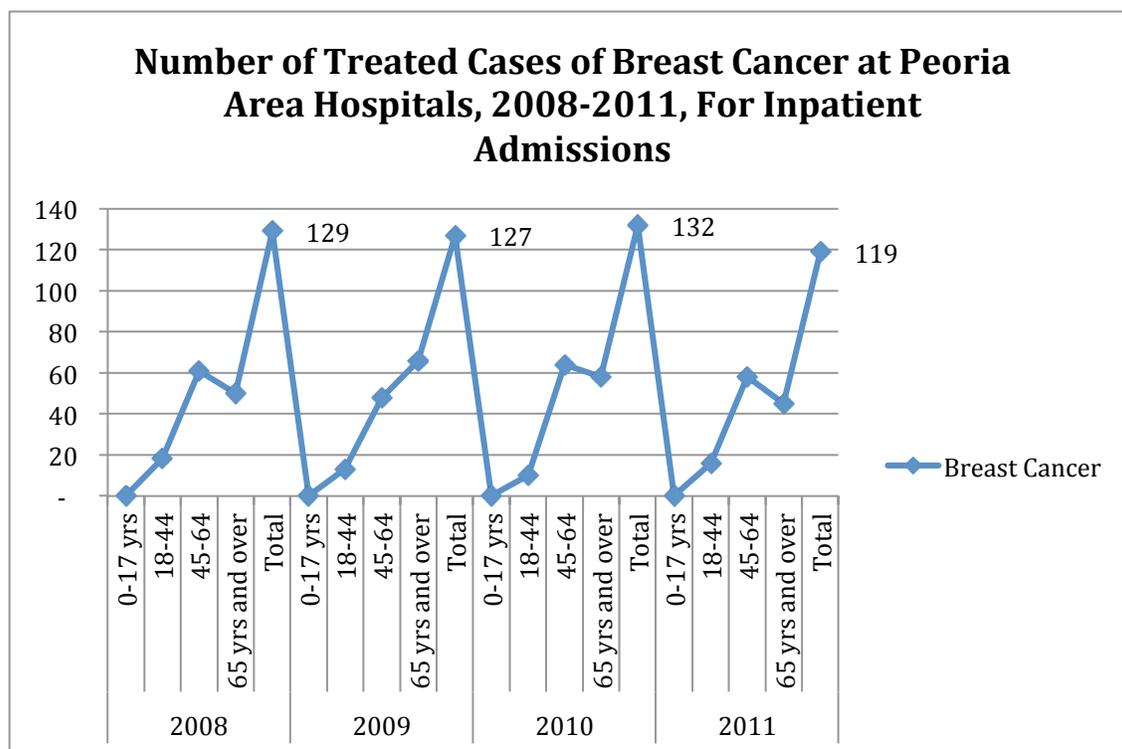
*Source: IL Cancer Care, 2011*

## Tri-County Community Health-Needs Assessment

## 4.4.1 Carcinoma

Cases of breast cancer at the four Peoria-area hospitals have decreased by 7.7% between 2008 and 2011 and rates decreased for each age distribution of the population for inpatient admissions.

**Table 4.4.1-1 Number of Treated Cases of Breast Cancer at Peoria Area Hospitals, 2008-2011, For Inpatient Admissions**

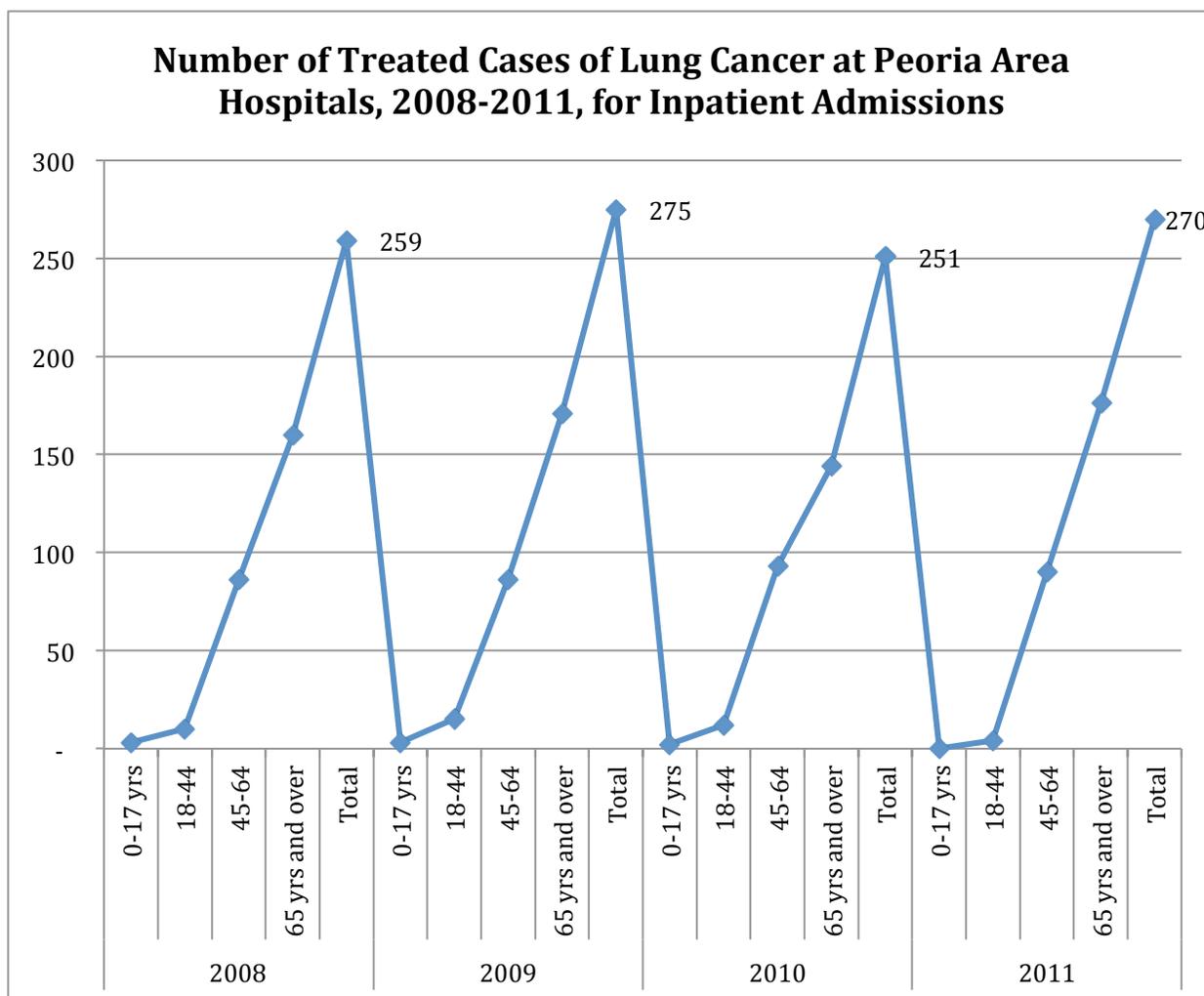


Source: COMPdata 2012

Tri-County Community Health-Needs Assessment

Cases of lung cancer at the four Peoria-area hospitals have increased by 4.2% between 2008 and 2011 for inpatient admissions. The number of cases for individuals aged 65 and over has increased 10% for inpatient admissions.

**Table 4.4.1-2 Number of Treated Cases of Lung Cancer at Peoria Area Hospitals, 2008-2011, For Inpatient Admissions**

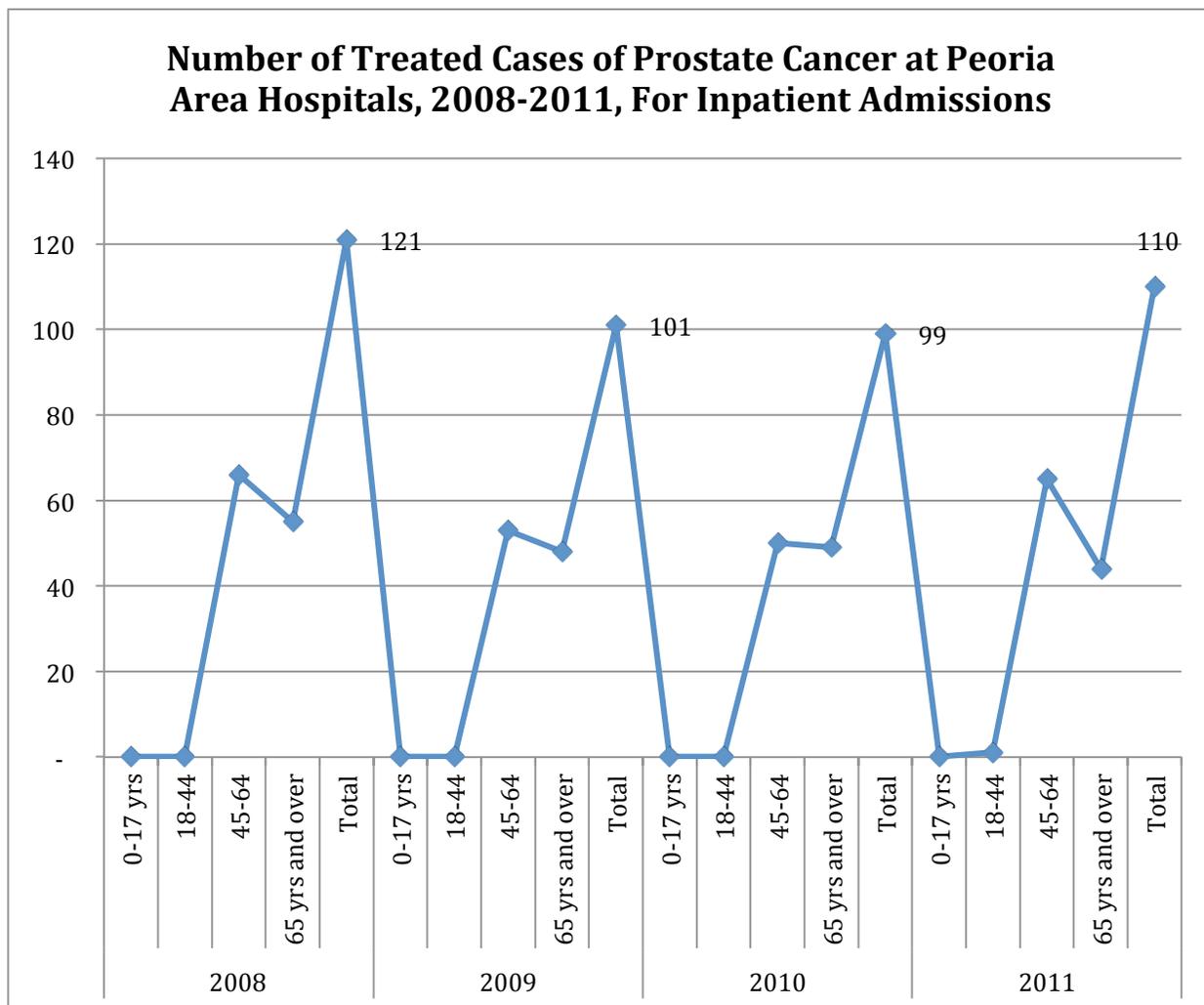


Source: COMPdata 2012

## Tri-County Community Health-Needs Assessment

Cases of prostate cancer at the four Peoria-area hospitals have decreased by 9.0% between 2008 and 2011 for inpatient admissions. The number of cases for individuals aged 65 and over has decreased by 20% for inpatient admissions.

**Table 4.4.1-3 Number of Treated Cases of Prostate Cancer at Peoria Area Hospitals, 2008-2011, For Inpatient Admissions**

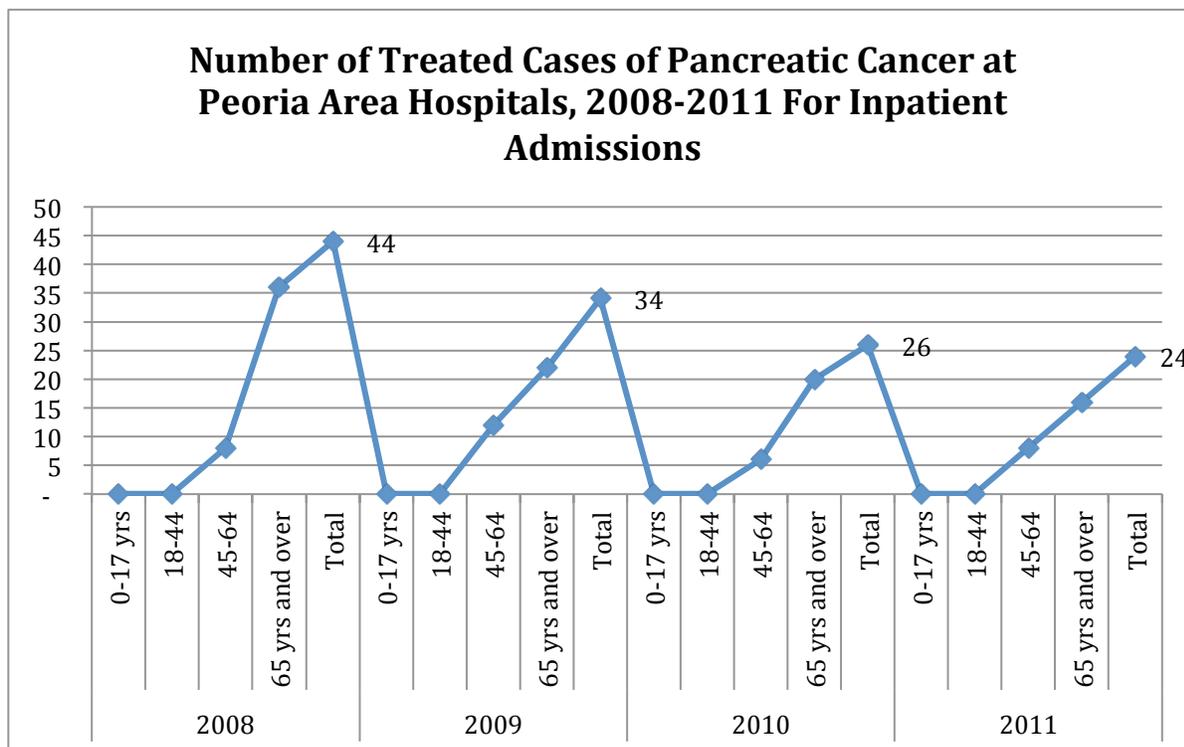


Source: COMPdata 2012

## Tri-County Community Health-Needs Assessment

Cases of pancreatic cancer at the four Peoria-area hospitals have decreased by 45.0% between 2008 and 2011 for inpatient admissions. The number of cases for individuals aged 65 and over has decreased by 55.5% for inpatient admissions.

**Table 4.4.1-4 Number of Treated Cases of Pancreatic Cancer at Peoria Area Hospitals, 2008-2011, For Inpatient Admissions**

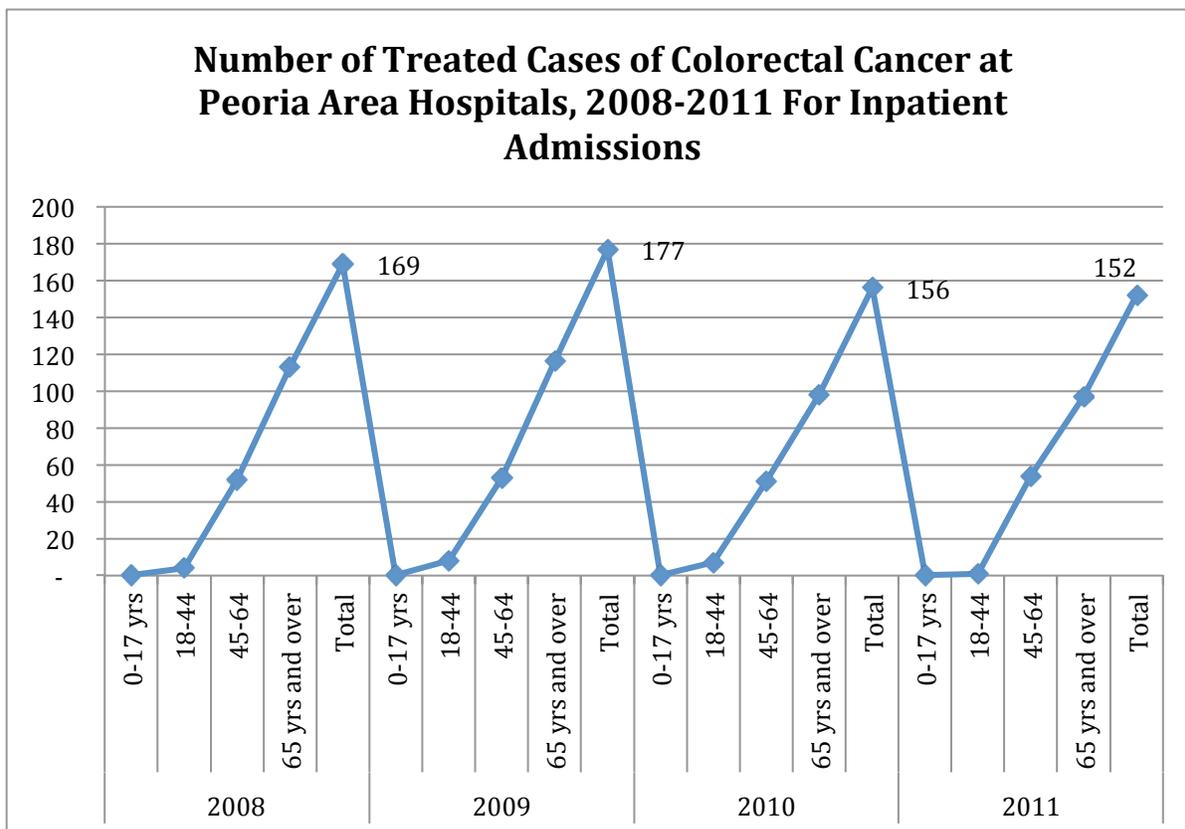


Source: COMPdata 2012

Tri-County Community Health-Needs Assessment

Cases of colorectal cancer at the four Peoria-area hospitals have decreased by 10.0% between 2008 and 2011 for inpatient admissions. The number of cases for individuals aged 65 and over has decreased by 14.1% for inpatient admissions.

**Table 4.4.1-5 Number of Treated Cases of Colorectal Cancer at Peoria Area Hospitals, 2008-2011 For Inpatient Admissions**

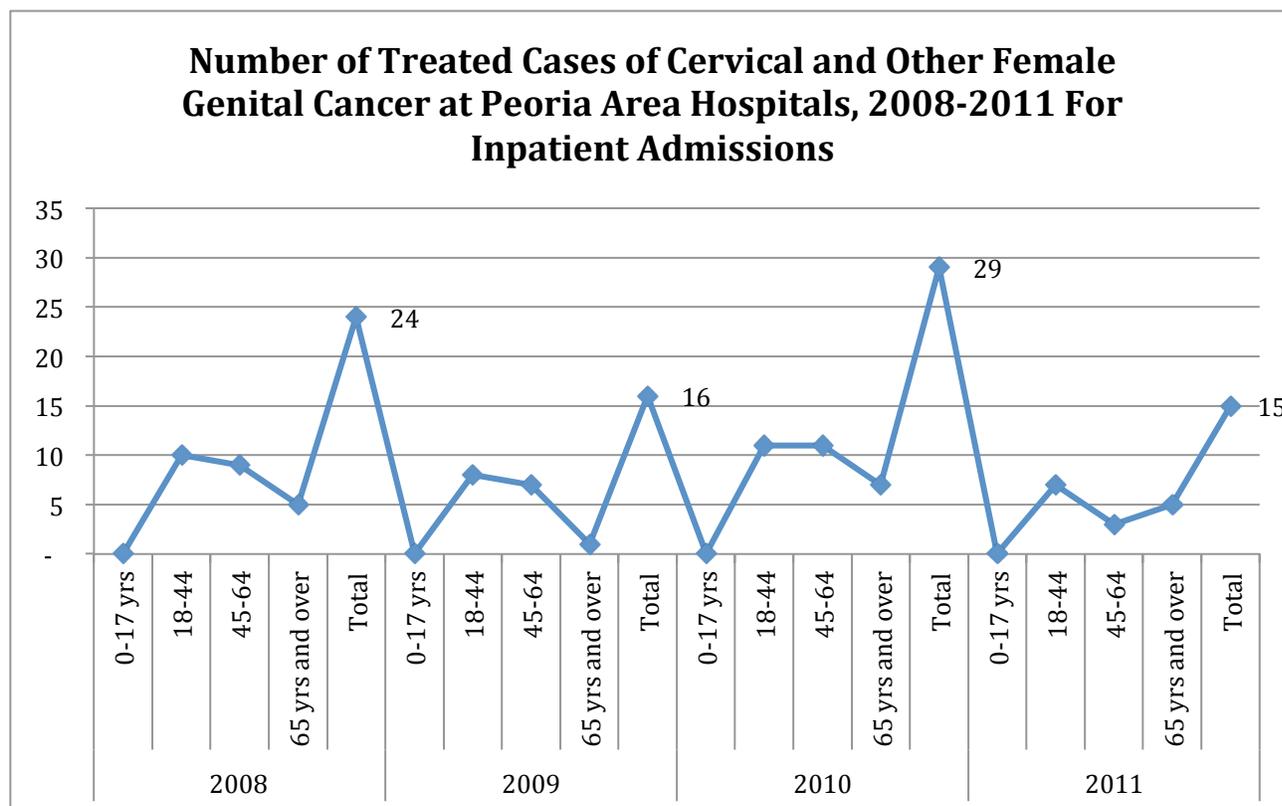


Source: COMPdata 2012

## Tri-County Community Health-Needs Assessment

Cases of cervical and other female genital cancer at the four Peoria-area hospitals have decreased by 37.5% between 2008 and 2011 for inpatient admissions.

**Table 4.4.1-6 Number of Treated Cases of Cervical and Other Female Genital Cancer at Peoria Area Hospitals, 2008-2011 For Inpatient Admissions**



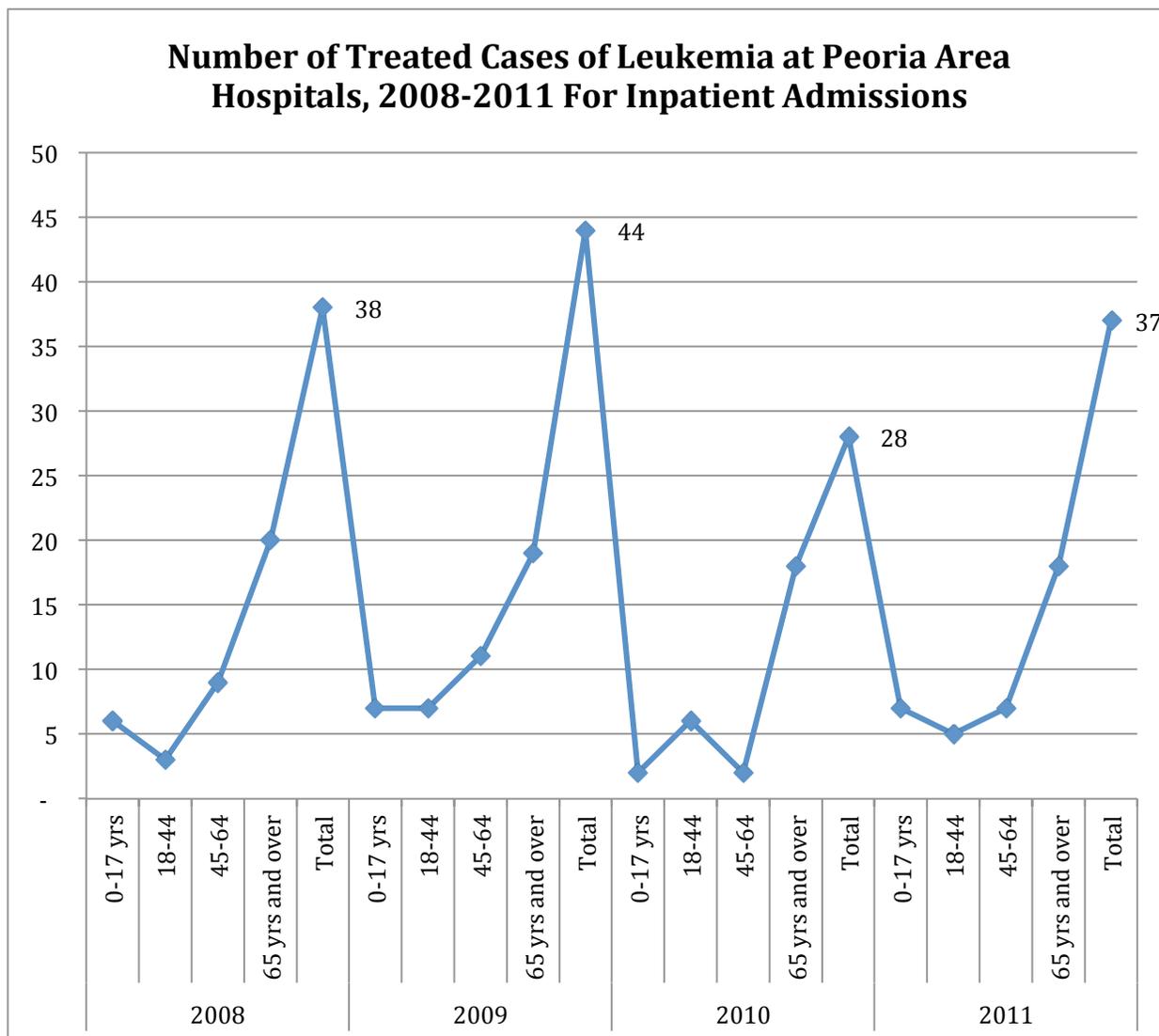
Source: COMPdata 2012

## Tri-County Community Health-Needs Assessment

## 4.4.2 Leukemia

Cases of leukemia at the four Peoria-area hospitals remained relatively constant between 2008 and 2011, netting a decrease of 2.6% in the number of cases treated for inpatient admissions.

**Table 4.4.2-1 Number of Treated Cases of Leukemia at Peoria Area Hospitals, 2008-2011 For Inpatient Admissions**



Source: COMPdata 2012

## Tri-County Community Health-Needs Assessment

**4.5 Type II Diabetes***Importance of the measure:*

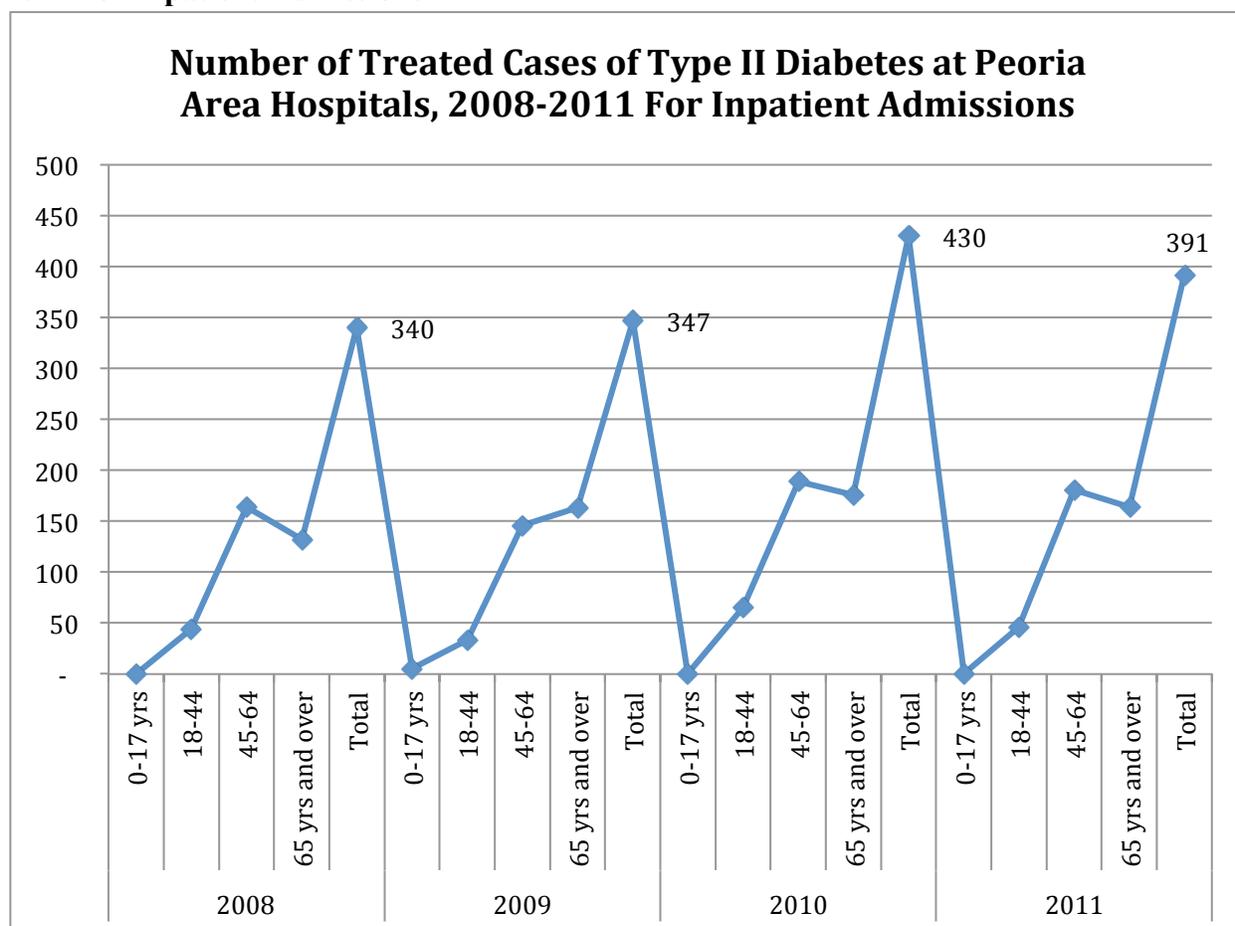
Diabetes is the leading cause of kidney failure, adult blindness and amputations and is a leading contributor to strokes and heart attacks. It is estimated that 90-95% of individuals with diabetes have Type II diabetes (previously known as adult-onset diabetes). Only 10-15% of individuals with diabetes have Type I diabetes (previously known as juvenile diabetes).

Type II Diabetes for inpatient admissions at the Peoria-area hospitals for individuals aged 45-64 increased by 10.3% between 2008-2011. The overall number of treated cases of Type I Diabetes increased by 47.0% for inpatient admissions during the same time period.

Data from the Illinois BRFSS indicate that nearly 10% of Tri-County Region residents have diabetes. Compared to data from the State of Illinois, the prevalence of diabetes is increasing in all three counties and now exceeds the state average.

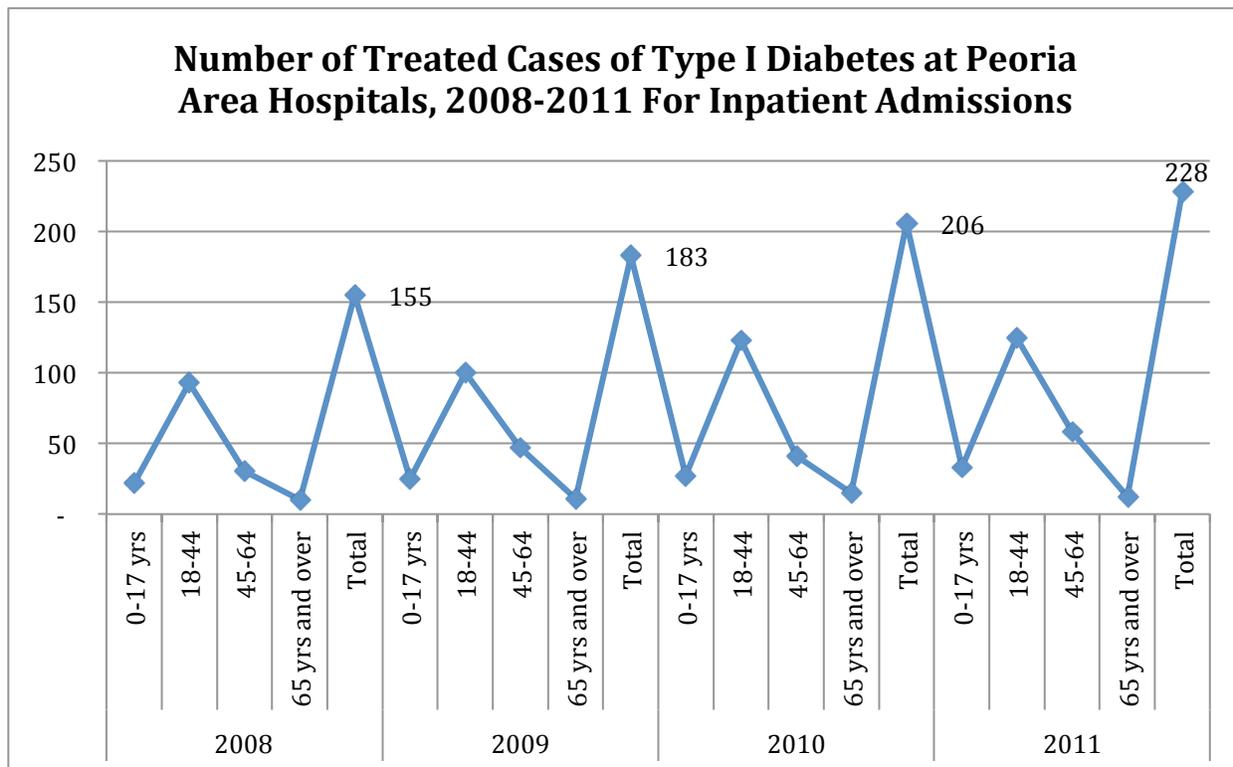
Data also suggests that residents in Peoria and Woodford Counties are lagging behind those in Tazewell County with regard to undertaking blood glucose tests.

**Table 4.5-1 Number of Treated Cases of Type II Diabetes at Peoria Area Hospitals, 2008-2011 For Inpatient Admissions**

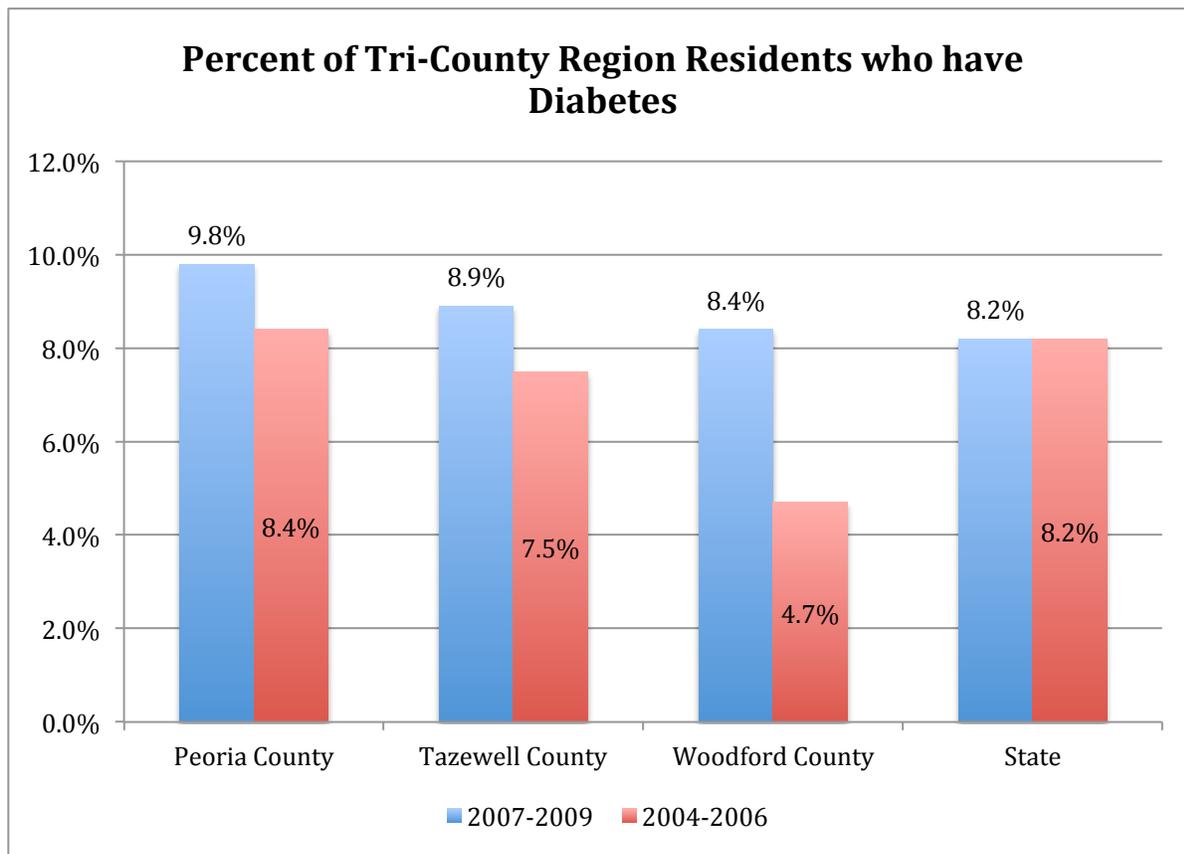


Source: COMPdata 2012

**Table 4.5-2 Number of Treated Cases of Type I Diabetes at Peoria Area Hospitals, 2008-2011 For Inpatient Admissions**

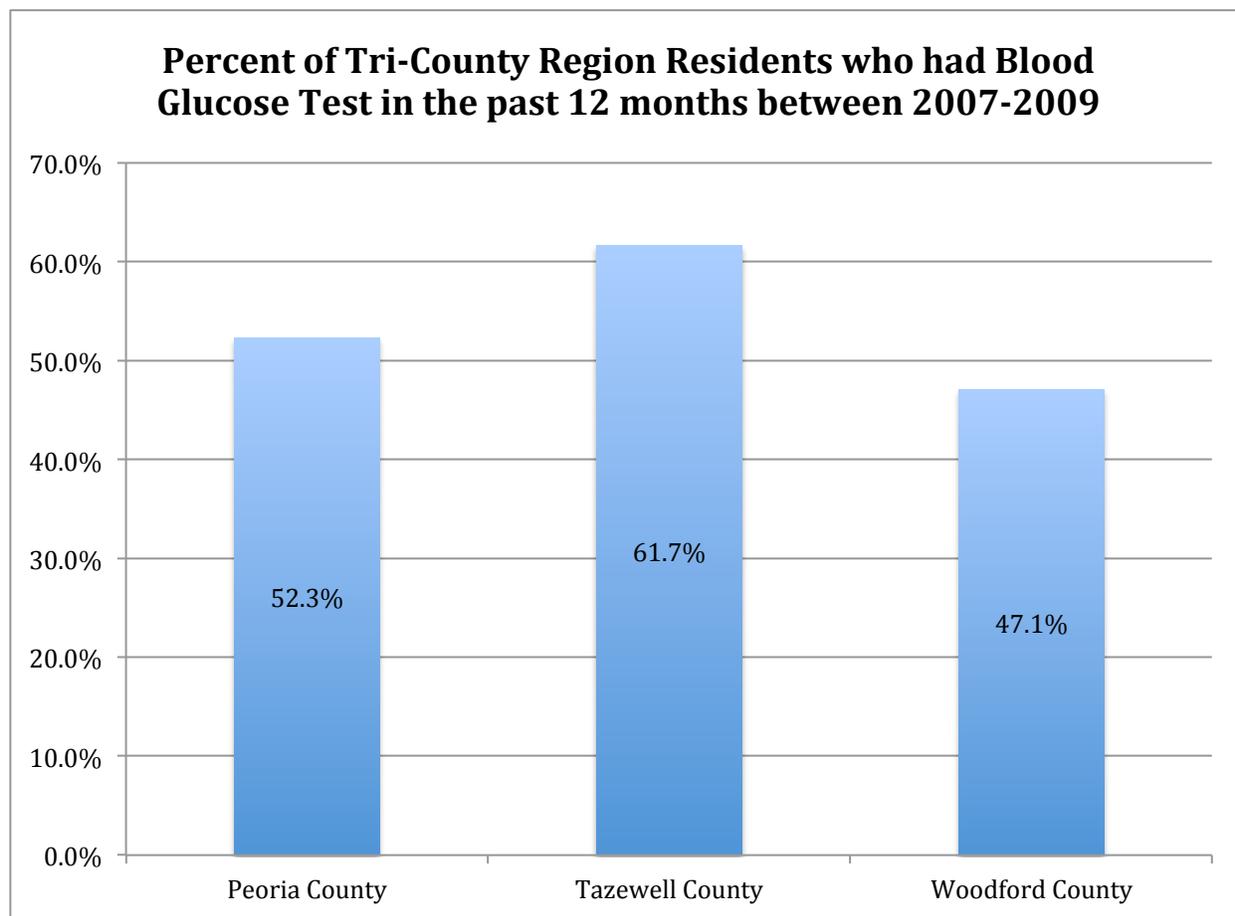


Source: COMPdata 2012

**Table 4.5-3 Percent of Tri-County Region Residents who have Diabetes**

Source: Illinois Department of Public Health

## Tri-County Community Health-Needs Assessment

**Table 4.5-4 Percent of Tri-County Region Residents who had a Blood Glucose Test in the past 12 months between 2007-2009**

*Source: Illinois Department of Public Health*

Tri-County Community Health-Needs Assessment

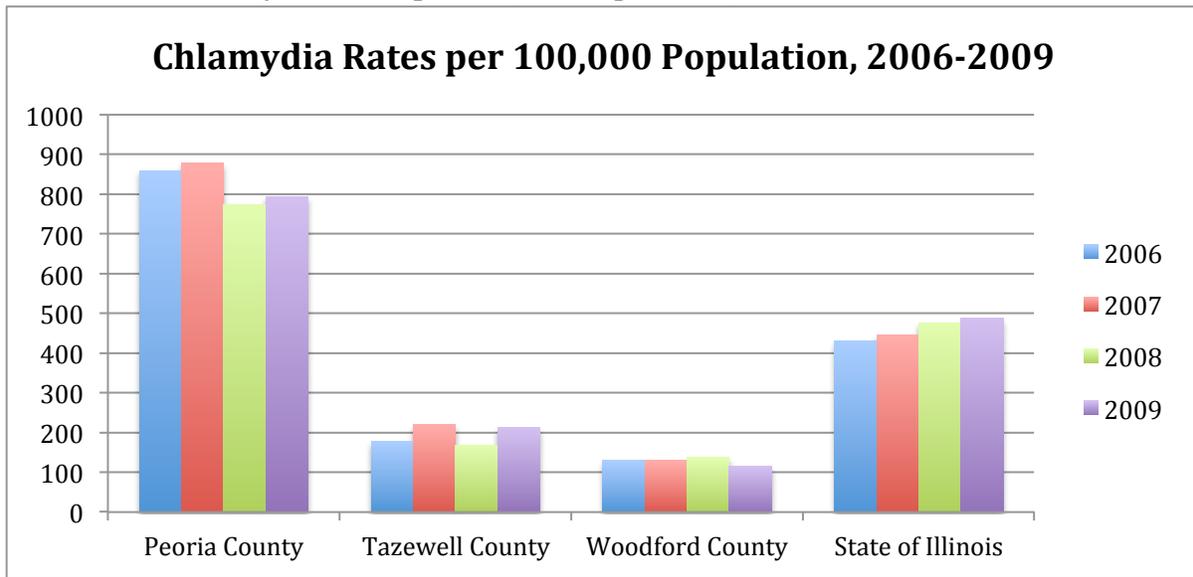
**4.6 Infectious Diseases**

*Importance of the measure:* Infectious diseases, including sexually transmitted infections and hepatitis, are impacted by high-risk sexual behavior, drug and alcohol abuse, limited access to health care, and poverty. It would be highly cost-effective for both individuals and society if more programs focused on prevention rather than treatment of infectious diseases.

**4.6.1 STIs**

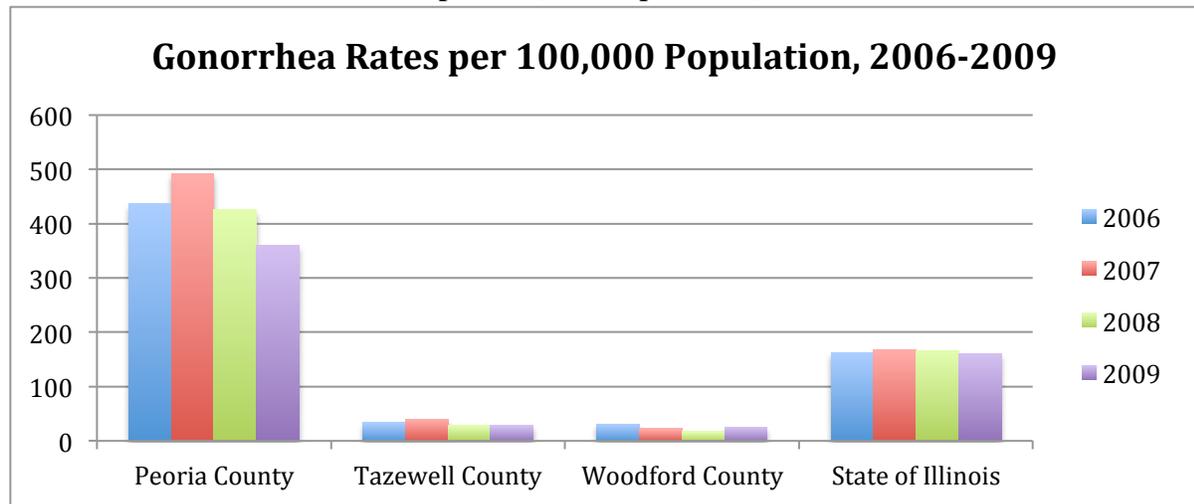
STIs are a real problem in Peoria County. While the rates for both Chlamydia and Gonorrhea seem to have somewhat declined, they are still almost twice and three times higher, respectively, than the state average.

**Table 4.6.1-1 Chlamydia Rates per 100,000 Population, 2006-2009**



Source: Illinois Department of Public Health

**Table 4.6.1-2 Gonorrhea Rates per 100,000 Population, 2006-2009**



Source: Illinois Department of Public Health

## Tri-County Community Health-Needs Assessment

### **4.7 Secondary Case Diagnoses**

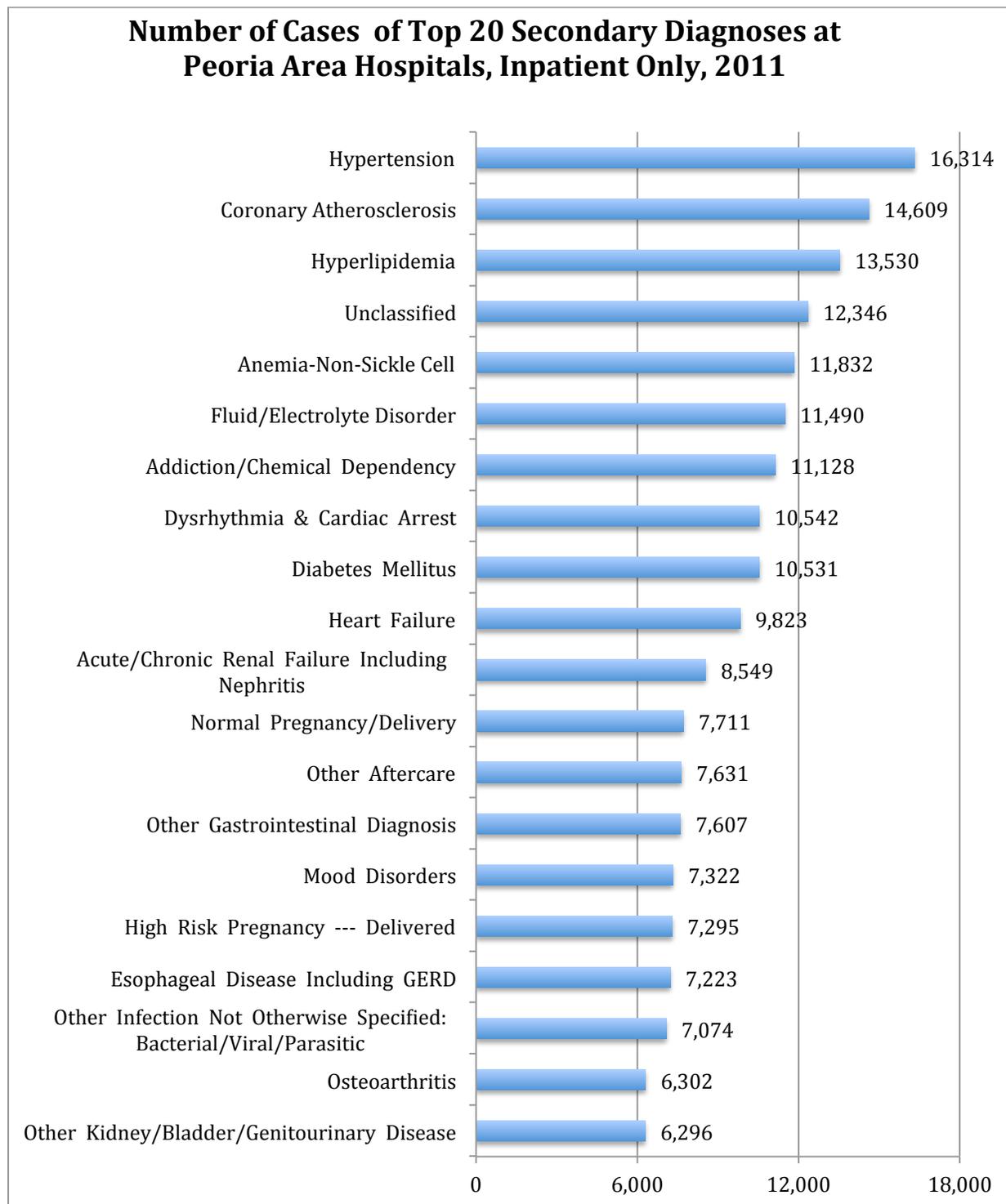
#### *Importance of the measure:*

Secondary case diagnoses are additional conditions diagnosed upon hospital intake. These issues may complicate treatment efforts aimed at alleviating the primary diagnosis and exacerbate health care costs.

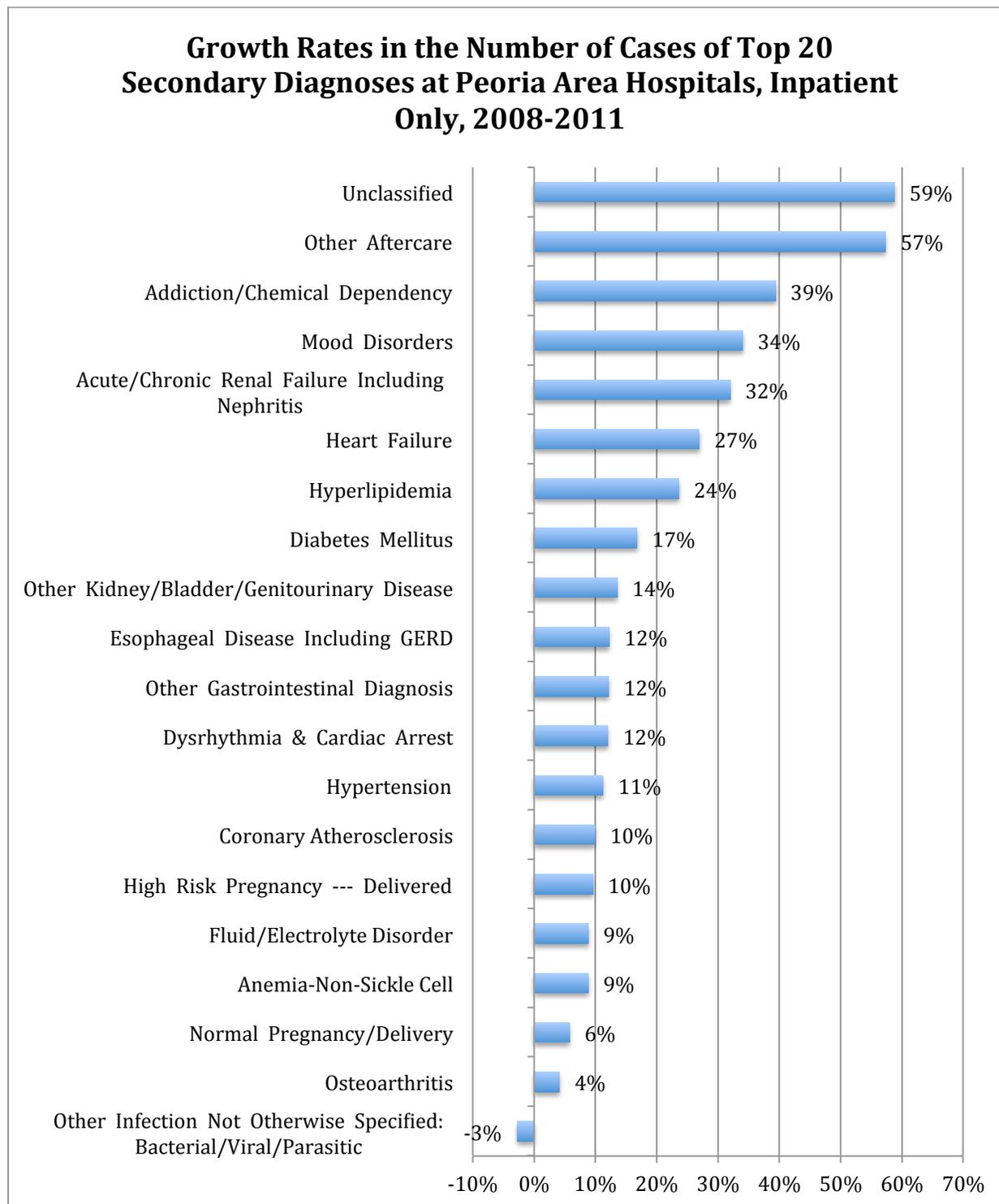
Tables 4.7.1-1 and 4.7.1-2 identify the top 20 secondary diagnoses in the Tri-County Region. While hypertension comprises the largest number of secondary diagnoses (16,314), the 11% three-year growth rate in the number of cases ranks it 13<sup>th</sup> among the top 20 secondary diagnoses.

Between 2008 and 2011, the number of cases categorized as “unclassified” and “other aftercare” increased 59% and 57%, respectively. In addition, “other infections” decreased by 3% in the same time frame.

It should be noted that the same patient may have multiple secondary diagnoses.

**Table 4.7.1-1 Number of Cases of Top 20 Secondary Diagnoses at Peoria Area Hospitals, Inpatient Only, 2011**

Source: COMPdata 2012

**Table 4.7.1-2 Growth Rates in the Number of Cases Top 20 Secondary Diagnoses at Peoria Area Hospitals, Inpatient Only, 2008-2011**

Source: COMPdata 2012

## Tri-County Community Health-Needs Assessment

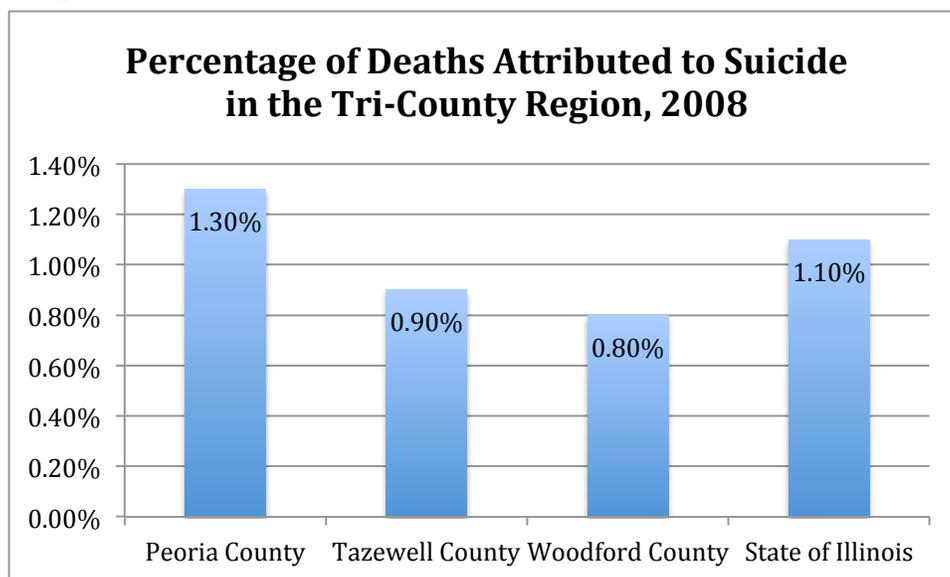
**4.8 Injuries***Importance of the measure:*

Unintentional injuries are injuries that can be classified as accidents resulting from car accidents, falls and unintentional poisonings. In many cases, these types of injuries—and the deaths resulting from them—are preventable. Suicide is intentional self-harm resulting in death. These injuries are often indicative of serious mental health problems requiring the treatment of other trauma-inducing issues.

*4.8.1 Intentional – suicide*

For Tazewell and Woodford Counties in 2008, the percentage of deaths attributed to suicide is less than 1% and less than the State of Illinois average. In Peoria County, the percentage of deaths attributed to suicide was 1.3% and 0.2% greater than the state average.

**Table 4.8.1-1 Percentage of Deaths Attributed to Suicide in the Tri-County Region, 2008**

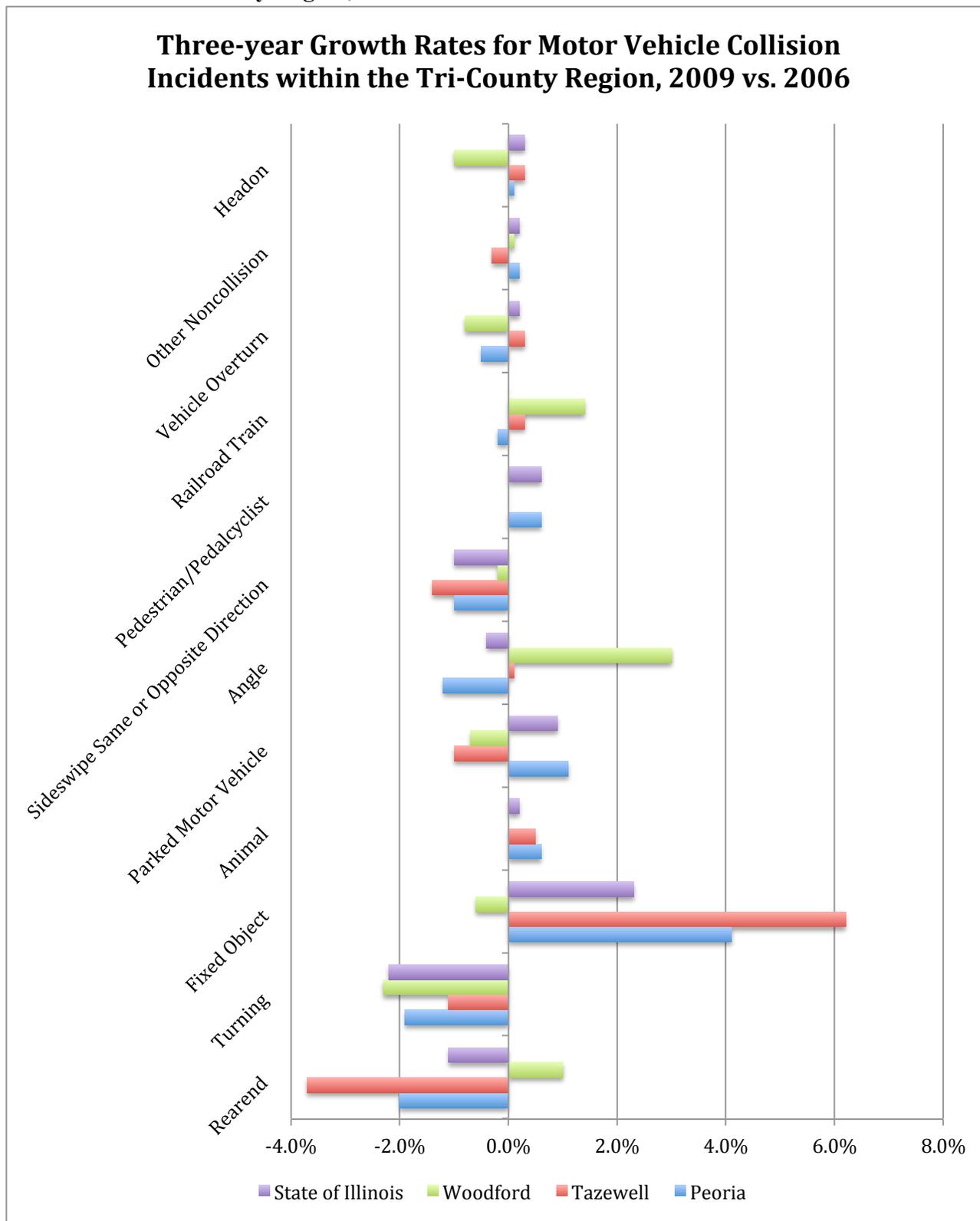


*Source: Illinois Department of Public Health*

*4.8.2 Unintentional – motor vehicle*

Research suggests that car accidents are a leading cause of unintentional injuries. In the Tri-County Region, the three-year growth rate between 2006 and 2009 for several types of motor vehicle collisions exceeds the State of Illinois average including vehicle-train, angle, and rear-end accidents in Woodford County, fixed-object and parked motor vehicle in Peoria County, and fixed-object in Tazewell County.

**Table 4.8.2-1 Three-year Growth Rates for Motor Vehicle Collision Incidents within the Tri-County Region, 2009 vs. 2006**



Source: Illinois Department of Transportation

## Tri-County Community Health-Needs Assessment

### **Diseases/Morbidity: Strategic Implications**

#### ***Emphasize prenatal health and infant care:***

It is essential that infants and children begin life healthy and preferably, at normal birth weights. Research suggests that infants born at low birth weight are at greater risk for life-threatening complications including infections, breathing problems, neurological problems and Sudden Infant Death Syndrome (SIDS).<sup>1</sup> Other studies suggest that low birth weight babies are also at a higher risk for developmental disabilities, such as learning disabilities and attention deficits, than babies with normal birth weights. Cognitive function of low birth weight babies may also be diminished leading to higher rates of sub-average IQ (< 85) than normal birth weight babies.<sup>2</sup>

Regular prenatal care is a vital aspect in producing healthy babies and children. The employment of screening and treatment for medical conditions as well as identification and interventions for behavioral risk factors associated with poor birth outcomes are important aspects of prenatal care. Research suggests that women who receive adequate prenatal care are more likely to have better birth outcomes, such as full term and normal weight babies.<sup>3</sup> Prenatal care can provide health risk assessments for the mother and fetus, early intervention for medical conditions and education to encourage healthy habits, including nutritional and substance-free health during pregnancy. According to a study by The National Public Health and Hospital Institute, cost of care and other financial barriers were cited as reasons expectant mothers did not get adequate prenatal care.<sup>4</sup>

As noted in Tables 4.1.1-1 and 4.1.2-1, despite Kotelchuck Index scores nearing 90%, the percentage of babies born in Peoria County with low birth weight was 1.8% above the State of Illinois average and the percentage of babies born with very low birth weight was 0.5% above the state average for 2009.

#### ***Emphasize the link between blood pressure and cardiovascular diseases:***

Research from the Center for Disease Control estimated that the total cost of cardiovascular diseases in the United States for 2010 was \$444 billion.<sup>5</sup> In essence, one out of every six dollars spent on health care is spent on the diagnosis and treatment of cardiovascular diseases.<sup>6</sup> However, controlling one's blood pressure and decreasing one's intake of cholesterol also reduces the risk of cardiovascular diseases. For example, research from the CDC suggests a "12–13 point reduction in average systolic blood pressure over 4 years can reduce heart disease risk by 21%, stroke risk by 37%, and risk of total cardiovascular death by 25%."<sup>7</sup>

Hypertension and complications from hypertension increased by 31.5% and 26.8% respectively between 2008 and 2011 in the four hospitals in the Tri-County Region. However, cases of hypertension in individuals 65 years of age and older have increased by 65.2% in the same time frame.

While cases of carditis at the four hospitals in the Tri-County Region have decreased by 12.5% between 2008 and 2011, cases in carditis in individuals age 18 to 44 have increased by a staggering 360% during the same time frame. Adults age 18 to 44 are also at higher risk of dysrhythmia and cardiac arrest. While the total number of cases at the four hospitals in the Tri-County Region increased by 10.2% between 2008 and 2011, cases in individuals 18 to 44 years of age increased 61.7% during the same time frame.

Youth age 0-17 are also impacted by cardiovascular disease. With regard to cases of congenital cardiac anomaly at the four hospitals in the Tri-County Region between 2008-2011,

## Tri-County Community Health-Needs Assessment

there has been a 23.4% increase in the number of treated cases; yet, the number of cases for individuals aged 0-17 has increased 53.5%.

### ***Endnotes Chapter 4***

<sup>1</sup> Lucile Packard Children's Hospital at Stanford University, *High-Risk Newborn: Low Birthweight*. Retrieved from <http://www.lpch.org/DiseaseHealthInfo/HealthLibrary/hrnewborn/lbw.html>.

<sup>2</sup> Kessenich, M. (2003). Developmental Outcomes of Premature, Low Birth Weight, and Medically Fragile Infants. *Newborn and Infant Nursing Reviews*, **3, 3, 80-87**.

<sup>3</sup> Kiely, J.L. & Kogan, M.D. (1994). Prenatal Care. In *Public Health Surveillance for Women, Infants, and Children*. Atlanta, GA: U.S. Center for Disease Control

<sup>4</sup> The National Public Health and Hospital Institute. *Barriers to Prenatal Care Study: A Survey of Women Who Deliver at Public Hospitals*, 2003.

<sup>5</sup> U.S. Center for Disease Control and Prevention. *Heart Disease and Stroke Prevention – At A Glance 2011*.

<sup>6</sup> Ibid.

<sup>7</sup> Ibid.

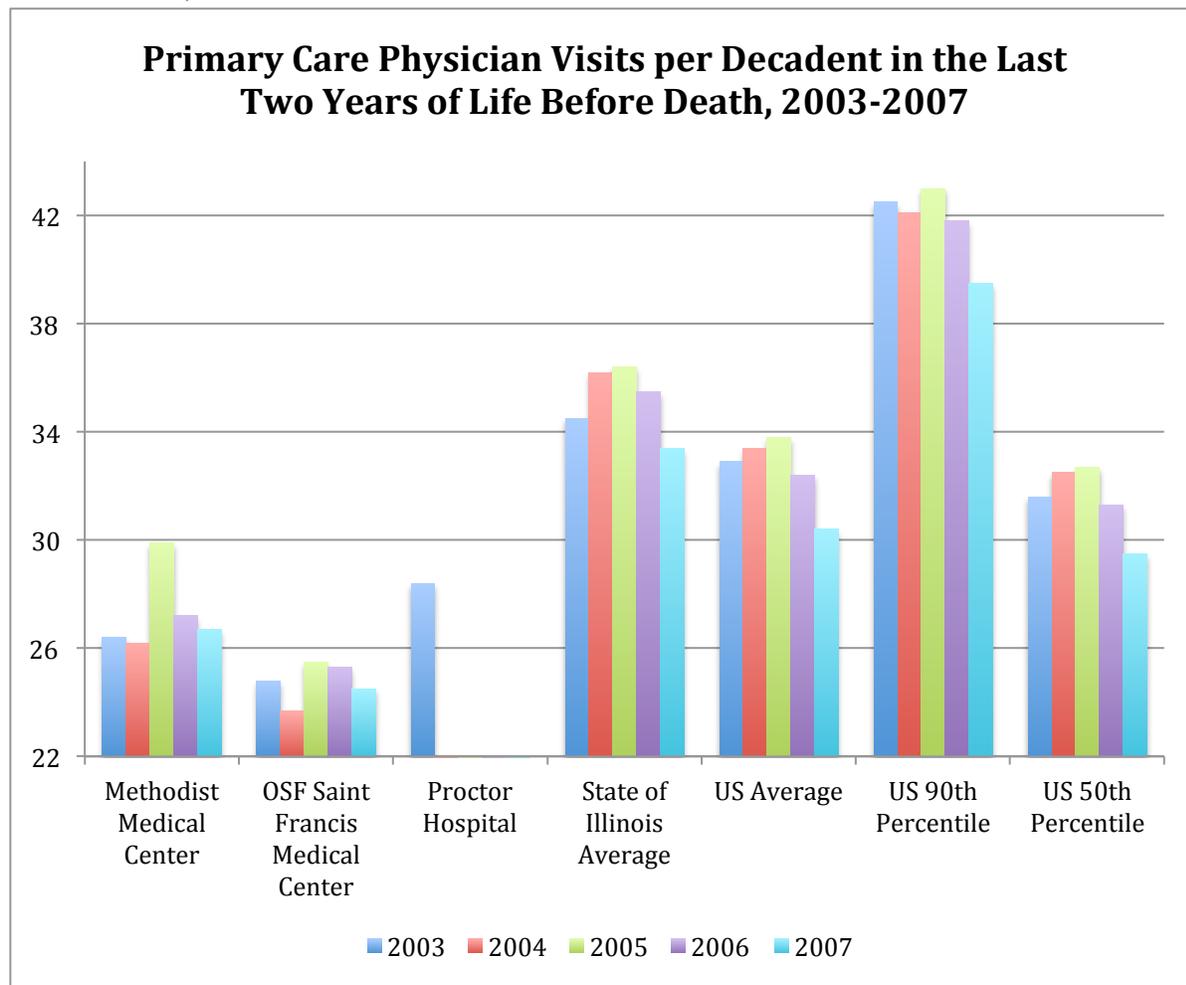
**CHAPTER 5. MORTALITY**

*Importance of the measure:* Presenting data that focuses on diseases provides an opportunity to analyze the ratio of sick individuals to healthy individuals in the Tri-County Region and, in addition, define and quantify what diseases are causing the most death and disability.

The top two leading causes of death in the Tri-County Region, despite being ranked differently, are consistent across Peoria, Tazewell, and Woodford Counties. Malignant Neoplasm and Diseases of the Heart were the two leading causes of death in the Tri-Counties for 2008. Additionally, data from 2006 suggests that cancer and heart disease are the leading causes of death for both African Americans and Caucasians in Peoria County.

<b>Table 5.1-1. Top 5 Leading Causes of Death for all Races by County, 2008</b>				
<b>Rank</b>	<b>Peoria County</b>	<b>Tazewell County</b>	<b>Woodford County</b>	<b>State of Illinois</b>
<b>1</b>	Diseases of Heart (25%)	Malignant Neoplasm (23%)	Diseases of Heart (25%)	Diseases of Heart (25%)
<b>2</b>	Malignant Neoplasm (24%)	Diseases of Heart (21%)	Malignant Neoplasm (17%)	Malignant Neoplasm (23%)
<b>3</b>	Cerebrovascular Disease (6%)	Chronic Lower Respiratory Disease (6%)	Cerebrovascular Disease (7%)	Cerebrovascular Disease (6%)
<b>4</b>	Chronic Lower Respiratory Disease (5%)	Cerebrovascular Disease (6%)	Chronic Lower Respiratory Disease (6%)	Chronic Lower Respiratory Disease (5%)
<b>5</b>	Accidents (4%)	Alzheimer's Disease (6%)	Alzheimer's Disease (6%)	Accidents (4%)

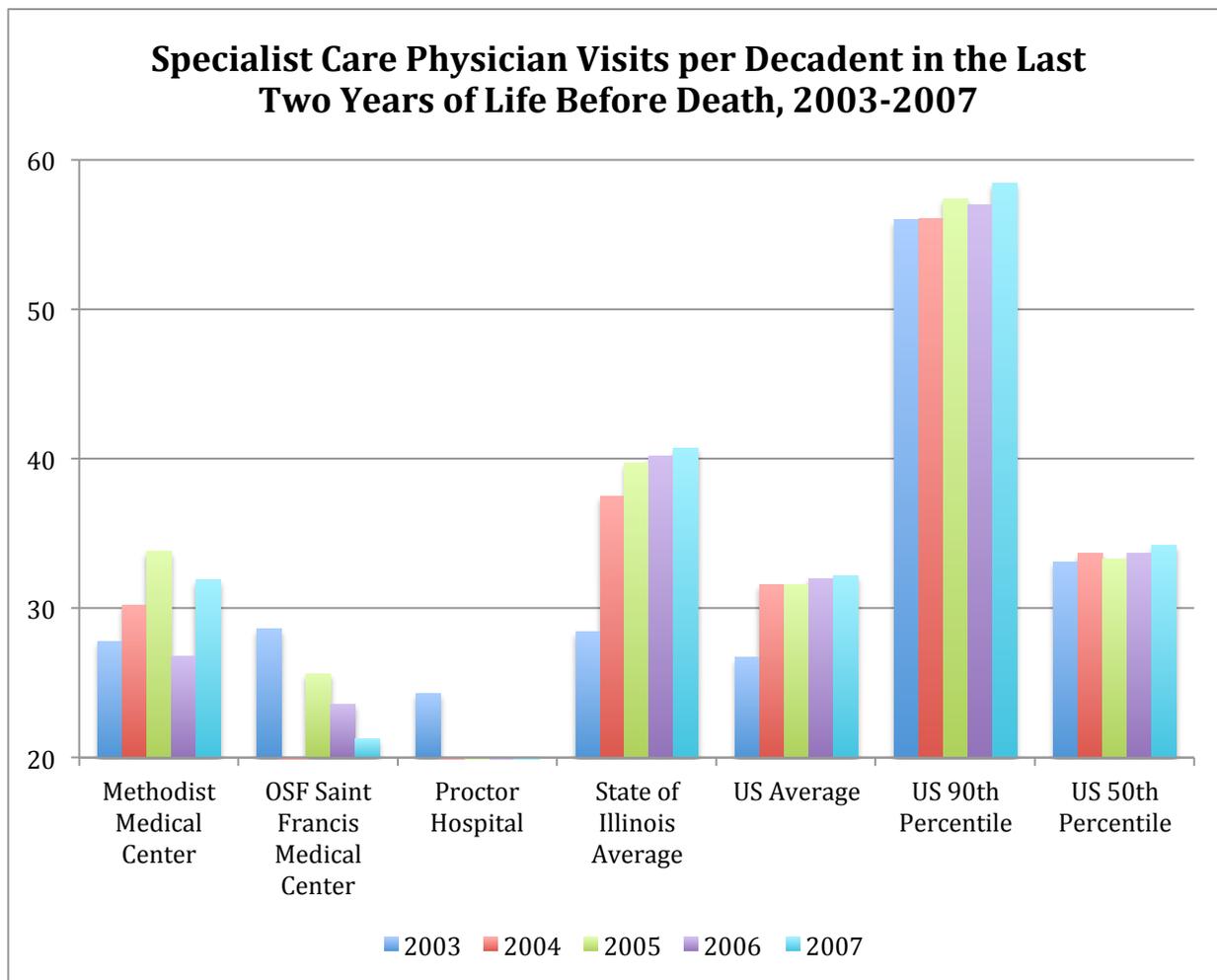
*Source: Illinois Department of Public Health*

**Table 5.1-2 Primary Care Physician Visits per Decedent in the Last Two Years of Life Before Death, 2003-2007**

*Source: Dartmouth Atlas of Health Care*

*Note: No data was available for Pekin Hospital or Proctor Hospital (2004-2007)*

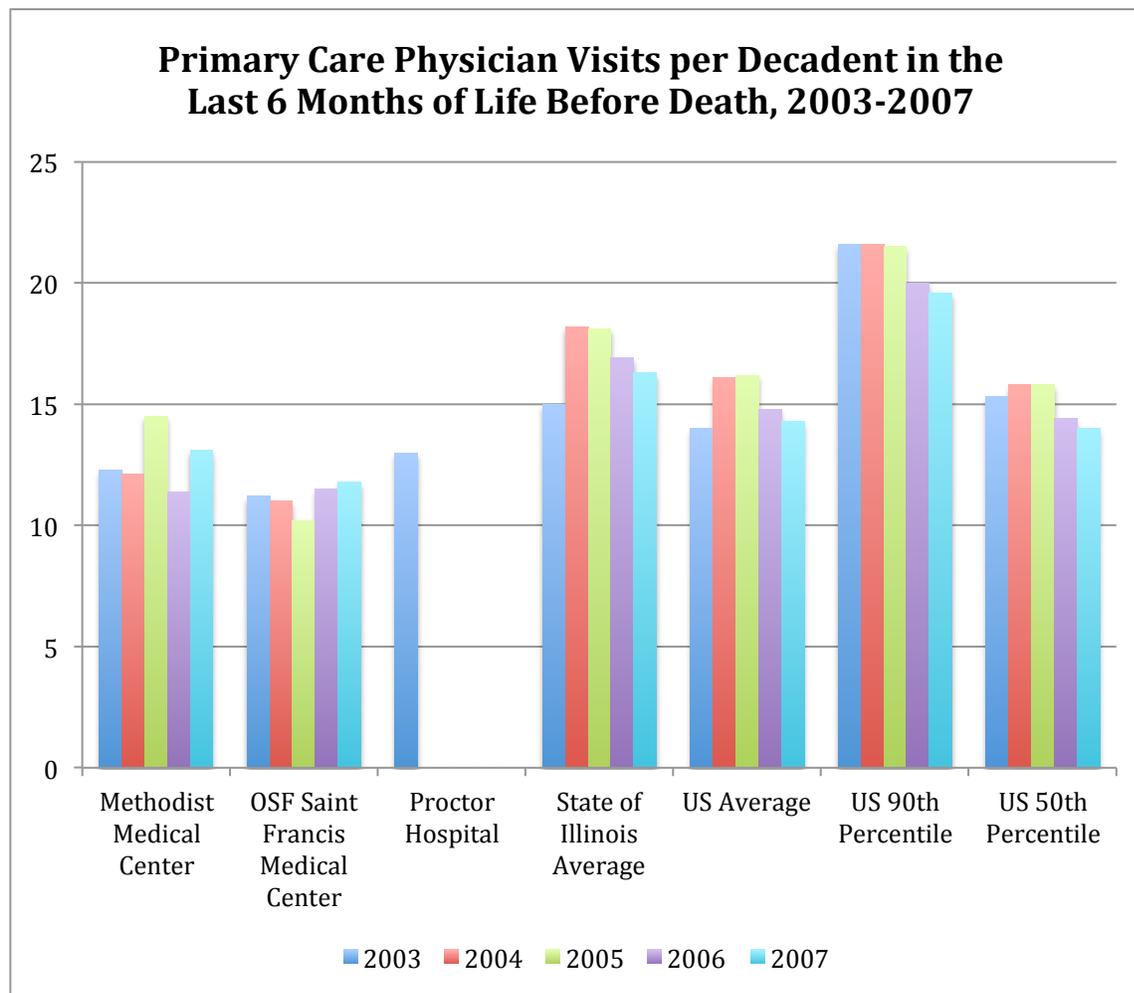
With regard to the number of specialist care physician visits per decedent in the last two years of life prior to death, UnityPoint Health - Methodist and OSF Saint Francis Medical Center rate lower than the State of Illinois average and the US average. In 2007, physicians at UnityPoint Health - Methodist averaged 31.9 visits and physicians at OSF Saint Francis Medical Center averaged 21.3 visits.

**Table 5.1-3 Specialist Care Physician Visits per Decadent in the Last Two Years of Life Before Death, 2003-2007**

Source: Dartmouth Atlas of Health Care

Note: No data was available for Pekin Hospital or Proctor Hospital (2004-2007)

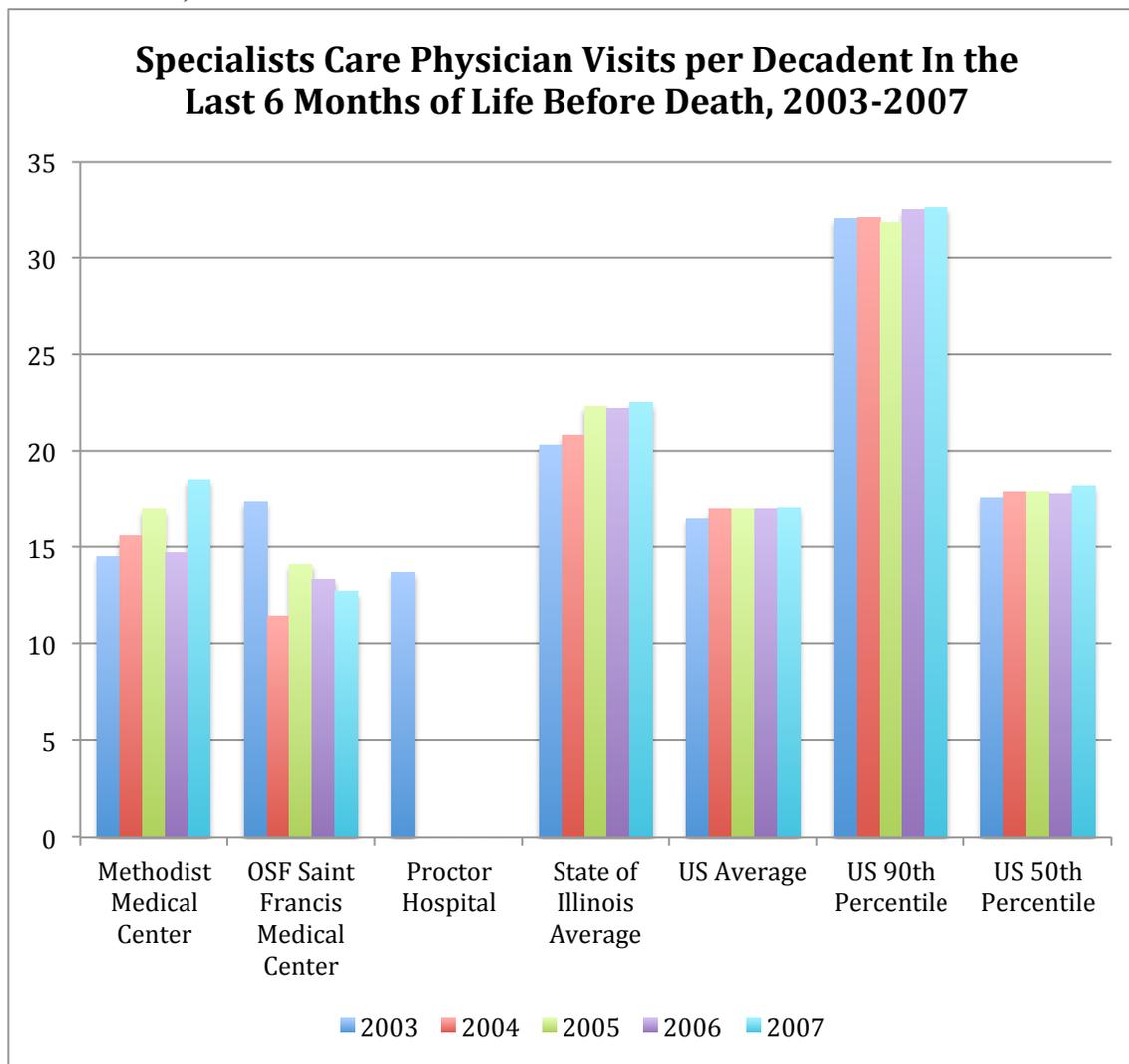
With regard to the number of primary care physician visits per decadent in the last six months of life prior to death, UnityPoint Health - Methodist and OSF Saint Francis Medical Center rate lower than the State of Illinois average and the US average. In 2007, physicians at UnityPoint Health - Methodist averaged 13.1 visits and physicians at OSF Saint Francis Medical Center averaged 11.8 visits.

**Table 5.1-4 Primary Care Physician Visits per Decadent in the Last 6 Months of Life Before Death, 2003-2007**

*Source: Dartmouth Atlas of Health Care*

*Note: No data was available for Pekin Hospital or Proctor Hospital (2004-2007)*

With regard to the number of specialist care physician visits per decedent in the last six months of life prior to death, UnityPoint Health - Methodist and OSF Saint Francis Medical Center rate lower than the State of Illinois average. In 2007, physicians at UnityPoint Health - Methodist averaged 18.5 visits and physicians at OSF Saint Francis Medical Center averaged 12.7 visits.

**Table 5.1-5 Specialists Care Physician Visits per Decedent in the Last 6 Months of Life Before Death, 2003-2007**

*Source: Dartmouth Atlas of Health Care*

*Note: No data was available for Pekin Hospital or Proctor Hospital (2004-2007)*

## **Mortality: Strategic Implications**

### ***Minimize unnecessary medical interventions to decrease mortality rates:***

Three decades of research suggests that more care for patients is associated with higher mortality.<sup>1</sup> This paradox is best explained by the fact that all medical procedures possess risk and by increasing the number of interventions a patient receives, the more risk incurred by the patient. More risk increases the chances of errors and additional physicians becoming involved to treat the patient. The Institute of Medicine contends that this fragmentary nature of the US health care delivery system is one of the major drivers of poor quality and higher costs.<sup>2</sup>

Poor quality disproportionately impacts those with chronic illnesses. Statistically, an estimated 90 million Americans live with at least one chronic illness, 70% of Americans die from chronic disease, and 90% of deaths among the Medicare population are attributed to just nine chronic illnesses: congestive heart failure, chronic lung disease, cancer, coronary artery disease, renal failure, peripheral vascular disease, diabetes, chronic liver disease, and dementia.<sup>3</sup>

The costs to treat chronic diseases are staggering, as inefficiencies drive up the cost of care. Patients with chronic conditions are often treated by primary care providers in addition to specialists. In most cases, little is done to coordinate treatments. Over time, as the chronic condition becomes more debilitating, patients require more care and the cost of care increases. According to the Dartmouth Institute for Health Policy and Clinical Practice, patients with chronic illnesses in their last two years of life account for nearly 32% of total Medicare spending.<sup>4</sup> Furthermore, overtreatment in the U.S. wastes an estimated 20 to 30 cents on every health care dollar spent.<sup>5</sup>

As noted in Tables 5.1-2 to 5.1-5, UnityPoint Health - Methodist and OSF Saint Francis Medical Center rate lower than the State of Illinois average with regard to the number of primary physician and specialist physician patient visits in the last two years and six months of life.

### ***Address the diverse needs of underserved populations:***

Research suggests individuals of color are at greater risk to be afflicted with violent crime, perinatal conditions, and chronic diseases. The U.S. Bureau of Justice notes that a racial divide impacts the prevalence of individuals being stricken by violent crime. In 2005, national homicide rates for African Americans were six times higher than the rates for whites.<sup>6</sup> Adverse perinatal conditions include poor maternal health and nutrition, inadequate care during pregnancy and childbirth, and problems relating to premature births.

With regard to chronic diseases including heart disease and cancer, the U.S. Department of Health and Human Services' Office of Minority Health suggests African Americans are 30% less likely to be diagnosed with heart disease than Whites, but are more likely to die from it. Furthermore, African Americans are 1.5 times more likely than Whites to have high blood pressure and African American women are 1.7 times more likely to be obese.<sup>7</sup>

The incidence of strokes disproportionately impacts African Americans, as they are 70% more prone to having a stroke than Whites. With mortality rates, Black men are 60% more likely to die from a stroke. For stroke survivors, African Americans are more often disabled than Whites.<sup>8</sup>

For cancer, Black men are 30% more likely than Whites to have new cases of prostate cancer and are twice as likely to be diagnosed with stomach cancer. The 5-year survival rates for African Americans are lower for lung and pancreatic cancer, and they are 2.4 times as likely to

## Tri-County Community Health-Needs Assessment

die from prostate cancer. Black women are 10% less likely to be diagnosed with breast cancer than Whites, but they are 34% more likely to die from it. Black women are twice as likely to be diagnosed with stomach cancer and are 2.4 times more likely to die.<sup>9</sup>

Data from 2006 indicate the top three leading causes of death for African Americans are malignant neoplasm (cancer), heart disease, and coronary heart disease. In addition, homicide ranked in 2006 as the sixth leading cause of death for African Americans in Peoria County and perinatal conditions ranked as ninth. It is important to note that homicide and perinatal conditions were not ranked among the top 10 leading causes of death for Caucasians in Peoria County. These data illuminate a larger national problem that is significant in the Tri-County Region.

### ***Endnotes for Chapter 5***

<sup>1</sup> The Dartmouth Institute for Health Policy and Clinical Practice. (2008). *Tracking the Care of Patients with Severe Chronic Illness*.

<sup>2</sup> Institute of Medicine. (2001). *Crossing the Quality Chasm: A New Health System for the 21<sup>st</sup> Century*.

<sup>3</sup> The Dartmouth Institute for Health Policy and Clinical Practice. (2008). *Tracking the Care of Patients with Severe Chronic Illness*.

<sup>4</sup> Ibid.

<sup>5</sup> Skinner, J.S., Fisher, E.S., & Wennberg, J.E. (2005). The Efficiency of Medicare. In D. Wise (ed.) *Analyses in the Economics of Aging*. Chicago: University of Chicago Press and NBER.

<sup>6</sup> U.S. Bureau of Justice Statistics, *Homicide Trends in the U.S.* Retrieved from <http://bjs.ojp.usdoj.gov/content/homicide/race.cfm>

<sup>7</sup> U.S. Department of Health and Human Services' Office of Minority Health.

<sup>8</sup> Ibid.

<sup>9</sup> Ibid.

**PHASE II – PRIMARY DATA RESEARCH FOR COMMUNITY HEALTH NEEDS**

To meet requirements of section 501(r)(3) of Schedule H Form 990, "...a community health needs assessment must take into account input from persons who represent the broad interests of the community served by the hospital(s), including those with special knowledge of or expertise in public health ...". Moreover, for strategic planning purposes of each hospital, perceptions of various stakeholder groups can provide important insights into perceptions of the community regarding general health-care effectiveness.

Numerous opportunities may exist that are related to impacting community health benefits, but are not published in secondary research sources. Rather they are discovered through unbiased data collection, rigorous statistical modeling and analyses, and simple, common-sense interpretations and conclusions. Through this type of research, the health-care community can expect to identify areas for self-improvement, opportunities for addressing community needs and underlying perceptions of how demographics impact the community's perceptions and effectiveness.

Phase II research consists of providing structure, information, documentation and practical interpretation of data. Five specific objectives are accomplished in the primary research:

- Create a statistically valid research instrument to collect necessary information;
- Collect data using a partnership process (rather than respondent mentality);
- Assess perceptions of current/potential community issues;
- Segment markets based on key demographics;
- Draw conclusions and discuss potential future directions to improve the health of the community.

In Phase II of the community health needs assessment, there are four chapters that assess different aspects of the general community as well as specific health-related issues for the at-risk population. The chapters are as follows:

**CHAPTER 6. GENERAL CHARACTERISTICS OF RESPONDENTS****CHAPTER 7. FINDINGS AND RESULTS COMMUNITY PERCEPTIONS****CHAPTER 8. ACCESSIBILITY TO HEALTH CARE****CHAPTER 9. HEALTH-RELATED BEHAVIORS**

### CHAPTER 6. GENERAL CHARACTERISTICS OF RESPONDENTS

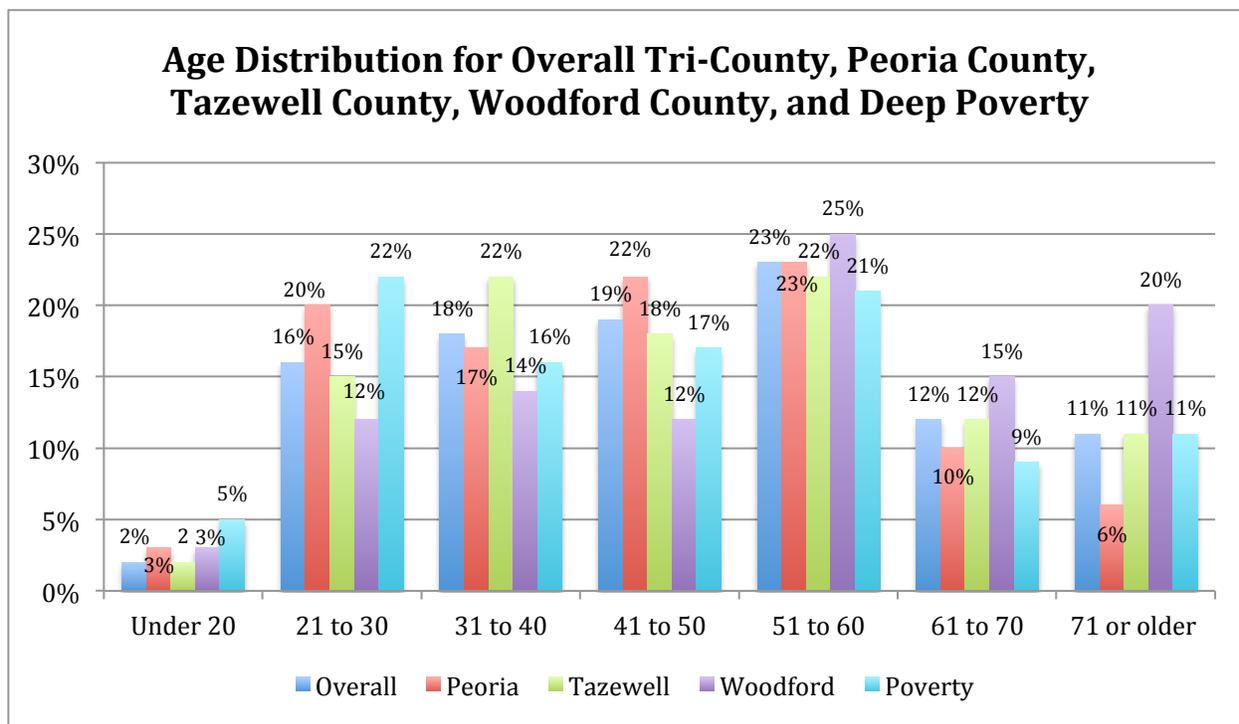
As mentioned in the Methods section of this study, data were collected via on-line surveys, paper surveys and personal interviews. In this chapter, the characteristics of the sample are presented. A total of 1,647 surveys/interviews were completed. All data includes the entire sample, except where specifically noted.

Note that for most characteristics in this chapter, data are analyzed for: (1) the overall sample; (2) by each county as presented in the Definition of the Community; and (3) by the at risk population. According to the CDC, at risk populations are characterized by economic disadvantage. Specifically, according to the CDC *Public Health Workbook*, at risk populations are defined as those individuals living in deep poverty, which for this study is operationalized as those with a household income of less than \$20,000. Note that 644 respondents were in this income category.

#### 6.1 Age

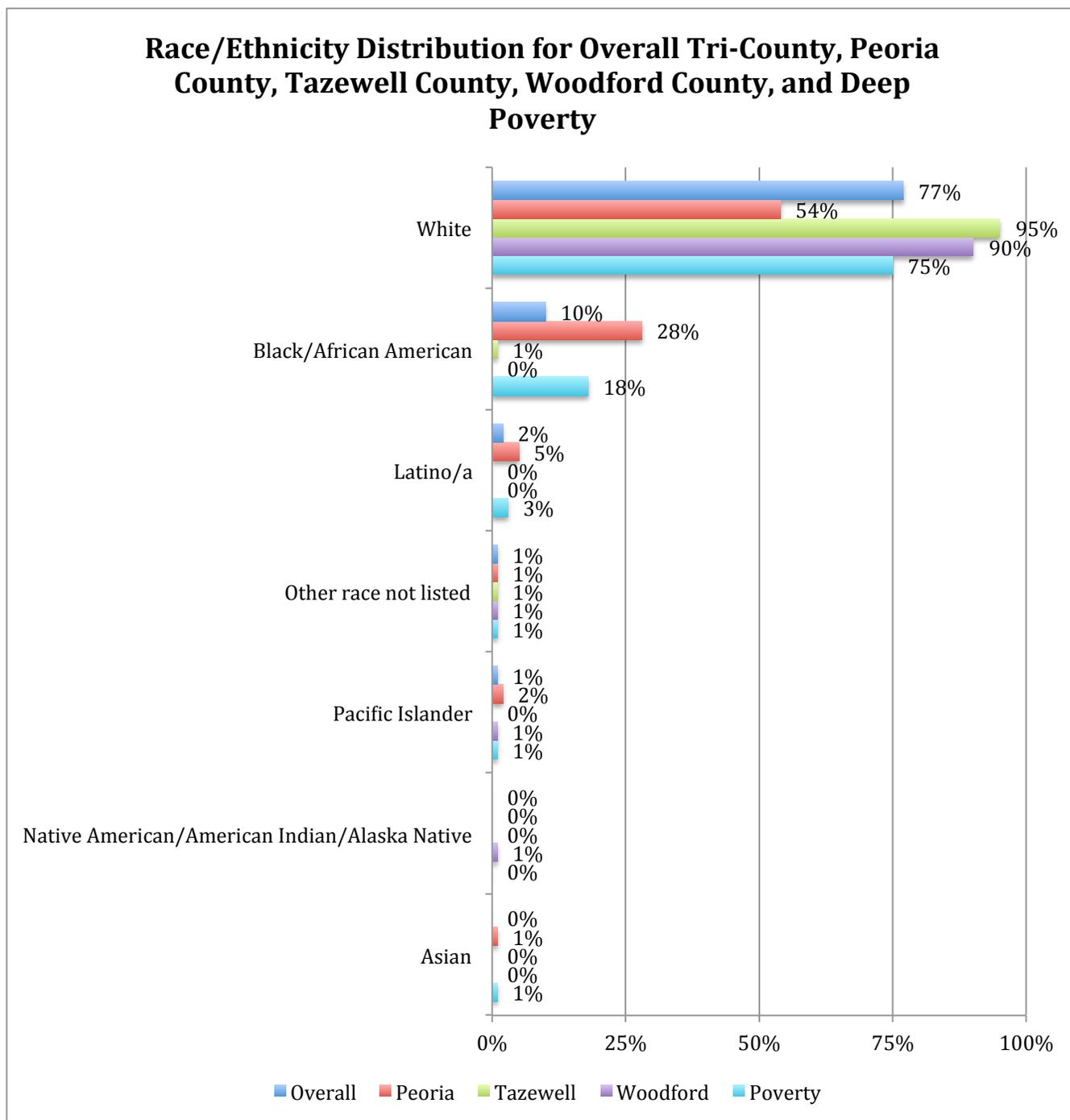
The average age of respondents was 42.23 years old. The distribution is reflective of the 2010 Census data, however, the mean age of surveyed respondents is slightly older, compared to the Census average age of 38.7 years old. This occurred because survey respondents were all adults, age 18 and above. Note that Woodford County was slightly skewed with 60% of respondents over the age of 50. Peoria and Tazewell counties reflected the distribution according to Census data.

**Table 6.1 Age Distribution for Overall Tri-County, Peoria County, Tazewell County, Woodford County, and Deep Poverty**



6.2 Race and Ethnicity

**Table 6.2 Race/Ethnicity Distribution for Overall Tri-County, Peoria County, Tazewell County, Woodford County, and Deep Poverty**



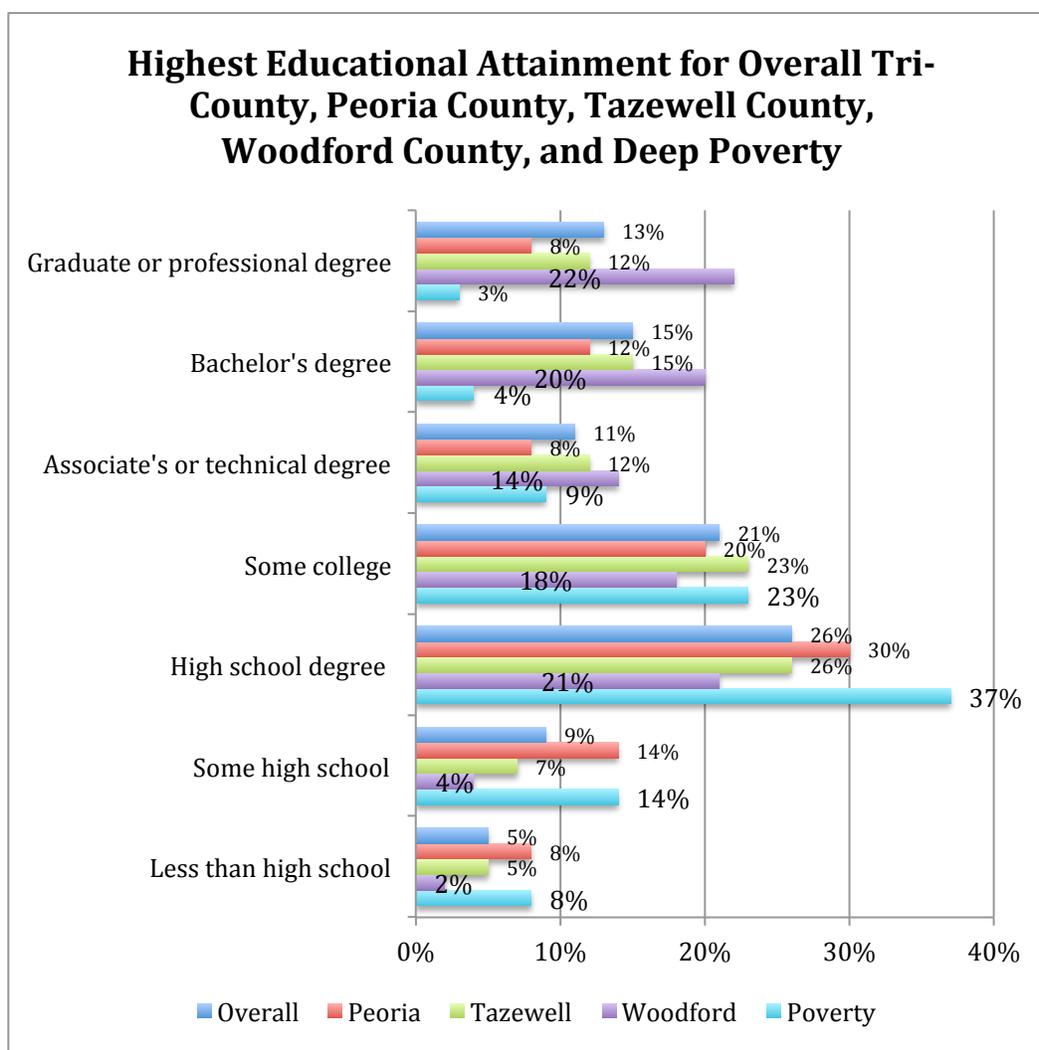
Tri-County Community Health-Needs Assessment

Overall demographics for race/ethnicity mirrored the secondary data assessed in Phase I. Comparing to Census data, the survey respondents, White (77%), Black (10%) and Latino/a residents (2%) were relatively close to one another. However, note that the Black population in Peoria at 28% is slightly higher compared to Census data. This is a result of the focus on the at risk population.

**6.3 Educational Attainment**

Level of education for survey respondents was similar to Census data, however, Woodford County was slightly skewed as 37% of the population had a bachelor’s degree or higher. Note that on 22% of those living in poverty have not completed high school.

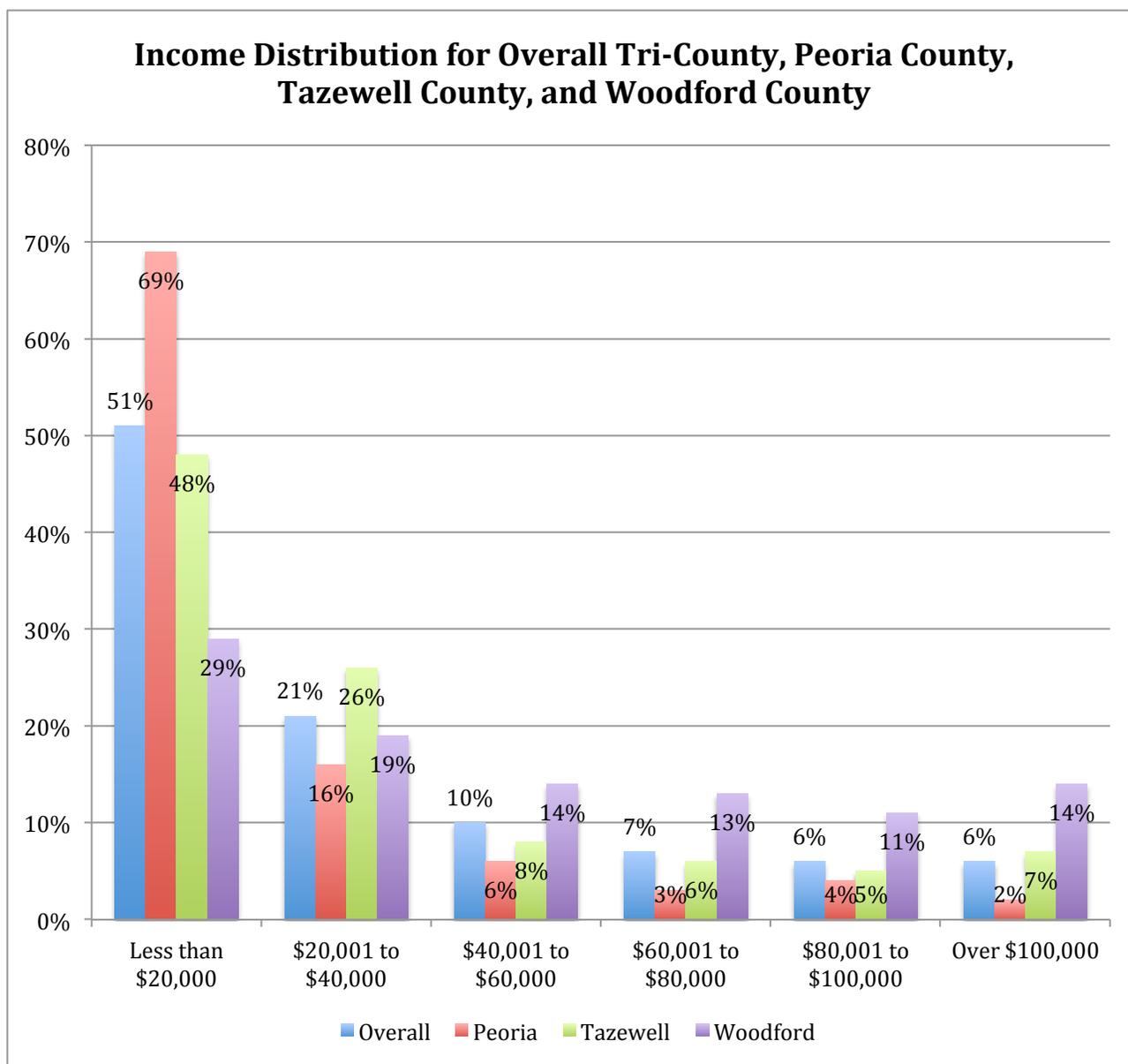
**Table 6.3 Highest Educational Attainment for Overall Tri-County, Peoria County, Tazewell County, Woodford County, and Deep Poverty**



**6.4 Income Distribution**

Note that income distribution for survey respondents is skewed low, as 51% of the overall sample had an income level of less than \$20,000. This is a result of the targeted efforts to survey the at-risk population.

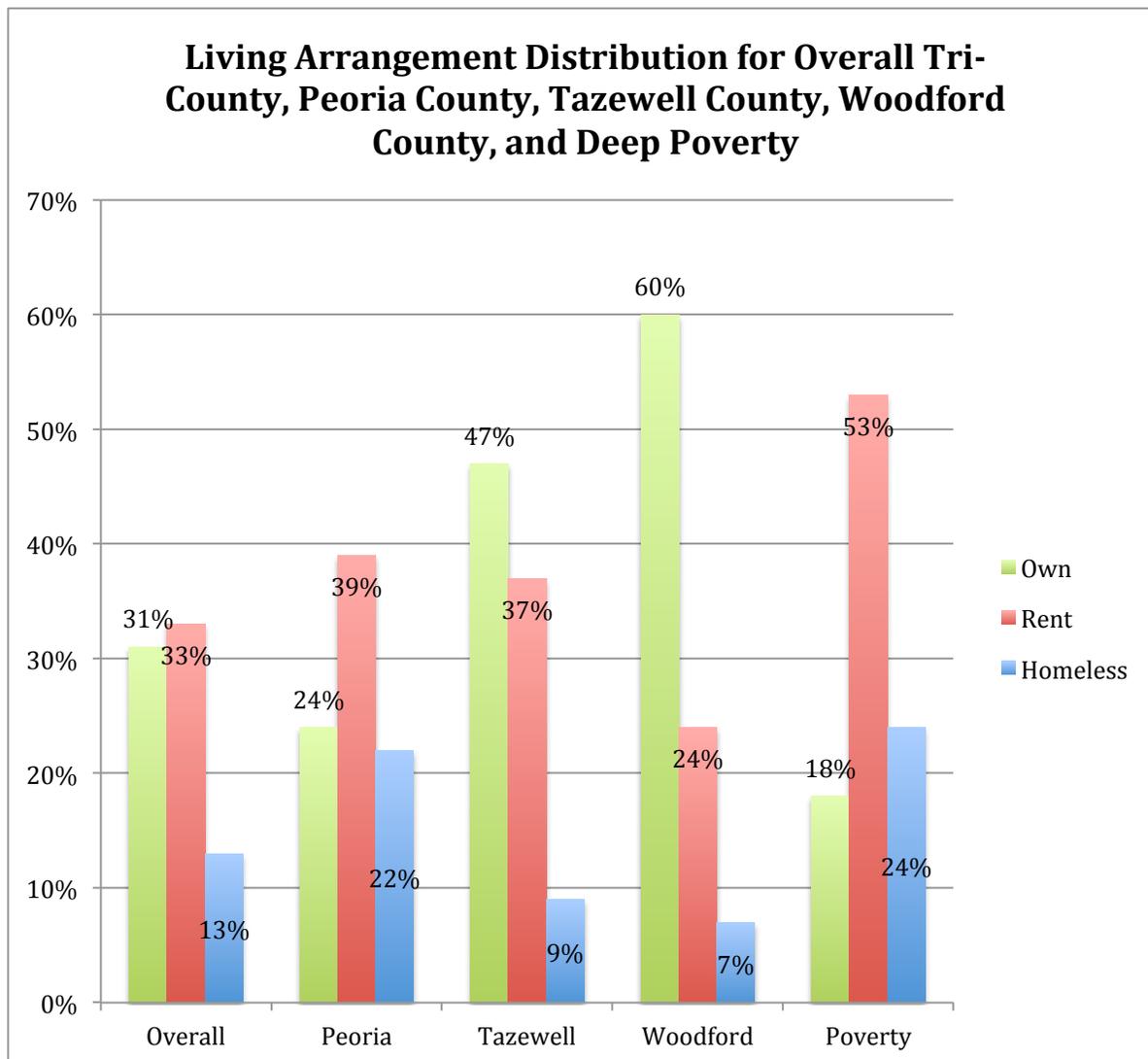
**Table 6.4 Income Distribution for Overall Tri-County, Peoria County, Tazewell County, and Woodford County**



### 6.5 Living Arrangements

Note that overall, there was an equal distribution between those that rented and those that owned. To protect the dignity of homeless survey respondents, a specific choice of homeless was not available, rather there was a category for “other.” While “other” could include respondents that lived with a family member or friend, those surveys that were distributed at homeless shelters were coded as homeless. Additionally, some respondents wrote in “homeless” on their surveys when choosing the “other” designation.

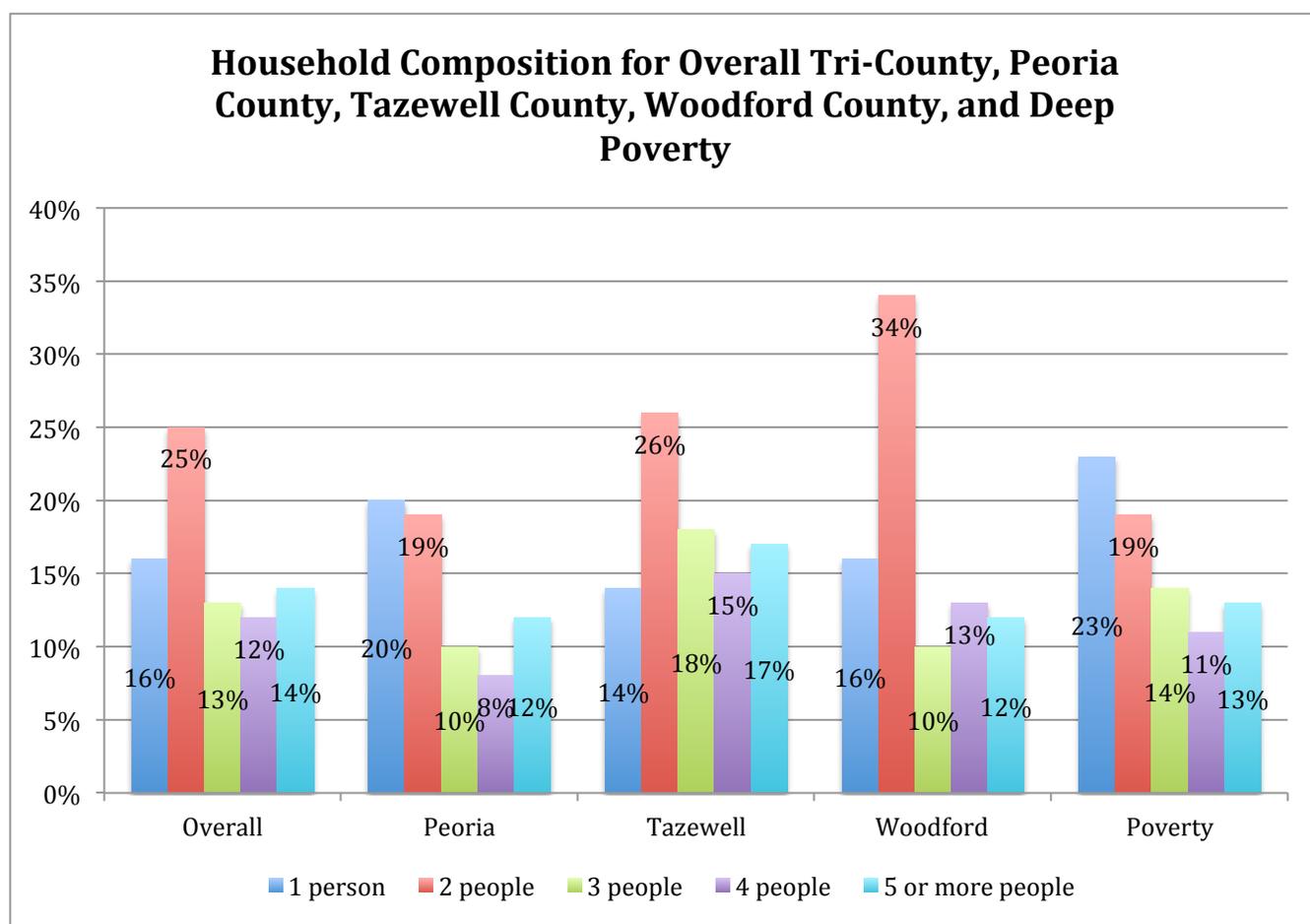
**Table 6.5 Living Arrangement Distribution for Overall Tri-County, Peoria County, Tazewell County, Woodford County, and Deep Poverty**



### 6.6 Household Composition

Household composition is based on the number of individuals living in a household. Overall the most prevalent response was 2 people per household, with the exception of those living in deep poverty, where the most prevalent response was a single household.

**Table 6.6 Household Composition for Overall Tri-County, Peoria County, Tazewell County, Woodford County, and Deep Poverty**

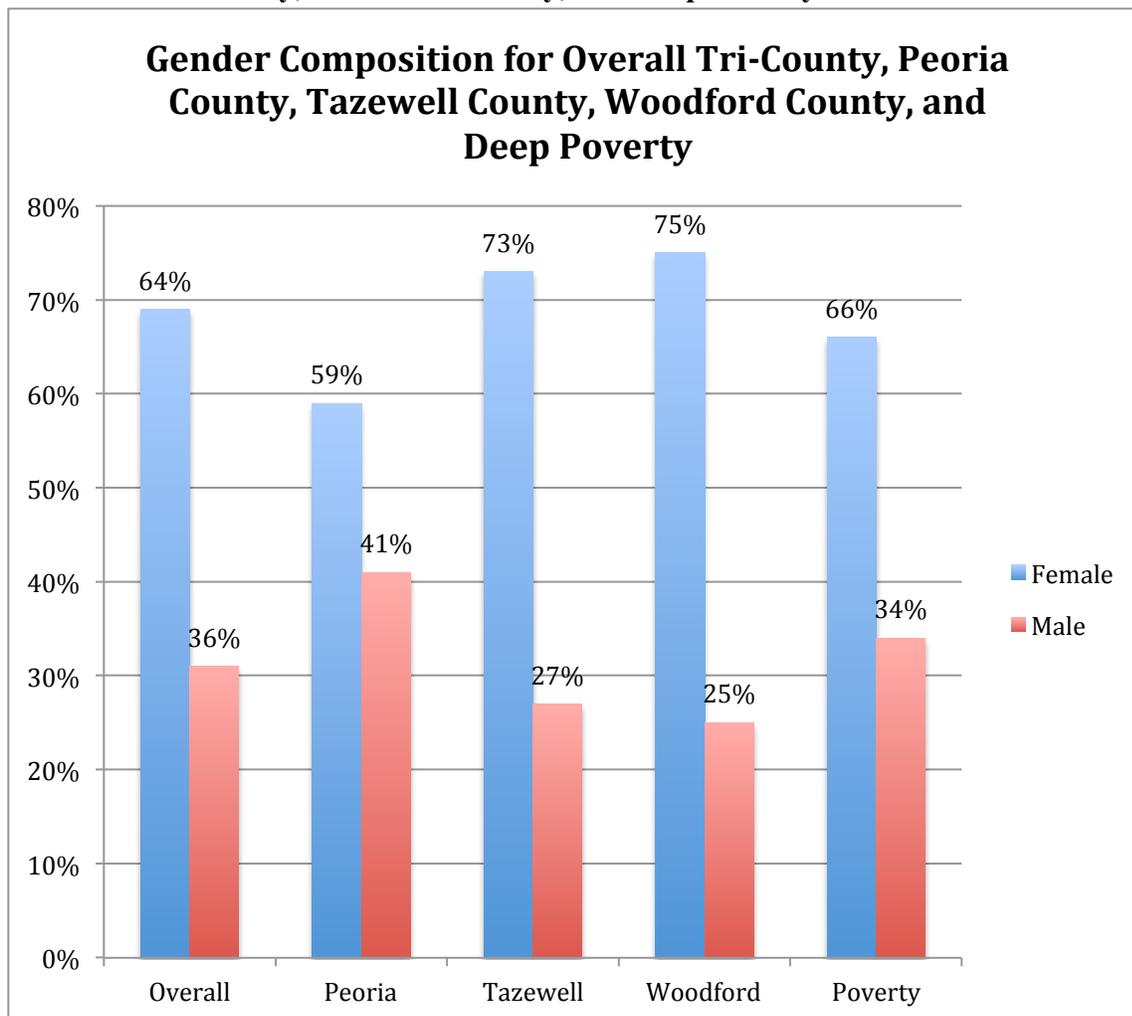


### 6.7 Employment Status

For employment status, overall, 33% of respondents were employed full time, 12% were employed part time, and 20% were unemployed. The rest of the population was either retired, in school, disabled, or served in the armed forces or was a homemaker.

### **6.8 Gender**

The one demographic variable that was significantly skewed was gender. Overall 64% of respondents were women and 36% of respondents were men. According to Census data, there are more women in the three-county area, but not to the extent of the survey respondents. Specifically, Census data identifies 52% of residents in the three-county area are women and 48% are men. Note that respondents from Tazewell and Woodford counties are heavily weighted toward women, with 73% and 75% respectively. For this type of survey, it is expected that women would be more likely to fill out the survey compared to men. In a research study performed by the Heart of Illinois United Way in 2011, a positive correlation was found between women and concern for health-care related issues. Stated differently, women are more interested in participating in these types of surveys than men.

**Table 6.8 Gender Composition for Overall Tri-County, Peoria County, Tazewell County, Woodford County, and Deep Poverty**

## CHAPTER 7. COMMUNITY PERCEPTIONS

In this chapter results of the first three sections of the survey are analyzed and discussed. Specifically, perceptions of Health Problems in the Community, Unhealthy Behaviors and factors impacting Quality of Life are presented. First, aggregate scores are presented. Then responses are presented for each county. Finally responses are presented for those living in deep poverty. After each category, correlation analyses between perceptions and demographic variables are presented in order to identify where certain demographic characteristics influence the way respondents perceive specific attributes of the community.

Note that for aggregated perceptions of the Tri-County community, modifications to data were made given the skewed income data and skewed gender data. Additionally, it was necessary to modify the number of responses from each county in order to reflect the *Definition of the Community*. While the majority of responses came from Peoria County, in order to ensure statistical validity for other counties, a disproportionate number of surveys was collected from Woodford County. Therefore a random number generator was used to select out specific cases based on income, gender and county, in order to replicate the demographics of the community. The sample used for aggregated analyses contains 1,147 responses.

### 7.1 Health Problems in the Community

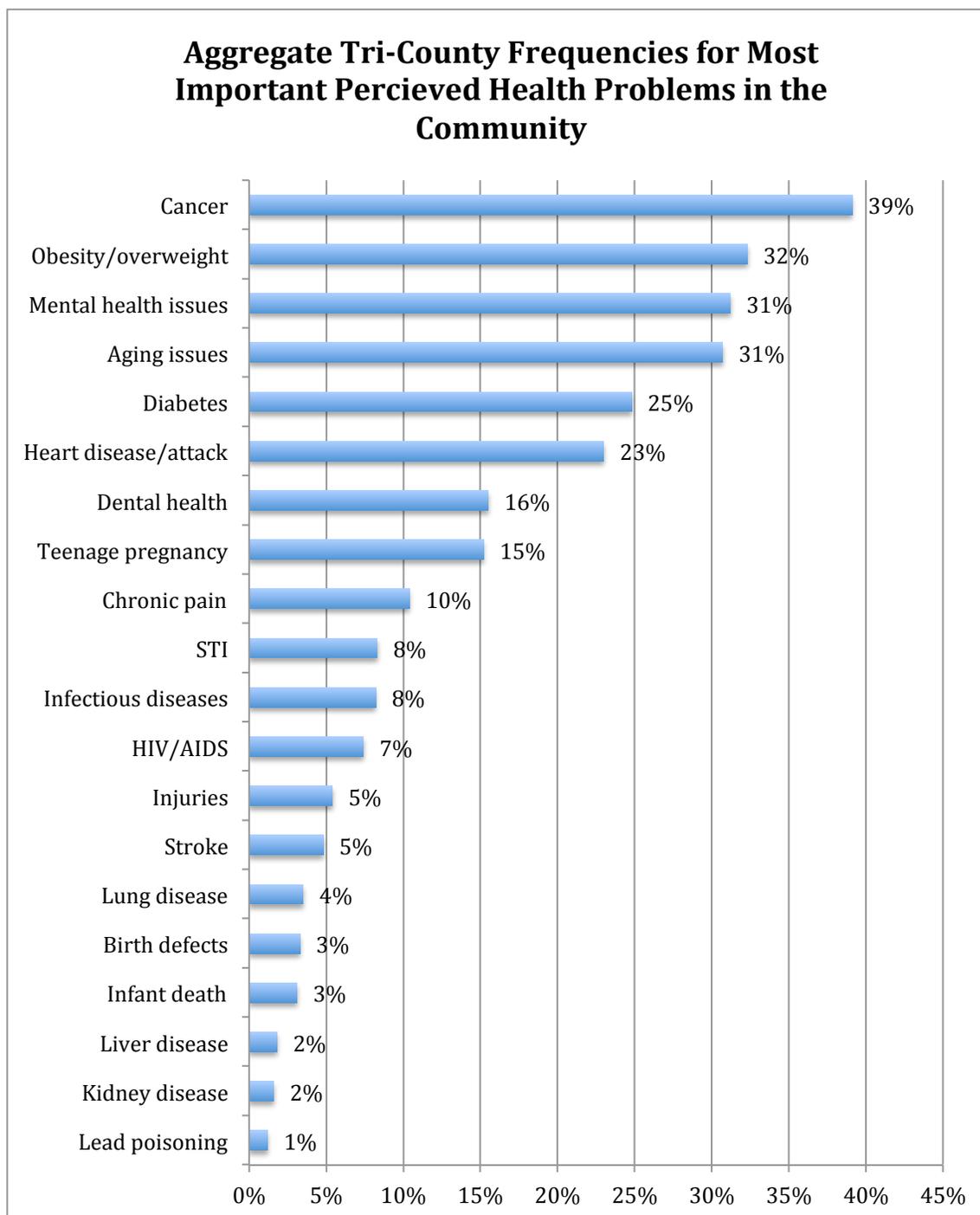
#### 7.1.1 Aggregated Results

The first dimension of the survey asked respondents to rate the three most important health problems in the community. Respondents had a choice of 20 different options. The health problem that rated highest was cancer. It was significantly higher than other categories based on *t-tests* between sample means.

This was followed by obesity, mental health issues and aging issues. Statistically, all three of these choices were rated similarly. The next set of health problems identified were diabetes and heart disease, followed by dental health and risky behavior, such as “teenage pregnancy.” Other categories were only identified 10% of the time or less.

Note that perceptions of the community were accurate in some cases, but inaccurate in others. For example, while cancer is a leading cause of mortality in the Tri-County area, the number of cases treated has been steadily declining. Also, obesity is an important issue and the survey respondents accurately identified obesity as an important health problem.

In contrast, heart disease/heart attacks rated 6<sup>th</sup> on the list. This is the leading cause of death in two-of-the-three counties and incidence of heart disease has been increasing in proportions between 2008-2011.

**Table 7.1.1 Aggregate Tri-County Frequencies for Most Important Perceived Health Problems in the Community**

*Note: n=1147*

## Tri-County Community Health-Needs Assessment

### 7.1.2 County Results

Note that county comparisons include all three counties in one table. Given Peoria County represents the largest percentage of respondents in the Tri-County community, the order of health problems is ranked relative to the Peoria ratings.

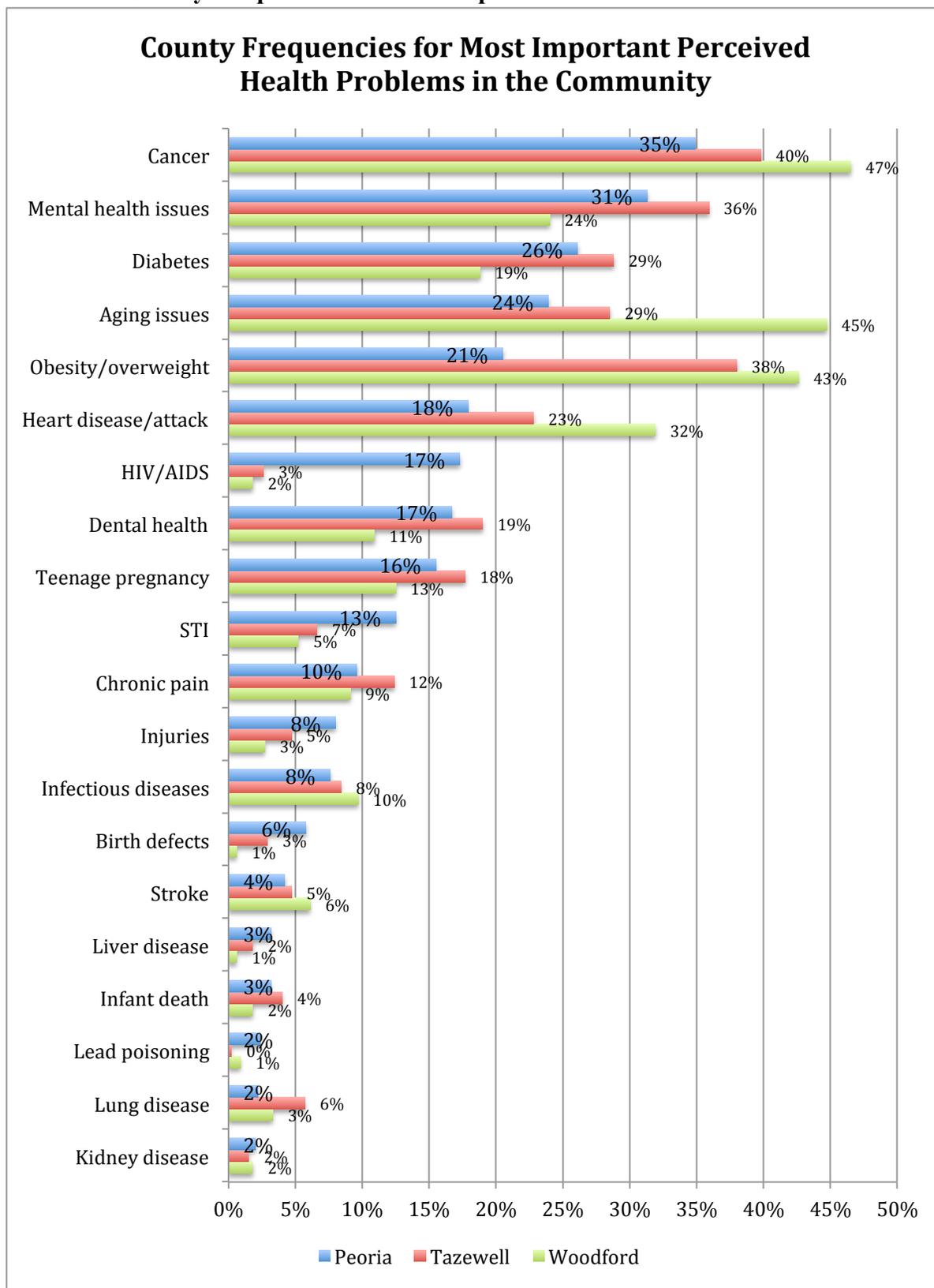
Similar to the aggregate results, the health problem that rated highest was cancer. It was significantly higher than other categories based on *t-tests* between sample means. It was significantly higher for residents of Woodford County.

This was followed by obesity, mental health issues and aging issues. Statistically, all three of these choices were rated similarly. The next set of health problems identified were diabetes and heart disease, followed by dental health and “teenage pregnancy.” Other categories were only identified 10% of the time or less.

Again similar to the aggregated results, note that perceptions of the county were accurate in some cases, but inaccurate in others. Note the perception of heart disease/heart attacks rated 6<sup>th</sup> on the list. Recall this is the leading cause of death in two-of-the-three counties and incidence of heart disease has been increasing in proportions between 2008-2011, but in Peoria County, it was identified only 18% of the time.

There are some large discrepancies between counties in terms of HIV, where Peoria County identifies HIV 17% of the time, compared to 3% and 2% for Tazewell and Woodford Counties respectively. Interestingly, even though “teenage pregnancy” in Tazewell and Woodford Counties is lower than the state average, and Peoria County is significantly higher than the state average, all three counties have similar ratings.

Table 7.1.2 County Frequencies for Most Important Perceived Health Problems

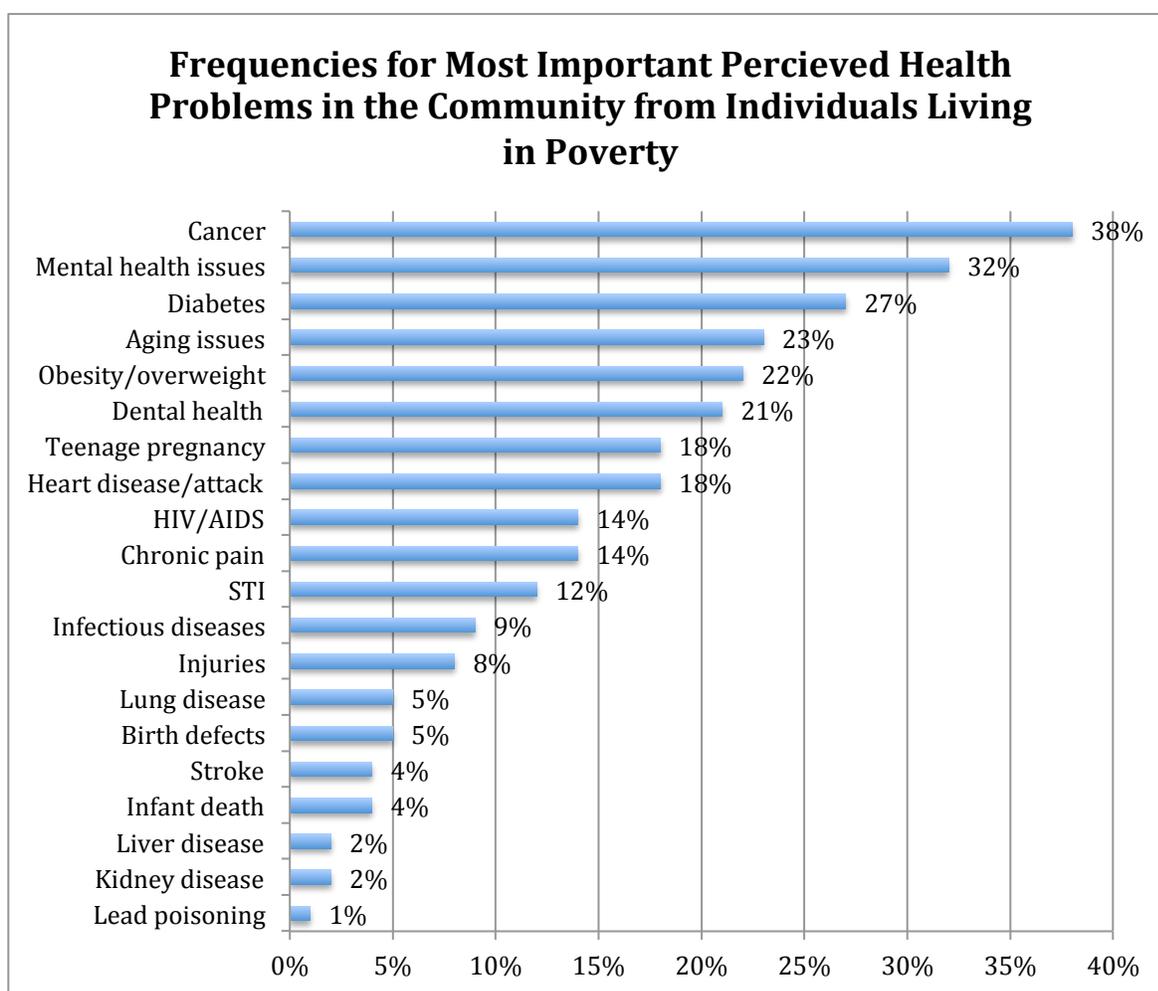


## Tri-County Community Health-Needs Assessment

## 7.1.3 Perceptions of Individuals Living in Poverty

When assessing perceptions of those living in poverty, it can be seen that many of the health problems change in terms of importance. While cancer is still the most important health problem, similar to the other rankings, diabetes becomes more important relative to the aggregated scores. Additionally, dental health and risky behavior such as “teenage pregnancy” become more important. However, heart disease/attack become even less important than the aggregate score and the county scores.

**Table 7.1.3 Frequencies for Most Important Perceived Health Problems in the Community from Individuals Living in Poverty**



#### 7.1.4 Relationships between Perceptions and Demographics

Only significant relationships are reported in this section. The threshold used for significant correlations is ( $p < .01$ ) given the large sample size. The following relationships can be identified.

***Aging Issues*** tend to be rated higher by individuals with the following characteristics: Older, Black ethnicity, educated, high income and from Woodford County. Residents from Peoria County tend to rate aging issues lower.

***Heart disease/attack*** tend to be rated higher by people with the following characteristics: men, older, and from Woodford County.

***HIV/AIDS*** tends to be rated higher by people with the following characteristics: Younger, Black ethnicity, less educated, lower income, and Peoria residents. Tazewell and Woodford County residents and White ethnicity tend to rate HIV/AIDS lower.

***Injuries*** tend to be rated higher by men.

***Mental Health Issues*** tend to be rated higher by women.

***Obesity/Overweight*** tends to be rated higher by people with the following characteristics: Women, White ethnicity, higher education, higher income, and residents of Woodford County. It tends to be rated lower by Black ethnicity and Peoria County.

***STIs*** tend to be rated higher by younger people, Black ethnicity and Peoria residents.

***“Teenage Pregnancy”*** tends to be rated higher by women and younger people.



## 7.2 Unhealthy Behaviors

Respondents were asked to select the three most important unhealthy behaviors in the community out of a total of 14 choices based on importance. Again note that the modified sample of 1,147 was used for aggregated responses in order to more accurately reflect the characteristics of the Tri-County population.

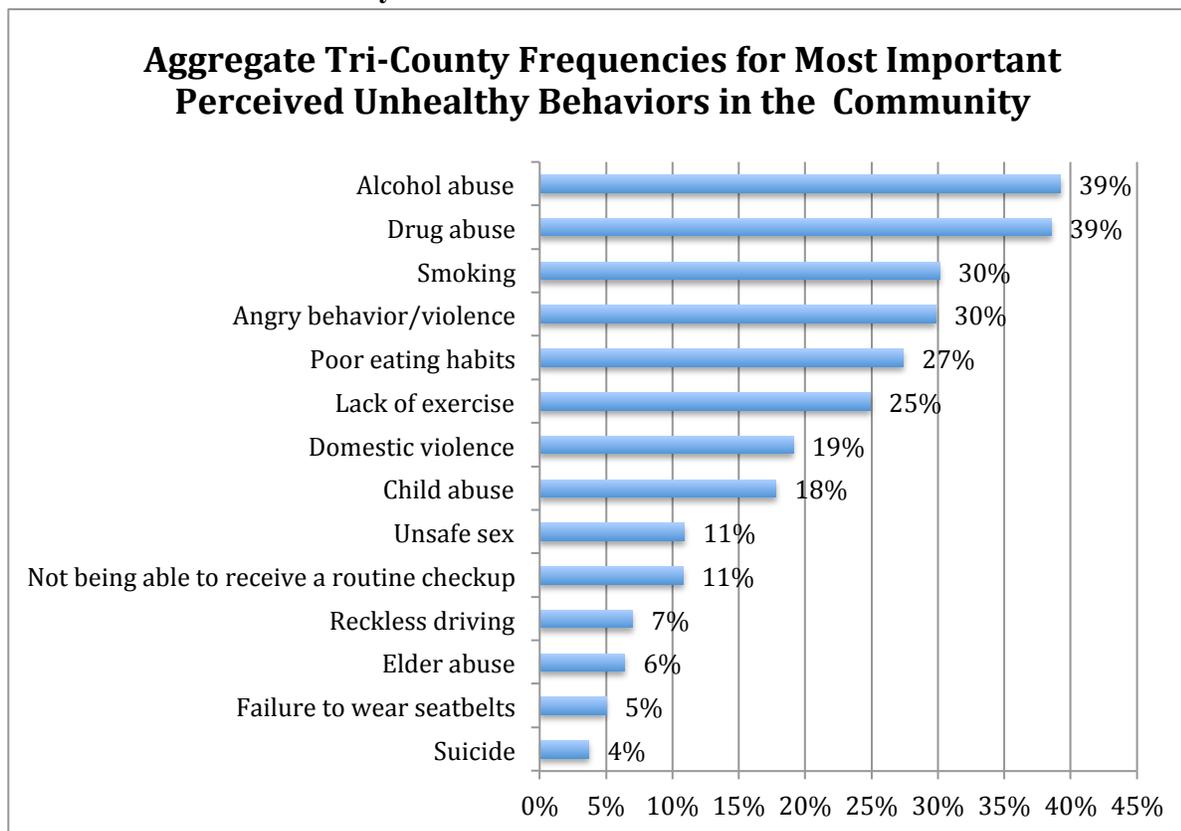
### *7.2.1 Aggregate Unhealthy Behaviors*

The unhealthy behaviors that rated highest were drug abuse and alcohol abuse. They were both significantly higher than other categories based on *t-tests* between sample means.

This was followed by smoking and violence. Statistically, both of these choices were rated similarly. The next set of unhealthy behaviors identified were diabetes and heart disease, followed by dental health and “teenage pregnancy.” Other categories were only identified 10% of the time or less.

Note that perceptions of the community were accurate in some cases, but inaccurate in others. For example, while drug and alcohol abuse are concerns in the Tri-County area, the number of individuals that smoke has been decreasing steadily.

In contrast, “unsafe sex” is rated relatively low, even though risky behaviors including STI and early sexual activity are significant problems in the region.

**Table 7.2.1 Aggregate Tri-County Frequencies for Most Important Perceived Unhealthy Behaviors in the Community**

Note:  $n=1147$

### 7.2.2 County Results

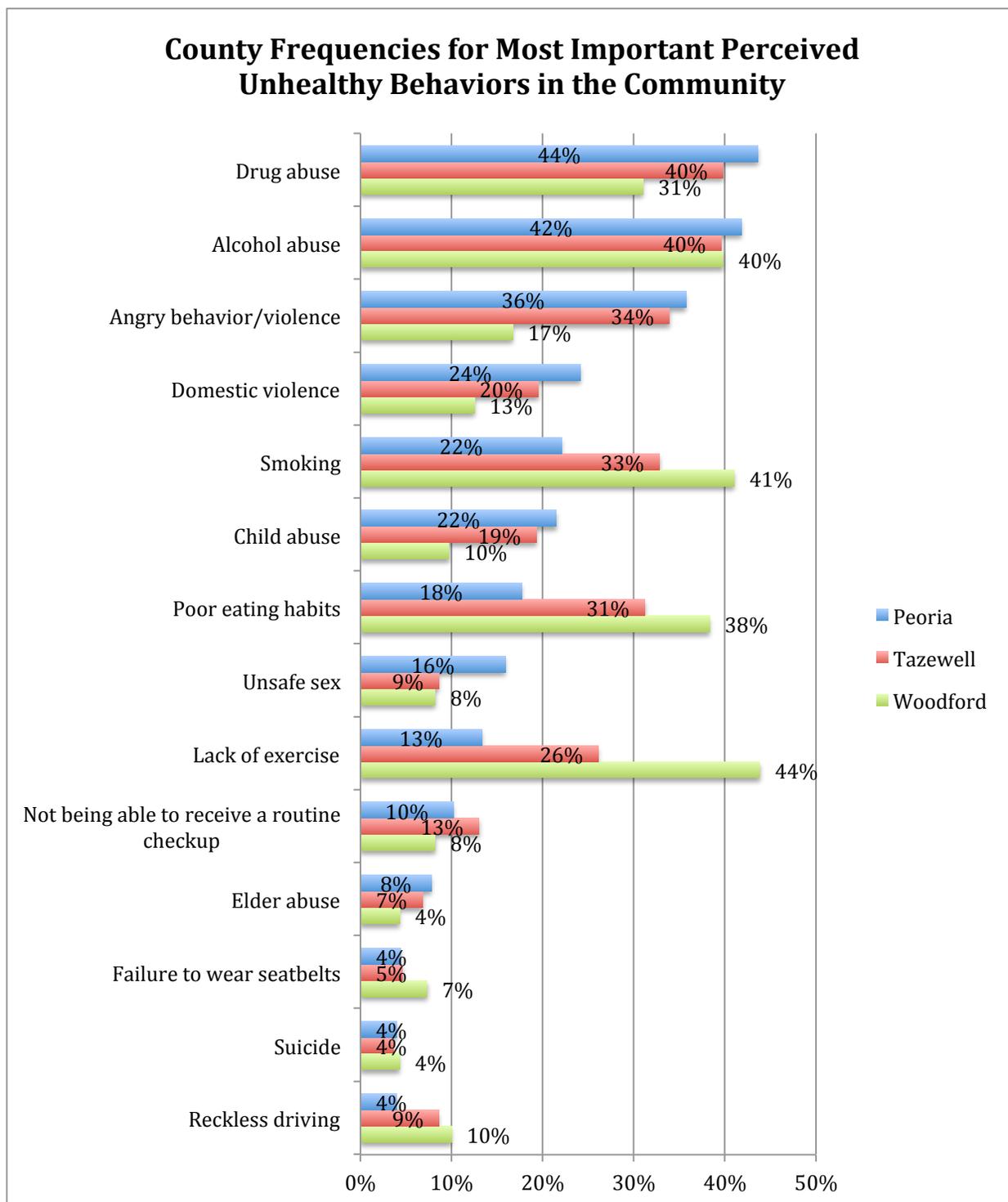
Note that county comparisons include all three counties in one table. Given Peoria County represents the largest percentage of respondents in the Tri-County community, the order of unhealthy behaviors is ranked relative to the Peoria ratings.

Similar to the aggregate results, the unhealthy behaviors that rated highest were drug and alcohol abuse. They were significantly higher than other categories based on *t-tests* between sample means. However, Woodford County rated drug abuse relatively lower.

Woodford County also put heavy emphasis on healthy lifestyle choices such as eating well and regular exercise.

Peoria County rated risky behavior such as “unsafe sex” considerably higher than Tazewell and Woodford Counties. This supports the data showing a bigger incidence of risky behavior including early sexual activity and STIs in Peoria County relative to the other two counties. However the overall recognition is still low.

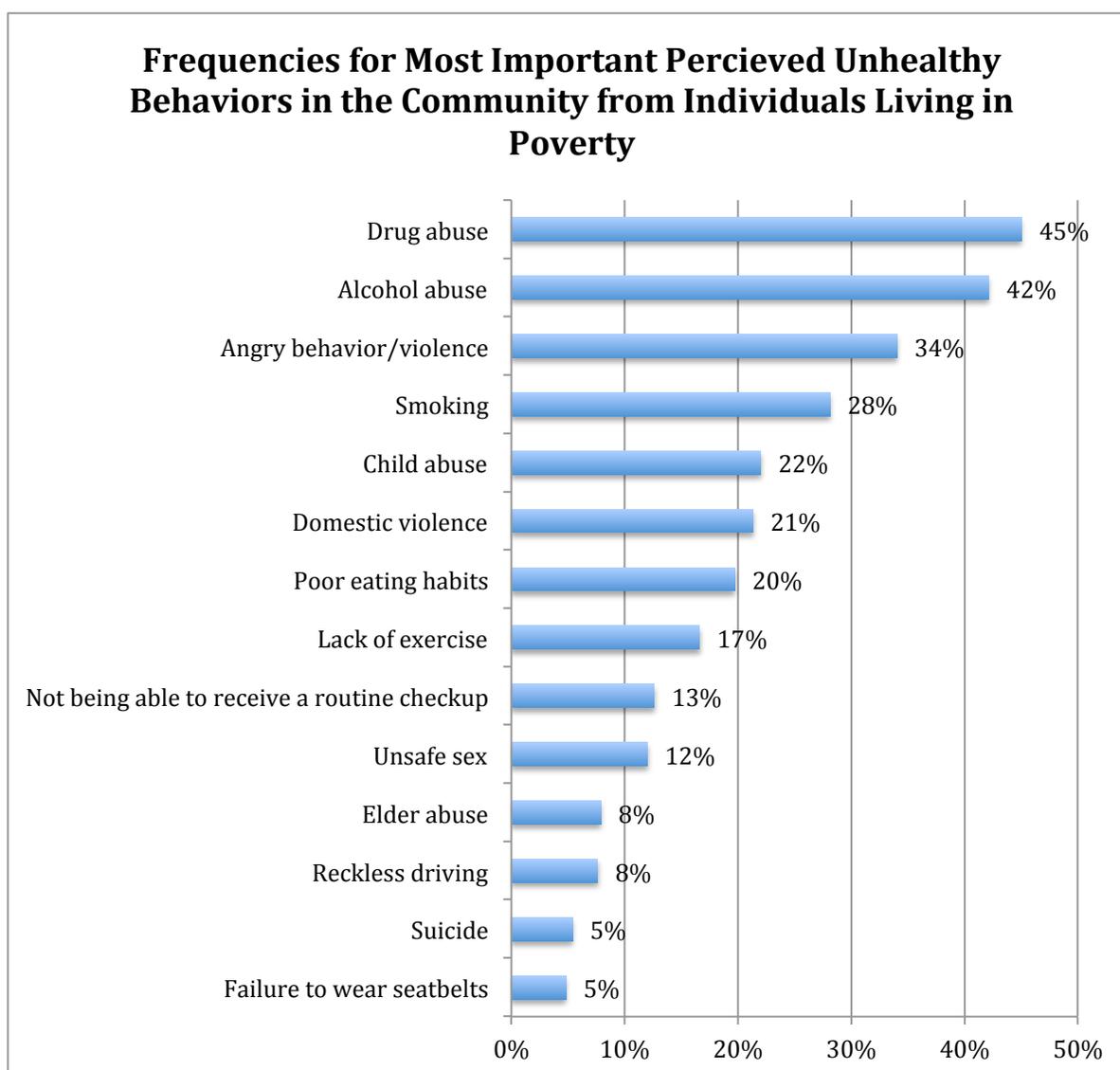
**Table 7.2.2 County Frequencies for Most Important Perceived Unhealthy Behaviors in the Community**



### 7.2.3 Perceptions of Individuals Living in Poverty

When assessing perceptions of those living in poverty, it can be seen that major issues like domestic abuse and child abuse become more important, indicating that individuals in poverty perceive more problems with violence in the home.

**Table 7.2.3 Frequencies for Most Important Perceived Unhealthy Behaviors in the Community from Individuals Living in Poverty**



#### 7.2.4 Relationships between Perceptions and Demographics

Only significant relationships are reported in this section. The threshold used for significant correlations is ( $p < .01$ ) given the large sample size. The following relationships can be identified.

***Anger/Violence*** tends to be rated higher by Black ethnicity.

***Child abuse*** tends to be rated higher by individuals with the following characteristics: Younger, and lower income. Residents from Woodford County tend to rate aging issues lower.

***Domestic Violence*** tends to be rated higher in Peoria County.

***Lack of exercise*** tends to be rated higher by people with the following characteristics: Older, White ethnicity, more educated, higher income and from Woodford County. Black residents and residents from Peoria County tend to rate it lower.

***Poor eating habits*** tends to be rated higher by people with the following characteristics: White ethnicity, more educated, higher income and from Woodford County. Black ethnicity and residents from Peoria County tend to rate it lower.

***Smoking*** tends to be rated higher by people with the following characteristics: White ethnicity and from Woodford County. Black ethnicity tends to rate it lower.

***Risky behavior such as “unsafe sex”*** tends to be rated higher by people with the following characteristics: Younger people, Black ethnicity, and residents of Peoria County.

**Table 7.2.4 Significant Correlations among Most Important Perceived Unhealthy Behaviors in the Community, Demographic Variables, and Respective Counties**

	Gender	Age	Race (White)	Race (Black)	Race (Latino/a)	Education	Income	Peoria	Tazewell	Woodford
Angry behavior/violence				+						
Alcohol abuse										
Child abuse		-					-			-
Domestic violence								+		
Failure to wear seatbelts										
Drug abuse				+						
Elder abuse										
Lack of exercise		+	+	-		+	+	-		+
Not being able to receive a routine checkup										
Poor eating habits			+	-		+	+	-		+
Reckless driving										
Smoking			+	-						+
Suicide										
Unsafe sex		-		+				+		
Lung disease										

### 7.3 Issues with Quality of Life

Respondents were asked to select the three most important issues impacting quality of life in the community out of a total of 9 choices based on importance. Again note that the modified sample of 1,147 was used for aggregated responses in order to more accurately reflect the characteristics of the Tri-County population.

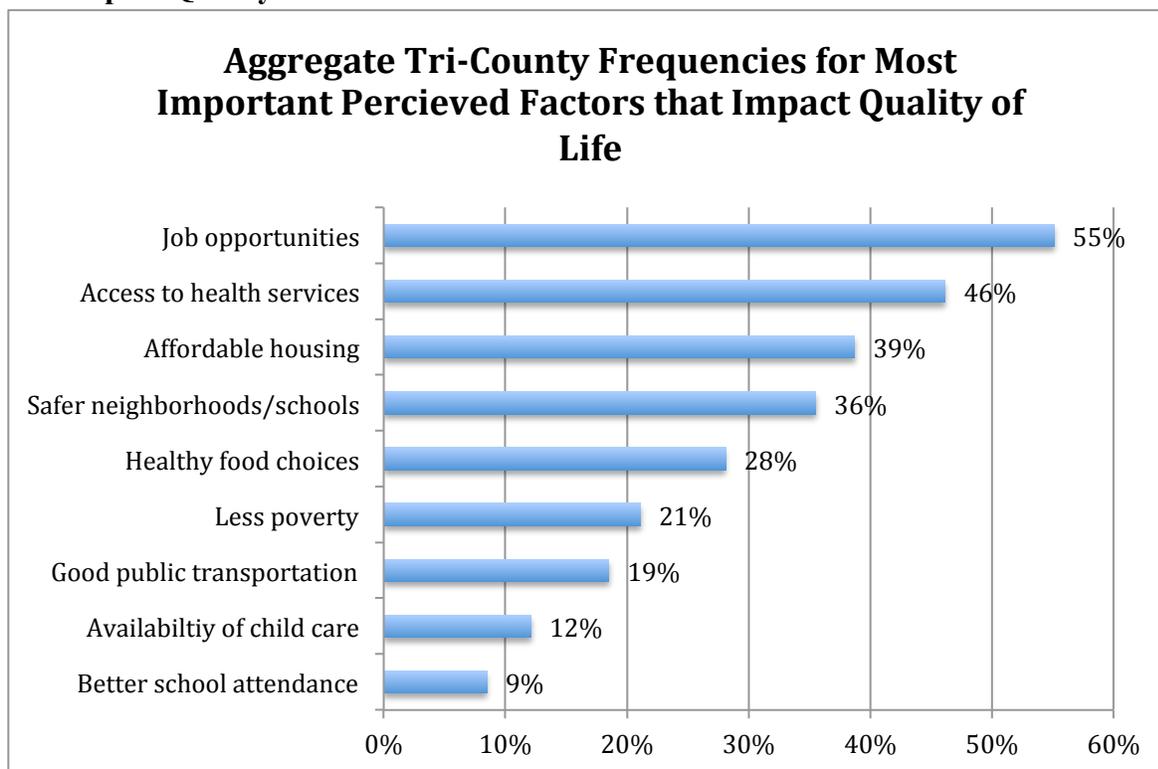
#### 7.3.1 Aggregate issues impacting quality of life

The issues impacting quality of life that rated highest were job opportunities and access to health care. They were both significantly higher than other categories based on *t-tests* between sample means. It is not surprising that job opportunities was rated high given the recent recession.

## Tri-County Community Health-Needs Assessment

This was followed by affordable housing and safer neighborhoods. Statistically, both of these choices were rated similarly. The next factor impacting quality of life identified was healthy food choices. This was followed by less poverty and transportation.

**Table 7.3.1 Aggregate Tri-County Frequencies for Most Important Perceived Factors that Impact Quality of Life**

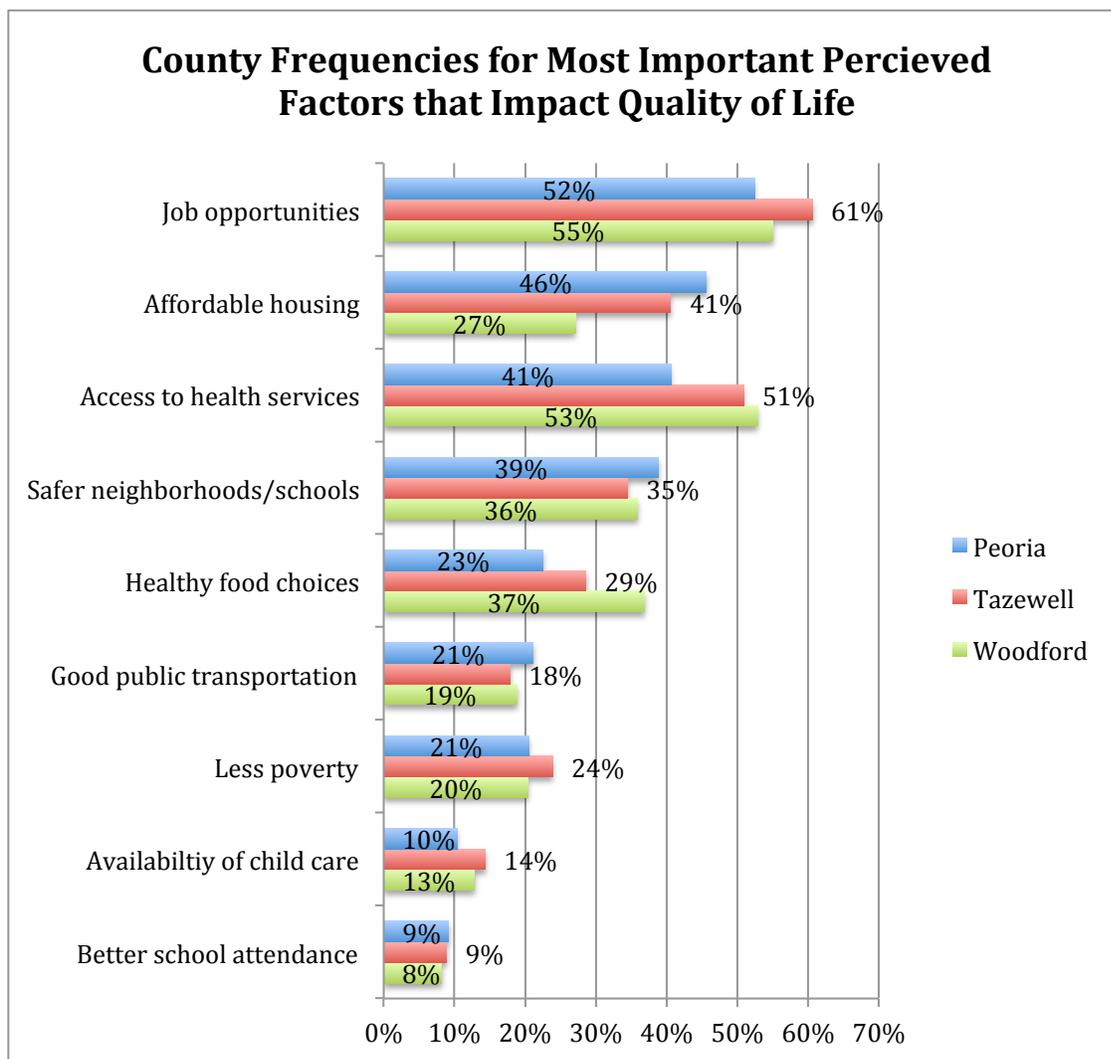


Note: n=1147

### 7.3.2 County Results

Note that county comparisons include all three counties in one table. Given Peoria County represents the largest percentage of respondents in the Tri-County community, the order of unhealthy behaviors is ranked relative to the Peoria ratings.

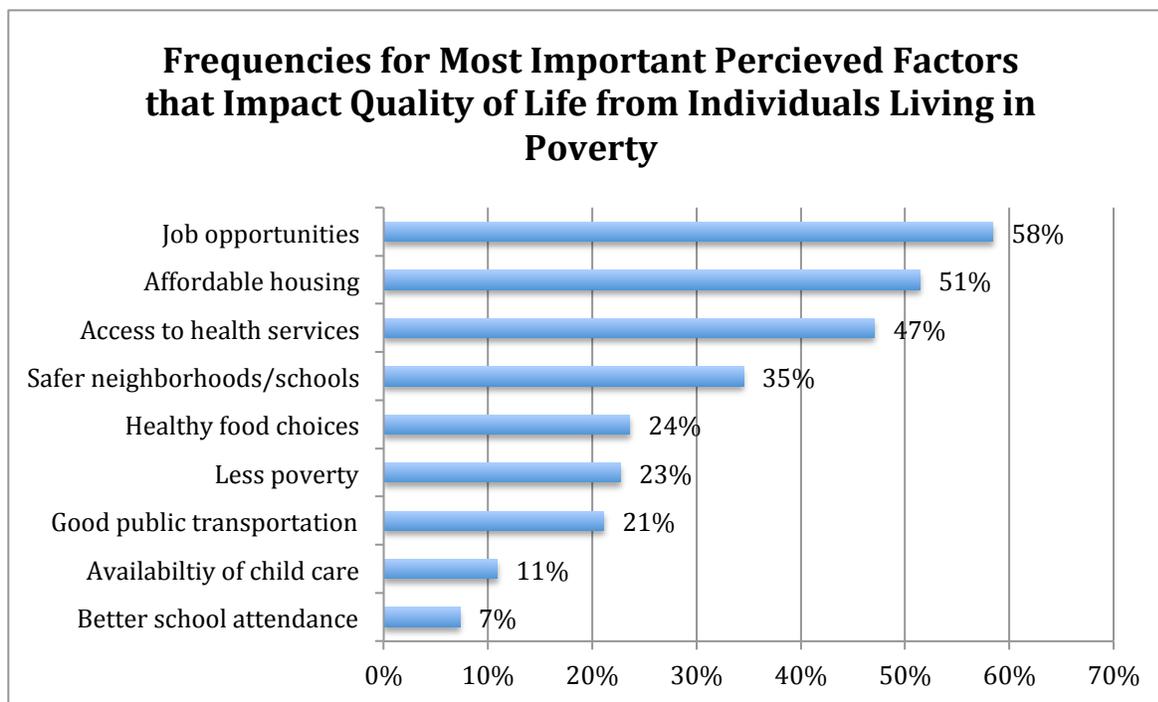
Results show that county comparisons are very similar to the aggregate score and there is minimal variance between counties. Given that there is little difference between counties, we would expect few significant correlations with county residence. This can be seen in Table 7.3.4, where only one significant correlation exists.

**Table 7.2.2 County Frequencies for Most Important Perceived Factors that Impact Quality of Life**

### 7.3.3 Perceptions of Individuals Living in Poverty

When assessing perceptions of those living in poverty, it can be seen that perceptions are similar to the aggregated sample. With the exception of increased importance for affordable housing and safer neighborhoods, the results are similar to the previous tables.

**Table 7.3.3 Frequencies for Most Important Perceived Factors that Impact Quality of Life from Individuals Living in Poverty**



#### 7.1.4 Relationships between Perceptions and Demographics

Only significant relationships are reported in this section. The threshold used for significant correlations is ( $p < .01$ ) given the large sample size. The following relationships can be identified.

**Access to health services** tend to be rated higher by individuals with the following characteristics: Older, White ethnicity, less educated. Black ethnicity tends to rate lower importance.

**Affordable housing** tend to be rated higher by people with the following characteristics: Black ethnicity, and lower income. Residents from Woodford County tend to rate it lower.

**Availability of child care** tends to be rated higher by younger people.

## Tri-County Community Health-Needs Assessment

**Job opportunities** tend to be rated higher by younger people.

**Public transportation** tends to be rated higher by older people.

**Healthy food choices** tend to be rated higher by White ethnicity and higher education.

**Less poverty** tends to be rated higher by White ethnicity.

**Safer neighborhoods** tends to be rated higher by White ethnicity, higher income and higher education.

### 7.3.4 Significant Correlations among Most Important Perceived Factors that Impact Quality of Life, Demographic Variables, and Respective Counties

	Gender	Age	Race (White)	Race (Black)	Race (Latino/a)	Education	Income	Peoria	Tazewell	Woodford
Access to health services		+	+	-		-				
Affordable housing				+			-			-
Availability of child care		-								
Better school attendance										
Job opportunities		-								
Good public transportation		+								
Healthy food choices			+			+				
Less poverty			+							
Safer neighborhoods/schools			+			+	+			

## Tri-County Community Health-Needs Assessment

### **Community Perceptions: Strategic Implications**

Heart disease appears to be perceived relatively low compared to actual causes of mortality. Specifically, younger people and men tend to have the largest misperceptions regarding the importance of understanding heart disease in the community.

“Unsafe sex” also seems to be rated relatively low in terms of unhealthy behaviors. Given the high rate of births from teenage mothers and STIs, particularly in Peoria County, addressing risky behavior is a leading factor in managing these issues. While young people and Black residents are more likely to rate “unsafe sex” as an important unhealthy behavior, it is still not perceived as important as many other factors.

Access to health services is rated as one of the highest determinants to quality of life across all categories. However, older people, White residents and less educated people see it as more important than Black residents.

## CHAPTER 8. ACCESSIBILITY TO HEALTH CARE

In this chapter, results examining access to health services are presented. Specifically, access to medical care, prescription medication, dental care and counseling are presented. First, aggregate scores are presented. Then responses are presented for each county. Finally responses are presented for those living in deep poverty. After each category, relationships between accessibility and demographic variables are presented in order to identify where certain demographic characteristics influence access to health services.

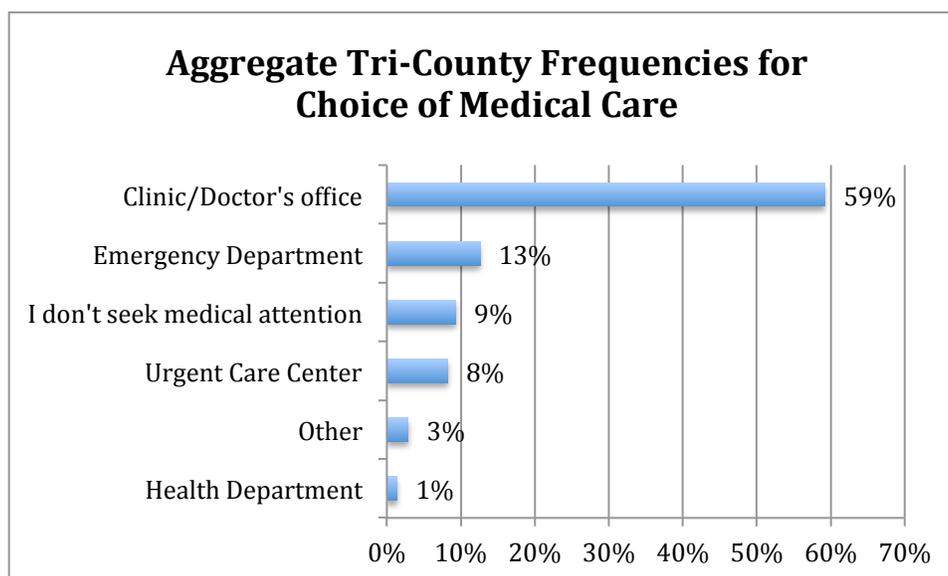
### 8.1 Choice of Medical Care

Respondents were asked to select the type of health care they used when they were sick. Six different alternatives were presented, including clinic or doctor's office, emergency department, Urgent care facility, health department, no medical treatment, and other. The modified sample of 1,147 was used for aggregated responses in order to more accurately reflect the characteristics of the Tri-County population.

#### 8.1.1 Aggregate Responses

The most common response was clinic/doctor's office, where 59% of survey respondents chose this as their primary choice for medical care. This was followed by the emergency department at a hospital (13%), not seeking medical attention (9%) urgent care (8%) and health department (1%).

**Table 8.1.1 Aggregate Tri-County Frequencies for Choice of Medical Care**



*n=1147*

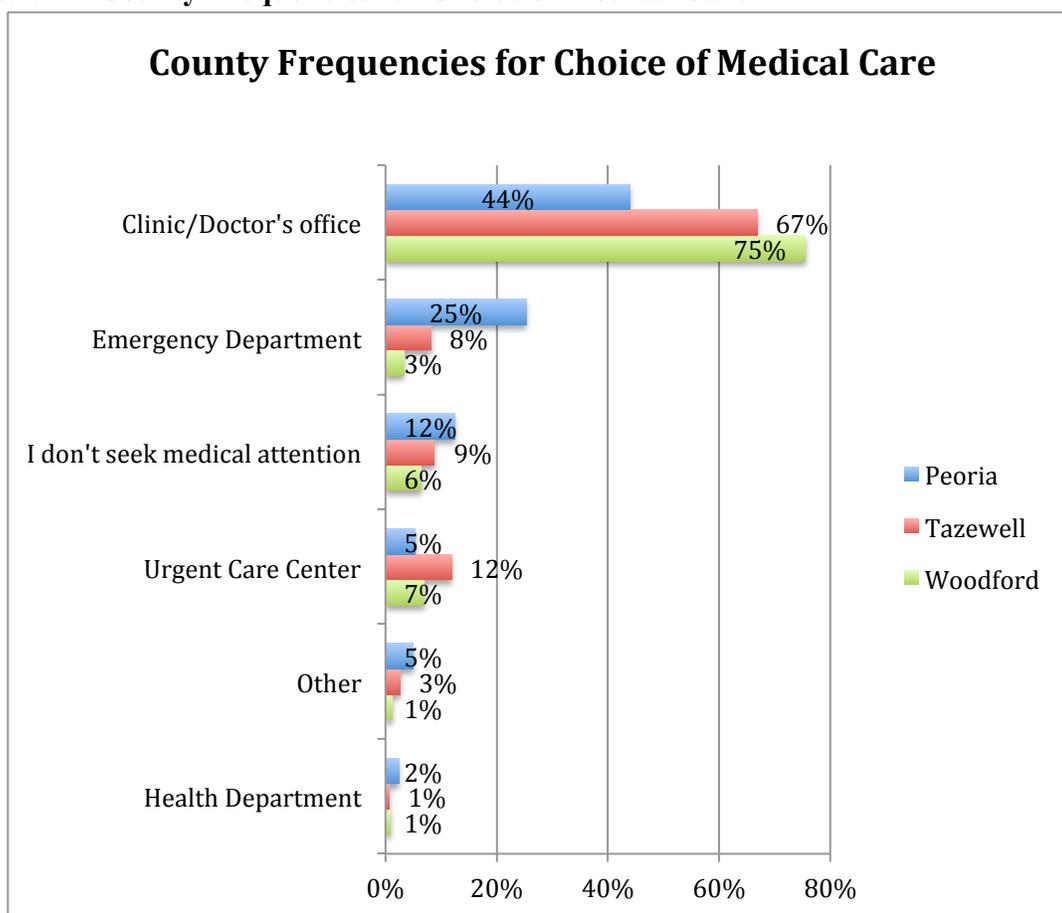
## Tri-County Community Health-Needs Assessment

## 8.1.2 County Responses

Note that county comparisons include all three counties in one table. Given Peoria County represents the largest percentage of respondents in the Tri-County community, the order of choice of medical care is ranked relative to the Peoria ratings.

Note that there is significant disparity between counties in terms of choice of medical care provider. Both Tazewell and Woodford counties have significantly higher percentages for use of a clinic or doctor's office and consequently much lower percentages for using an emergency department as a first choice of medical care.

**Table 8.1.2 County Frequencies for Choice of Medical Care**

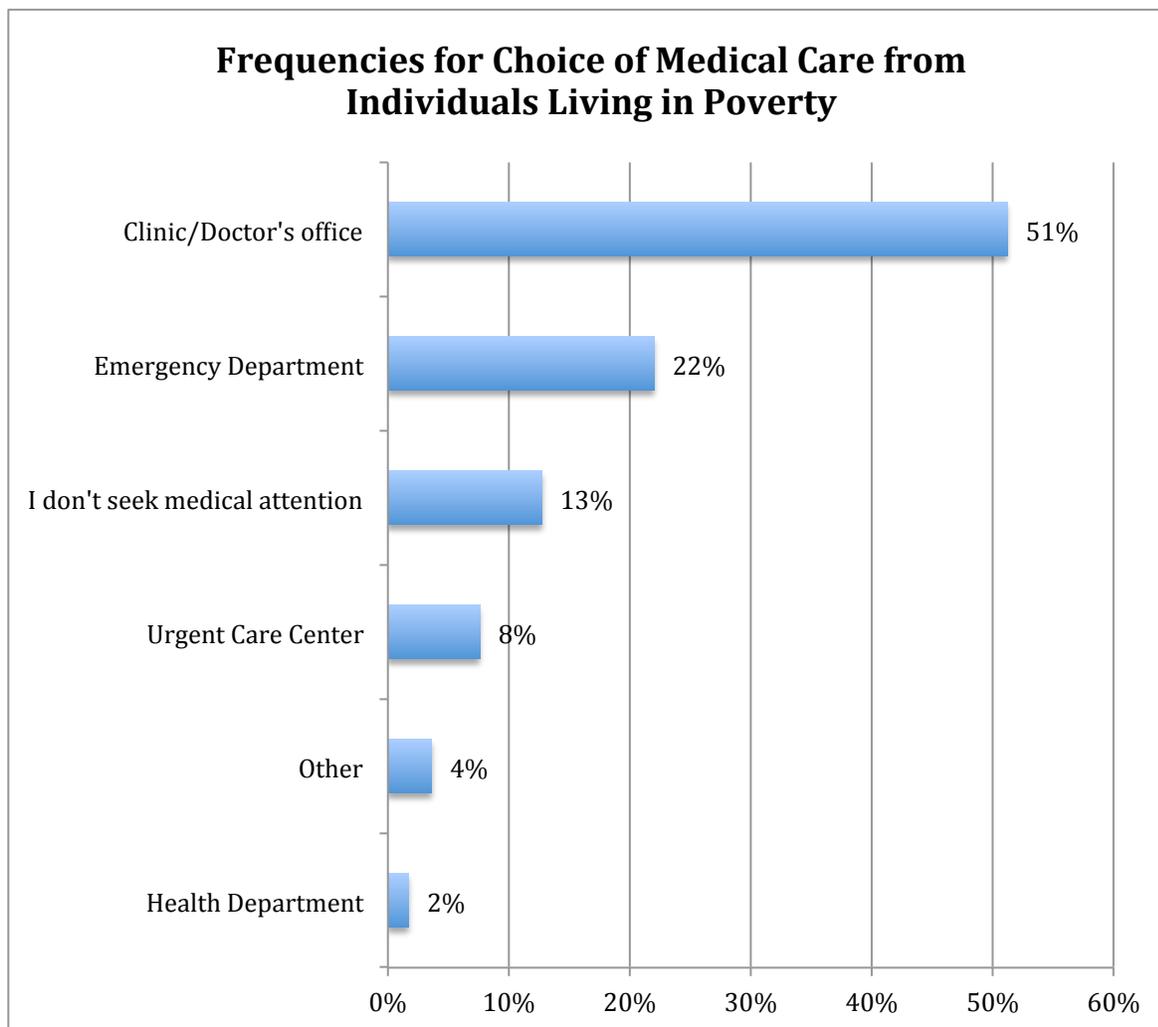


## Tri-County Community Health-Needs Assessment

## 8.1.3. Perceptions of individuals living in poverty

Note that for individuals living in poverty, only 51% choose a clinic/doctor's office as their first choice for medical care. Almost a quarter (22%) use an emergency department and 13% don't choose any medical care at all when sick.

**Table 8.1.3 County Frequencies for Choice of Medical Care from Individuals Living in Poverty**

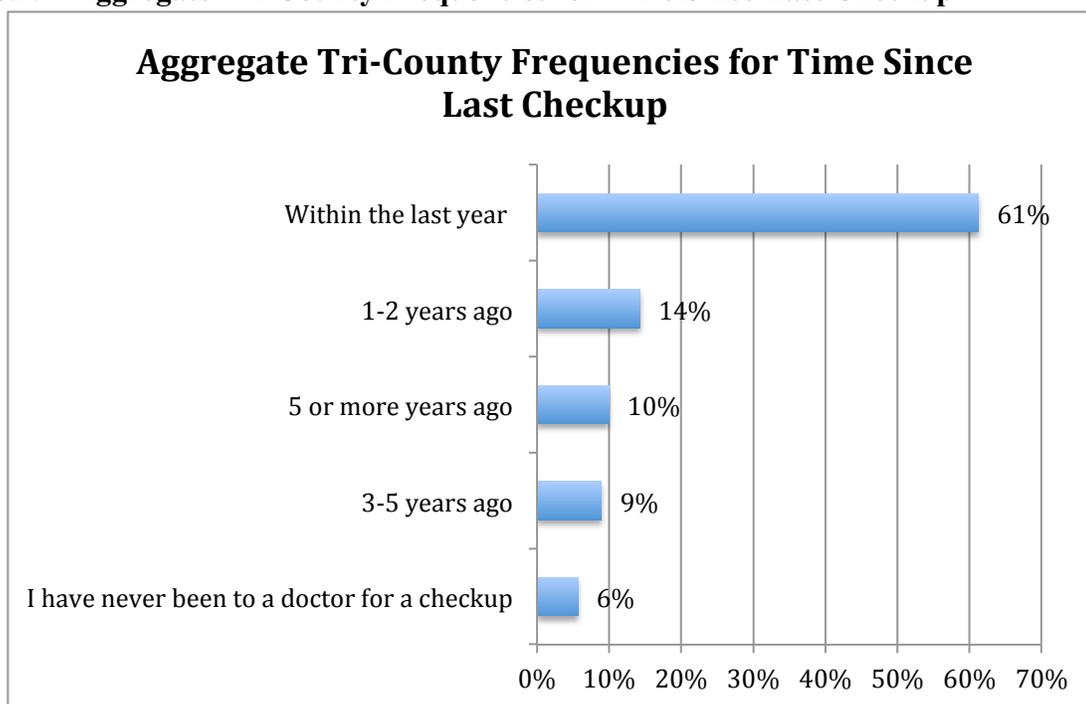




## Tri-County Community Health-Needs Assessment

**8.2 Frequency of Checkups***8.2.1 Aggregated responses*

Respondents were asked how often they had a checkup. Of respondents, 61% received a checkup in the last year, 14% in the past 1-2 years, 9% in the last 3-5 years, 10% 5 years or more and 6% have never been to a doctor's office for a checkup. The modified sample of 1,147 was used for aggregated responses in order to more accurately reflect the characteristics of the Tri-County population.

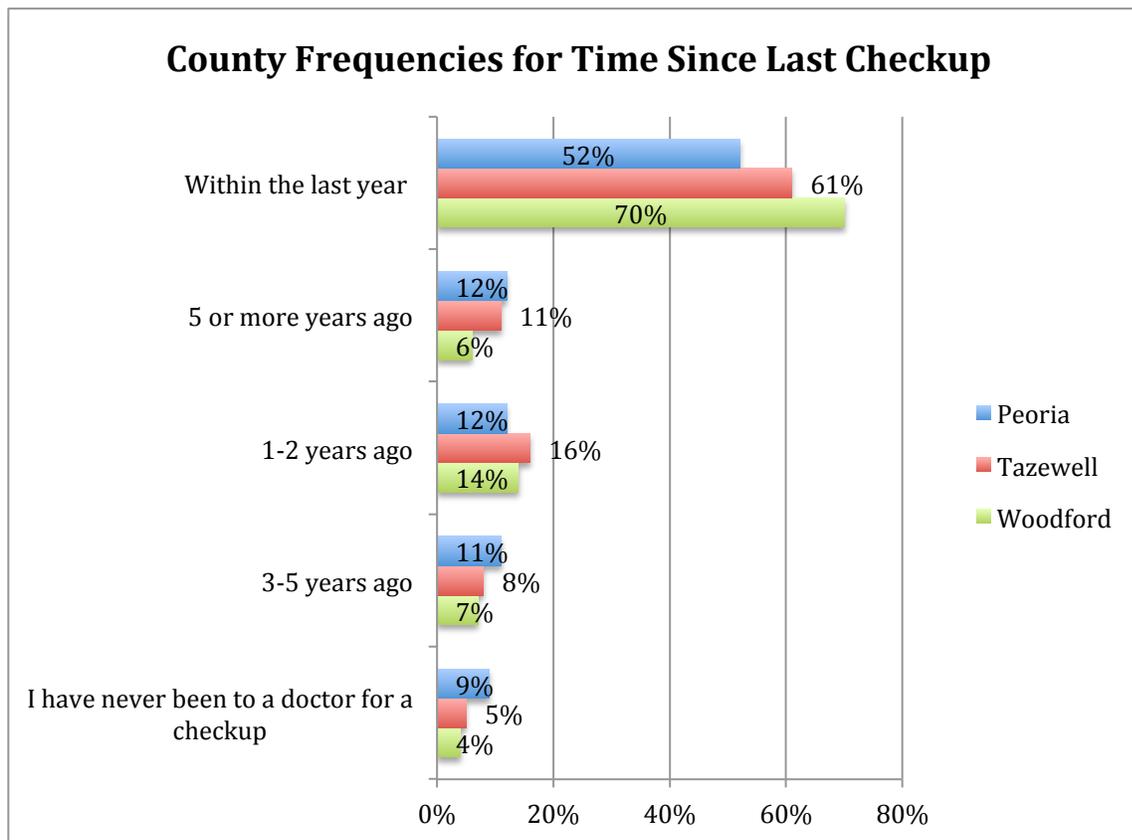
**Table 8.2.1 Aggregate Tri-County Frequencies for Time Since Last Checkup**

*Note: n=1147*

*8.2.2 County Perceptions*

Note that county comparisons include all three counties in one table. Given Peoria County represents the largest percentage of respondents in the Tri-County community, the order of frequencies for time since last checkup is ranked relative to the Peoria ratings.

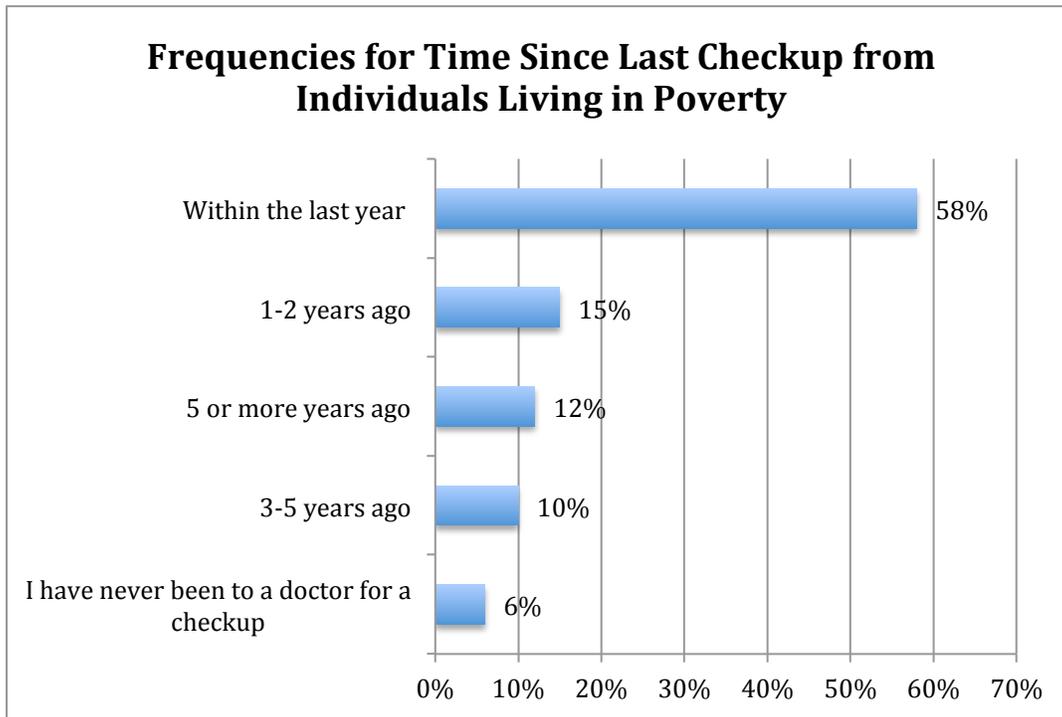
There is significant variation in between counties. In Tazewell and Woodford Counties, approximately 80% of residents have seen a doctor for a checkup within the last two years. In Peoria County, only 64% of residents have seen a doctor for a checkup in the last two years.

**Table 8.2.2 County Frequencies for Time Since Last Checkup**

### 8.2.3 People living in poverty

Note that people living in poverty were relatively reflective of the aggregated population when going to a doctor for a checkup. Specifically, over 70% of people living in deep poverty had seen a doctor for a checkup within the last two years.

**Table 8.2.3** Frequencies for Time Since Last Checkup from Individuals Living in Poverty



*8.2.4 Relationships between frequency of checkups and demographics*

The data show that men, younger people, homeless people and residents of Peoria County are less likely to get a checkup at a doctor’s office. Residents of Woodford County are more likely to get a checkup. Moreover, results of Ordinary-Least-Squared regression models show that homelessness is the most important predictor, followed by age and gender, based on significance levels of *beta* coefficients.

**Table 8.2.4** Significant Correlations for Time Since Last Checkup

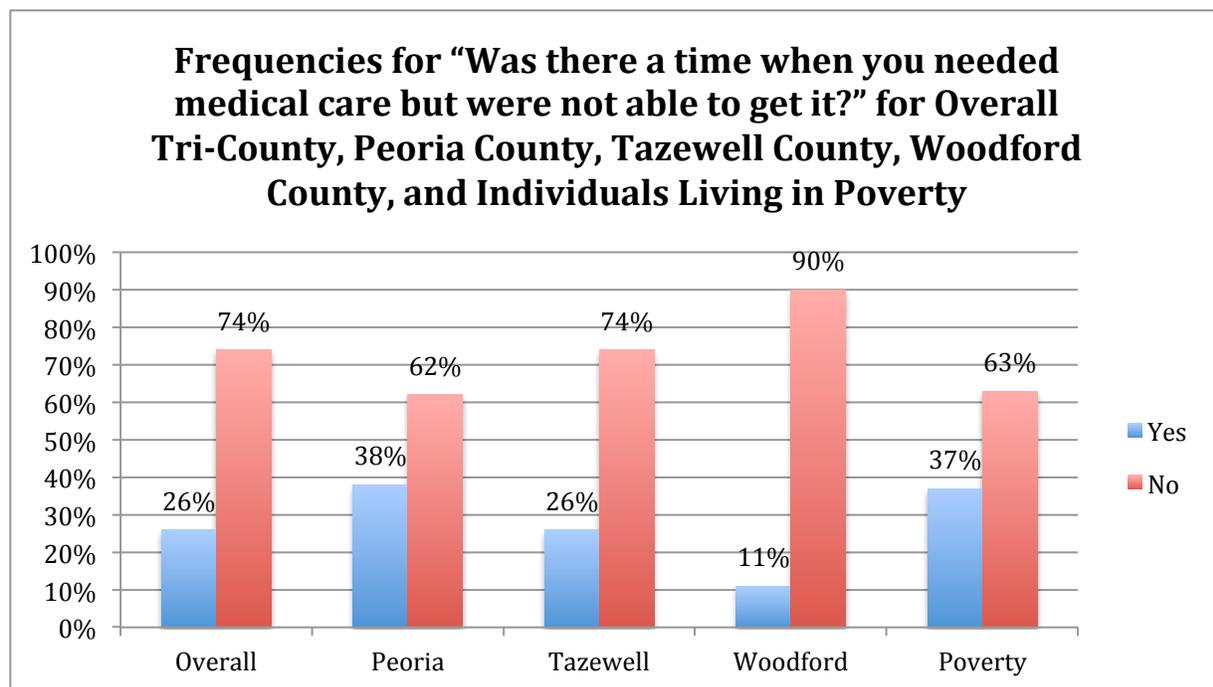
Gender	-
Age	-
Homeless	+
Peoria	+
Woodford	-

## Tri-County Community Health-Needs Assessment

**8.3 Access to Medical Care**

Respondents were asked, “Was there a time when you needed medical care but were not able to get it?” Note that for Woodford County, most respondents indicated that access to medical care was relatively higher than the other two counties. Peoria and Tazewell Counties were similar, but people living in deep poverty indicated that roughly 1/3 of the time they could not get access to medical care when necessary.

**Table 8.3.1** Frequencies for “Was there a time when you needed medical care but were not able to get it?” for Overall Tri-County, Peoria County, Tazewell County, Woodford County, and Individuals Living in Poverty

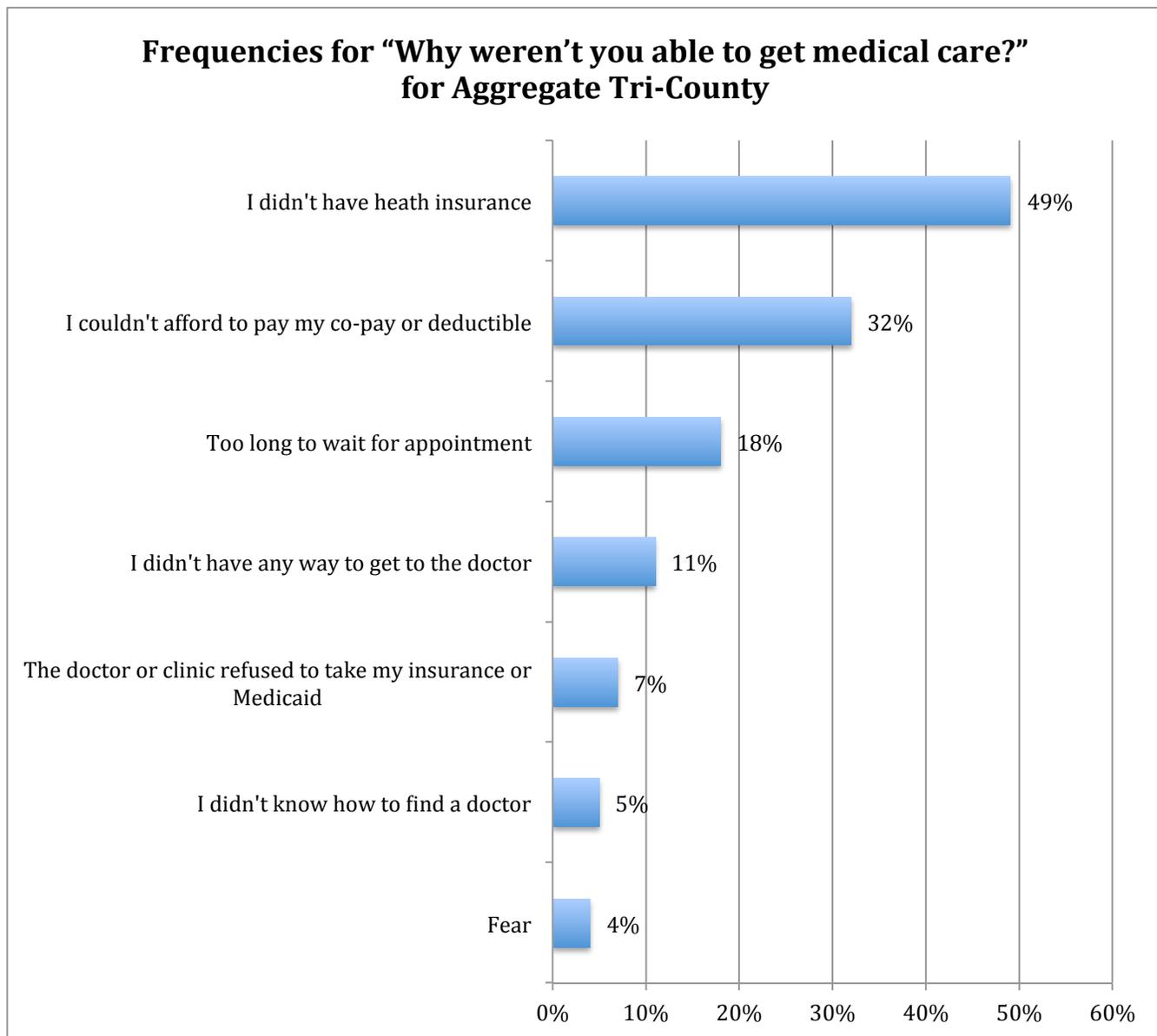


For relationships between access to medical care and demographics, note that the relationships are reverse coded. Therefore a survey respondent was more likely to answer that they did not have access to medical care if income levels were low, education was low, they were residents of Peoria County, they were homeless and they were younger. Residents of Woodford County and White ethnicity were less likely to have difficulty accessing medical care. Logit regression results indicate that low income, younger people and homeless were the most important predictors respectively, based on significance levels of *beta* coefficients.

**Table 8.3.2 Significant Correlations for “Was there a time when you needed medical care but were not able to get it?”**

Income	+
Education	+
Woodford	+
White	+
Peoria	-
Homeless	-
Age	+

The leading causes of why someone did not have access to medical care were no insurance (49%) and the inability to afford copayments or deductibles (32%). This was followed by too long to wait for an appointment (18%) and no way to get to the doctor (11%). Note that total percentages do not equal 100% as respondents could choose more than one answer.

**Table 8.3.3.1** Frequencies for “Why weren’t you able to get medical care?” for Aggregate Tri-County

*Note: n=375*

Note that low-income level related to having no insurance and affordability and homeless was significantly related to most categories.

## Tri-County Community Health-Needs Assessment

**Table 8.3.3.2 Significant Correlations for “Was there a time when you needed medical care but were not able to get it?”**

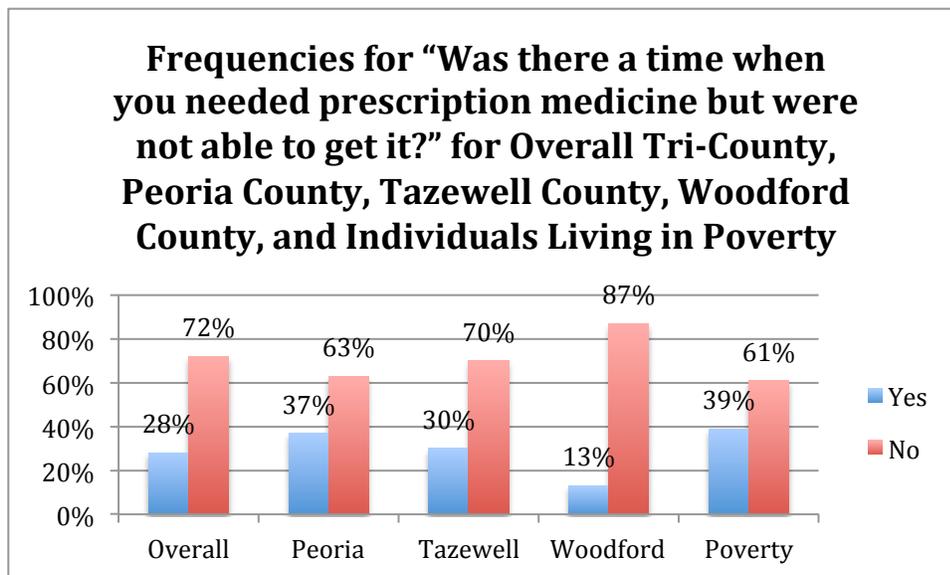
	Income	Homeless
<i>No Insurance</i>	-	+
<i>Can't afford copay/deductible</i>	-	+
<i>No way to get to Doctor</i>		
<i>Refused my insurance/Medicaid</i>		
<i>I don't know how to find a doctor</i>		+
<i>Too long for an appointment</i>		+
<i>Fear</i>		+

**8.4 Access to Prescription Drugs**

Respondents were asked, “Was there a time when you needed prescription medication but were not able to get it?” Note that for Woodford County, most respondents indicated that access was relatively higher than the other two counties. Peoria and people living in poverty were similar, indicating that over 1/3 of the time they could not get access to prescription medication when necessary.

For relationships between access to prescription medications and demographics, logit regression results indicate that low income, homeless, younger people, less educated and non-White residents were the most important predictors respectively, based on significance levels of *beta* coefficients.

**Table 8.4.1** Frequencies for “Was there a time when you needed prescription medicine but were not able to get it?” for Overall Tri-County, Peoria County, Tazewell County, Woodford County, and Individuals Living in Poverty



The leading causes of why someone did not have access to prescription medicine were no insurance (40%) and the inability to afford copayments or deductibles (40%). This was followed by refused insurance or Medicaid (8%) and no way to get to the pharmacy (5%). Note that total percentages do not equal 100% as respondents could choose more than one answer.

**Table 8.4.2** Significant Correlations for “Was there a time in the last year when you needed prescription medication and were unable to get it?”

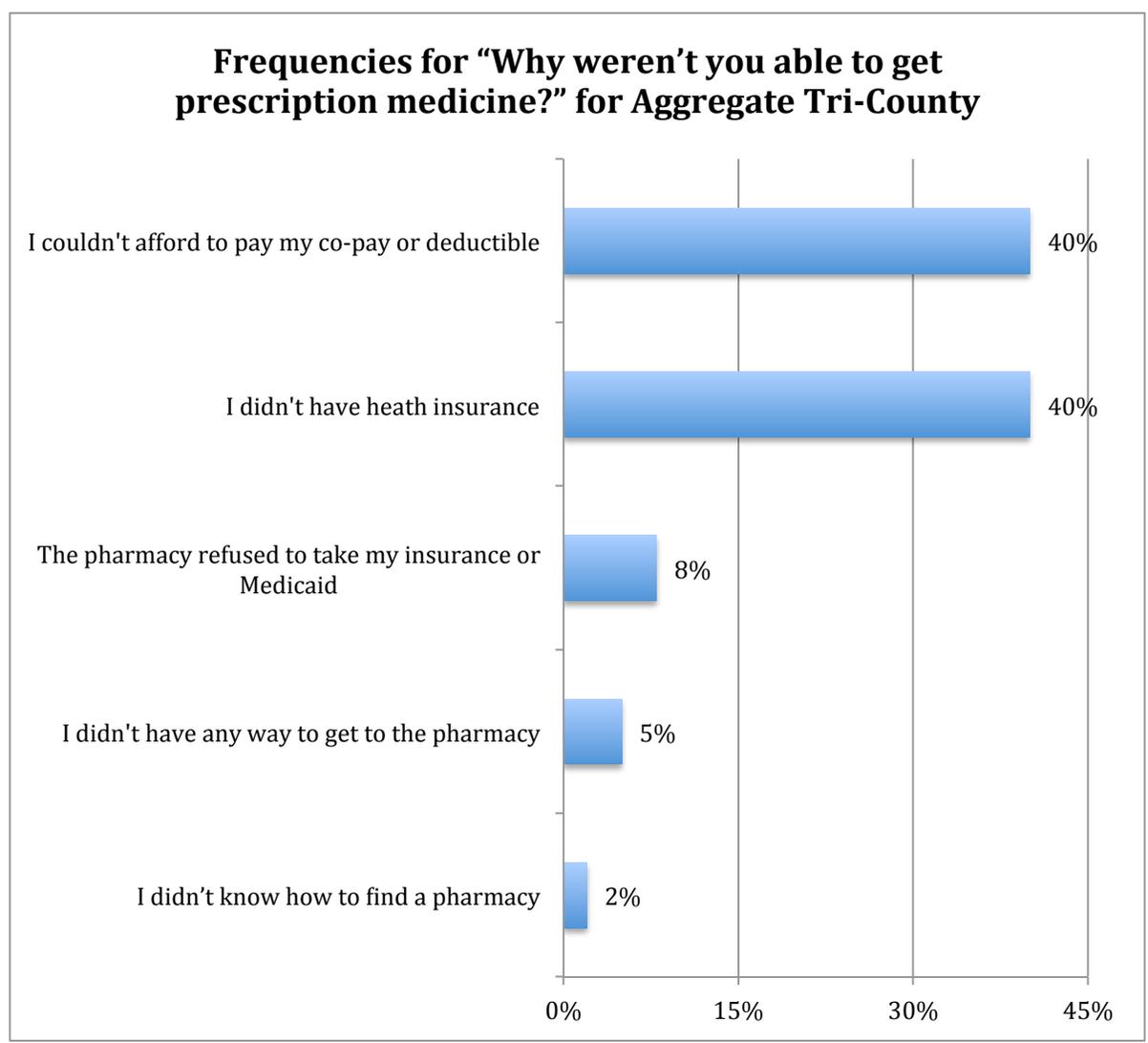
Income	+
Education	+
Woodford	+
White	+
Peoria	-
Homeless	-

Tri-County Community Health-Needs Assessment

Age	+
Race (Black)	-

For relationships between needing prescription drugs and demographics, note that the relationships are reverse coded. Therefore a survey respondent was more likely to answer that they did not have access to prescription drugs if they were residents of Peoria County, they were homeless and were of Black ethnicity.

**Table 8.4.3** Frequencies for “Why weren’t you able to get prescription medicine?” for Aggregate Tri-County



Note: n=375

## Tri-County Community Health-Needs Assessment

**Table 8.4.4 Significant Correlations for Reasons Why Individuals Were Not Able to Obtain Prescription Medication in the Past Year**

	Race (Black)	Race (Latino/a)	Income	Homeless
<i>No insurance</i>	+		-	+
<i>Couldn't afford copay/deductible</i>				+
<i>I didn't know how to find a pharmacy</i>		+		
<i>The pharmacy refused to take my insurance or Medicaid</i>				
<i>I didn't have any way to get to the pharmacy</i>	+			+

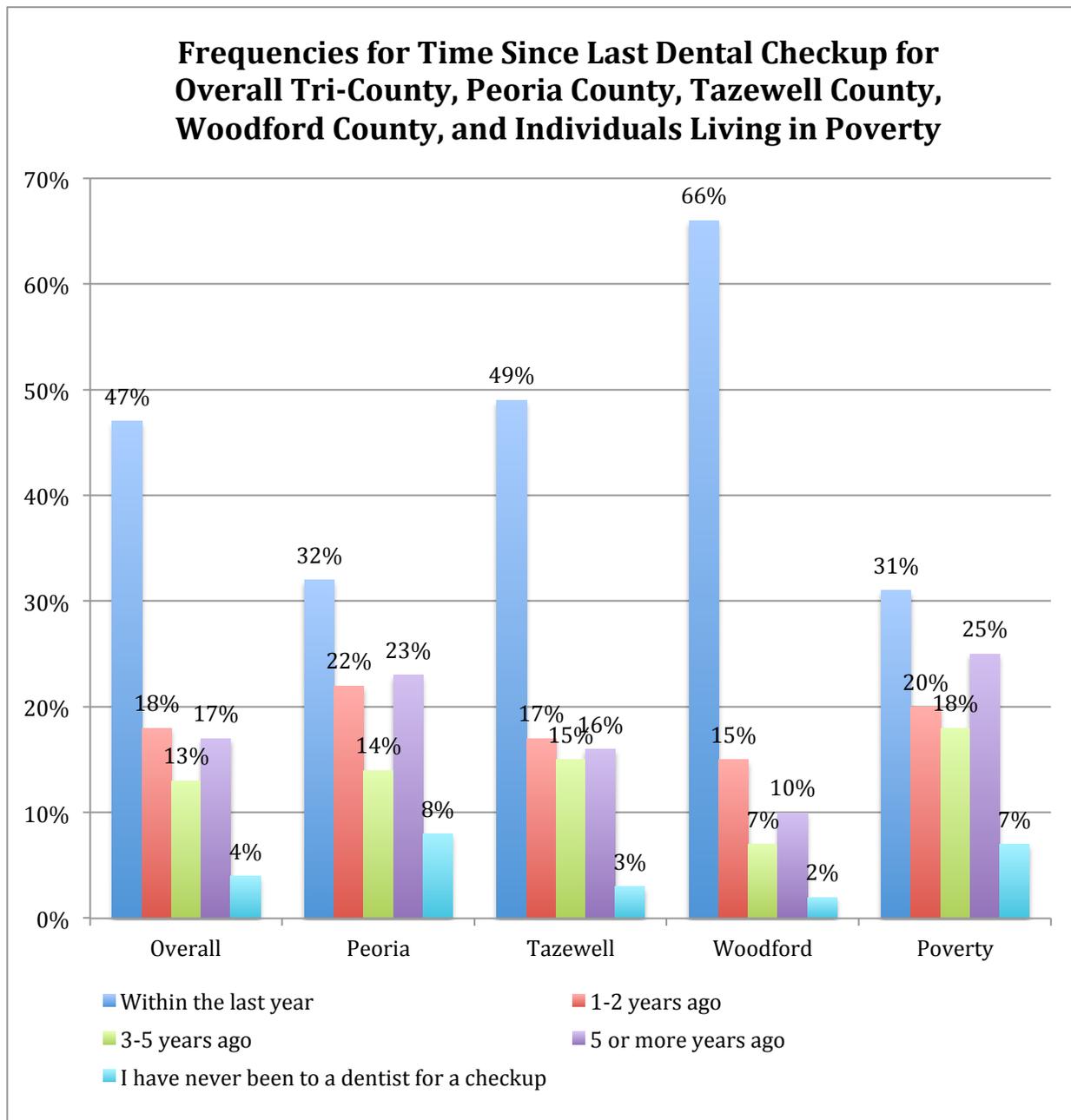
Note that “No Insurance” tends to be rated higher by people with the following characteristics: Black ethnicity and homeless. Individuals with higher incomes tend to rate it lower. In addition, homeless individuals are more likely to rate “couldn’t afford copay/deductible” and “I didn’t have any way to get to the pharmacy” as reasons they were unable to obtain prescription drugs in the past year.

### 8.5 Access to Dental Care

Respondents were asked when was the last time that they had a dental checkup. Note that for Woodford County, most respondents indicated that access was relatively higher than the other two counties. Peoria and Tazewell Counties were similar, indicating that almost 50% of residents have had a dental checkup in the last year. For those living in deep poverty, only 31% had a dental checkup in the last year.

Note that Ordinary-Least-Squared regression modeling indicates that lower income, men and lower education contribute to lower rated access to dental checkups, based on significance levels of *beta* coefficients.

**Table 8.5.1** Frequencies for Time Since Last Dental Checkup for Overall Tri-County, Peoria County, Tazewell County, Woodford County, and Individuals Living in Poverty



Respondents were then asked “Was there a time when you needed dental care but were not able to get it?” Note that for Woodford County, most respondents indicated that access was relatively higher than the other two counties. Peoria and people living in poverty were similar, indicating that over 1/3 of the time they could not get access to dental care when necessary.

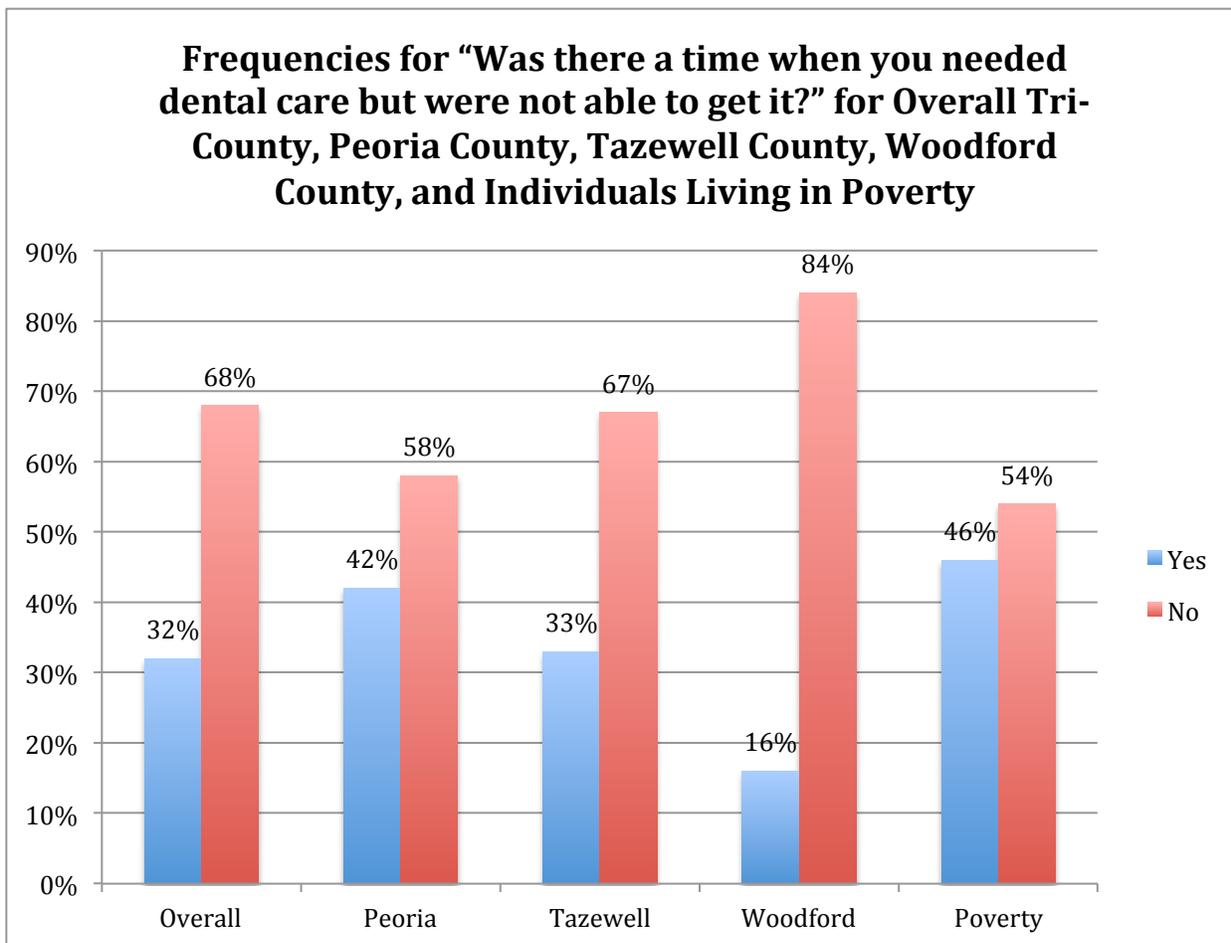
Logistic regression modeling indicated that lower income, younger age and non-White residents were more likely not to have access to dental care, based on significance levels of *beta* coefficients.

**Table 8.5.2 Significant Correlations for Time Since Last Dental Checkup**

Income	+
Education	+
Woodford	+
White	+
Peoria	-
Homeless	-
Age	+
Race (Black)	-
Gender (Male)	-

For relationships between time since last dental checkup and demographic variables, note that the relationships are reverse coded. Therefore a survey respondent was more likely to answer that a longer time has passed since his or her last dental checkup if they were residents of Peoria County, they were homeless and were of Black ethnicity, and they were male.

**Table 8.5.3** Frequencies for “Was there a time when you needed dental care but were not able to get it?” for Overall Tri-County, Peoria County, Tazewell County, Woodford County, and Individuals Living in Poverty



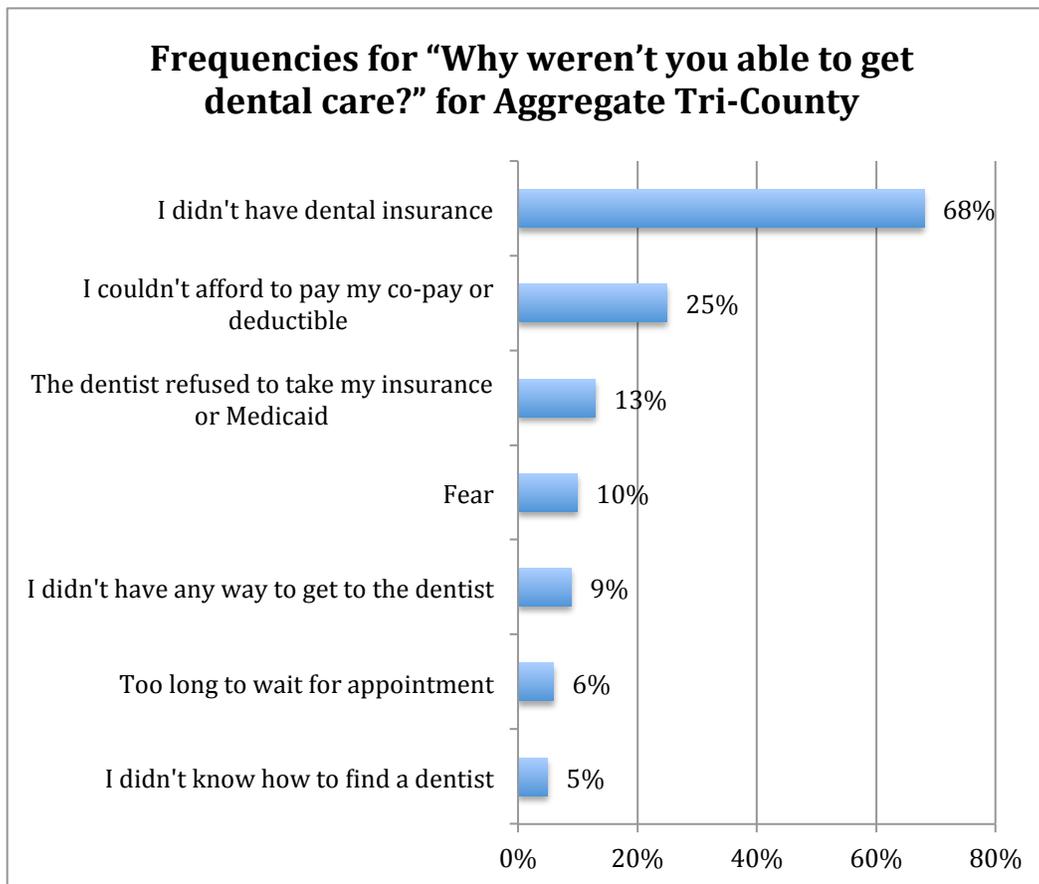
The leading causes of why someone did not have access to dental care were no insurance (68%) and the inability to afford copayments or deductibles (25%). While fear was a non-issue with access to medical care, 10% of respondents indicated they did not get access to dental care because they were uncomfortable going to the dentist. Note that total percentages do not equal 100% as respondents could choose more than one answer.

**Table 8.5.4 Significant Correlations for “In the last year, was there a time when you needed dental care but could not get it?”**

Income	+
Education	+
Woodford	+
White	+
Peoria	-
Homeless	-
Age	+
Race (Black)	-

For relationships between needing dental care and demographic variables, note that the relationships are reverse coded. Therefore a survey respondent was more likely to answer that he or she needed dental care and were unable to receive it if they were residents of Peoria County, they were homeless and they were male.

**Table 8.5.5** Frequencies for “Why weren’t you able to get dental care?” for Aggregate Tri-County



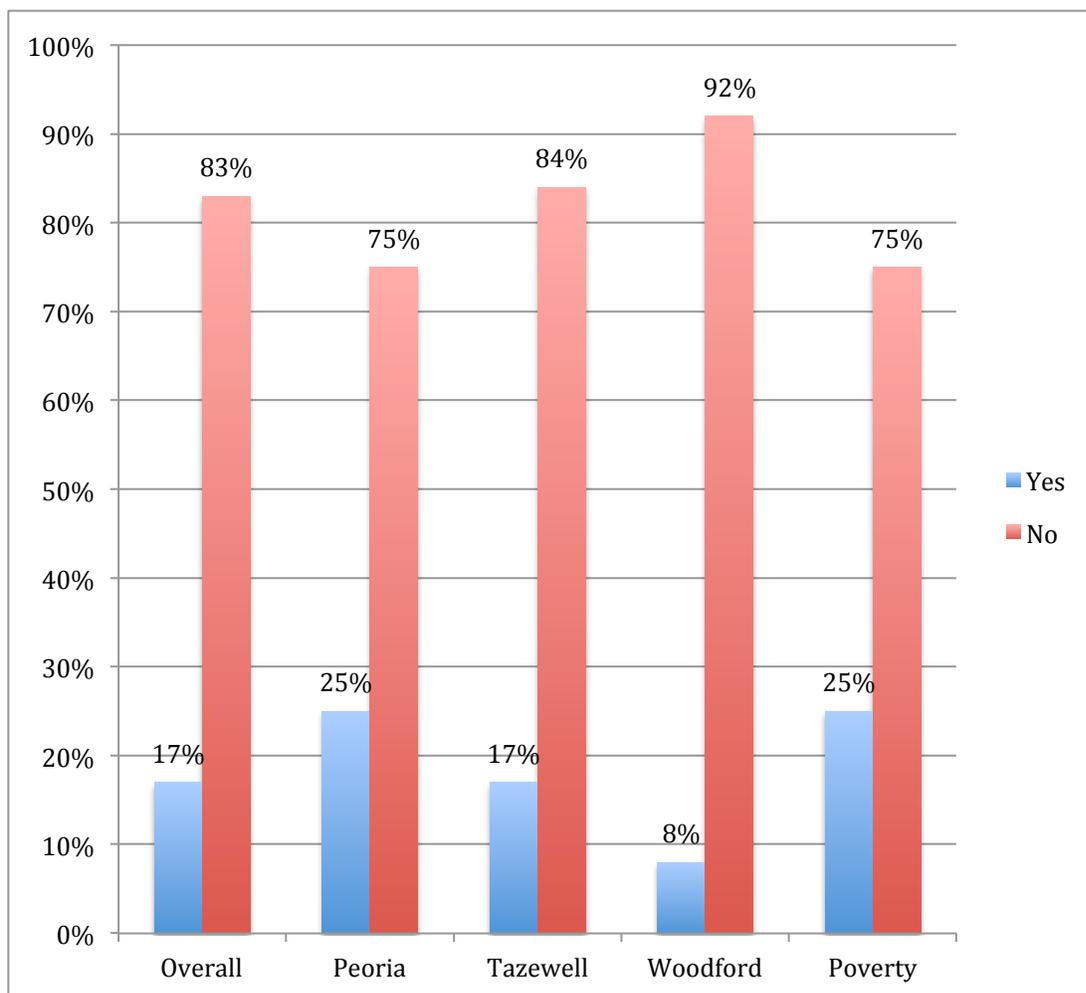
*Note: n=375*

## 8.6 Access to Counseling

Respondents were asked, “Was there a time when you needed counseling but were not able to get it?” Note that for Woodford County, most respondents indicated that access was relatively higher than the other two counties. Peoria and people living in poverty were similar, however most respondents felt that they could get access to counseling when needed.

Logit regression results indicated that low income, younger people and homelessness were the most important predictors of no access to counseling, respectively.

## Tri-County Community Health-Needs Assessment

**Table 8.6.1** Frequencies for “Was there a time when you needed counseling but were not able to get it?” for Overall Tri-County, Peoria County, Tazewell County, Woodford County, and Individuals Living in Poverty

## Tri-County Community Health-Needs Assessment

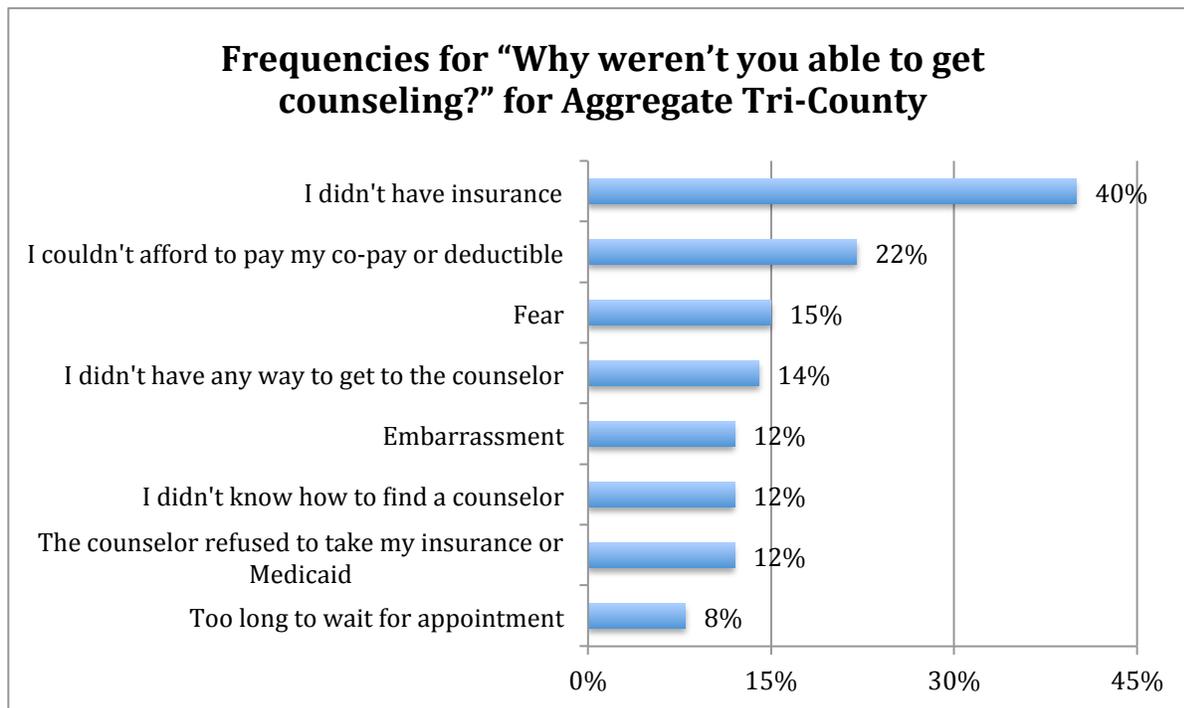
**Table 8.6.2 Significant Correlations for “In the last year, was there a time when you needed counseling but could not get it?”**

Income	+
Education	+
Woodford	+
White	+
Peoria	-
Homeless	-
Age	+
Race (Black)	-

For relationships between needing counseling and demographic variables, note that the relationships are reverse coded. Therefore a survey respondent was more likely to answer that he or she needed counseling and was unable to receive it if they were residents of Peoria County, they were homeless and they were male.

The leading causes of why someone did not have access to counseling were no insurance (40%) and the inability to afford copayments or deductibles (22%). Fear, transportation and embarrassment were also relatively high, as well as the inability to find a counselor and the refusal of Medicaid. Subsequent analyses revealed that members of the Latino/a population were highly correlated to fear and embarrassment. Note that total percentages do not equal 100% as respondents could choose more than one answer.

**Table 8.6.3** Frequencies for “Why weren’t you able to get counseling?” for Aggregate Tri-County



Note: n=375

**Table 8.6.4** Significant Correlations for Reasons Why Individuals Were Not Able to Obtain Counseling in the Past Year

	Race (Black)	Race (Latino/a)	Age	Homeless
<i>No insurance</i>	+		-	
<i>I didn't have any way to get to the counselor</i>			-	
<i>Embarrassment</i>		+		+
<i>Fear</i>		+	-	+

Note several significant relationships between demographic variables and the reasons why individuals were not able to obtain counseling in the past year:

*No Insurance* tends to be rated higher by individuals of Black ethnicity and younger people.

*I didn't have any way to get to the counselor* tends to be rated higher by younger people.

*Embarrassment* tends to be rated higher by individuals of Latino/a ethnicity and those who are homeless.

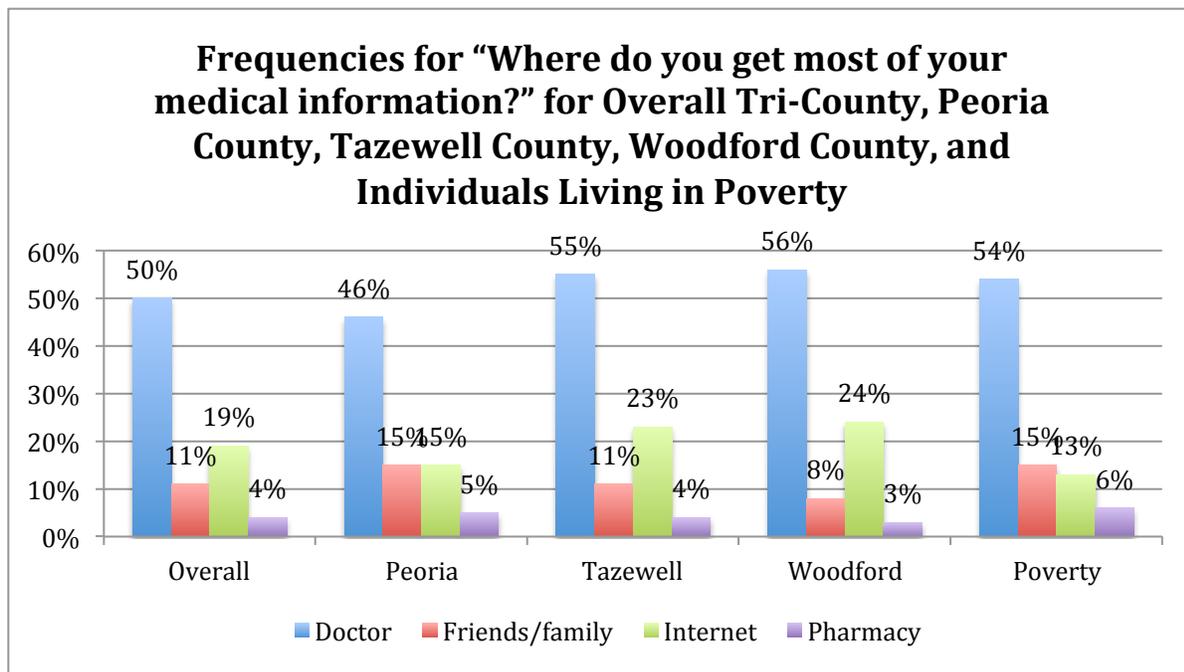
*Fear* tends to be rated higher by individuals of Latino/a ethnicity, those who are homeless, and younger people.

### **8.7 Access to Information**

Respondents were asked, "Where do you get most of your medical information." The vast majority of respondents obtained information from their doctor. While the Internet was the second most common choice, it was significantly lower than information from doctors. Note that in Peoria County, friends/family were equally important to the Internet.

There were no statistically significant relationships between access to information and demographic factors.

**Table 8.7.1** Frequencies for “Where do you get most of your medical information?” for Overall Tri-County, Peoria County, Tazewell County, Woodford County, and Individuals Living in Poverty

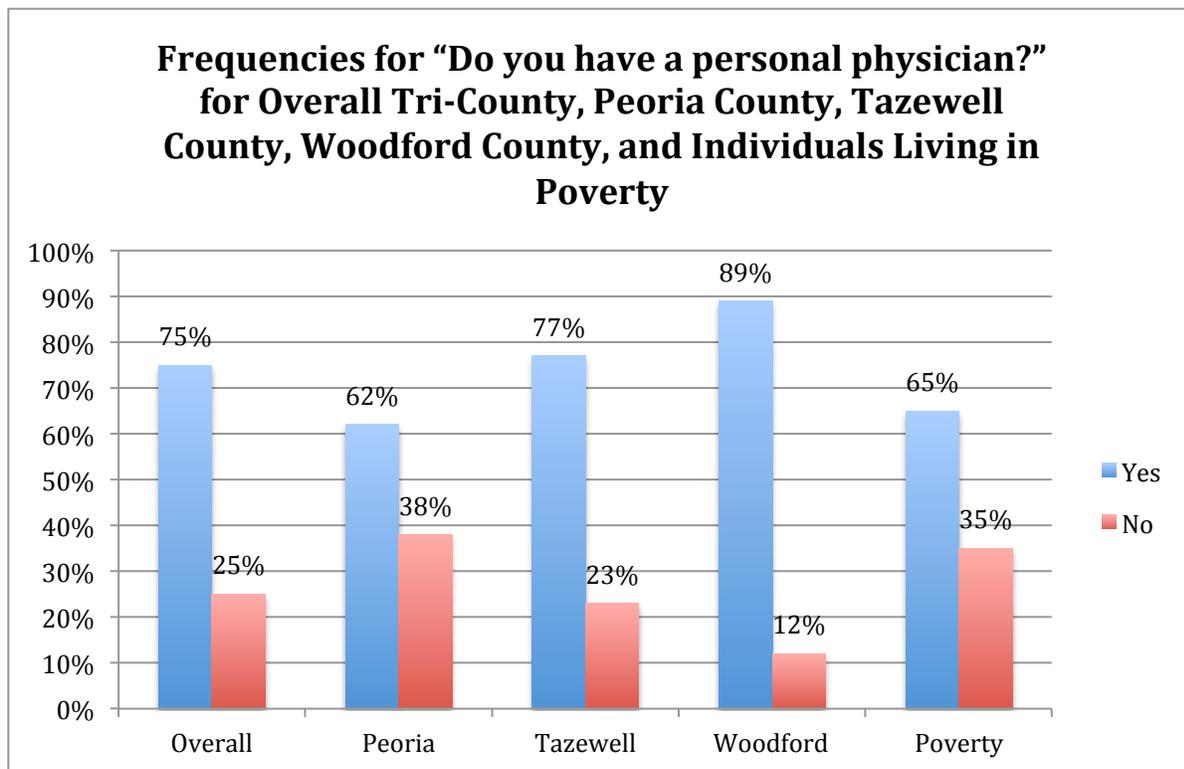


**8.8 Personal physician**

Respondents were asked if they had a personal physician. Note that for Woodford County, most respondents indicated that they had a personal physician at a rate relatively higher than the other two counties. Peoria County and people living in poverty were similar, however most respondents (approximately 2/3) had a personal physician.

Logit regression analyses reveal that people with higher incomes, women and older people positively impacted whether someone had a personal physician, and Black ethnicity and homelessness had a negative impact on whether someone had a personal physician.

**Table 8.8.1** Frequencies for “Do you have a personal physician?” for Overall Tri-County, Peoria County, Tazewell County, Woodford County, and Individuals Living in Poverty



Numerous significant relationships exist between access to a personal physician and demographic variables. Specifically, a survey respondent was more likely to answer that he or she did not have a personal physician if they were residents of Peoria County, they were homeless, or they were of Black or Latino/a ethnicity.

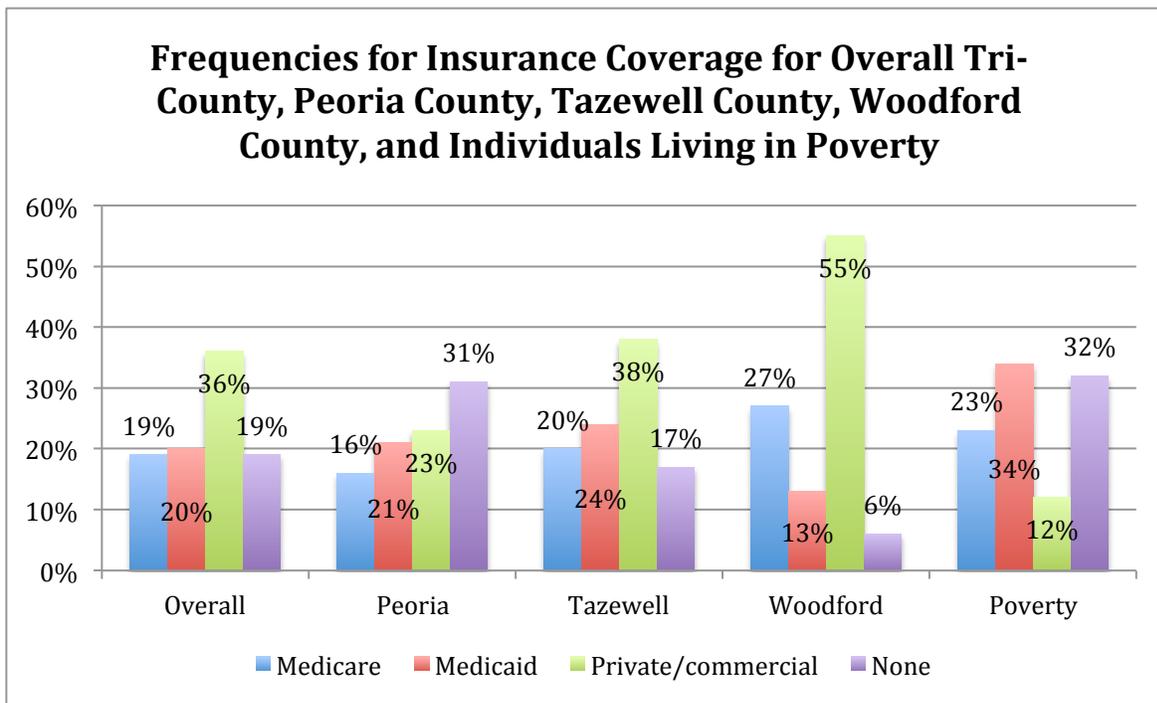
**Table 8.8.2** Significant Correlations among Access to a Personal Physician, Demographic Variables, and Respective Counties

	Race (Black)	Race (Latino/a)	Gender (Female)	Income	Age	Education	Homeless	Peoria	Woodford
Do you have a personal physician	-	-	+	+	+	+	-	-	+

**8.9 Type of Insurance**

Respondents were asked to identify the type of insurance that they had. Across all three counties, the most prevalent type of insurance is private or commercial, however, those living in poverty and Peoria County residents are disproportionately more reliant on Medicaid. Also, for those living in poverty, 1/3 do not have any type of insurance at all.

**Table 8.9.1** Frequencies for Insurance Coverage for Overall Tri-County, Peoria County, Tazewell County, Woodford County, and Individuals Living in Poverty



## Tri-County Community Health-Needs Assessment

### Access to Health Care: Strategic Implications

Only half of people living in deep poverty seek medical services at a clinic or doctor's office. For this segment of the population, it is very common to seek medical services from an emergency department, or even more concerning is that 13% of this segment of the population will not seek any medical services at all. Those that are most likely to not seek any medical services when sick include men and Latino/a residents and homeless people. Additionally, when a person is not sick, regression results indicate that homeless people, men and younger people are less likely to proactively seek a medical-service provider for a checkup.

Over 1/3 of the population living in deep poverty indicated there was a time in the last year when they were not able to get medical care when needed. According to regression results, this was more likely among homeless people and older people. The leading causes were lack of insurance and inability to afford a copayment or deductible. Similar results were found for access to prescription medication. Regression results indicated that homelessness, younger people, lower education and non-White residents were less likely to have access to necessary prescription medication. Again the leading causes of the inability to have access to prescription medications were lack of insurance and inability to afford copayment or deductibles.

While significant research exists linking dental care to numerous diseases, including heart disease, less than 50% of the aggregate Tri-County population had a checkup in the last year. Specifically, men, lower income and less educated people were less likely to visit a dentist. Moreover, note that almost half of people living in poverty indicated that they needed dental care in the last year, but were not able to get it. Lack of dental insurance and inability to afford copayments were the leading causes, however fear was significantly higher for seeing a dentist compared to seeing a doctor.

Approximately 25% of people living in deep poverty indicated they were not able to get counseling when they needed it over the last 12 months. Leading indicators are younger people and homelessness. While affordability and insurance were the leading reasons, fear and embarrassment were also significant, particularly among the Latino/a population.

Across categories, residents of the Tri-County area get most of their medical information from doctors and the next most prevalent is the Internet.

Across all three counties, the most prevalent type of insurance is private or commercial, however, those living in poverty and Peoria County residents are disproportionately more reliant on Medicaid. Also for those living in poverty, 1/3 do not have any type of insurance at all.

**CHAPTER 9. HEALTHY BEHAVIORS**

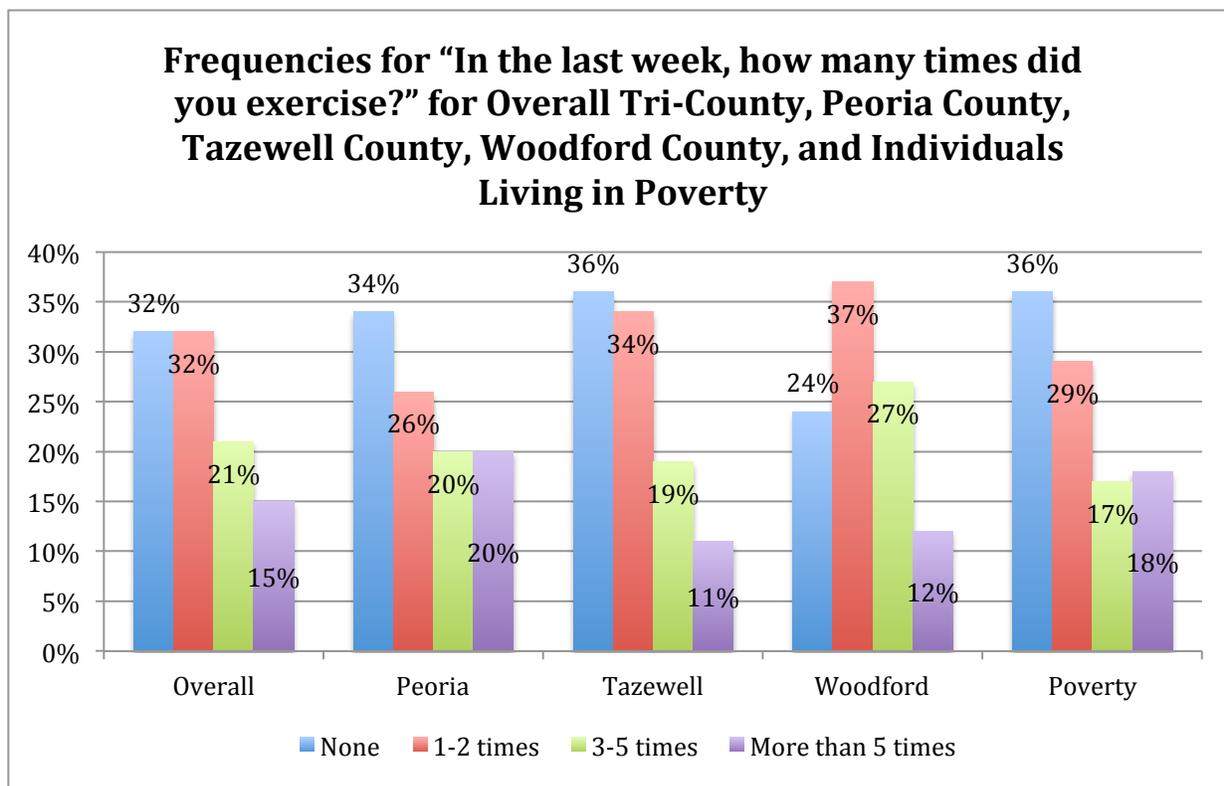
In this chapter, healthy behaviors of the community are presented. Specifically, frequency of physical exercise, healthy eating habits and smoking are examined. Additionally, overall self-perceptions of health are presented.

**9.1 Physical Exercise**

Respondents were asked how frequently they engage in physical exercise. The majority of the population across all categories does not engage in sufficient exercise. Note that these findings are more consistent with state averages when compared to data reported by the *Illinois Behavioral Risk Factor Surveillance System* data, where it indicated the Tri-County area was roughly twice the rate of the state average. For physical exercise, ordinary-least-square regression results show that men, younger people and educated people are more likely to engage in physical exercise, while homeless residents are not.

Only one significant relationship existed between physical exercise and demographic variables. Specifically, a survey respondent was more likely to answer that he or she did not regularly exercise if they were residents of Tazewell County.

**Table 9.1.1** Frequencies for “In the last week, how many times did you exercise?” for Overall Tri-County, Peoria County, Tazewell County, Woodford County, and Individuals Living in Poverty

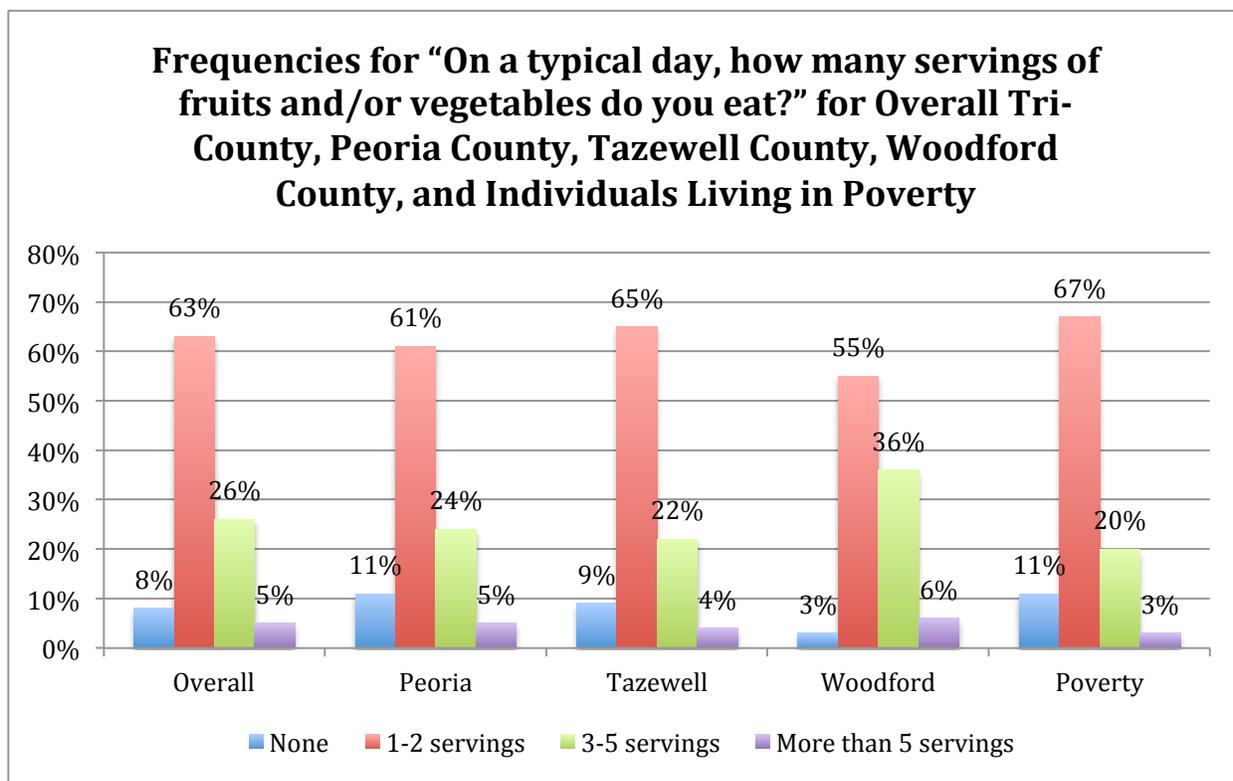


### 9.2 Healthy Eating

For healthy eating habits, about 30% of the population consumes at least three servings of fruits/vegetables in a day. Moreover, only about 10% of the population consumes the minimal recommended daily amount of vegetables. Some recent research by the CDC states that for a typical person consuming 2,200 calories per day, they should have 7 servings of vegetables. In the Tri-County area, those that are more likely to have healthy eating habits include women, people with higher educations and more income, and older people, respectively, according to Ordinary-Least-Square regression modeling.

Note that while most data from the CHNA survey is relatively consistent with the *Illinois Behavioral Risk Factor Surveillance System* data, there is a large discrepancy between those consuming 5-or-more servings of fruits and vegetables per day. While secondary data found that approximately 14% of respondents met this criterion, the CHNA survey found that only 5% of respondents consumed 5-or-more servings of fruits and vegetables per day. In both cases, however, the data suggest this area of study is of significant concern.

**Table 9.2.1** Frequencies for “On a typical day, how many servings of fruits and/or vegetables do you eat?” for Overall Tri-County, Peoria County, Tazewell County, Woodford County, and Individuals Living in Poverty



**Table 9.2.2 Significant Correlations among Number of Servings of Fruits and Vegetables Consumed Daily, Demographic Variables, and Respective Counties**

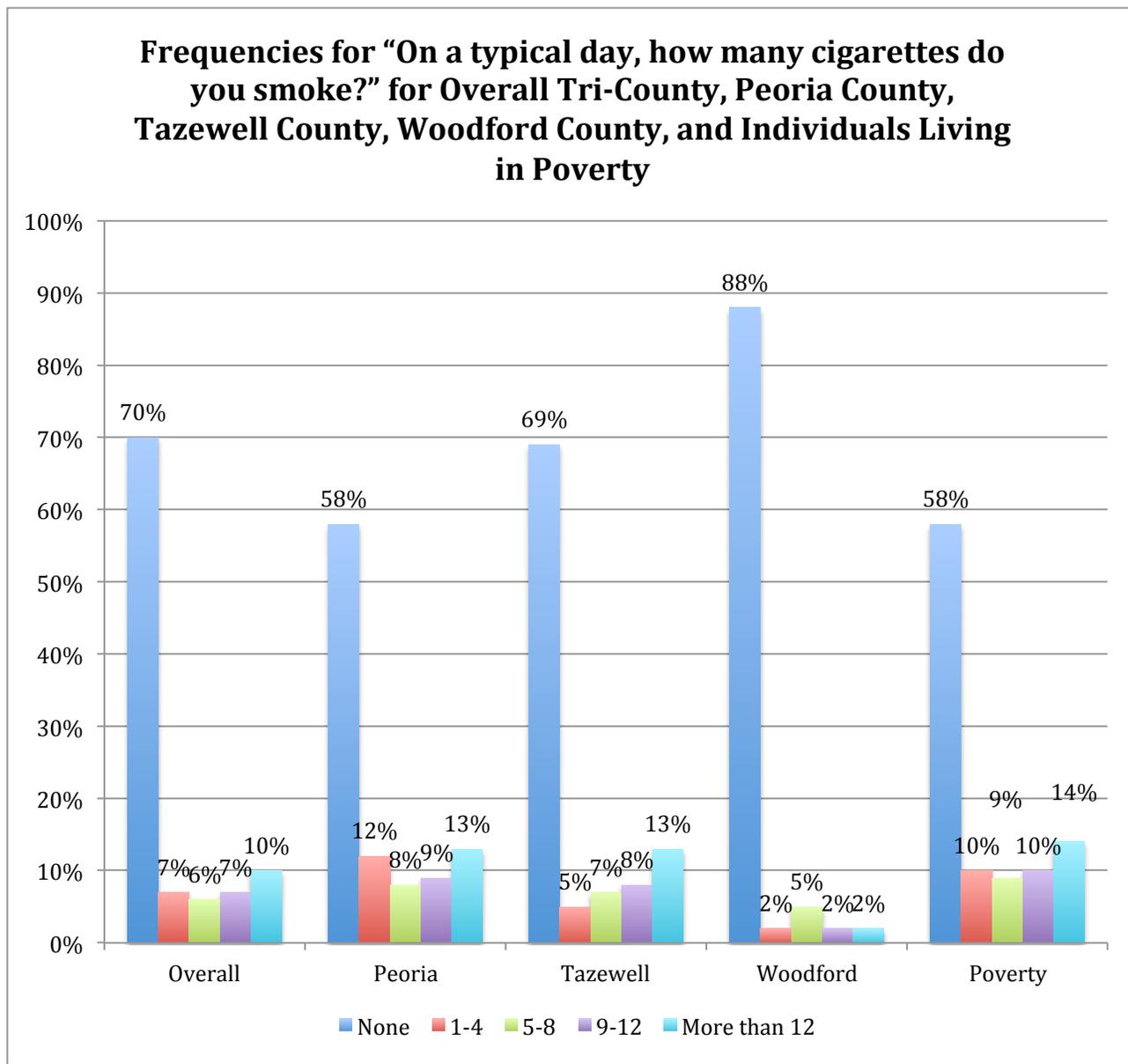
<i>Woodford</i>	+
<i>Age</i>	+
<i>Gender (Female)</i>	+
<i>Income</i>	+
<i>Education</i>	+
<i>Homeless</i>	-

Numerous significant relationships exist between consumption of fruits and vegetables and demographic variables. Specifically, a survey respondent was more likely to answer that he or she consumed more fruits and vegetables each day if they were residents of Woodford County, were older in age, were female, earned a higher income, and had attained higher levels of education. Conversely, a survey respondent was more likely to answer that he or she consumed less fruits and vegetables each day if they were homeless.

### 9.3 Smoking

Smoking is on the decline, as seen in the secondary research presented earlier in this report. However, there are still segments of the population that are likely to smoke. According to Ordinary-Least-Square regression modeling, less educated people, men, younger people, Black residents and homeless people are more likely to smoke, respectively. Note that when comparing these data to the *Illinois Behavioral Risk Factor Surveillance System* data, the CHNA survey assesses the frequency of smoking compared to whether a respondent smoked or did not smoke.

**Table 9.3.1** Frequencies for “On a typical day, how many cigarettes do you smoke?” for Overall Tri-County, Peoria County, Tazewell County, Woodford County, and Individuals Living in Poverty



**Table 9.3.2 Significant Correlations among Number of Cigarettes Smoked Daily, Demographic Variables, and Respective Counties**

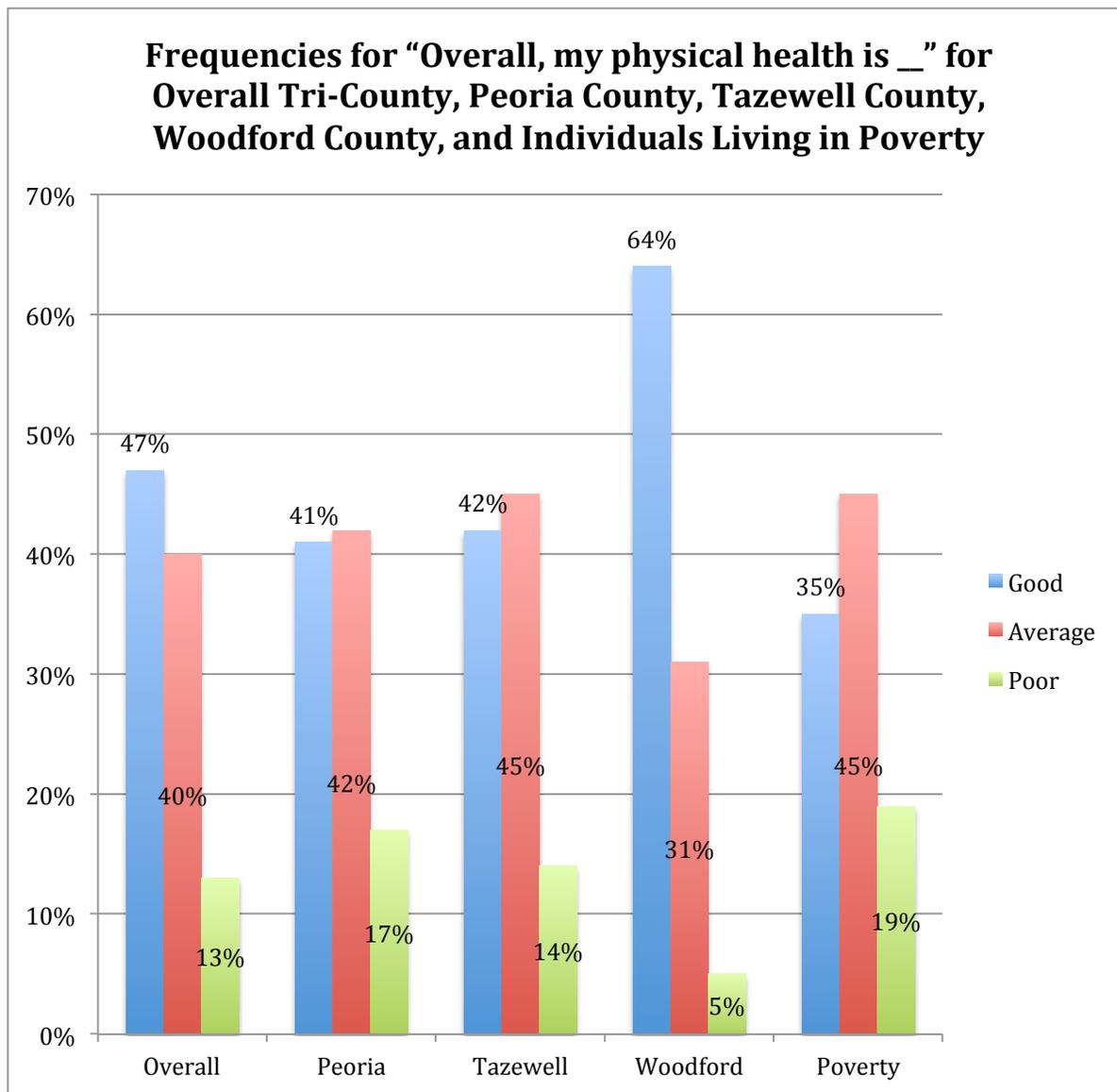
<i>Peoria</i>	+
<i>Woodford</i>	-
<i>Age</i>	-
<i>Gender (Male)</i>	+
<i>Income</i>	-
<i>Homeless</i>	+

Numerous significant relationships exist between cigarette smoking and demographic variables. Specifically, a survey respondent was more likely to answer that he or she smoked more cigarettes each day if they were residents of Peoria County, were younger in age, were male, earned a lower income, and were homeless.

#### 9.4 Overall Health

In terms of self-perceptions of physical and mental health, almost 90% of the population indicated that they were in average or good physical health. Similar results were found for residents' self-perceptions of mental health. Regression modeling reveal that people with higher income, higher education, younger age and women are more likely to view themselves as physically healthy, respectively.

**Table 9.4.1** Frequencies for “Overall, my physical health is \_\_” for Overall Tri-County, Peoria County, Tazewell County, Woodford County, and Individuals Living in Poverty



Ordinary-Least Square Regression modeling for self-perceptions of physical health indicates that people with higher income, and white ethnicity are more likely to view themselves as physically healthy, respectively.

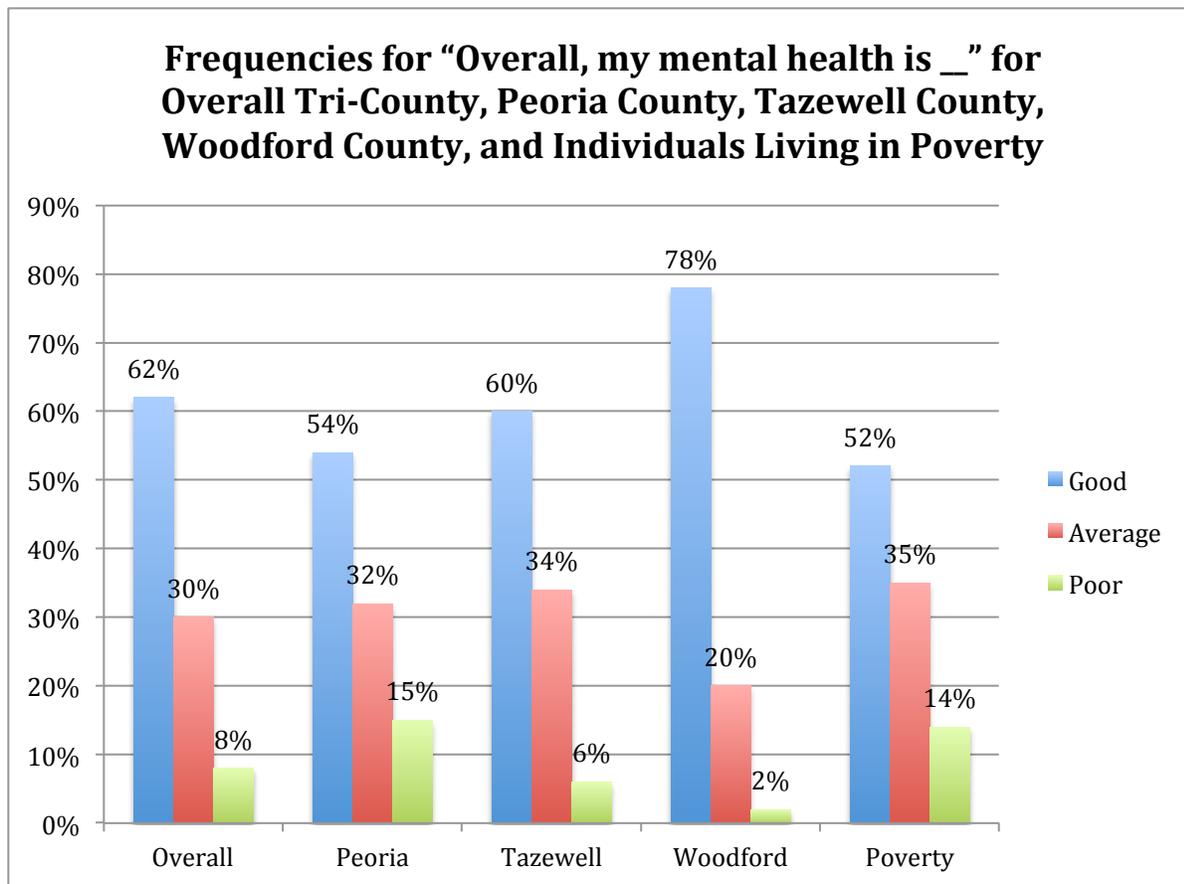
## Tri-County Community Health-Needs Assessment

**Table 9.4.2 Significant Correlations among Overall Physical Health, Demographic Variables, and Respective Counties**

<i>Peoria</i>	-
<i>Tazewell</i>	-
<i>Woodford</i>	+
<i>Education</i>	+
<i>Income</i>	+
<i>Homeless</i>	-

Numerous significant relationships exist between overall physical health and demographic variables. Specifically, a survey respondent was more likely to answer that he or she possessed better physical health if they were residents of Woodford County, earned a higher income, and had attained higher levels of education. Conversely, a survey respondent was more likely to answer that he or she possessed poorer physical health if they were residents of Peoria or Tazewell Counties, or were homeless.

**Table 9.4.3** Frequencies for “Overall, my mental health is \_\_” for Overall Tri-County, Peoria County, Tazewell County, Woodford County, and Individuals Living in Poverty



Numerous significant relationships exist between overall mental health and demographic variables. Specifically, a survey respondent was more likely to answer that he or she possessed better mental health if they were residents of Woodford County, earned a higher income, and were of White ethnicity. Conversely, a survey respondent was more likely to answer that he or she possessed poorer mental health if they were residents of Peoria County, were homeless, or were of Black ethnicity.

**Table 9.4.4 Significant Correlations among Overall Mental Health, Demographic Variables, and Respective Counties**

<i>Peoria</i>	-
<i>Woodford</i>	+
<i>Race (White)</i>	+
<i>Race (Black)</i>	-
<i>Income</i>	+
<i>Homeless</i>	-

**Healthy Behaviors: Strategic Implications**

For healthy behaviors, men, younger people and educated people are more likely to engage in physical exercise, while homeless residents are not. Although only about 30% of the population engages in exercise at least 3 times a week. Similarly for healthy eating habits, about 30% of the population consumes at least three servings of fruits/vegetables in a day. Those that are more likely to have healthy eating habits include women, people with higher educations and more income, and older people. Given the documented research showing the benefits of physical exercise and healthy eating, this is a concern for the community, as most primary and secondary diagnoses in the Tri-County community can be mitigated, to some extent, by healthy lifestyle.

Smoking is on the decline, however, less educated people, men, younger people, Black residents and homeless people are more likely to smoke.

In terms of self-perceptions of physical and mental health, almost 90% of the population indicated that they were in average or good physical health. Similar results were found for residents' self-perceptions of mental health.

## PHASE III – PRIORITIZATION OF HEALTH-RELATED ISSUES

The identification and prioritization of the most important health-related issues in the Tri-County region are identified in Phase III. To accomplish this, a summary of Phase I and Phase II were performed to provide a foundation for the prioritization process. After summarizing all of the issues in the Community Health Needs Assessment, a comprehensive assessment of existing community resources was performed to identify the efficacy to which health-related issues were being addressed. Finally a collaborative team of leaders in the healthcare community used an importance/urgency methodology to identify the most critical issues in the area. Results are included in Chapter 10.

### CHAPTER 10. PRIORITIZATION OF HEALTH-RELATED ISSUES

In this chapter, we identify the most critical health-related needs in the community. To accomplish this, first we identified the most important areas of concern. Next we completed a comprehensive inventory of community resources, and finally we identified the most important health concerns in the community.

Specific criteria used to identify these issues included: (1) magnitude to the community; (2) strategic importance to the community; (3) existing community resources; (4) potential for impact; and (5) trends and future forecasts.

#### 10.1 Summary of Community Health Issues

Based on findings from the previous analyses, a chapter-by-chapter summary of key takeaways was necessary to provide a foundation to identify the most important health-related issues in the community. Considerations for identifying key takeaways included prevalence of the issues, importance to the community, impact, trends and projected growth.

**Demographics (Chapter 1)** – Four factors were identified as the most important areas of concern from the demographic analyses: increasing elderly population, birth rates to teenage mothers, mental health rates and poverty.

**Insurance (Chapter 2)** – Lack of insurance contributes to decreased accessibility to health care, including both medical and dental insurance.

**Symptoms and Predictors (Chapter 3)** – Based on prevalence and growth rates, factors were identified as having significant impact on the community. These include, obesity, hypertension, atherosclerosis/hyperlipidemia, addiction/chemical dependency and renal failure.

**Diseases/Morbidity (Chapter 4)** – By evaluating magnitude of morbidities and growth rates of morbidities, five specific issues were identified. These included cardiovascular issues, asthma, cancer (note that while some types of cancer are actually decreasing, lung cancer is increasing), diabetes (specifically Type II diabetes), and STIs.

## Tri-County Community Health-Needs Assessment

**Mortality (Chapter 5)** – The two leading causes of mortality were heart disease and cancer. While there were other categories for mortality, heart disease and cancer were significantly more prevalent than all other categories.

**Community Misperceptions (Chapter 7)** – Based on results from the survey, respondents to the survey incorrectly perceived “heart disease” and “unsafe sex” as being relatively unimportant health concerns in the community.

**Access to Health Services (Chapter 8)** – Results from survey respondents defined as living in deep poverty indicated that access to healthcare services is limited. This includes medical, dental and mental healthcare.

**Health-Related Behaviors (Chapter 9)** – Results from survey respondents defined as living in deep poverty indicated that there are limited efforts at proactively managing one’s own health. This includes limited exercise, poor eating habits and increased incidence of smoking

In order to provide parsimony before prioritization of key community health-related issues, the collaborative team first aggregated findings into 10 key categories, based on similarities and duplication. The 10 areas were:

**Obesity**

**Risky Behaviors - Substance Abuse**

**Mental Health**

**Healthy Behaviors**

**Access to Health Services**

**Asthma**

**Heart Disease**

**Cancer**

**Diabetes**

**Sexual Health**

## **10.2 Community Resources**

After summarizing issues in the Community Health Needs Assessment, a comprehensive analysis of existing community resources was performed to identify the efficacy to which these 10 health-related issues were being addressed.

There are numerous forms of resources in the community. They are categorized as recreational facilities, county health departments, community agencies and area hospitals/clinics.

### **10.2.1 Recreational Facilities (10)**

#### **Club Fitness Gym**

##### *Obesity*

Club Fitness Gym offers a weight loss program, “25 in 3” that includes nutritional guidance, supervised cardio training, and weight training with certified personal trainers.

#### **Clubs at River City**

##### *Obesity*

The Clubs at River City offers a weight loss program “Lose it 2012” to promote an active, healthy lifestyle for members of all ages and fitness levels.

#### **Fon du Lac (East Peoria) Park District:**

##### *Obesity, Healthy Behaviors, Heart Disease*

Fon du Lac Park District maintains over 1,600 acres of parks, natural areas, riverfront, trails, two golf courses, a picturesque marina, campground, water park, a quaint farm park, and a variety of recreational programs and activities for all ages.

#### **Greater Peoria Family YMCA**

##### *Healthy Behaviors*

The Greater Peoria Family YMCA is a community based service organization dedicated to building the mind, body and spirit for members of the Peoria area community. By offering value-based programs emphasizing education, health and recreation for individuals regardless of sex, race or socio-economic status the YMCA is increasing the quality of life in the Greater Peoria area.

#### **Morton Park District:**

##### *Obesity, Healthy Behaviors, Heart Disease*

The Morton Park District maintains ten facilities offering a variety of programs for infants, toddlers, early childhood, youth, adults, and seniors.

#### **Pekin Park District:**

##### *Obesity, Healthy Behaviors, Heart Disease*

Through 2500 acres of land developed into 15 parks, the Pekin Park District strives to improve quality of life for the district's residents by providing both active and passive recreational opportunities in recreational facilities, parks and areas. The Pekin Park District offers a variety of programs for infants, toddlers, early childhood, youth, adults, and seniors.

## Tri-County Community Health-Needs Assessment

### **Peoria Park District:**

#### *Healthy Behaviors*

The Peoria Park District maintains over 9,000 acres of open space, 64 park sites, 6 golf courses, 6 swimming pools, 31 tennis courts, 11 softball and 22 soccer fields, zoo, conservatory and gardens, nature center, arena with 2 ice rinks, outdoor stage and a band shell. The Peoria Park District offers programs for infants, toddlers, early childhood, youth, adults, and seniors.

### **RiverPlex Recreation and Wellness Center**

#### *Obesity, Healthy Behaviors*

The RiverPlex is a joint project between the Peoria Park District and OSF Saint Francis Medical Center. It is an 118,000 square foot facility complete with a state of the art fitness center, indoor aquatic park, multipurpose arena, activity room, classrooms and more. Programs include a Weight Management Program (*Obesity*), Exergaming for Health Program (*Obesity*) and numerous health/fitness programs (*Healthy Behaviors*).

### **YWCA Pekin:**

#### *Obesity, Healthy Behaviors, Heart Disease*

The YWCA Pekin provides a full range of aquatics and other fitness, child care, adult literacy, health and leisure, and community service programs.

### **Washington Park District:**

#### *Obesity, Healthy Behaviors, Heart Disease*

The Washington Park District offers a variety of programs for infants, toddlers, early childhood, youth, adults, and seniors.

## **10.2.2 Health Departments (3)**

### **Peoria City/County Health Department**

#### *Obesity, Healthy Behaviors, Access to Health Services, Asthma, Sexual Health*

The goal of the Peoria City/County Health Department is to protect and promote health and prevent disease, illness and injury. Public health interventions range from preventing diseases to promoting healthy lifestyles and from providing sanitary conditions to ensuring safe food and water.

### **Tazewell County Health Department:**

#### *Obesity, Healthy Behaviors, Cancer, Sexual Health*

The Tazewell County Health Department promotes and protects the public's health and wellbeing through programs targeting the following concerns: dental, emergency planning, environmental, health promotion, MCH/WIC, nursing, and concerns for the 21<sup>st</sup> century.

## Tri-County Community Health-Needs Assessment

### **Woodford County Health Department**

*Obesity, Healthy Behaviors, Access to Health Services, Sexual Health*

The Woodford County Health Department sponsors programs in the following areas: maternal and child health, infectious diseases, environmental health, health education, and emergency preparedness.

### **10.2.3 Community Agencies/Private Practices (22)**

#### **Advocates for Access**

*Access to Health Services*

Advocates for Access, is a nonprofit organization that empowers people with disabilities to live independently in our community. As a center for independent living, Advocates for Access provides four core services: independent living skills training, information and referral, peer support services, and systems change advocacy.

#### **All Our Kids (AOK) Early Childhood Network**

*Mental Health, Healthy Behaviors, Access to Health Services*

The AOK Network is a community-based collaboration that is committed to assuring a high-quality, well-coordinated, easily-accessible system of care that will promote positive growth and development for children birth to age five and their families. The overall goal of the AOK Network is to ensure that all children under the age of five years and their families have the opportunity to receive the services they need from prenatal care to well-baby checkups to parenting education to specialized services, such as speech therapy, physical therapy or home visits.

#### **American Cancer Society**

*Cancer*

The American Cancer Society is dedicated to eliminating cancer as a major health problem by preventing cancer, saving lives, and diminishing suffering from cancer, through research, education, advocacy, and service.

#### **American Diabetes Association of Peoria**

*Diabetes*

The American Diabetes Association is dedicated to preventing and curing diabetes and improving the lives of all people affected by diabetes through research, delivering services, and providing advocacy.

#### **American Heart Association**

*Healthy Behaviors, Heart Disease*

The mission of the American Heart Association is to build healthier lives, free of cardiovascular diseases and stroke. The American Heart Association sponsors a variety of programs for all ages including community heart screenings (*Heart Disease*).

## Tri-County Community Health-Needs Assessment

### **American Lung Association**

#### *Asthma, Cancer*

The American Lung Association is committed to saving lives by improving lung health and preventing lung disease through research, education and advocacy. In addition to anti-tobacco programs, the American Lung Association sponsors the Active with Asthma Day Camps and COPD Initiatives.

### **American Red Cross of Central Illinois**

#### *Healthy Behaviors*

The American Red Cross is a humanitarian organization led by volunteers and guided by its Congressional Charter and the Fundamental Principles of the International Red Cross Movement that provides relief to victims of disaster and helps people prevent, prepare for, and respond to emergencies.

### **Antioch Group**

#### *Addiction, Mental Health*

The Antioch Group provides Christian counseling and psychological services for alcohol and drug addictions, sexual addictions, and eating disorders.

### **Cancer Center for Healthy Living**

#### *Cancer*

The Cancer Center for Healthy Living provides emotional support beyond medical care for cancer patients, survivors, and their caregivers. A variety of programs and services are available to help heal the mind, body and spirit free of charge including individual, family and group support, individual nutrition counseling and group cooking demonstrations, healthy living classes, a resource library, educational workshops and seminars, and massage therapy.

### **Central Illinois Wellness Council**

#### *Obesity, Healthy Behaviors*

The Central Illinois Wellness Council is a multi-stakeholder group that works to improve health and wellness in the Peoria community. The council is focused on three areas: Obesity, oral health, and reproductive health.

### **Children's Home Association of Illinois**

#### *Addictions, Mental Health, Healthy Behaviors*

The Children's Home operates five locations in the Peoria area and employs a staff of 400+ professionals committed to community-based, family-focused programs that provide counseling, education and support to nearly 1,000 children each month. Programs for children and youth include: residential care, group homes, foster care and adoption, supervised independent living, private school, crisis intervention, mental health assessment, homeless services, in-home counseling and family preservation.

## Tri-County Community Health-Needs Assessment

### **Christian Psychological Associates (John Day and Associates)**

#### *Mental Health*

Christian Psychological Associates offers services for children and adults including individual psychotherapy for the full range of difficulties, including anxiety and mood disorders, dissociative disorders, coping with medical problems, personality disorders, psychotic-spectrum disorders, and adjustment disorders.

### **FamilyCore**

#### *Addictions*

FamilyCore is a private, non-profit, nationally accredited social service agency committed to helping individuals and families strengthen their lives through a variety of counseling, child welfare, family preservation and preventative education services. Services include adoptions, counseling, foster care, single parent programs, and youth outreach.

### **Fayette Companies**

#### *Addiction, Mental Health*

Fayette Companies is a behavioral health organization that provides residential, in-patient, and outpatient services for individuals with serious mental illness and substance use disorders through numerous programs. Affiliated programs include Human Service Center (formally known as White Oaks; *Addiction, Mental Health*), Behavioral Health Advantage (*Mental Health*).

### **Heart of Illinois United Way**

#### *Access to Health Services*

The Heart of Illinois United Way brings together people from business, labor, government, health and human services to address community's needs. Money raised through the Heart of Illinois United Way campaign stays in community funding programs and services in Marshall, Peoria, Putnam, Stark, Tazewell and Woodford Counties.

### **Lutheran Social Services of Illinois**

#### *Mental Health*

Lutheran Social Services provides behavioral health services (counseling, substance abuse, mental health and developmental disabilities), children's community services (adoption, foster care, pregnancy counseling, Intact Family Services, residential services and Head Start), nursing and community services (long-term care and rehabilitation, home care services, adult day services, respite services for caregivers and retirement communities), prisoner and family ministry (support for children of incarcerated parents and their caregivers, re-entry programs, on-site prison programs, *Building Homes: Rebuilding Lives* and justice education), and senior housing services (affordable housing for low-income seniors and people with disabilities).

### **National Alliance on Mental Illness Tri-County**

#### *Mental Health*

The National Alliance on Mental Illness is the nation's largest grassroots mental health organization dedicated to building better lives for the millions of Americans affected by mental illness. NAMI advocates for access to services, treatment, support, and research and is steadfast

## Tri-County Community Health-Needs Assessment

in its commitment to raising awareness and building a community of hope for all of those in need.

### **Neighborhood House**

#### *Healthy Behaviors*

Neighborhood House Association is dedicated to providing a safe haven with comprehensive services that meet the social, emotional and material needs of individuals and families from infancy to the elderly. The common goal of all services is to enhance the quality of life and foster independence of those served. Services include Meals on Wheels, 55 and Better, and child and youth education programs.

### **Peoria Area Intergroup Association (Alcoholics Anonymous)**

#### *Addiction*

Alcoholics Anonymous is a fellowship of men and women who share their experience, strength and hope with each other that they may solve their common problem and help others recover from alcoholism.

### **Planned Parenthood**

#### *Sexual Health*

Planned Parenthood is a sexual and reproductive health care provider to improve women's health and prevent unintended pregnancies.

### **Susan G. Komen for the Cure**

#### *Cancer*

The Susan G. Komen for the Cure is dedicated to breast cancer research, education, advocacy, health services and social support programs.

### **Tazwood Mental Health Center**

#### *Addiction, Mental Health*

Tazwood provides an extensive continuum of outpatient services to address mental health and substance abuse issues. Services include individual psychotherapy for adults, adolescents, and children, family and group therapy, and psychiatry services, including medication management and monitoring.

## **10.2.4 Hospitals/Clinics (11)**

### **Bob Michel Veterans Affairs Outpatient Clinic**

#### *Access to Health Services*

The Bob Michel Veterans Affairs Outpatient Clinic offers comprehensive patient care services which include primary care, women's health, optometry, audiology, neurology, podiatry, pharmacy, lab services, dietary, diabetes education, home based primary care (HBPC), and mental health services.

## Tri-County Community Health-Needs Assessment

### **Central Illinois Diabetes and Metabolism Institute**

#### *Obesity, Diabetes*

The Central Illinois Diabetes and Metabolism Institute offers a comprehensive diabetes Program involving diabetes treatment, teaching and education. In addition, the Institute offers programs for obesity and overweight individuals.

### **Central Illinois Endoscopy Center**

#### *Cancer*

Central Illinois Endoscopy Center is downstate Illinois' largest freestanding dedicated endoscopy center. CIEC is Peoria area's first outpatient center dedicated to the diagnosis and treatment of gastrointestinal disorders. Programs include colon screening.

### **Heartland Community Health Clinic**

#### *Addiction, Access to Health Services*

The Heartland Community Health Clinic provides accessible, high quality, comprehensive primary health care services for the medically underserved, regardless of ability to pay, and to conduct high quality programs in health professions education through collaborative community partnerships.

### **Hopedale Medical Complex**

#### *Obesity, Addiction, Mental Health, Healthy Behaviors, Access to Health Services, Asthma, Heart Disease, Cancer, Diabetes, Sexual Health*

Hopedale Hospital is a Critical Access Hospital with a total of 25 beds that are interchangeable between our acute care and swing bed services. Hopedale Hospital offers 24 hour emergency services, an intensive care unit, general and advanced vascular surgery, orthopedic surgery, cardiopulmonary services, diagnostic radiology imaging services, and numerous outpatient services.

### **Illinois CancerCare**

#### *Cancer*

Illinois CancerCare provides comprehensive, compassionate care that enhances the lives of patients and their families. Illinois CancerCare is a comprehensive practice treating patients with cancer and blood diseases through state-of-the-art treatments while staying on the leading edge of breakthrough research and medicines.

### **OSF Saint Francis Medical Center**

#### *Obesity, Addiction, Mental Health, Healthy Behaviors, Access to Health Services, Asthma, Heart Disease, Cancer, Diabetes, Sexual Health*

OSF Saint Francis Medical Center is the fourth largest medical center in the state of Illinois. With a medical staff of more than 800 physician and 616 patient beds, it is a major teaching affiliate of the University of Illinois College of Medicine at Peoria, the area's only Level 1 Trauma Center and tertiary care medical center, and home to the Children's Hospital of Illinois. Specific centers of interest include the Pediatric Diabetes Resource Center at the Children's Hospital (*Diabetes*), Joslin Diabetes Center Affiliate (*Diabetes*), OSF Sisters Community Healthcare Clinic (*Access to Health Services*), Mobile MRI/PET (*Access to Health Services, Cancer*), Community Heart Screening (*Heart Disease*).

## Tri-County Community Health-Needs Assessment

### **Pekin Hospital**

*Obesity, Addiction, Mental Health, Healthy Behaviors, Access to Health Services, Asthma, Heart Disease, Cancer, Diabetes, Sexual Health*

Pekin Hospital is a 125-bed medical center and has a staff of 240 physicians that provide advanced care and state-of-the-art diagnostic capabilities from emergency medicine to intermediate (ICU) and critical care (CCU) to surgery. Medical Staff physicians and support staff are highly skilled in pediatrics, oncology, vascular diseases, sleep disorders and obstetrics. Specific centers of interest include the Cancer Treatment Center (joint venture with OSF Saint Francis Medical Center; *Cancer*), Community Heart Screening (*Heart Disease*).

### **Proctor Health Care**

*Obesity, Addiction, Mental Health, Healthy Behaviors, Access to Health Services, Asthma, Heart Disease, Cancer, Diabetes, Sexual Health*

Proctor Hospital is licensed for 299 beds and has a staff of over 500 physicians. Proctor Hospital provides comprehensive inpatient and outpatient surgical procedures and plays a major role in the treatment of heart disease through comprehensive cardiovascular care. Specific centers of interest include Hult Education Center (*Healthy Behaviors*), Illinois Institute for Addiction Recovery (*Addiction*), Proctor Outpatient Counseling (*Mental Health*), Proctor Home Care (*Addictions, Access to Health Services*), Community Heart Screening (*Heart Disease*).

### **UnityPoint Health - Methodist**

*Obesity, Addiction, Mental Health, Healthy Behaviors, Access to Health Services, Asthma, Heart Disease, Cancer, Diabetes, Sexual Health*

UnityPoint Health - Methodist includes a 329-bed hospital in the heart of Peoria and provides a full range of services by almost 600 board-certified physicians. UnityPoint Health - Methodist is the only hospital in downstate Illinois with Joint Commission Disease Specific Certification for heart attack, heart failure, stroke, pneumonia, hip and knee replacement, and sleep disorders. The network of primary care and specialty physicians, has offices located throughout central Illinois, including convenient walk-in centers. It is also home to Methodist College and the Family Medicine Residency Program of the University of Illinois College of Medicine. Specific centers of interest include Methodist Well Mobile (*Access to Health Services*), Methodist MammoVan (*Cancer, Access to Health Services*), Peoria Public Schools District 150 Health Clinic (*Obesity, Access to Health Services, Sexual Health*), Community Heart Screening (*Heart Disease*).

### **University of Illinois College of Medicine/Heart of Illinois HIV/AIDS Center**

*Healthy Behaviors, Sexual Health*

HIHAC (Heart of Illinois HIV/AIDS Center) exists to provide comprehensive, consumer driven care and services to all individuals infected with and affected by HIV and to their communities

### **Various pediatric practices**

*Asthma*

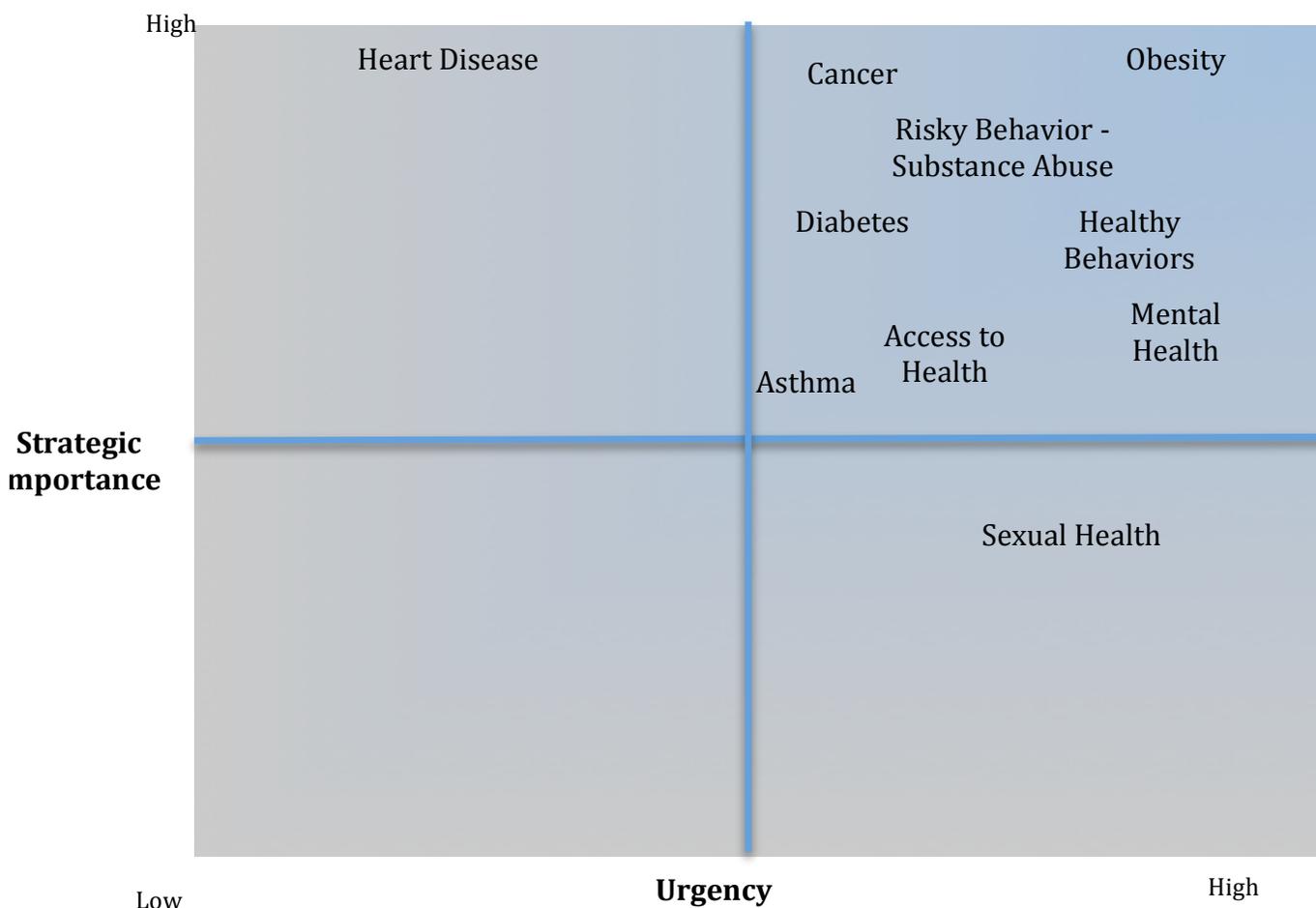
Pediatricians specializing in treating asthma include Peoria Ear, Nose, & Throat Group and Allergy and Asthma of Illinois.



### 10.3 Prioritization of Community Health-Related Issues

In order to prioritize the previously identified dimensions, the collaborative team considered health needs based on: (1) short-term urgency – issues that need immediate attention; and (2) long-term strategic importance – issues that will have the most significant impact on the future health of the community. Additional considerations included the magnitude of the issues (e.g., what percentage of the population was impacted by the issue), growth rate or projected trend of the issue, magnitude to the community, existing community resources, and the potential to make a significant impact to the community. Using these criteria, the collaborative team prioritized the previously identified health issues. Results can be seen in Figure 10.3.

**Figure 10.3 Importance/Urgency Matrix for Community Health Needs**



## Tri-County Community Health-Needs Assessment

In conclusion, the collaborative identified the most critical health-related issues in the Tri-County region as:

### ***ACCESS TO HEALTHCARE***

Access to medical care, dental care, prescription medication and counseling is limited for those living in deep poverty. Only half of people living in deep poverty seek medical services at a clinic or doctor's office. For this segment of the population, it is very common to seek medical services from an emergency department, or even more concerning is that 13% of this segment of the population will not seek any medical services at all.

### ***RISKY BEHAVIORS - SUBSTANCE ABUSE***

In the Tri-County region, among 8<sup>th</sup> graders, the average age at first use of alcohol, tobacco and marijuana is 13, 11.5 and 12.4 years respectively. The same average age for 12<sup>th</sup> graders is 15.9, 14 and 14.9 years respectively. Peoria County is much higher for marijuana use compared to state averages, especially among 12<sup>th</sup> graders (33% vs. 21%).

### ***ASTHMA***

Inpatient admissions to the Peoria area hospitals including UnityPoint Health - Methodist, Saint Francis Medical Center, Proctor, and Pekin, increased by 26.7%.

### ***DIABETES***

Type I and Type II Diabetes are increasing and all three counties are higher than state averages.

### ***HEALTHY BEHAVIORS***

Only 15% of the population engages in exercise at least 5 times a week. Less than 5% of the population consumes at least the minimum recommended servings of fruits/vegetables in a day. Yet, in terms of self-perceptions of physical and mental health, almost 90% of the population indicated that they were in average or good physical health.

### ***CANCER (SPECIFICALLY LUNG CANCER)***

While some types of cancer have experienced decreased growth rates in recent years, lung cancer has been steadily increasing.

## Tri-County Community Health-Needs Assessment

### ***MENTAL HEALTH***

Approximately 25% of residents in the Tri-County region reported they had experienced 1-7 days with poor mental health per month between 2007 and 2009. These percentages are greater than the State of Illinois average for the same time frame and represent a modest increase compared to 2006.

### ***OBESITY***

Research strongly suggests that obesity is a significant problem facing youth and adults nationally, in Illinois, and within the Tri-County region. In terms of obesity, the Tri-County area as a whole is significantly higher than the state average. Considering that Illinois is the 6<sup>th</sup> worst state in the U.S. in terms of obesity, this is an important issue.

Note that while “heart disease” and “sexual health” are important attributes, in terms of importance and urgency, the collaborative team rated the other 8 categories as more important.

As a validity check, note that the findings from this study are similar with the health assessments completed by the three County Health Departments. Specifically, Peoria County identified obesity, oral health and reproductive health as most important. Tazewell County Health Department identified infant mortality, obesity, smoking/lung cancer, and mental health as most important. Woodford County Health Department identified obesity, mental health, and substance abuse as most important.

## Tri-County Community Health-Needs Assessment

## APPENDIX 1. Sample Survey

## COMMUNITY HEALTH-NEEDS ASSESSMENT SURVEY

**INSTRUCTIONS**

We want to know how you view our community, so we are inviting you to participate in a research study for community health-needs. Your opinions are important. This questionnaire will take approximately 10 minutes to complete. All of your individual responses are confidential. We will use results of the surveys to improve our understanding of health needs in the community.

Please read each question and mark the response that best represents your views of community needs.

**I. HEALTH PROBLEMS IN THE COMMUNITY**

Please identify the three (3) most important health problems in the community.

- |   |   |
|---|---|
| <input type="checkbox"/> Aging issues, such as Alzheimer's disease,<br>hearing loss or arthritis  | <input type="checkbox"/> Injuries   |
| <input type="checkbox"/> Birth defects  | <input type="checkbox"/> Kidney disease   |
| <input type="checkbox"/> Cancer   | <input type="checkbox"/> Lead poisoning   |
| <input type="checkbox"/> Chronic pain   | <input type="checkbox"/> Liver disease  |
| <input type="checkbox"/> Dental health  | <input type="checkbox"/> Lung disease (asthma)                                  |
| <input type="checkbox"/> Diabetes   | <input type="checkbox"/> Mental health issues such as<br>depression, anger, etc |
| <input type="checkbox"/> Heart disease/heart attack   | <input type="checkbox"/> Obesity/overweight                                     |
| <input type="checkbox"/> HIV/AIDS   | <input type="checkbox"/> Sexually transmitted infections                        |
| <input type="checkbox"/> Infant death   | <input type="checkbox"/> Stroke   |
| <input type="checkbox"/> Infectious/contagious diseases such as flu,<br>pneumonia, food poisoning | <input type="checkbox"/> Teenage pregnancy                                      |
|   | <input type="checkbox"/> Other _____  |

**II. UNHEALTHY BEHAVIORS**

Please identify the three (3) most important unhealthy behaviors in the community.

- |   |  |
|---|--|
| <input type="checkbox"/> Angry behavior/violence                              | <input type="checkbox"/> Not able to get a routine checkup |
| <input type="checkbox"/> Alcohol abuse  | <input type="checkbox"/> Poor eating habits                |
| <input type="checkbox"/> Child abuse  | <input type="checkbox"/> Reckless driving                  |
| <input type="checkbox"/> Domestic violence                                    | <input type="checkbox"/> Smoking                           |
| <input type="checkbox"/> Don't use seatbelts                                  | <input type="checkbox"/> Suicide                           |
| <input type="checkbox"/> Drug abuse   | <input type="checkbox"/> Unsafe sex                        |
| <input type="checkbox"/> Elder abuse (physical, emotional, financial, sexual) | <input type="checkbox"/> Other _____                       |
| <input type="checkbox"/> Lack of exercise                                     |  |

**III. ISSUES WITH QUALITY OF LIFE**

Please identify the three (3) most important factors that impact your quality of life in the community.

- |   |  |
|---|--|
| <input type="checkbox"/> Access to health services  | <input type="checkbox"/> Good public transportation  |
| <input type="checkbox"/> Affordable housing         | <input type="checkbox"/> Healthy food choices        |
| <input type="checkbox"/> Availability of child care | <input type="checkbox"/> Less poverty                |
| <input type="checkbox"/> Better school attendance   | <input type="checkbox"/> Safer neighborhoods/schools |
| <input type="checkbox"/> Job opportunities          | <input type="checkbox"/> Other _____                 |

## Tri-County Community Health-Needs Assessment

**IV. ACCESS TO HEALTH CARE**

The following questions ask about your own personal health and health choices. Remember, this survey will not be linked to you in any way.

1. When you get sick, where do you go? Please choose only one.

- Clinic/Doctor's office       Health Department       Urgent Care Center  
 Emergency Department       I don't seek medical attention       Other \_\_\_\_\_

2. How long has it been since you have been to the doctor to get a checkup when you were well (not because you were already sick)?

- Within the last year       1-2 years ago       3-5 years ago  
 5 or more years ago       I have never been to a doctor for a checkup.

3. In the last year, was there a time when you needed medical care but were not able to get it?

- No (please go to question 5)       Yes (please go to the next question)

4. If you just answered "yes" to question 3, why couldn't you get medical care? Choose all that apply.

- I didn't have health insurance.       The doctor or clinic refused to take my insurance or Medicaid.  
 I couldn't afford to pay my co-pay or deductible.       I didn't know how to find a doctor.  
 I didn't have any way to get to the doctor.       Too long to wait for appointment.  
 Fear  
 Other \_\_\_\_\_

5. In the last year, was there a time when you needed prescription medicine but were not able to get it?

- No (please go to question 7)       Yes (please go to the next question)

6. If you just answered "yes" to question 5, why weren't you able to get prescription medication? Choose all that apply.

- I didn't have health insurance.       The pharmacy refused to take my insurance or Medicaid.  
 I couldn't afford to pay my co-pay or deductible.       I didn't have any way to get to the pharmacy.  
 I didn't know how to find a pharmacy.       Other \_\_\_\_\_

7. About how long has it been since you have been to the dentist to get a checkup (not for an emergency)?

- Within the last year       1-2 years ago       3-5 years ago  
 5 or more years ago       I have never been to a dentist for a checkup.

8. In the last year, was there a time when you needed dental care but could not get it?

- No (please go to question 10)       Yes (please go to the next question)

9. If you just answered "yes" to question 8, why weren't you able to get dental care? Choose all that apply.

- I didn't have dental insurance.       The dentist refused to take my insurance or Medicaid.  
 I couldn't afford to pay my co-pay or deductible.       I didn't know how to find a dentist.  
 I didn't have any way to get to the dentist.       Too long to wait for appointment.  
 Fear.  
 Other \_\_\_\_\_

## Tri-County Community Health-Needs Assessment

10. In the last year, was there a time when you needed counseling but could not get it?

- No (please go to question 12)       Yes (please go to the next question)

11. If you just answered "yes" to question 10, why weren't you able to get counseling? Choose all that apply.

- I didn't have insurance.       The counselor refused to take my insurance or Medicaid.  
 I couldn't afford to pay my co-pay or deductible.       I didn't know how to find a counselor.  
 I didn't have any way to get to a counselor.       Too long to wait for appointment.  
 Fear.       Other \_\_\_\_\_  
 Embarrassment.

12. In the last week how many times did you participate in deliberate exercise, (such as jogging, walking, golf, weight-lifting, fitness classes) that lasted for at least 30 minutes or more?

- None       1 - 2       3 - 5       More than 5

13. If you answered "none" to the last question, why **didn't** you exercise in the past week? Choose all that apply.

- I don't have any time to exercise.       I don't like to exercise.  
 It is not important to me.       I can't afford the fees to exercise.  
 I don't have access to an exercise facility.       I am too tired.  
 I don't have child care while I exercise.       I have a physical disability.  
 Other \_\_\_\_\_

14. On a typical day, how many servings of fruits and/or vegetables do you have?

- None       1 - 2       3 - 5       More than 5

15. On a typical day, how many cigarettes do you smoke?

- None       1 - 4       5 - 8       9 - 12       More than 12

16. Where do you get most of your medical information (*check only one*)

- Doctor       Friends/family       Internet       Pharmacy       Other \_\_\_\_\_

17. Do you have a personal physician?       No       Yes

18. Overall, my physical health is:  Good       Average       Poor

19. Overall, my mental health is:  Good       Average       Poor

## V. BACKGROUND INFORMATION

What county do you live in?

- Peoria       Tazewell       Woodford       Other

What type of insurance do you have?

- Medicare       Medicaid       Private/commercial       None

What is your gender?  Male       Female

## Tri-County Community Health-Needs Assessment

What is your age?

- Under 20     21-30     31-40     41-50     51-60     61-70     71 or older

What is your race?

- White     Black/African American  
 Hispanic/Latino     Native American/American Indian/Alaska Native  
 Asian (Indian, Pakistani, Japanese, Chinese, Korean, Vietnamese, Filipino/a)  
 Pacific Islander (Native Hawaiian, Samoan, Guamanian/Chamorro)  
 Other race not listed here: \_\_\_\_\_

What is your highest level of education?

- Less than high school     Some high school     High school degree (or GED/equivalent)  
 Some college (no degree)     Associate's or technical degree  
 Bachelor's degree     Graduate or professional degree  
 Other: \_\_\_\_\_

What was your total income last year, before taxes?

- Less than \$20,000     \$20,001 to \$40,000     \$40,001 to \$60,000  
 \$60,001 to \$80,000     \$80,001 to \$100,000     over \$100,000

Do you:  Rent     Own     Other

How many people live in your home? \_\_\_\_\_

What is your job status?

- Full-time     Part-time     Unemployed     Homemaker  
 Retired     Disabled     Student     Armed Forces

Is there anything else you would like to tell us about community concerns, health problems or services in the community?

---



---



---



---

**Thank you very much for sharing your views with us!**

This survey instrument was approved by the Committee on the Use of Human Subjects and Research (CUSHR),  
Bradley University Institutional Review Board (IRB) in May 2012.