

MAPP

**Mobilizing for Action through Planning and Partnerships
Berkeley, Jefferson and Morgan Counties West Virginia**

Community Health Status Assessment **A Compilation of Data that Reflects the Community's Health**

February 2013



***Bridges to Healthy Transitions:
Serving the Eastern Panhandle and the State of West Virginia
West Virginia University School of Nursing, Eastern Division***

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If any of this report is adapted for publication or presentation, please use the following language when citing: *These data were adapted from: Bartlett, T. C. and J. Buck (2013). Eastern Panhandle Mobilizing for Action through Planning and Partnerships Report: A Community Health Status Assessment, West Virginia University School of Nursing, Eastern Division, available at: <http://www.hsc.wvu.edu/eastern/SON/Bridges/Forms/Mapp-Form.aspx>.*

ACKNOWLEDGEMENTS

The Eastern Panhandle Mobilizing for Action through Planning and Partnerships (MAPP) began as a voluntary effort developed by representatives from various organizations and community volunteers. Those individuals involved in the early development of the project and data collection were:

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The Eastern Panhandle MAPP was generously supported by a grant from the Claude B. Worthington Benedum Foundation with the West Virginia University School of Nursing serving as its administrative home with Dr. Joy Buck, PhD, MSN serving as the Project Director and Ms. Trina Bartlett, MSW as the Project Coordinator. MAPP activities are currently guided by a core group that includes the following members:

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Thomas Kimm, Community Member
Dr. Sharon Mailey, PhD, Professor and Chair, Department of Nursing Education, Shepherd University
Kathy Mason, Business Programs Manager, Berkeley County Development Authority
Kathy Olson, Director, Family Resource Network of the Eastern Panhandle
Anne Prentice, Attorney/court appointed guardian ad litem, in Virginia and West Virginia.
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TABLE OF CONTENTS

ACKNOWLEDGEMENTS _____ ***i***

TABLE OF CONTENTS _____ ***1***

INTRODUCTION _____ ***6***

OVERVIEW: MOBILIZING FOR ACTION THROUGH PARTNERSHIPS AND PLANNING _____ ***7***

 The Goals of MAPP _____ 7

 The Elements of MAPP _____ 7

EXECUTIVE SUMMARY _____ ***8***

 Population Trends _____ 11

 Economic Factors _____ 11

 Maternal and Child Health _____ 12

 Behavioral Risk Factors _____ 13

 Morbidity and Mortality _____ 14

 Social Factors and Behavioral Health _____ 14

 Environmental Factors _____ 15

OVERVIEW OF THE EASTERN PANHANDLE _____ ***16***

 Table 1: Service Area Population 2010 _____ 16

BERKELEY COUNTY _____ ***17***

 Berkeley County Employment/Income _____ 17

 Berkeley County Education _____ 18

 Berkeley County Public Safety _____ 18

 Berkeley County Health Services _____ 19

 Berkeley County Recreation _____ 20

JEFFERSON COUNTY _____ ***20***

 Jefferson County Employment/Income _____ 21

 Jefferson County Public Safety _____ 21

 Jefferson County Education _____ 22

 Jefferson County Health Services _____ 22

 Jefferson County Recreation _____ 23

MORGAN COUNTY _____ ***23***

 Morgan County Employment/Income _____ 24

 Morgan County Public Safety _____ 24

 Morgan County Education _____ 25

 Morgan County Health Services _____ 25

 Morgan County Recreation _____ 26

COMMUNITY HEALTH STATUS ASSESSMENT _____ ***27***

DEMOGRAPHICS _____ ***27***

Population by Age and Sex _____ ***27***

 Table 2: United States Population by Age and Sex 2000 and 2005 _____ 27

| | |
|---|-----------|
| Table 3: United States Population and by Age and Sex 2010 _____ | 27 |
| Table 4: West Virginia Population by Age & Sex 2000, 2005, 2010 _____ | 28 |
| Table 5: Berkeley County Population by Age & Sex 2000, 2005, 2010 _____ | 28 |
| Table 6: Jefferson County Population by Age & Sex 2000, 2005, 2010 _____ | 28 |
| Table 7: Morgan County Population by Age & Sex 2000, 2005, 2010 _____ | 29 |
| Population by Race/Ethnic Distribution _____ | 29 |
| Table 8: United States Population by Race/Ethnic Distribution 2000, 2005, 2010 _____ | 29 |
| Table 9: West Virginia Population by Race/Ethnic Distribution 2000, 2005, 2010 _____ | 30 |
| Table 10: Berkeley County Population by Race/Ethnic Distribution 2000, 2005, 2010 _____ | 30 |
| Table 11: Jefferson County Population by Race/Ethnic Distribution 2000, 2005, 2010 _____ | 30 |
| Table 12: Morgan County Population by Race/Ethnic Distribution 2000, 2005, 2010 _____ | 31 |
| Population Change _____ | 31 |
| Table 13: Population Change by Age U.S., WV and Eastern Panhandle Counties 2000 - 2010 _____ | 32 |
| Table 14: Population Change by Race/Ethnicity U.S., WV and Eastern Panhandle 2000 - 2010 _____ | 32 |
| Socioeconomic and Education Measures _____ | 32 |
| Table 15: Socioeconomic and Educational Attainment in U.S. and WV 2000 and 2010 _____ | 33 |
| Table 16: Socioeconomic and Educational Attainment in the Eastern Panhandle 2000 and 2010 _____ | 34 |
| HEALTH INDICATORS _____ | 35 |
| Table 17: WV County Health Rankings 2010-2012 _____ | 35 |
| Mortality _____ | 35 |
| Table 18: Life Expectancy in U.S., WV and the Eastern Panhandle Counties 2000 and 2009 _____ | 35 |
| Table 19: Average Age of Death West Virginia and Eastern Panhandle Counties 2000, 2005, 2009 _____ | 35 |
| Table 20: Leading Causes of Death in U.S., WV and Eastern Panhandle Counties 2000 and 2009 _____ | 36 |
| <i>Years of Potential Life Lost _____</i> | <i>37</i> |
| Table 21: Years of Potential Life Lost Before Age 65 U.S. and WV 2000, 2005, 2010 _____ | 37 |
| <i>Injury Mortality _____</i> | <i>37</i> |
| Table 22: Injury Mortality Rates per 100,000 Population U.S. and WV 2001 -2009 _____ | 38 |
| Health Risk Factors _____ | 38 |
| <i>Behavioral Risk Factor Surveillance System _____</i> | <i>38</i> |
| Table 23: Health Risk Factors U.S. and WV 2003, 2006, 2008 and 2010 _____ | 39 |
| Table 24: Health Risk Factors Eastern Panhandle Counties 2001 - 2010 _____ | 39 |
| <i>Primary and Secondary Prevention _____</i> | <i>40</i> |
| Table 25: Primary and Secondary Prevention U.S. and WV for Selected Year _____ | 40 |
| <i>Youth Risk Behavior Surveillance System _____</i> | <i>40</i> |
| Table 26: Youth Risk Behavior Survey Grades 9 -12 U.S. and WV for Selected Years _____ | 41 |
| Maternal and Child Health _____ | 41 |
| <i>Infant Mortality _____</i> | <i>42</i> |
| Table 27: Infant Mortality U.S., WV and Eastern Panhandle Counties Rates per 1,000 population _____ | 42 |
| Table 28: Infant Mortality by Cause U.S. and WV 2000 - 2008 Rates per 100,000 Population _____ | 42 |
| Table 29: Infant Mortality Rate by Race and Cause United States 2000 - 2008 _____ | 43 |
| Table 30: Infant Mortality By Race and Cause West Virginia 2000 - 2008 _____ | 43 |
| <i>Prenatal Care _____</i> | <i>43</i> |
| Table 31: Percent of All Birth Mothers Who Received Prenatal Care Beginning in the First Trimester _____ | 44 |
| <i>Low Birth Weight _____</i> | <i>44</i> |
| Table 32: Percent of Low Birth weight Births U.S., WV and Eastern Panhandle Counties 2000, 2005 and 200 _____ | 44 |

| | |
|---|-----------|
| <i>Smoking during Pregnancy</i> _____ | 44 |
| Table 33: Percent of All Birth Mothers Who Used Tobacco During Pregnancy as Reported on Birth Certificates _____ | 45 |
| Table 34: Percent of Women Who Smoked During Last Three Months of Pregnancy _____ | 45 |
| <i>Drinking Alcohol during Pregnancy</i> _____ | 46 |
| Table 35: Percent Mothers Reported Having Any Alcoholic Drinks During the Last 3 Months of Pregnancy _____ | 46 |
| Table 36: Prevalence of Maternal Drinking the Last Three Months of Pregnancy by Annual Income _____ | 46 |
| Table 37: Prevalence of Maternal Drinking Last Three Months of Pregnancy by Age _____ | 46 |
| Table 38: Prevalence of Maternal Drinking Last Three Months of Pregnancy Among Medicaid Recipients _____ | 46 |
| <i>Teen Birth Rates</i> _____ | 47 |
| Table 39: Teen Birth rates in the U.S. and WV for Selected Years Per 1,000 Population _____ | 47 |
| Table 40: Teen Birth Rates in Eastern Panhandle Counties for Selected Years Per 1,000 Population _____ | 47 |
| Communicable Diseases _____ | 47 |
| Table 41: Communicable Diseases U.S. and WV 2000, 2005, 2010 _____ | 48 |
| Chronic Disease _____ | 49 |
| Table 42: Prevalence of Selected Chronic Disease and Risk Factors Heart Disease _____ | 50 |
| Table 43: Chronic Obstructive Pulmonary Disease in U.S., WV and Eastern Panhandle Counties _____ | 50 |
| Table 44: Current Asthma - Adults Who Have Been Told They Currently Have Asthma _____ | 51 |
| Table 45: Age Adjusted Percent of Adults Who Have Been Diagnosed with Diabetes _____ | 52 |
| Cancer _____ | 52 |
| Table 46: Cancer Incident Rates per 100,000 Population U.S., WV and Eastern Panhandle Counties 2005-2009 _____ | 53 |
| Table 47: Annual Cancer Death Rates Per 100,000 Population U.S., WV and Eastern Panhandle Counties Through 2009 _____ | 53 |
| Table 48: Cancer Death Trends Per 100,000 Population Eastern Panhandle Counties _____ | 53 |
| ENVIRONMENTAL FACTORS _____ | 54 |
| Radon _____ | 54 |
| Table 49: Average Indoor Radon Level U.S. and Eastern Panhandle Counties _____ | 54 |
| Table 50: Average Indoor Radon Level _____ | 54 |
| Air Quality _____ | 55 |
| Table 51: Berkeley County Air Quality Index 2000, 2005, 2010 _____ | 55 |
| SOCIAL AND MENTAL HEALTH _____ | 55 |
| Suicide _____ | 56 |
| Table 52: Suicide Rate per 100,000 population US, WV and Eastern Panhandle Counties 2000, 2005 and 2010 _____ | 56 |
| Alcohol and Drug Use _____ | 57 |
| Table 53: West Virginia State Police Seized Drugs Report 2000, 2005 and 2010 _____ | 57 |
| Table 54: Drug and Narcotic Offenses WV and Eastern Panhandle Counties 2000, 2005 and 2010 _____ | 58 |
| Table 55: Drug Overdose Deaths per 100,000 WV and Eastern Panhandle Counties _____ | 58 |
| Table 56: Any Drug Overdose With at Least One Possible Prescription Drug Involved _____ | 58 |
| Table 57: Average Annual Per Capita Number of Retail Prescription Drugs Filled at Pharmacies _____ | 59 |
| Table 58: Driving Under the Influence U.S., WV and Eastern Panhandle Counties _____ | 59 |
| Crime _____ | 59 |

| | |
|---|-----------|
| Table 59: Uniform Crime Report Rates per 100,000 Population U.S. and WV 2003, 2005 and 2010 | 60 |
| Domestic Violence | 60 |
| Table 60: Number of Reported Domestic Violence Investigations WV and Eastern Panhandle Counties | 62 |
| Table 61: Number of Unduplicated Individuals Sheltered at Shenandoah Women’s Center | 62 |
| Table 62: Number of Non-Sheltered Individuals Receiving Services from Shenandoah Women’s Center | 62 |
| Child Abuse | 62 |
| Table 63: Child Abuse Referrals and Investigations Eastern Panhandle Counties 2010 and 2011 | 63 |
| Table 64: Child Abuse Cases Eastern Panhandle Counties 2010 and 2011 | 63 |
| MAPP VISIONING | 64 |
| COMMUNITY STRENGTHS AND THEMES | 65 |
| Survey Findings | 65 |
| Respondent Demographics | 65 |
| Chart 1: Sex or gender of MAPP respondents | 66 |
| Chart 2: Job status of MAPP Respondents | 66 |
| Chart 3: Household income of MAPP respondents | 67 |
| Quality of Life | 67 |
| Chart 4: “How safe do you feel in our county?” | 68 |
| Chart 5: “How satisfied are you with opportunities to participate in community activities in our county?” | 69 |
| Chart 6: “How satisfied are you with access to quality health care in our county?” | 69 |
| Chart 7: “How satisfied are you with health services in our county?” | 70 |
| Chart 8: “How satisfied are you with the quality of schools in our county?” | 70 |
| Chart 9: “How satisfied are you with the quality of day care in our county?” | 71 |
| Chart 10: “How satisfied are you with the quality of after school programs in our county?” | 71 |
| Chart 11: “How satisfied are you with the quality of recreation programs in our county?” | 72 |
| Chart 12: “How satisfied are you with transportation services in our county?” | 72 |
| Chart 13: “How satisfied are you with programs that support senior citizens in our county?” | 73 |
| Chart 14: “How satisfied are you with jobs and career growth in our county?” | 73 |
| Chart 15: “How satisfied are you with job training programs in our county?” | 74 |
| Chart 16: “How satisfied are you with higher education in our county?” | 74 |
| Chart 17: “How satisfied are you with availability of affordable housing in our county?” | 75 |
| Chart 18: “How satisfied are you with how far you have to drive to work?” | 75 |
| Chart 19: “How satisfied are you with our county’s outdoor air quality?” | 76 |
| Chart 20: “How satisfied are you with the indoor air quality in public places?” | 76 |
| Chart 21: “How satisfied are you with the county’s public water supply quality?” | 77 |
| Chart 22: “How satisfied are you with the county’s well water supply quality?” | 77 |
| Chart 24: “What do you think are the three factors which most improve your quality of life?” | 79 |
| Chart 25: “In your opinion, which are the three most critical health and safety issues facing our county?” | 79 |
| Chart 26: “What do you think are the three most important attitudes or behaviors that cause health problems in our county?” | 80 |
| Health and Access to Health Care | 80 |
| Chart 27: “Where do you usually go when you are sick or need medical care?” | 81 |

| | |
|--|-----------------|
| Chart 28: “Where do you usually go when you need dental care?” _____ | 81 |
| Chart 29: “Overall, how would you describe your health status?” _____ | 82 |
| Chart 30: “Are you satisfied with your overall health?” _____ | 82 |
| Chart 31: “What do you feel are the barriers to getting health care in our county?” _____ | 83 |
| Chart 32: “Where do you get information about health resources in our county?” _____ | 83 |
| <i>FORCES OF CHANGE FOCUS GROUPS AND KEY INFORMANT INTERVIEWS</i> _____ | 84 |
| <i>PUBLIC HEALTH ASSESSMENT</i> _____ | 85 |
| <i>APPENDICES</i> _____ | <i>I</i> |
| Appendix A: US. Census Poverty Thresholds _____ | I |
| Appendix B: Federal Poverty Level _____ | II |
| Appendix C: Percent of Women who Smoked During Last Three Months of Pregnancy _____ | III |
| Appendix D: MAPP Community Health Needs Assessment Survey _____ | IV |
| Appendix E: Forces of Change – Focus Group Questions _____ | XIV |
| Appendix F: Forces of Change – Key Informant Interview Form _____ | XV |

INTRODUCTION

The Eastern Panhandle's Mobilizing for Action through Planning and Partnerships (MAPP) project is intended to serve as a planning tool for government agencies, educational institutions, nonprofit organizations, community groups and others committed to improving the health of Berkeley, Jefferson and Morgan County residents.

According to the World Health Organization (WHO), the health of a community is not simply determined by the existence or absence of disease. Many factors combine together to affect the health of individuals and communities, and individuals are unlikely to be able to directly control many of the determinants of health¹. These determinants include, but are not limited to:

- Income and social status - higher income and social status are linked to better health, and the greater the gap between the richest and poorest people, the greater the differences in health.
- Education – low education levels are linked with poor health, more stress and lower self-confidence.
- Physical environment – safe water and clean air, healthy workplaces, safe houses and roads all contribute to good health.
- Employment and working conditions – people in employment are healthier, particularly those who have more control over their working conditions.
- Social support networks – greater support from families, friends and communities is linked to better health.
- Culture – customs, traditions and the beliefs of the family and community affect health.
- Genetics - inheritance plays a part in determining lifespan, health and the likelihood of developing certain illnesses.
- Personal behavior and coping skills – balanced eating, keeping active, smoking, drinking and how we deal with life's stresses and challenges all affect health.
- Health services - access and use of services that prevent and treat disease influences health.
- Sex - men and women suffer from different types of diseases at different ages. There are also social and economic differences associated with a persons' sex that result in health disparities.

The MAPP assessment obtained data about many of these determinants from multiple sources. When possible, trend and comparative data are provided in the body of this report.

¹ <http://www.who.int/hia/evidence/doh/en/>

OVERVIEW: MOBILIZING FOR ACTION THROUGH PARTNERSHIPS AND PLANNING



Mobilizing for Action through Planning and Partnerships (MAPP) is a community-driven strategic planning process developed by the National Association of County and City Health Officials (NACCHO) in cooperation with the Centers for Disease Control and Prevention (CDC). This process provides a framework, structure and best practices to help communities improve health and quality of life by taking into account their unique circumstances and needs, using their resources wisely and forming effective partnerships for strategic action.

The vision for implementing MAPP is: "Communities achieving improved health and quality of life by mobilizing partnerships and taking strategic action."

The Goals of MAPP

- Create and implement a well-coordinated plan that uses resources efficiently and effectively.
- Develop long-term strategies that address the multiple factors that affect health in a community.
- Engage the entire community in order to increase community ownership of the process. Community ownership, in turn, increases the credibility and sustainability of health improvement efforts.

The Elements of MAPP

- 1) MAPP engages key stakeholders and residents in creating a vision of a healthy community.
- 2) MAPP brings four assessments together to drive the development of a community strategic plan:
 - The Community Health Status Assessment analyzes data about health status, quality of life and risk factors in the community.
 - Community Themes and Strengths Assessment identifies themes that interest the community and emphasizes community assets.
 - The Local Public Health Assessment measures the capacity of the local public health system to conduct essential public health services.
 - The Forces of Change Assessment identifies forces that are occurring or will occur that will affect the community or the local public health system.

For more information about MAPP, go to <http://www.naccho.org/topics/infrastructure/mapp/>.

EXECUTIVE SUMMARY

This report provides a comprehensive health assessment of West Virginia's Eastern Panhandle (Berkeley, Jefferson and Morgan counties) drawing from multiple data sources. In general, the region is better positioned than the rest of the state to weather economic uncertainty. Yet this report also reveals significant current and future challenges that require strategic thinking and collaboration among area health and human services providers, agencies, health and hospital systems and the general public.

During the first decade of the twenty-first century, the Eastern Panhandle experienced significant growth in population and relative prosperity when compared to the rest of the state. Unlike much of West Virginia, the Eastern Panhandle has also seen improvements in health risk behaviors such as smoking, even though the percentage of smokers is higher than the rest of the state in all but Jefferson County. At the same time, the MAPP assessments reveal diverse needs in the community related to economic downturn and rise in unemployment, shifting population demographics and persistent health problems that differ across the three counties.

Demographic trends in the region are quite different than the rest of West Virginia. Between 2000 and 2010, the largest growth in population in the region was among persons between the ages of 50 and 64. The "graying" of the region is important to consider in planning for senior services to help elders to age in place and live as well as possible for as long as possible. There is evidence that the demand is already outstripping the supply of community-based services, especially for elders with lower incomes without local family to help them as they age.

The growth in the aging population over the past ten years was accompanied by a marked increase in ethnic and racial diversity in the region. Historically, racial and ethnic minorities have higher rates of hypertension and diabetes than non-minority populations for myriad reasons, including genetic predisposition. The need to improve primary and secondary prevention of chronic illness in general and diabetes in particular, was identified by the MAPP and WVUH-East Community Health Needs Assessment in both acute and community care settings. Any interventions aimed at improving health outcomes should be culturally and linguistically congruent with the targeted populations. This includes, but is not limited to, considerations of health literacy, native language, the use of interpreters and social conditions. This is best accomplished by engaging the community in both the identification and prioritization of problems and feasible solutions to remedy them.

In addition to chronic illness, the rise of infant mortality in all three Eastern Panhandle counties is of concern. Ironically, this rise in infant mortality occurred at the same time that access to prenatal care during pregnancy rose. An understanding of the root causes of the rising infant mortality rate is critical to any interventions that aim to decrease the trend.

There were also income disparities based on sex that warrant closer inspection and intervention. While overall incomes in the region were higher in 2010 when compared to 2000, the percentage of children living in poverty increased and the majority of children living in poverty live in female head of household homes. Moreover, the MAPP Community Themes and Strengths Survey identified statistically significant differences ($p < .001$) in the responses from higher incomes respondents when compared to those with lower incomes. These differences included perceptions of safety, health problems in the region, satisfaction with health services, self-reported health status and overall satisfaction with health.

Six initial priority areas were identified after analysis of the results of the MAPP visioning process and four health assessments. These priority areas were:

- **Access and Quality of Health Care:** This category includes medical services, community-based and inpatient behavioral health services, substance abuse treatment, social services and long-term care.
- **Economic Security:** The assessments indicate that economic development, better/higher paying jobs and access to higher education and training opportunities are important to residents in all three counties.
- **Environment:** This category includes preferences for better air quality and built environment. A smaller subsection of respondents to the MAPP visioning and assessments indicated preferences for more open green spaces.
- **Recreation and Community:** MAPP visioning and assessment participants expressed preferences for more local parks and organized recreational activities for families, teens and young adults that help bring people together to enhance a sense of community.
- **Safety and Law Enforcement:** All MAPP assessments indicated concerns about drug trafficking and preferences for better communication between police and citizens, community neighborhood watch programs, traffic on highways and local roads and higher minority representation on the police force.
- **Community/Public Health:** This category includes improved access to affordable health promotion for adults, teens and children; smoking cessation; spaces for hiking; and swimming and exercise facilities. Qualitative responses to the Community Strengths and Themes Survey indicate that many respondents have information about what they should be doing to be healthy, including diet and exercise, but they encounter multiple barriers to improving health behaviors.

Representatives from the Eastern Panhandle Health and Human Services Collaborative (HHSC) members were given the initial priority areas and asked to select the top three for intervention. The HHSC representatives ranked the top three priorities as follows:

- 1 . Access to and the quality of health care;
- 2 . Economic security;
- 3 . Community and public health (distant third).

The same MAPP assessment tools were used as part of the Community Health Needs Assessment that was conducted for West Virginia University Hospitals-East (City Hospital and Jefferson Memorial Hospital). The same initial priority areas were identified by the key WVUH-East key stakeholders, which included hospital administrators, staff, physicians and community leaders. The top three priorities identified by these stakeholders were:

1. Access to and the quality of health care;
2. Community and public health;
3. Economic security (distant third).

Both the HHSC members and WVUH-East key stakeholder groups ranked the top two priority areas much higher than the third priority area. These results are reflective of the socioeconomic differences between the community-at-large and WVUH-East key stakeholders. Respondents who had higher incomes ranked community/public health as the second priority area and economic security was ranked a distant third. By contrast, those with lower income levels ranked economic security much higher than community/public health.

These socioeconomic differences are consistent throughout the MAPP assessments and are important to consider during strategic planning as they emphasize the need to engage target populations in the development of interventions to improve health.

Based on analyses of aggregated data that include the MAPP visioning, assessments and community health indicators, the following areas were identified as priority areas for health planning and intervention:

1. Strategies to reduce disparities in maternal/child health, particularly in the area of infant mortality;
2. Access to and the quality of behavioral health providers and services, including substance use prevention and intervention;
3. Regional economic development that includes the creation of higher paying jobs with insurance benefits, opportunities for career growth and improved transitions from public assistance programs to paying jobs;
4. Strategies to improve citizen safety, including targeted interventions in higher crime areas, improved road safety and illicit substance use and abuse;
5. Chronic illness self-management, particularly acute and community-based diabetes care, heart failure and chronic obstructive pulmonary disease (COPD).
6. Early detection and timely intervention in cancer targeting both breast cancer and the links between environment, behavior and the incidence of lung cancer among women;
7. Enhanced collaboration with public health and community-based initiatives to address regional health trends;
8. Better access to healthy foods, including community gardens, increased access to farmer's markets and healthier options in restaurants and schools.

Data to support these conclusions are found in the body of this report that is also available for download at: <http://www.hsc.wvu.edu/eastern/SON/Bridges/>. Additional reports and periodic updates will also be posted to the website as they become available. Highlights of the data follow.

Population Trends

Between 2000 and 2010, the Eastern Panhandle experienced significant population growth as well as a shift in its age and racial/ethnic composition.

- While the United States population grew by 9.7% and West Virginia's population grew by 2.5%, Berkeley County's population grew by 37.2%, Jefferson County's population grew by 26.8% and Morgan County's population grew by 17.4%.
- Of this growth, the greatest was among persons ages 50 – 64 years. The percent change was 68.8% in Berkeley County, 51.5% in Jefferson County and 47.4% in Morgan County.
- In Berkeley and Jefferson counties, the second highest population growth rates were among children ages five and under with 44.1% in Berkeley County and 43% in Jefferson County. In Morgan County, the next highest growing population was among individuals ages 65 and older (29.9%), while the population under age five actually dropped by 6.9%.
- The Eastern Panhandle has more racial and ethnic diversity than West Virginia. In 2010, 95% of WV residents were Caucasian, 4.2% Black/African American and 1.2% Hispanic. By contrast, 8.7% of Berkeley County residents were Black/African American and 3.8% were Hispanic/Latin American. Similarly, almost 8% of Jefferson County residents were Black/African American and 4.7% were Hispanic/Latin American.
- Between 2000 and 2010, the number of African Americans grew by 22.5% in WV, by 127% in Berkeley County, by 50.3% in Jefferson County and by 55% in Morgan County. The number of Hispanics grew by 81.4% in West Virginia, 242.7% in Berkeley County, 239.1% in Jefferson County and 47.6% in Morgan County.

These changes in population indicate a need to ensure the availability of quality services to meet the health and social service needs of an elderly population as well as address the needs of children and families. There are significant health disparities and rates of obesity and chronic illness among the African American and Hispanic population, and the need for culturally appropriate services is critical.

Economic Factors

Between 2000 and 2010, the Eastern Panhandle experienced multiple economic changes:

- The median household income grew significantly in two of the three Eastern Panhandle counties. In Berkeley County, it grew from \$38,763 to \$50,724, and in Jefferson County it grew from \$44,374 to \$62,425. In Morgan County, it grew slightly from \$35,016 to \$37,281.
- The percentage of children living in poverty increased from 14.6% to 19.4% in Berkeley County, from 11.4% to 14.7% in Jefferson County and from 11.6% to 22.0% in Morgan County.
- The unemployment rate grew from 3.6% to 8.7% in Berkeley County and from 3.4% to 6.4% in Jefferson County. It remained stable in Morgan County.

- Responses in the MAPP Community Strengths and Themes Survey to the question “How satisfied are you with jobs and career growth in our county?” indicate widespread dissatisfaction. Fifty-six percent of Berkeley County respondents, 54% of Jefferson County respondents, and 65% of Morgan County respondents were either dissatisfied or very dissatisfied to the question.

There are income disparities based on sex that warrant closer inspection and intervention. While overall incomes in the region were higher in 2010 when compared to 2000, the percentage of children living in poverty increased, and the majority of children living in poverty live in homes with a female head of household.

Maternal and Child Health

- Between 2000 and 2009, the infant mortality rate rose in all three Eastern Panhandle counties: from 7.4/1,000 live births to 13.3/1,000 in Berkeley County; from 3.4/1,000 live births to 9.6/1,000 in Jefferson County and from 6.8/1,000 live births to 18.5/1,000 in Morgan County. This increase occurred at the same time prenatal care increased and national and state infant mortality rates remained relatively stable.
- Behavioral risk factors during pregnancy include smoking and substance abuse. From 2000 to 2009, the percent of pregnant mothers that smoked dropped from 28.4% to 20.6% in Berkeley County, from 21.3% to 15.8% in Jefferson County and from 27.4% to 24.8% in Morgan County. Despite the downward trend, these percentages are much higher than the national average of 13.0% of women who smoked during pregnancy.
- Discharge data from 2011 indicate almost 29% and 31% of neonate discharges from WVUH-East’s City Hospital and Jefferson Memorial Hospital had other significant problems. The Diagnosis Related Group (DRG) code associated with this category includes a range of conditions that includes simple neonatal jaundice to maternal health problems. A closer inspection of the specific associated “significant problems” is necessary before making recommendations to improve these outcomes.
- Birth rates among girls ages 15-19 decreased in all three counties from 1999 to 2009 with greater reductions in Berkeley County (from 66 births/1,000 to 46.8/1,000) and Morgan County (from 55.3 births/1,000 to 34/1,000) than in Jefferson County (from 44.6 births/1,000 to 40.3/1,000).
- Compared with unexposed infants, babies whose mothers smoked before and after birth are at three to four fold greater risk of Sudden Infant Death Syndrome. Chronic diseases in the mother, including obesity, hypertension, diabetes and asthma, have been also been associated with poor birth outcomes.
- Implementing strategies that shift from a narrow focus on prenatal and infant care to a broader emphasis on women’s health has been identified as critical for lowering the infant mortality rate. It is vitally important to analyze the role of race, ethnicity and class in the rising infant mortality in the region and develop targeted strategies that address the root causes of the trend.

Behavioral Risk Factors

- In 2010, 14.9% of United States residents reported their health as “fair” or “poor” in comparison to 23.4% of West Virginians. Aggregate data from 2006-2010 show 15.1% of Berkeley County residents, 16.8% of Jefferson County residents and 20.9% of residents of Morgan/Hampshire counties reported their health as “fair” or “poor”.
- MAPP responses to “How would you describe your health status?” indicate that 70% of Berkeley County respondents, 62% of Jefferson County respondents, and 69% of Morgan County respondents describe their health as being either “excellent” or “good”. There were 7% of Berkeley County respondents, 12% of Jefferson County respondents and 10% of Morgan County respondents described their health status as being either “poor” or “very poor”.
- Comparison data from 2001-2005 and from 2006-2010 show:
 - The percentage of Berkeley County residents who did NOT participate in physical activity fell from 32.0% to 26.4% but rose in Jefferson County from 21.7% to 27.4% and in Morgan/Hampshire counties from 24.9% to 29.8%.
 - The percentage of obese Berkeley County residents rose from 28.9% to 32.4% and from 26.1% to 32.6% for Morgan/Hampshire county residents. The percent of obese Jefferson County residents fell from 30.4% to 28.9%.
 - The percent of adult smokers fell from 30.2% to 28.8% in Berkeley County and from 28.5% to 24.4% in Jefferson County but rose slightly from 28.0 to 28.4% in Morgan/Hampshire counties. The national percent is 17.3%, and the West Virginia percent is 26.8%.

The percent of West Virginia adults who smoke remains significantly higher than the national rate, and only Jefferson County has a lower percent of smokers than the state.

Personal health practices have been shown to be important determinants of overall health. Tobacco use, poor diet and physical inactivity alone contribute to more than a third of the premature deaths in the United States. Evidence-based preventive strategies help reduce the preventable burden of disease through the delivery of appropriate clinical preventive services, through community-level primary and secondary prevention interventions and through appropriate treatment.

Morbidity and Mortality

- The economic impact of chronic illness in the West Virginia is compelling. In 2003, the cost of treating chronic illness and complications was \$2.3 billion with an additional economic loss of \$8.1 billion associated with lower worker productivity and missed work days.
- In 2009, 8.4% of adults in the United States had diabetes. In the Eastern Panhandle, the percent of adults with diabetes ranged from 10.5% to 11%.
- In 2011, 36.4% of Ambulatory Care Sensitive (ACS) discharges at City Hospital and 22.5% of ACS discharges at Jefferson Memorial Hospital were among persons with diabetes. In 2012, 31.5% of War Memorial's inpatient discharges were among persons with diabetes.
- Of the 2011 City Hospital diabetes-related ACS discharges, 53% were due to uncontrolled diabetes and 22.8% were due to long-term complications of the disease. At Jefferson Memorial Hospital, 50% of diabetes-related discharges were due to uncontrolled diabetes and 33.3% were due to long-term complications. Of the 2012 diabetes-related inpatient discharges at War Memorial Hospital, 15.7% were due to uncontrolled diabetes and 28.1% were due to long-term complications of the disease.
- From 2000 to 2009, the percent of deaths attributed to unintentional injuries/accidents of all deaths increased in all three Eastern Panhandle counties: from 5.2% to 7.2% in Berkeley County, from 2.4% to 6.1% in Jefferson County and from 3.9% to 4.1% in Morgan County.
- Between 2000 and 2009, the percentage of heart disease deaths of all deaths decreased from 27.5% to 23% in Berkeley County and from 26.5% to 25.8% in Jefferson County. The percent increased slightly from 26.3% to 26.7% in Morgan County.
- The percentage of cancer-related deaths of all deaths also decreased between 2000 and 2009 in Berkeley County (from 27.8% to 24.5%) and in Jefferson County (from 26.5% to 25.8%), but rose slightly from 21.7% to 22.0% in Morgan County.
- The National Cancer Institute has designated the rising rates of lung cancer among women in Berkeley County as a top priority area.

Social Factors and Behavioral Health

- The drug overdose death rate per 100,000 population in West Virginia grew from 9.2 in 2001 to 34.7 in 2011. During this same time period, the rate grew from 12.8 to 27.7/100,000 in Berkeley County, from 4.6 to 18.6/100,000 in Jefferson County and from 6.5 to 22.8 in Morgan County.
- West Virginia seized drug reports demonstrate a significant increase in the availability of heroin, prescription drugs and narcotics.

- Substance abuse was identified as the most critical health and safety issue by respondents to the MAPP survey. Additionally, illegal drug abuse was identified as the most important behavior that causes health problems. Based on the MAPP Survey, there is a positive correlation between level of income and perception that substance abuse is a significant problem in the Eastern Panhandle.
- The majority of MAPP Survey respondents indicated that they feel either safe or very safe (Berkeley County – 68%; Jefferson County – 73%; Morgan County – 78 %). Nevertheless, 13% of Berkeley County residents, 12% of Jefferson County residents and 10% of Morgan County residents felt either “unsafe” or “very unsafe”. Eighty-one percent of respondents who reported feeling “very unsafe” had annual family incomes less than \$20,000.
- Crime statistics and client data provide a mixed message about the prevalence of domestic violence in the Eastern Panhandle, but key informant interviews and MAPP Survey data indicate that it continues to be a significant problem and that the severity of cases is worsening.

Key informant interviews indicate that the issues of mental health, substance abuse and interpersonal violence are intertwined yet services remain fragmented. The current health and social services system is designed to address specific incidents or issues rather than to provide holistic services to an individual and/or family unit. Substance abuse treatment services are limited and difficult to access, particularly for individuals with limited means. Programs aimed at preventing interpersonal violence are insufficient to meet the rising demand for them.

Environmental Factors

- The majority of MAPP survey respondents reported being satisfied or very satisfied with their county’s outdoor air quality (Berkeley County – 56%; Jefferson County – 61%; Morgan -69%). The Air Quality Index in Berkeley County improved from 2000 to 2010.
- The percentage of MAPP survey respondents who were also satisfied or very satisfied with indoor air quality in public places (Berkeley County – 59%; Jefferson County - 61%; Morgan County – 70%). The percent who were dissatisfied or very dissatisfied was much lower (Berkeley County – 16%, Jefferson County – 15% and Morgan County - 9%).
- The average levels of radon, a radioactive gas linked to lung cancer, are well above a safe level of 4 pCi/L in all three Eastern Panhandle counties with Berkeley County at 8.7 pCi/L, Jefferson County at 8.1pCi/L and Morgan County at 12.8pCi/L.
- Radon is the second leading cause of lung cancer and the leading cause of lung cancer among non-smokers.

When combined, high levels of radon, smoking and a rise in lung cancer among women in Berkeley County warrant further inspection and intervention. Such interventions should be multifaceted and include partnerships among public health, community leaders, health promotion specialists and clinicians to identify and implement multilevel primary and secondary prevention interventions that target both environmental and personal risk factors.

OVERVIEW OF THE EASTERN PANHANDLE

Berkeley, Jefferson and Morgan counties comprise the Eastern Panhandle of West Virginia, which forms a wedge between Maryland to the North and Virginia to the south. All three counties are bordered by the Potomac River, and, like the rest of the state, lie entirely within the Appalachian Mountains. The region is rich in both Civil War and Colonial history, with the George Washington Heritage Trail running through all three counties. Major interstates (Interstate 81 runs north and south and Interstates 70/68 run east and west) serve the Eastern Panhandle, and the area is a short drive from both the Baltimore and Washington, DC metropolitan areas. The drive to the state capital, Charleston, is much farther – taking approximately five hours.

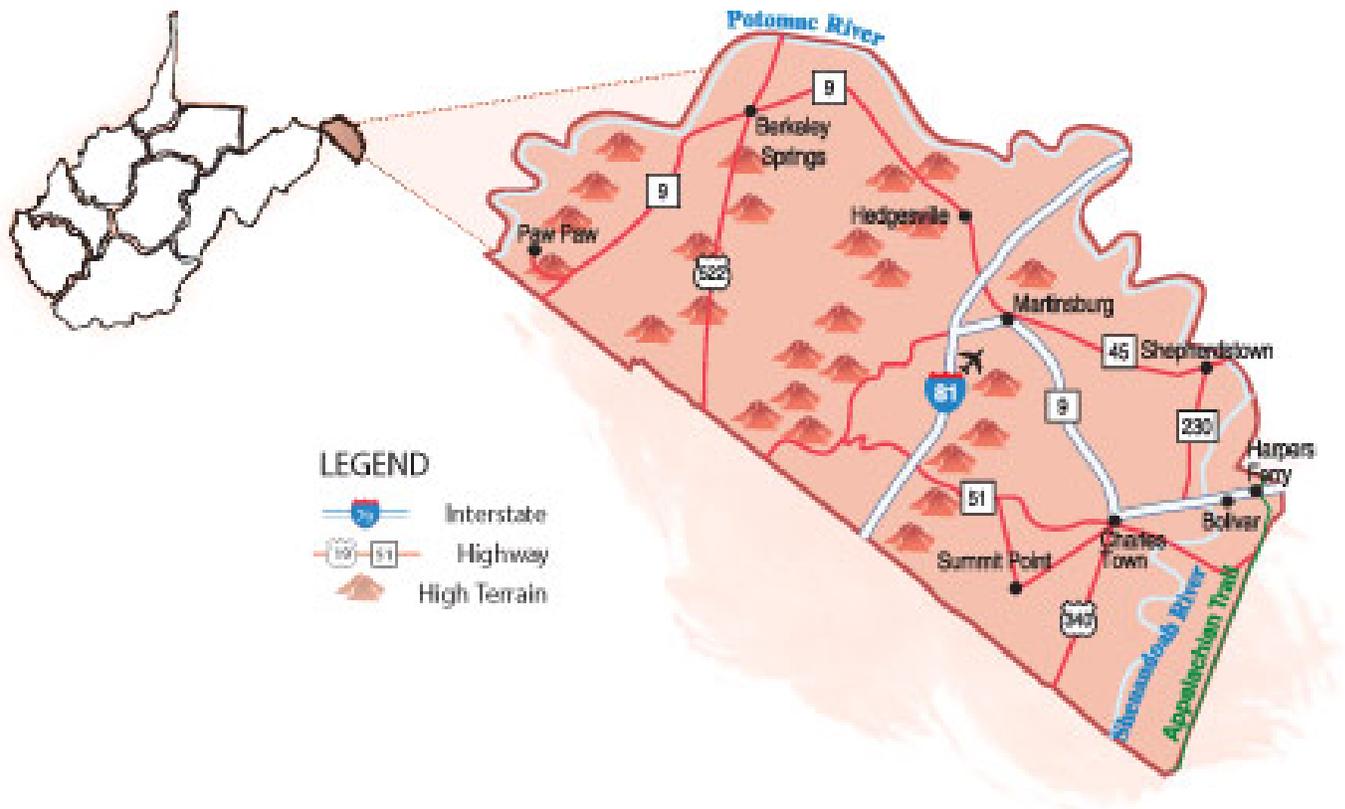


Table 1: Service Area Population 2010

| County | Population | Square Miles | Population Density |
|-------------------------------|----------------|--------------|--------------------|
| Berkeley County ² | 104,169 | 321 | 324 |
| Jefferson County ³ | 53,498 | 210 | 255 |
| Morgan County ⁴ | 17,541 | 229 | 77 |
| Eastern Panhandle | 175,208 | 760 | 231 |

² Source: <http://factfinder2.census.gov> Berkeley County WV; DP-1 Profile of General Population and Housing Characteristics: 2010; 2010 Demographic Profile Data.

³ Source: <http://factfinder2.census.gov> Jefferson County WV; DP-1 Profile of General Population and Housing Characteristics: 2010; 2010 Demographic Profile Data.

⁴ Source: <http://factfinder2.census.gov> Morgan County, WV, DP-1 Profile of General Population and Housing Characteristics: 2010 2010 Demographic Profile Data.

BERKELEY COUNTY

Berkeley County, West Virginia's second oldest county, was created from land previously belonging to Frederick County, Virginia. At the time Berkeley County was founded, it also consisted of the present-day counties of Jefferson, to the east, and Morgan, to the west. It is also bordered by Washington County, Maryland to the northeast and Frederick County, Virginia to the southwest and is part of the Hagerstown-Martinsburg, MD-WV Metropolitan Statistical Area. The county incorporates an area of 321.14 square miles with approximately 324.4 persons per square miles.⁵ Martinsburg is the county seat.

Berkeley County is within 500 miles of 50% of the U.S. population and two-thirds of all industrial activity in the U.S.⁶ It is approximately 300 miles from the state capital of Charleston, but is closer to many other metropolitan areas. Approximate mileage to Berkeley County is:

- 79 miles from Washington DC
- 85 miles from Baltimore, MD
- 170 miles from Richmond, VA
- 180 miles to Pittsburgh, PA
- 190 miles from Philadelphia, PA
- 240 from New York, NY⁷

A highly-developed transportation network links Berkeley County to the entire nation. Two major interstate highways- I-81, which runs north/south, and I-70, which runs east/west - are the cornerstones of a national highway system and trucking route. MARC Train Service, a commuter rail system, runs between Martinsburg and Washington, DC, Monday through Friday. Limited local bus service is provided by the Eastern Panhandle Transit Authority (Pan Tran).

The population of Berkeley County, which was 104,169 in 2010, changed significantly between 2000 and 2010:⁸

- The overall population grew by 37.24%.
- The Black/African American population grew by 126.98% from 4,006 to 9,093.
- The Hispanic/Latino population grew by 242.65% from 1,156 to 3,961.
- The population age 50-64 grew by 68.81% from 12,240 to 20,663.

Berkeley County Employment/Income

The median household income in 2010 was \$50,724⁹ with approximately 45% of the Berkeley County labor force working in the county, 10.5% working in Washington County, MD, 9.4% working in Jefferson County, WV and over 10% commuting to the Washington, DC metro area. Approximately 13.5% of the workforce has a commute of 60 minutes or more, and 25.1% have a commute of 30-59 minutes.¹⁰

⁵ <http://quickfacts.census.gov/qfd/states/54/54003.html>

⁶ <http://www.developmentauthority.com/why-berkeley-county/promixity-to-markets.php>

⁷ <http://www.berkeleycounty.org/berkeley/>

⁸ <http://factfinder2.census.gov> Berkeley County WV; DP-1 Profile of General Population and Housing Characteristics: 2010; 2010 Demographic Profile Data;

⁹ <http://factfinder2.census.gov> Berkeley County, WV; DP03; Selected Economic Characteristics: 2010 American Community Survey 1 -Year estimates

¹⁰ http://www.berkeleycounty.org/pdf/berkeley_county_demographics.pdf

In March 2011, the top employers were:¹¹

- 1) Berkeley County Schools
- 2) Quad Graphics
- 3) Enterprise Computing System
- 4) WVU Hospitals, East
- 5) Bureau of Alcohol, Tobacco & Firearms
- 6) U.S. Coast Guard
- 7) RESA 8
- 8) FedEx Smartpost

The top industries that employed Berkeley County residents were retail trade (13.0%) health care/social services (11.5%), manufacturing (11.2%), construction (10.2%) and educational services (8.2%).¹²

In 2010, the unemployment rate was 8.7%¹³ with 13.3% of people and 19.4% of children living below the poverty level.¹⁴

Berkeley County Education

During the 2010-2011 school year, Berkeley County had 30 public schools with 17,721 students enrolled.¹⁵ Private schools include Faith Christian Academy (Pre K – 12), Martinsburg Christian Academy (Pre K – 12), Rocky Knoll Seventh Day Adventist Elementary and St. Joseph’s Catholic School (K – 8). The James Rumsey Technical Institute is the designated area technical school for Berkeley, Morgan and Jefferson County School Districts. It offers career and technical education opportunities for high school students and adult learners.

Blue Ridge Community and Technical College, located in Martinsburg, offers associate degrees, certificates and certification training in liberal arts, business administration and allied health fields. In 2010, 3,818 students were enrolled at Blue Ridge CTC.¹⁶ West Virginia University Robert C Byrd Health Sciences Center, Eastern Division is an integrated facility with community health care professionals and full-time faculty to provide students with real world learning environments. Berkeley County is also served by Shepherd University in neighboring Jefferson County.

Berkeley County Public Safety

In 2011, the West Virginia State Police detachment in Martinsburg had 29 officers and an additional five officers who were assigned to the Bureau for Criminal Investigation. Other law enforcement entities include:

- Berkeley County Sheriff’s Office with 56 officers
- Martinsburg Police Department with 48 officers
- Eastern Panhandle Drugs and Violent Crimes Task Force with 6 officers
- Department of Natural Resources with one officer¹⁷

¹¹http://www.berkeleycounty.org/pdf/berkeley_county_demographics.pdf

¹²http://www.berkeleycounty.org/pdf/berkeley_county_demographics.pdf

¹³<http://www.bls.gov/lau/#tables>: Labor Force Data by County, 2010 Annual Averages;

¹⁴<http://factfinder2.census.gov> Berkeley County, WV; DP03; Selected Economic Characteristics: 2010 American Community Survey 1 –Year estimates

¹⁵http://wveis.k12.wv.us/nclb/pub/enroll/e06Makeup_county.cfm?so=CNSN&grade=99&size=0&updown=1&sop=0&spcd=T&sv=11

¹⁶<http://www.blueridgectc.edu/wordpress/wp-content/uploads/2012/08/Demographicsfall2010.pdf>

¹⁷<http://www.statepolice.wv.gov/about/Documents/CrimeStatistics/2011Crimes.pdf>

The Berkeley County Central Dispatch, or 911 Center, responds to requests for emergency assistance. In addition to serving law enforcement, it provides primary dispatch and related services to the following agencies:

- Martinsburg Fire Department
- South Berkeley Volunteer Fire Department
- Hedgesville Volunteer Fire & Rescue Department
- Bedington Volunteer Fire & Rescue Department
- Back Creek Valley Volunteer Fire & Rescue Department
- Baker Heights Volunteer Fire & Rescue Department
- Veterans Medical Center Fire Department
- Office of Emergency Services
- Berkeley County Emergency Ambulance Authority ¹⁸

Berkeley County Health Services

Together, City Hospital in Berkeley County and Jefferson Memorial Hospital, a critical access hospital, comprise West Virginia University Hospitals – East (also known as WVUH-East). City Hospital is a non-profit community hospital that is licensed for 260 hospital beds and has staff for 144, and a 24-hour level 3 trauma center emergency room. The hospital offers a variety of medical, surgical and health care services as well as educational programs and support groups.

The Martinsburg Veterans Administration Medical Center (VAMC) provides health care services to more than 129,000 veterans living in 23 counties in Western Maryland, West Virginia, South Central Pennsylvania and Northwest Virginia. The VAMC is affiliated with the WVU School of Medicine and offers rehabilitation programs for veterans.

The Eastern Panhandle Free Clinic, located in Ranson in Jefferson County, serves low-income and uninsured Berkeley County residents. Services include general primary care, prescription medications, health education, mental health services and some specialized care.

Shenandoah Valley Medical Systems, Inc. provides primary health care and support services, mental health care, oral health care, and health education through a community health center that offers services on a sliding fee scale. It has sites in all three Eastern Panhandle counties as well as a family practice service in Winchester, Virginia. Services specifically provided in Berkeley County include internal medicine, family practice & pediatrics, behavioral health, obstetrics, gynecological care & midwifery, Migrant Health (all three counties and additional sites in Virginia) and WIC & Nutritional Services. It also operates Healthy Smiles Community Oral Health Center. Shenandoah Valley Medical Systems, Inc. provides some transportation services.

EastRidge Health Systems is the comprehensive behavioral health center that serves the all three Eastern Panhandle counties by providing mental health, substance abuse and intellectual/developmental disability services and programs for all age groups. The majority of services are provided at outpatient clinic sites, including one located in Martinsburg. Specialized services are offered at several additional sites in Martinsburg and Hedgesville. In any given year, EastRidge Health Systems serves approximately 4,000 individuals.

¹⁸ <http://www.berkeleycountycomm.org/safety/dispatch.cfm>

Berkeley County Recreation

Martinsburg-Berkeley County Parks and Recreation offers sports leagues, classes and recreation programs for residents of all ages. In addition, it operates more than 15 parks, playgrounds and recreation areas, including two outdoor public swimming pools and a BMX/Skate park. The WV Route 9 Bike Path runs 10 miles from Martinsburg to Ranson in Jefferson County, and Yankauer Nature Preserve offers walking trails.

JEFFERSON COUNTY

Jefferson County comprises the eastern most part of West Virginia. It is bordered by Berkeley County, WV to the west, Washington County, MD to the north, Loudoun County, VA to the east and Clarke County, VA to the south. It is part of the Washington-Arlington-Alexandria DC-VA-MD-WV, Metropolitan Area and part of the Washington-Baltimore-Northern Virginia DC-MD-VA-WV, Combined Statistical Area. The county incorporates an area of 209.64 square miles with approximately 255.2 persons per square miles.¹⁹ Charles Town is the county seat.

Jefferson County is within 500 miles of 50% of the U.S. population and two-thirds of all industrial activity in the U.S. It is approximately 325 miles from the state capital of Charleston, with a closer drive to several metropolitan areas. Approximate mileage to Jefferson County is:

- 58 miles from Washington DC
- 67 miles from Baltimore, MD
- 168 miles from Richmond, VA
- 193 miles to Pittsburgh, PA
- 180 miles from Philadelphia, PA
- 265 from New York, NY²⁰

A newly upgraded four-lane WV Route 9 connects the 10 miles from Jefferson County to Interstate 81 in Berkeley County. Jefferson County is also close to I-70. MARC Train Service, a commuter rail system, has two stops in Jefferson County and runs to Washington, DC Monday through Friday. Limited local bus service is provided by the Eastern Panhandle Transit Authority (Pan Tran).

The population of Jefferson County, which was 53,498 in 2010, grew and changed significantly between 2000 and 2010:²¹

- The overall population grew by 26.80%;
- The Black/African American population grew by 50.30% from 2,813 to 4,228;
- The Hispanic/Latino population grew by 239.10% from 734 to 2,489;
- The population age 50-64 grew by 51.48% from 7,251 to 10,984.

¹⁹ <http://quickfacts.census.gov/qfd/states/54/54037.html>

²⁰ http://tmcms.techmethods.com/tmcms_files/community_profile_2012.pdf

²¹ <http://factfinder2.census.gov> Jefferson County WV; DP-1 Profile of General Population and Housing Characteristics: 2010; 2010 Demographic Profile Data;

Jefferson County Employment/Income

The median household income in 2010 was \$62,425²² with approximately 40% of Jefferson County's labor force leaving to work in other states²³. In 2010, the unemployment rate in Jefferson County was 6.4%²⁴ with 10.4% of people and 14.7% of children living below the poverty level.²⁵

In 2010, the top employers in Jefferson County were:²⁶

- 1) PNCI Charles Town Gaming
- 2) Jefferson County Board of Education
- 3) Shepherd University
- 4) American Public University
- 5) Jefferson Memorial Hospital
- 6) Royal Vendors
- 7) Wal-Mart Stores, Inc.
- 8) Department of the Interior (National Park Service)

Tourism plays a significant role in Jefferson County's economy. Hollywood Casinos at Charles Town Races, which features a six furlong thoroughbred horse racing facility, more than 3,000 slot machines and table games, brings millions of dollars into the county annually. Harpers Ferry National Historic Park also draws thousands of visitors each year.

Jefferson County Public Safety

In 2011, the District Headquarters for the West Virginia State Police was located in Kearneysville with 12 officers. Other law enforcement entities include:

- Jefferson County Sheriff - 26 officers
- Charles Town Police Department - 15 officers
- Shepherdstown Police Department - 5 officers
- Ranson Police Department - 13 officers
- Harpers Ferry Police Department - 4 officers
- Department of Natural Resources - 2 officers
- Shepherd University - 9 officers ²⁷

²² <http://factfinder2.census.gov> Jefferson County, WV; DP03; Selected Economic Characteristics: 2008-2010 American Community Survey 3-Year Estimates

²³ <http://www.icda.net/workforce.php>

²⁴ <http://www.bls.gov/lau/#tables>; Labor Force Data by County, 2010 Annual Averages

²⁵ <http://factfinder2.census.gov> Jefferson County, WV; DP03; Selected Economic Characteristics: 2008-2010 American Community Survey 3-Year Estimates

²⁶ <http://www.workforcewv.org/lmi/OTHRDATA.cfm>

²⁷ <http://www.statepolice.wv.gov/about/Documents/CrimeStatistics/2011Crimes.pdf>

The Jefferson County Emergency Communication center answers calls 24 hours a day, 365 days a year by processing emergency 9-1-1 and non-emergency calls. In addition to law enforcement, it serves the following:

- Friendship Volunteer Fire Company
- Citizen's Fire Company
- Shepherdstown Volunteer Fire Department
- Independent Fire Company
- Blue Ridge Mountain Volunteer Fire Company
- Middleway Volunteer Fire Department
- Bakerton Fire Company
- Jefferson County Emergency Services Agency²⁸

Jefferson County Education

During the 2010-2011 school year, Jefferson County had 16 public schools with 8,845 students enrolled.²⁹ Private schools include Wee Disciples Christian Enrichment Program (Pre K – 2) and The Country Day School (K – 8). The James Rumsey Technical Institute, located in Berkeley County, is the designated area technical school for Jefferson County. It offers career and technical education opportunities for high school students and adult learners.

Blue Ridge Community and Technical College, located in Martinsburg, offers associate degrees, certificates and certification training in liberal arts, business administration and allied health fields. In 2010, 3,818 were enrolled at Blue Ridge CTC. Shepherd University is a state-supported institution within the West Virginia system of higher education. With an undergraduate enrollment of about 4,200, it offers baccalaureate degrees in a wide range of fields, encompassing the liberal arts, business administration, teacher education, the social and natural sciences and other career-oriented areas. American Public University, located in Charles Town, is an accredited higher education community comprised of two online learning institutions: American Military University and American Public University.

Jefferson County Health Services

West Virginia University Health System – East serves Jefferson County through WVUH-East, Jefferson Memorial Hospital in Ranson. This non-profit community hospital has 25 acute care beds and 20 skilled nursing beds. The hospital has a 24-hour emergency department and is a Level IV trauma center. The Martinsburg VA Medical Center, located near the Berkeley County/Jefferson County line, provides health care services to more than 129,000 veterans living in 23 counties in Western Maryland, West Virginia, South Central Pennsylvania, and Northwest Virginia.

The Eastern Panhandle Free Clinic, located in Ranson in Jefferson County, serves approximately 3,000 low-income and uninsured Eastern Panhandle residents. Services include general primary care, prescription medications, health education, mental health services and some specialized care.

²⁸ <http://www.jeffersoncountywv.org/government/departments/emergency-communications/public-safety-agencies-2.html>

²⁹ http://wveis.k12.wv.us/nclb/pub/enroll/e06Makeup_county.cfm?so=CNSN&grade=99&size=0&updown=1&sop=0&spcd=T&sy=11

Shenandoah Valley Medical Systems provides primary health care and support services, mental health care, oral health care and health education through a community health center. It has sites in all three Eastern Panhandle counties as well a family practice service in Winchester, Virginia. It also provides migrant health services in both West Virginia and Frederick County, Virginia. Services provided in Jefferson County include behavioral health and WIC & Nutrition services. Internal medicine, family practice & pediatrics, obstetrics, gynecological care & midwifery and the Healthy Smiles Community Oral Health Center are available in neighboring Berkeley County. Some transportation services are provided.

EastRidge Health Systems is the comprehensive behavioral health center that serves the all three Eastern Panhandle counties by providing mental health, substance abuse and intellectual/developmental disability services and programs for all age groups. The majority of services are provided at outpatient clinic sites, including one located in Kearneysville. Specialized services are offered at several additional sites in Berkeley County.

Jefferson County Recreation

Jefferson County Parks and Recreation offers sports leagues, classes and recreation programs for residents of all ages. In addition, it operates 10 parks, playgrounds and recreation areas. In addition, a private nonprofit organization operates Jefferson Memorial Park, which has an outdoor swimming pool open to the public. An indoor swimming pool is available to students and members of the Shepherd University Fitness Center.

Harpers Ferry National Historic Park and the Appalachian Trail Conservancy are both located in Jefferson County. Parts of the Appalachian Trail and the C&O Canal Towpath biking and hiking trail run through Jefferson County. The WV Route 9 Bike Path runs 10 miles from Ranson to Martinsburg in Berkeley County, and white water rafting, tubing, zip line and other outdoor adventures are offered in the county. Yankauer Nature Preserve, located in Berkeley County but just north of Shepherdstown, offers two walking trails.

MORGAN COUNTY

Morgan County is the westernmost of the three Eastern Panhandle counties in West Virginia. It is bordered by Berkeley County, WV to the east, Washington County, MD to the North, Allegany County, MD to the northwest, Hampshire County, WV to the southwest and Frederick County, VA to the southeast. It is part of the Hagerstown-Martinsburg, MD-WV Metropolitan Statistical Area. The county incorporates an area of 229.07 square miles with approximately 76.6 persons per square miles.³⁰ Berkeley Springs is the county seat.

³⁰ <http://quickfacts.census.gov/qfd/states/54/54065.html>

Of the three Eastern Panhandle counties, Morgan County is closest to Charleston, the state capital, with a distance of 275 miles. It is also located within a few hours' drive from several metropolitan areas. Approximate mileage to Morgan County is:

- 107 miles from Washington DC
- 100 miles from Baltimore, MD
- 146 miles to Pittsburgh, PA
- 165 miles from Philadelphia, PA
- 179 miles from Richmond, VA
- 255 miles from New York, NY³¹

Interstates 70 and 68 are six miles to the north of Berkeley Springs, and Interstate 81 is 25 miles to the east. The Pennsylvania Turnpike is 32 miles to the north. U.S. 522 and WV Route 9 are the primary highways. No public transportation system serves Morgan County.

The population of Morgan County, which was 17,541 in 2010, grew significantly between 2000 and 2010: the overall population grew by 17.39%, and the population ages 50-64 grew by 47.43% from 2,825 to 4,165.³²

Morgan County Employment/Income

The median household income in 2010 was \$37,281,³³ the unemployment rate was 3.9%³⁴ with 15.8% of people and 22.0% of children living below the poverty level.³⁵

In 2010, the top employers in Morgan County were:³⁶

- 1) Morgan County Board of Education
- 2) Valley Health System
- 3) Dayspring, Inc.
- 4) WV Division of Natural Resources
- 5) Caperton Furnitureworks
- 6) U.S. Silica Company
- 7) Senior Life Services of Morgan County
- 8) Morgan County Commission

Morgan County Public Safety

In 2011, the West Virginia State Police detachment in Berkeley Springs had 5 officers. Other law enforcement entities included:

- Morgan County Sheriff's Office – 11 officers
- Berkeley Springs (Bath) Police Department – 3 officers
- Paw Paw Police Department - 1 officer
- Department of Natural Resources – 2 officers³⁷

³¹ <http://www.berkeleysprings.com/directions.htm>

³² <http://factfinder2.census.gov> Morgan County WV; DP-1 Profile of General Population and Housing Characteristics: 2010; 2010 Demographic Profile Data

³³ <http://factfinder2.census.gov> Morgan County, WV; DP03; Selected Economic Characteristics: 2006-2010 American Community Survey 5-Year Estimates

³⁴ <http://www.bls.gov/lau/#tables>; Labor Force Data by County, 2010 Annual Averages

³⁵ <http://factfinder2.census.gov>; Morgan County, WV; DP03; Selected Economic Characteristics: 2006-2010 American Community Survey 5-Year Estimates

³⁶ <http://www.workforcewv.org/lmi/OTHRDATA.cfm>

³⁷ <http://www.statepolice.wv.gov/about/Documents/CrimeStatistics/2011Crimes.pdf>

The Morgan County Emergency Communication, or 911, Center, responds to requests for emergency assistance and works with law enforcement and the following departments:

- Morgan County Emergency Medical Services
- Berkeley Springs Volunteer Fire Department
- South Morgan Volunteer Fire Department
- Great Cacapon Volunteer Fire Department
- Paw Paw Volunteer Fire Department

Morgan County Education

During the 2010-2011 school year, Morgan County had eight public schools with 2,617 students enrolled.³⁸ There are no private schools in Morgan County. The James Rumsey Technical Institute, located in Berkeley County, is the designated Area Technical School for Morgan County. It offers career and technical education opportunities for high school students and adult learners. Blue Ridge Community and Technical College, with its main campus in Martinsburg, offers associate degrees, certificates and certification training in liberal arts, business administration and allied health fields. In Fall 2012, Blue Ridge CTC opened a campus at the former War Memorial Hospital building in Berkeley Springs. The Morgan County campus offers administrative offices, classes, computer labs and meeting space with specific programs under development.

Morgan County Health Services

Valley Health Systems operates War Memorial Hospital in Berkeley Springs. This non-profit facility is a licensed Critical Access Hospital and features 25 inpatient beds, 21 private rooms, 16 long-term care beds and a six-bed emergency department. The new hospital opened in the spring of 2012 and features upgraded technologies and a helipad.

Shenandoah Valley Medical Systems provides primary health care and support services, mental health care, oral health care, health education on a sliding fee scale for low-income residents. Services provided at its Morgan County site include behavioral health, women's health and WIC & Nutrition services. Internal medicine, family practice & pediatrics, and the Healthy Smiles Community Oral Health Center are available in neighboring Berkeley County.

EastRidge Health Systems is the comprehensive behavioral health center that serves all three Eastern Panhandle counties by providing mental health, substance abuse and intellectual/developmental disability services and programs for all age groups. The majority of services are provided at outpatient clinic sites, including one located in Berkeley Springs. Specialized services are offered at several additional sites in Berkeley County.

Mountaineer Community Health Center in Paw Paw and Tri-state Community Health Center in nearby Hancock, MD also provide primary care services on a sliding fee scale for low-income Morgan County residents.

³⁸ http://wveis.k12.wv.us/nclb/pub/enroll/e06Makeup_county.cfm?so=CNSN&grade=99&size=0&updown=1&sop=0&spcd=T&sy=11

The Eastern Panhandle Free Clinic, located in Ranson in Jefferson County, serves low-income and uninsured Morgan County residents. Services include general primary care, prescription medications, health education, mental health services and some specialized care. Patients must travel to Jefferson County for services.

Morgan County Recreation

Cacapon State Park and Berkeley Springs State Park are both located in Morgan County. Cacapon State Park offers a lake with a sand beach and facilities for tennis, fishing, boating and swimming. Berkeley Springs State Park is located on the site of a series of natural spring which have been used as a health spa since pre-colonial times. Today, the park features 14 Roman baths, a number of conventional tubs, various forms of physiotherapy and an outdoor swimming pool. There are three county parks, and the Town of Paw Paw owns and operates a municipal park.

COMMUNITY HEALTH STATUS ASSESSMENT

DEMOGRAPHICS

Demographic data was obtained from United States Census.

Population by Age and Sex

Tables 2 – 7 show the population by age and sex for the United States, West Virginia and the Eastern Panhandle counties. Certain age groups were summed to reflect the age groups shown.

| Table 2: United States Population by Age and Sex 2000 and 2005 | | | | | | | | |
|--|--------------------|-------------|-------------|------------|--------------------|-------------|-------------|------------|
| Age | 2000 ³⁹ | | | | 2005 ⁴⁰ | | | |
| | Male | Female | Total # | % of Total | Male | Female | Total # | % of Total |
| <5 | 9,810,733 | 9,365,065 | 19,175,798 | 6.8% | 10,356,773 | 9,910,403 | 20,267,176 | 7.0% |
| 5 – 14 | 21,043,474 | 20,034,103 | 41,077,577 | 14.6% | 20,619,498 | 19,692,972 | 40,312,470 | 14.0% |
| 15-29 | 29,877,578 | 28,687,649 | 58,565,227 | 20.8% | 29,449,764 | 28,690,947 | 58,140,711 | 20.2% |
| 30-49 | 42,659,073 | 43,092,246 | 85,751,319 | 30.5% | 41,893,090 | 43,068,245 | 84,961,335 | 29.5% |
| 50-64 | 20,253,080 | 21,607,152 | 41,860,232 | 14.9% | 24,111,710 | 25,824,208 | 49,935,918 | 17.3% |
| 65+ | 14,409,625 | 20,582,128 | 34,991,753 | 12.4% | 14,844,129 | 19,916,398 | 34,760,527 | 12.0% |
| Total | 138,053,563 | 143,368,343 | 281,421,906 | | 141,274,964 | 147,103,173 | 288,378,137 | |

| Table 3: United States Population and by Age and Sex 2010 ⁴¹ | | | | |
|---|-------------|-------------|-------------|------------|
| Age | Male | Female | Total # | % of Total |
| <5 | 10,319,427 | 9,881,935 | 20,201,362 | 6.5% |
| 5 – 14 | 20,969,500 | 20,056,351 | 41,025,851 | 13.3% |
| 15-29 | 32,953,433 | 31,774,758 | 64,728,191 | 21.0% |
| 30-49 | 41,641,584 | 42,099,712 | 83,741,296 | 27.1% |
| 50-64 | 28,534,422 | 30,246,432 | 58,780,854 | 19.0% |
| 65+ | 17,362,960 | 22,905,024 | 40,267,984 | 13.0% |
| Total | 151,781,326 | 156,964,212 | 308,745,538 | |

³⁹ <http://factfinder2.census.gov>; United State; Profile of General Demographic Characteristics: 2000 Census 2000 Summary File 1 (SF 1) 100-Percent Data

⁴⁰ http://www.census.gov/acs/www/data_documentation/summary_file/ (ACS 2005-2009 estimates)

Table 4: West Virginia Population by Age & Sex 2000, 2005, 2010

| Age | 2000 ⁴² | | | | 2005 ⁴³ | | | | 2010 ⁴⁴ | | | |
|--------------|--------------------|----------------|------------------|------------|--------------------|----------------|------------------|------------|--------------------|----------------|------------------|------------|
| | Male | Female | Total # | % of Total | Male | Female | Total # | % of Total | Male | Female | Total # | % of Total |
| <5 | 51,864 | 49,941 | 101,805 | 5.6% | 50,833 | 48,103 | 98,936 | 5.6% | 53,300 | 50,760 | 104,060 | 5.6% |
| 5 – 14 | 117,076 | 110,256 | 227,332 | 12.6% | 109,568 | 103,337 | 212,905 | 12.0% | 109,973 | 105,088 | 215,061 | 11.6% |
| 15-29 | 182,177 | 177,087 | 359,264 | 19.9% | 167,892 | 164,294 | 332,186 | 18.7% | 176,857 | 168,883 | 345,740 | 18.7% |
| 30-49 | 261,111 | 267,884 | 528,995 | 29.3% | 243,247 | 252,101 | 495,348 | 28.0% | 242,419 | 240,253 | 482,672 | 26.0% |
| 50-64 | 154,404 | 159,649 | 314,053 | 17.4% | 180,318 | 185,672 | 365,990 | 20.7% | 201,371 | 206,686 | 408,057 | 22.0% |
| 65+ | 112,538 | 164,357 | 276,895 | 15.3% | 114,174 | 152,211 | 266,385 | 15.0% | 129,666 | 167,738 | 297,404 | 16.0% |
| Total | 879,170 | 929,174 | 1,808,344 | | 866,032 | 905,718 | 1,771,750 | | 913,586 | 939,408 | 1,852,994 | |

Table 5: Berkeley County Population by Age & Sex 2000, 2005, 2010

| Age | 2000 ⁴⁵ | | | | 2005 ⁴⁶ | | | | 2010 ⁴⁷ | | | |
|--------------|--------------------|---------------|---------------|------------|--------------------|---------------|---------------|------------|--------------------|---------------|----------------|------------|
| | Male | Female | Total # | % of Total | Male | Female | Total # | % of Total | Male | Female | Total # | % of Total |
| <5 | 2,502 | 2,522 | 5,024 | 6.6% | 2,946 | 3,076 | 6,022 | 6.5% | 3,632 | 3,609 | 7,241 | 7.0% |
| 5 – 14 | 5,783 | 5,386 | 11,169 | 14.7% | 6,457 | 6,287 | 12,744 | 13.8% | 7,439 | 7,211 | 14,650 | 14.1% |
| 15-29 | 7,527 | 7,312 | 14,839 | 19.5% | 9,916 | 9,879 | 19,795 | 21.5% | 9,586 | 9,738 | 19,324 | 18.6% |
| 30-49 | 12,067 | 12,100 | 24,167 | 31.8% | 14,392 | 13,920 | 28,312 | 30.7% | 15,170 | 15,263 | 30,433 | 29.2% |
| 50-64 | 6,163 | 6,077 | 12,240 | 16.1% | 7,598 | 7,944 | 15,542 | 16.9% | 10,422 | 10,241 | 20,663 | 19.8% |
| 65+ | 3,742 | 4,724 | 8,466 | 11.1% | 4,354 | 5,371 | 9,725 | 10.6% | 5,454 | 6,404 | 11,858 | 11.4% |
| Total | 37,784 | 38,121 | 75,905 | | 45,663 | 46,477 | 92,140 | | 51,703 | 52,466 | 104,169 | |

Table 6: Jefferson County Population by Age & Sex 2000, 2005, 2010

| Age | 2000 ⁴⁸ | | | | 2005 – 2009 ⁴⁹ | | | | 2010 ⁵⁰ | | | |
|--------------|--------------------|---------------|---------------|------------|---------------------------|---------------|---------------|------------|--------------------|---------------|---------------|------------|
| | Male | Female | Total # | % of Total | Male | Female | Total # | % of Total | Male | Female | Total # | % of Total |
| <5 | 1,326 | 1,316 | 2,642 | 6.3% | 1,725 | 1,740 | 3,465 | 6.8% | 1,736 | 1,641 | 3,777 | 7.1% |
| 5 – 14 | 2,947 | 2,714 | 5,661 | 13.4% | 3,371 | 3,231 | 6,602 | 13.0% | 3,657 | 3,797 | 7,354 | 13.6% |
| 15-29 | 4,184 | 4,245 | 8,429 | 20.0% | 4,764 | 4,676 | 9,440 | 18.6% | 5,073 | 5,098 | 10,171 | 19.0% |
| 30-49 | 6,656 | 6,827 | 13,483 | 32.0% | 7,972 | 7,923 | 15,895 | 31.3% | 7,633 | 7,765 | 15,398 | 28.8% |
| 50-64 | 3,681 | 3,570 | 7,251 | 17.2% | 4,864 | 4,868 | 9,732 | 19.2% | 5,437 | 5,547 | 10,984 | 20.5% |
| 65+ | 2,079 | 2,645 | 4,724 | 11.2% | 2,640 | 3,017 | 5,657 | 11.1% | 2,908 | 3,406 | 6,314 | 11.8% |
| Total | 20,873 | 21,317 | 42,190 | | 25,336 | 25,455 | 50,791 | | 26,444 | 27,054 | 53,498 | |

⁴² <http://factfinder2.census.gov> West Virginia; DP-1 Profile of General Demographic Characteristics: 2000 110th Congressional District Summary File

⁴³ <http://factfinder2.census.gov> West Virginia, DP01; General Demographic Characteristics: 2005; 2005 American Community Survey

⁴⁴ <http://factfinder2.census.gov> West Virginia Profile of General Population and Housing Characteristics: 2010; 2010 Demographic Profile Data

⁴⁵ <http://factfinder2.census.gov> Berkeley County, WV; DP-1; Profile of General Demographic Characteristics: 2000 Census 2000 Summary File 1 (SF 1) 100-Percent Data

⁴⁶ <http://factfinder2.census.gov> Berkeley County, WV; DP01; General Demographic Characteristics: 2005; 2005 American Community Survey

⁴⁷ <http://factfinder2.census.gov> Berkeley County WV; DP-1 Profile of General Population and Housing Characteristics: 2010; 2010 Demographic Profile Data;

⁴⁸ <http://factfinder2.census.gov> Jefferson County, WV; Profile of General Demographic Characteristics: 2000; Census 2000 Summary File 1 (SF 1) 100-Percent Data

⁴⁹ http://www.census.gov/acs/www/data_documentation/summary_file/; Jefferson County, WV; (Excel file downloaded through summary retrieval tool)

⁵⁰ <http://factfinder2.census.gov> Jefferson County WV; DP-1 Profile of General Population and Housing Characteristics: 2010; 2010 Demographic Profile Data;

Table 7: Morgan County Population by Age & Sex 2000, 2005, 2010

| Age | 2000 ⁵¹ | | | | 2005 – 2009 ACS ⁵² | | | | 2010 ⁵³ | | | |
|--------------|--------------------|--------------|---------------|------------|-------------------------------|--------------|---------------|------------|--------------------|--------------|---------------|------------|
| | Male | Female | Total # | % of Total | Male | Female | Total # | % of Total | Male | Female | Total # | % of Total |
| <5 | 445 | 460 | 905 | 6.1% | 486 | 413 | 899 | 5.5% | 439 | 404 | 843 | 4.80% |
| 5 – 14 | 955 | 941 | 1,896 | 12.7% | 999 | 980 | 1,979 | 12.1% | 1,059 | 1,020 | 2,079 | 11.90% |
| 15-29 | 1,220 | 1,181 | 2,401 | 16.1% | 1319 | 1262 | 2,581 | 15.8% | 1,340 | 1,247 | 2,587 | 14.7% |
| 30-49 | 2,219 | 2,222 | 4,441 | 29.7% | 2251 | 2208 | 4,459 | 27.4% | 2,344 | 2,307 | 4,651 | 26.5% |
| 50-64 | 1,400 | 1,425 | 2,825 | 18.9% | 1769 | 1817 | 3,586 | 22.0% | 2,055 | 2,110 | 4,165 | 23.7% |
| 65+ | 1,104 | 1,371 | 2,475 | 16.6% | 1263 | 1536 | 2,799 | 17.2% | 1,512 | 1,704 | 3,216 | 18.3% |
| Total | 7,343 | 7,600 | 14,943 | | 8,087 | 8,216 | 16,303 | | 8,749 | 8,792 | 17,541 | |

Population by Race/Ethnic Distribution

Tables 8 – 12 show the population by race/ethnic population. Population numbers under “other” include the category “two or more races. “

When compared to the United States, West Virginia is relatively homogenous but there is variation across the state. In 2010, 74.8% of Americans were white, 13.6% reported were black or African American, 16.3% Hispanic or Latino, 5.6% Asian, 1.7% American Indian or Alaskan native, 0.4% native Hawaiian/Pacific Islander and 7% other. By contrast, only 4.2% of West Virginians were black or African American and 1.2% reported being Hispanic/Latino.

When compared to the rest of the state, the Eastern Panhandle has a higher percentage of ethnic and racial minorities. Almost 9% of Berkeley County residents were black/African American and 3.8% were Hispanic/Latin American. Similarly, almost 8% of Jefferson County residents were black/African American and 4.7% Hispanic/Latin American. Morgan County roughly approximates the rest of the state.

Table 8: United States Population by Race/Ethnic Distribution 2000, 2005, 2010

| | 2000 ⁵⁴ | | 2005 ⁵⁵ | | 2010 ⁵⁶ | |
|--|--------------------|---------|--------------------|---------|--------------------|---------|
| | Number | Percent | Number | Percent | Number | Percent |
| White | 216,930,975 | 77.1% | 220,080,685 | 76.3% | 231,040,398 | 74.8% |
| Black or African American | 36,419,434 | 12.9% | 36,844,565 | 12.8% | 42,020,743 | 13.6% |
| American Indian or Alaska Native | 4,119,301 | 1.5% | 4,154,705 | 1.4% | 5,220,579 | 1.7% |
| Asian | 11,898,828 | 4.2% | 13,879,891 | 4.8% | 17,320,856 | 5.6% |
| Hispanic or Latino | 35,305,818 | 12.5% | 41,870,703 | 14.5% | 50,477,594 | 16.3% |
| Native Hawaiian or Pacific Islander | 874,414 | 0.3% | 764,255 | 0.3% | 1,225,195 | 0.4% |
| Other | 18,521,486 | 6.6% | 18,629,399 | 6.5% | 21,748,084 | 7.0% |
| Total Population | 281,421,906 | | 288,378,137 | | 308,745,538 | |

⁵¹ <http://factfinder2.census.gov> Morgan County, WV; DP-1 Profile of General Demographic Characteristics: 2000 Census 2000 Summary File 1 (SF 1) 100-Percent Data

⁵² http://www.census.gov/acs/www/data_documentation/summary_file/ Morgan County, WV; (Excel file downloaded through summary retrieval tool)

⁵³ <http://factfinder2.census.gov> Morgan County, WV; DP-1 Profile of General Population and Housing Characteristics: 2010; 2010 Demographic Profile Data

⁵⁴ <http://factfinder2.census.gov>; United State; Profile of General Demographic Characteristics: 2000 Census 2000 Summary File 1 (SF 1) 100-

⁵⁵ http://www.census.gov/acs/www/data_documentation/summary_file/ (ACS 2005-2009 estimates)

⁵⁶ <http://factfinder2.census.gov> United States; DP-1 Profile of General Population and Housing Characteristics: 2010 ; 2010 Demographic Profile Data

Table 9: West Virginia Population by Race/Ethnic Distribution 2000, 2005, 2010

| | 2000 ⁵⁷ | | 2005 ⁵⁸ | | 2010 ⁵⁹ | |
|--|--------------------|---------|--------------------|---------|--------------------|---------|
| | Number | Percent | Number | Percent | Number | Percent |
| White | 1,733,390 | 95.9% | 1,702,216 | 96.1% | 1,765,642 | 95.3% |
| Black or African Am. | 62,817 | 3.5% | 62,279 | 3.5% | 76,945 | 4.2% |
| American Indian or Alaska Native | 10,644 | 0.6% | 11,834 | 0.7% | 13,314 | 0.7% |
| Asian | 11,873 | 0.7% | 10,476 | 0.6% | 16,465 | 0.9% |
| Hispanic or Latino | 12,279 | 0.7% | 10,139 | 0.6% | 22,268 | 1.2% |
| Native Hawaiian or Pacific Islander | 887 | 0.0% | 1,183 | 0.1% | 1,254 | 0.1% |
| Other | 5,579 | 0.3% | 4,418 | 0.2% | 8,164 | 0.4% |
| Total Population | 1,808,344 | | 1,771,750 | | 1,852,994 | |

Table 10: Berkeley County Population by Race/Ethnic Distribution 2000, 2005, 2010

| | 2000 ⁶⁰ | | 2005 ⁶¹ | | 2010 ⁶² | |
|--|--------------------|---------|--------------------|---------|--------------------|---------|
| | Number | Percent | Number | Percent | Number | Percent |
| White | 71,254 | 93.9% | 85,370 | 92.7% | 94,052 | 90.3% |
| Black or African Am. | 4,006 | 5.3% | 5,768 | 6.3% | 9,093 | 8.7% |
| American Indian or Alaska Native | 490 | 0.6% | N | N | 902 | 0.9% |
| Asian | 531 | 0.7% | 688 | 0.7% | 1,330 | 1.3% |
| Hispanic or Latino | 1,156 | 1.5% | 2,299 | 2.5% | 3,961 | 3.8% |
| Native Hawaiian or Pacific Islander | 43 | 0.1% | N | N | 116 | 0.10% |
| Other | 608 | 0.8% | 1,495 | 1.6% | 1,609 | 1.5% |
| Total Population | 75,905 | | 92,140 | | 104,169 | |

Table 11: Jefferson County Population by Race/Ethnic Distribution 2000, 2005, 2010

| | 2000 ⁶³ | | 2005 ⁶⁴ | | 2010 ⁶⁵ | |
|--|--------------------|---------|--------------------|---------|--------------------|---------|
| | Number | Percent | Number | Percent | Number | Percent |
| White | 38,919 | 92.2% | 46,032 | 90.6% | 48,142 | 90.0% |
| Black or African American. | 2,813 | 6.7% | 3,763 | 7.4% | 4,228 | 7.9% |
| American Indian or Alaska Native | 329 | 0.8% | 399 | 0.8% | 502 | 0.90% |
| Asian | 359 | 0.9% | 645 | 1.3% | 920 | 1.70% |
| Hispanic or Latino | 734 | 1.7% | 1,910 | 3.8% | 2,489 | 4.7% |
| Native Hawaiian or Pacific Islander | 37 | 0.1% | 67 | 0.1% | 89 | 0.20% |
| Other | 355 | 0.8% | 718 | 1.4% | 1,117 | 2.10% |
| Total | 42,190 | | 50,791 | | 53,498 | |

⁵⁷ <http://factfinder2.census.gov> West Virginia; DP-1 Profile of General Demographic Characteristics: 2000 110th Congressional District Summary File

⁵⁸ <http://factfinder2.census.gov> West Virginia, DP01; General Demographic Characteristics: 2005; 2005 American Community Survey

⁵⁹ <http://factfinder2.census.gov> United State; Profile of General Demographic Characteristics: 2000 Census 2000 Summary File 1 (SF 1) 100-Percent Data

⁶⁰ <http://factfinder2.census.gov> Berkeley County, WV; DP-1; Profile of General Demographic Characteristics: 2000 Census 2000 Summary File 1 (SF 1) 100-Percent Data

⁶¹ <http://factfinder2.census.gov> Berkeley County, WV; DP01; General Demographic Characteristics: 2005 ; 2005 American Community Survey

⁶² <http://factfinder2.census.gov> Berkeley County WV; DP-1 Profile of General Population and Housing Characteristics: 2010; 2010 Demographic Profile Data;

⁶³ <http://factfinder2.census.gov> Jefferson County, WV; Profile of General Demographic Characteristics: 2000; Census 2000 Summary File 1 (SF 1) 100-Percent Data

⁶⁴ http://www.census.gov/acs/www/data_documentation/summary_file/; Jefferson County, WV; (Excel file downloaded through summary retrieval tool)

⁶⁵ <http://factfinder2.census.gov> Jefferson County WV; DP-1 Profile of General Population and Housing Characteristics: 2010; 2010 Demographic Profile Data;

Table 12: Morgan County Population by Race/Ethnic Distribution 2000, 2005, 2010

| | 2000 ⁶⁶ | | 2005 ⁶⁷ | | 2010 ⁶⁸ | |
|--|--------------------|---------|--------------------|---------|--------------------|---------|
| | Number | Percent | Number | Percent | Number | Percent |
| White | 14,774 | 98.9% | 16,133 | 99.0% | 17,289 | 98.60% |
| Black or African Am. | 113 | 0.8% | 180 | 1.1% | 175 | 1.00% |
| American Indian or Alaska Native | 61 | 0.4% | 61 | 0.4% | 185 | 1.10% |
| Asian | 34 | 0.2% | 78 | 0.5% | 87 | 0.5% |
| Hispanic or Latino | 124 | 0.8% | 176 | 1.1% | 183 | 1.00% |
| Native Hawaiian or Pacific Islander | 3 | 0.0% | 0 | N | 9 | 0.1% |
| Other | 51 | 0.3% | 182 | 1.1% | 55 | 0.3% |
| Total | 14,943 | | 16,303 | | 17,541 | |

Population Change

Population change was calculated by using the data included in Tables 2 – 12. For each demographic category, the difference between the identified years was determined then divided by the past year figure. (Percent change = [(value at end of period - value at beginning of period)/value at beginning of period] multiplied by 100. All percent changes are positive (representing an increase in population) unless otherwise indicated.

Between 2000 and 2010, the population in the U.S. grew by 9.7% and in WV by 2.5%. By contrast, Berkeley County’s population grew by 37.2%, Jefferson County’s population grew by 26.8% and Morgan County’s population grew by 17.4%. The greatest growth was among 50 – 64 year olds in Berkeley (68.8%), Jefferson (51.5%) and Morgan (47.4%) counties. The growth in aging adults was offset by the growth rates among children age five and under in Berkeley (44%) and Jefferson (43%). This was not true in Morgan County where the second highest population was growth was among individuals ages 65 and older; the percentage of children under the age of five dropped by 6.9%.

Overall, trending data reveals that the population in all three counties is aging and experiencing a growth of ethnic and racial minorities. Demographic changes indicate a need to ensure the availability of quality services to meet the health and social service needs of an aging population, many of whom have moved from other areas and do not have family nearby, as well as address the needs of children and families.

⁶⁶ <http://factfinder2.census.gov>, Morgan County, WV; DP-1 Profile of General Demographic Characteristics: 2000 Census 2000 Summary File 1 (SF 1) 100-Percent Data

⁶⁷ http://www.census.gov/acs/www/data_documentation/summary_file/ Morgan County, WV; (Excel file downloaded through summary retrieval tool)

⁶⁸ <http://factfinder2.census.gov>, Morgan County, WV, DP-1 Profile of General Population and Housing Characteristics: 2010 2010 Demographic Profile Data

Table 13: Population Change by Age U.S., WV and Eastern Panhandle Counties 2000 - 2010

| Age | United States | | West Virginia | | Berkeley County | | Jefferson County | | Morgan County | |
|--------------|---------------|--------------|---------------|-------------|-----------------|---------------|------------------|---------------|---------------|---------------|
| | 2000-2005 | 2000 - 2010 | 2000-2005 | 2000 - 2010 | 2000-2005 | 2000 - 2010 | 2000-2005 | 2000 - 2010 | 2000-2005 | 2000 - 2010 |
| <5 | 5.7% | 5.35% | -2.81% | 2.21% | 19.86% | 44.13% | 31.15% | 42.96% | -0.66% | -6.85% |
| 5 – 14 | -1.9% | -0.13% | -6.35% | -5.4% | 14.10% | 31.17% | 16.62% | 30.0% | 4.38% | 9.65% |
| 15-29 | -.73 | 10.52% | -7.53% | -3.76% | 33.40% | 30.22% | 12.0% | 17.1% | 7.50% | 7.75% |
| 30-49 | -.092% | -2.34% | -6.36% | -8.76% | 17.15% | 25.93% | 17.89% | 14.20% | 0.40% | 4.73% |
| 50-64 | 19.29% | 40.42% | 16.54% | 29.93% | 26.98% | 68.81% | 34.22% | 51.48% | 26.94% | 47.43% |
| 65+ | -.66% | 15.08% | -3.8% | 7.4% | 14.87% | 40.06% | 19.75% | 33.66% | 13.0% | 29.94% |
| Total | 2.47% | 9.70% | -2.02% | 2.5% | 21.39% | 37.24% | 20.39% | 26.80% | 9.10% | 17.39% |

Over the past 10 years, all three Eastern Panhandle counties experienced significant growth in the Hispanic and African American populations. Between 2000 and 2010, the number of African Americans grew by 22.49% in WV, by 126.98% in Berkeley County, by 50.3% in Jefferson County and by 54.87% in Morgan County. The number of persons who identified as Hispanic grew by 81.35% in WV, 242.65% in Berkeley County, 239.1% in Jefferson County and 47.58% in Morgan County. Because of this growth, the need for culturally and linguistically appropriate services to address health disparities among minority populations is critical.⁶⁹

Table 14: Population Change by Race/Ethnicity U.S., WV and Eastern Panhandle Counties 2000 - 2010

| | United States | | West Virginia | | Berkeley County | | Jefferson County | | Morgan County | |
|--|---------------|--------------|---------------|-------------|-----------------|---------------|------------------|---------------|---------------|---------------|
| | 2000-2005 | 2000 - 2010 | 2000-2005 | 2000 - 2010 | 2000-2005 | 2000 - 2010 | 2000-2005 | 2000 - 2010 | 2000-2005 | 2000 - 2010 |
| White | 1.45% | 6.5% | -1.80% | 1.86% | 19.81% | 32.0% | 18.28% | 23.70% | 9.20% | 17.02% |
| Black or African American | 1.17% | 15.38% | -0.86% | 22.49% | 43.98% | 126.98% | 33.77% | 50.30% | 59.29% | 54.87% |
| American Indian or Alaska Native | .86% | 26.73% | 11.18% | 25.08% | NA | 84.08% | 21.28% | 52.58% | 0% | 203.28% |
| Asian | 16.65% | 45.57% | -11.77% | 38.68% | 29.57% | 150.47% | 79.66% | 156.27% | 129.41% | 155.88% |
| Hispanic or Latino | 18.59% | 42.97% | -17.43 | 81.35% | 98.90% | 242.65% | 169.21% | 239.10% | 41.94% | 47.58% |
| Native Hawaiian or Pacific islander | -12.60% | 40.12% | 33.37% | 41.38% | NA | 179.77% | 81.08% | 140.54% | -100.00% | 200% |
| Other | .58% | 17.42% | -20.81% | 46.33% | 146% | 165% | 102.25% | 214.65% | 256.86% | 7.41% |
| Total Population | 2.47% | 9.70% | -2.02% | 2.5% | 21.39% | 37.24% | 20.39% | 26.80% | 9.10% | 17.39% |

Socioeconomic and Education Measures

Socioeconomic data were obtained from the United States Census Bureau, with the exception of unemployment data, which were obtained from the Bureau for Labor Statistics. Some data are based on American Community Survey (ACS) estimates. *(Note: The poverty threshold referenced in US Census data are different than the Federal Poverty Level often used for determining eligibility for social services. The poverty threshold and the Federal Poverty level are included in the Appendices.)*

There is variability in socioeconomic indicators in the Eastern Panhandle. Jefferson County has the lowest unemployment rate and highest median income.

⁶⁹ <http://www.wrha.mb.ca/osd/files/soc-AJPM-evrev-healthcare-systems.pdf>

While the median income in all three counties rose substantially from 2000 to 2010, so did the percent of children living in poverty. Families with female heads of household with no husband present and with related children under age 18 had significantly higher poverty levels than the general population in all geographic areas.

Table 15: Socioeconomic and Educational Attainment in U.S. and WV 2000 and 2010

| | 2000 | | 2010 | |
|---|--|--|---|--|
| | United States | West Virginia | United States | West Virginia |
| Unemployed | 5.0% ⁷⁰ | 5.5% ⁷¹ | 9.6% ⁷² | 8.5% ⁷³ |
| | Source for all information below ⁷⁴ | Source for information below unless otherwise referenced ⁷⁵ | Data source for information below unless otherwise referenced ⁷⁶ | Source for information below unless otherwise referenced ⁷⁷ |
| Median Household Income | \$41,994 | \$29,696 | \$51,914 | \$38,218 |
| Children living below the poverty level | 16.1% | 23.9% | 21.6% | 25.5% |
| Families living below the poverty level | 9.2% | 13.9% | 11.3% | 13.2% |
| Female head of household, no husband present with own children under 18 years | 7.2% | 5.7% ⁷⁸ | 7.2% ⁷⁹ | 5.7% ⁸⁰ |
| Families with female householder, no husband present, with related children under 18 years living below poverty | 34.4% | 48.8% | 39.6% | 48.7% |
| Total People living below poverty level | 12.4% | 17.9% | 15.3% | 18.1% |
| Population age 25 and older that graduated from high school | 80.4% | 75.2% | 85.6% ⁸¹ | 83.2% ⁸² |
| Population age 25 and older with a Bachelor's Degree or higher | 24.4% | 14.8% | 28.2% ⁸³ | 17.5% ⁸⁴ |

Between 2000 and 2010, the median household income grew in all three Eastern Panhandle counties. In Berkeley County, it grew from \$38,763 to \$50,724; in Jefferson County it grew from \$44,374 to \$62,425 and in Morgan County it grew slightly from \$35,016 to \$37,281. Ironically, the percentage of children living in poverty increased in all three counties during the same time. From 2000 to 2010, it grew from 14.6% to 19.4% in Berkeley County, from 11.4% to 14.7% in Jefferson County and from 11.6% to 22.0% in 2010 in Morgan County. Nationally, statewide and at a county level, families with a female head of household with children are significantly more likely to live below the poverty threshold than other families. This income gap is greater in West Virginia and in Berkeley and Morgan counties than it is nationally.

⁷⁰ Bureau of Labor Statistics <http://www.bls.gov/lau/lastch00.htm>

⁷¹ Bureau of Labor Statistics <http://www.bls.gov/lau/lastch00.htm>

⁷² Bureau of Labor Statistics <http://www.bls.gov/lau/lastrk10.htm>

⁷³ Bureau of Labor Statistics <http://www.bls.gov/lau/lastrk10.htm>

⁷⁴ <http://censtats.census.gov/data/US/01000.pdf>

⁷⁵ <http://www.census.gov/prod/cen2000/phc-2-50.pdf>

⁷⁶ <http://factfinder2.census.gov> United States, DP03 Selected Economic Characteristics, 2010 American Community Survey 1-Year Estimates

⁷⁷ <http://factfinder2.census.gov> West Virginia, DP03, Selected Economic Characteristics in the United States: 2010 American Community Survey 1-Year Estimates

⁷⁸ <http://factfinder2.census.gov> West Virginia; DP-1; Profile of General Demographic Characteristics: 2000 ; Census 2000 Summary File 1 (SF 1) 100-Percent Data

⁷⁹ <http://factfinder2.census.gov> United States, DP1, Profile of General Population and Housing Characteristics: 2010 2010 Census Summary File 2

⁸⁰ <http://factfinder2.census.gov> West Virginia, DP-1, Profile of General Population and Housing Characteristics: 2010; 2010 Demographic Profile Data

⁸¹ <http://factfinder2.census.gov> United States, S1501, Educational Attainment; 2010 American Community Survey 1-Year Estimates

⁸² <http://factfinder2.census.gov> West Virginia, DP02, Selected Social Characteristics in the United States: 2010 American Community Survey 1-Year Estimates

⁸³ <http://factfinder2.census.gov> United States, S1501, Educational Attainment; 2010 American Community Survey 1-Year Estimates

⁸⁴ <http://factfinder2.census.gov> West Virginia, DP02, Selected Social Characteristics in the United States: 2010 American Community Survey 1-Year Estimates

Table 16: Socioeconomic and Educational Attainment in the Eastern Panhandle Counties 2000 and 2010

| | 2000 | | | 2010 | | |
|---|--|--|--|--|--|--|
| | Berkeley County | Jefferson County | Morgan County | Berkeley County | Jefferson County | Morgan County |
| Unemployed | 3.6% ⁸⁵ | 3.4% ⁸⁶ | 3.9% ⁸⁷ | 8.7% ⁸⁸ | 6.4% ⁸⁹ | 3.9% ⁹⁰ |
| | Source for information below unless otherwise referenced ⁹¹ | Source for information below unless otherwise referenced ⁹² | Source for information below unless otherwise referenced ⁹³ | Source for information below unless otherwise referenced ⁹⁴ | Source for information below unless otherwise referenced ⁹⁵ | Source for information below unless otherwise referenced ⁹⁶ |
| Median Household Income | \$38,763 | \$ 44,374 | \$35,016 | \$50,724 | \$62,425 | \$37,281 |
| Children living below the poverty level | 14.6% | 11.4% | 11.6% | 19.4% | 14.7% | 22.0% |
| Families living below the poverty level | 8.7% | 7.2% | 8.0% | 9.0% | 5.7% | 11.9% |
| Female head of household, no husband present with own children under 18 years | 6.6% ⁹⁷ | 5.8% ⁹⁸ | 4.6% ⁹⁹ | 7.0% ¹⁰⁰ | 5.3% ¹⁰¹ | 4.6% ¹⁰² |
| Families with female householder, no husband present, with related children under 18 years living below the poverty | 40.2% | 28.7% | 34.6% | 43.5% | 29.7% | 54.3% |
| Total people living below poverty level | 11.5% | 10.3% | 10.4% | 13.3% | 10.4% | 15.8% |
| Population age 25 and older that graduated from high school | 77.6% | 79.0% | 75.8% | 85.3% ¹⁰³ | 86.7% ¹⁰⁴ | 84.1% ¹⁰⁵ |
| Population age 25 and older with a Bachelor's Degree or higher | 15.1% | 21.6% | 11.2% | 21.4% ¹⁰⁶ | 29.0% ¹⁰⁷ | 12.7% ¹⁰⁸ |

⁸⁵ <http://www.bls.gov/lau/#tables>; Labor Force Data by County, 2000 Annual Averages;

⁸⁶ <http://www.bls.gov/lau/#tables>; Labor Force Data by County, 2000 Annual Averages;

⁸⁷ <http://www.bls.gov/lau/#tables>; Labor Force Data by County, 2000 Annual Averages;

⁸⁸ <http://www.bls.gov/lau/#tables>; Labor Force Data by County, 2010 Annual Averages;

⁸⁹ <http://www.bls.gov/lau/#tables>; Labor Force Data by County, 2010 Annual Averages;

⁹⁰ <http://www.bls.gov/lau/#tables>; Labor Force Data by County, 2000 Annual Averages

⁹¹ <http://www.census.gov/prod/cen2000/phc-2-50.pdf>

⁹² <http://www.census.gov/prod/cen2000/phc-2-50.pdf>

⁹³ <http://www.census.gov/prod/cen2000/phc-2-50.pdf>

⁹⁴ <http://factfinder2.census.gov> Berkeley County, WV; DP03; Selected Economic Characteristics: 2010 American Community Survey 1-Year estimates

⁹⁵ <http://factfinder2.census.gov> Jefferson County, WV; DP03; Selected Economic Characteristics: 2008-2010 American Community Survey 3-Year Estimates

⁹⁶ <http://factfinder2.census.gov> Morgan County, WV; DP03; Selected Economic Characteristics: 2006-2010 American Community Survey 5-Year Estimates

⁹⁷ <http://factfinder2.census.gov> Berkeley County, WV; DP-1; Profile of General Demographic Characteristics: 2000; Census 2000 Summary File 1 (SF 1) 100-Percent Data

⁹⁸ <http://factfinder2.census.gov> Jefferson County, WV; DP-1; Profile of General Demographic Characteristics: 2000; Census 2000 Summary File 1 (SF 1) 100-Percent Data

⁹⁹ <http://factfinder2.census.gov> Morgan County, WV; DP-1; Profile of General Demographic Characteristics: 2000; Census 2000 Summary File 1 (SF 1) 100-Percent Data

¹⁰⁰ <http://factfinder2.census.gov> Berkeley County, WV; DP-1; Profile of General Population and Housing Characteristics, 2010; 2012 SF2

¹⁰¹ <http://factfinder2.census.gov> Jefferson County, WV; DP-1; Profile of General Population and Housing Characteristics, 2010; 2010 Population Profile Data

¹⁰² <http://factfinder2.census.gov> Morgan County, WV; DP-1; Profile of General Population and Housing Characteristics, 2010; 2010 Population Profile Data

¹⁰³ <http://factfinder2.census.gov> Berkeley County, WV; S1501; Educational attainment; 2010 American Community Survey 1-Year Estimates

¹⁰⁴ <http://factfinder2.census.gov> Jefferson County, WV; DP03; Selected Social Characteristics: 2008-2010 American Community Survey 3-Year Estimates

¹⁰⁵ <http://factfinder2.census.gov> Morgan County, WV; DP02; Selected Social Characteristics: 2006-2010 American Community Survey 5-Year Estimates

¹⁰⁶ <http://factfinder2.census.gov> Berkeley County, WV; S1501; Educational attainment; 2010 American Community Survey 1-Year Estimates

¹⁰⁷ <http://factfinder2.census.gov> Jefferson County, WV; DP03; Selected Social Characteristics: 2008-2010 American Community Survey 3-Year Estimates

¹⁰⁸ <http://factfinder2.census.gov> Morgan County, WV; DP02; Selected Social Characteristics: 2006-2010 American Community Survey 5-Year Estimates

HEALTH INDICATORS

The Robert Wood Johnson Foundation collaborates with the University of Wisconsin Population Health Institute to provide the County Health Rankings & Roadmaps program. Launched in 2010, the project ranks counties in each state by 1) health outcomes and 2) health factors. Each of these rankings represents a weighted summary of a number of measures. Health outcomes represent how healthy county residents are based on premature death, poor physical health days, poor mental health days and low birth weight. Health factors represent influences on health, such as health behavior, clinical care, social and economic factors and the physical environment. Of the 55 West Virginia counties, Jefferson County has ranked among the top 10 (best) for both health outcomes and health factors during all three years.

| | Health Outcomes | | | Health Factors | | |
|------------------|-----------------|------|------|----------------|------|------|
| | 2010 | 2011 | 2012 | 2010 | 2011 | 2012 |
| Berkeley | 15 | 10 | 11 | 29 | 25 | 15 |
| Jefferson | 2 | 6 | 5 | 6 | 3 | 3 |
| Morgan | 23 | 16 | 24 | 3 | 7 | 12 |

Mortality

Life expectancy at birth represents the average number of years that a group of infants would live if the group was to experience throughout life the age-specific death rates present in the year of birth. In general, West Virginians have a shorter life expectancy than the national average. There is a discrepancy between life expectancy nationally as well as locally.

| | 2000 | | 2009 | |
|---------------------------------------|---------------------|---------------------|------|--------|
| | Male | Female | Male | Female |
| United States¹¹⁰ | 74.1 | 79.3 | 76.0 | 80.9 |
| West Virginia | 72.3 ¹¹¹ | 77.7 ¹¹² | NA | NA |
| Berkeley County¹¹³ | 72.9 | 79 | 73.8 | 79.1 |
| Jefferson County¹¹⁴ | 73.8 | 79.6 | 75.1 | 79.4 |
| Morgan County¹¹⁵ | 73.1 | 80 | 74 | 80.2 |

| | 2000 ¹¹⁶ | 2005 ¹¹⁷ | 2009 ¹¹⁸ |
|-------------------------|---------------------|---------------------|---------------------|
| West Virginia | 73.1 | 72.4 | 72.1 |
| Berkeley County | 68.5 | 68.5 | 68.4 |
| Jefferson County | 71.9 | 71.2 | 68.9 |
| Morgan County | 72.3 | 72.6 | 71.1 |

¹⁰⁹ <http://www.countyhealthrankings.org/app/west-virginia/2012/rankings/outcomes/overall>

¹¹⁰ http://www.cdc.gov/nchs/data/nvsr/nvsr60/nvsr60_03.pdf

¹¹¹ wonder.cdc.gov/WONDER/help/populations/population-projections/MethodsTable2.xls

¹¹² wonder.cdc.gov/WONDER/help/populations/population-projections/MethodsTable2.xls

¹¹³ <http://www.healthmetricsandevaluation.org/tools/data-visualization/life-expectancy-county-and-sex-us-1989-2009#/overview/explore>

¹¹⁴ <http://www.healthmetricsandevaluation.org/tools/data-visualization/life-expectancy-county-and-sex-us-1989-2009#/overview/explore>

¹¹⁵ <http://www.healthmetricsandevaluation.org/tools/data-visualization/life-expectancy-county-and-sex-us-1989-2009#/overview/explore>

¹¹⁶ http://www.wvdhhr.org/bph/hsc/statserv/viewer.asp?target=http://www.wvdhhr.org/bph/hsc/pubs/vital/2005/index.htm&Source=pub.asp&DocID=1_2000; County Data - Age at Death

¹¹⁷ http://www.wvdhhr.org/bph/hsc/statserv/viewer.asp?target=http://www.wvdhhr.org/bph/hsc/pubs/vital/2005/index.htm&Source=pub.asp&DocID=1_2000; County Data - Age at Death

¹¹⁸ <http://www.wvdhhr.org/bph/hsc/pubs/vital/2009/2009Vital.pdf> Page 116, Table 55

National leading causes of death data in this report are based on information from all death certificates filed in the 50 States and the District of Columbia and reported to the Centers for Disease Control and Prevention. State and county specific data was based on death certificates filed with the WV Office of Vital Statistics. County level percentages were determined by dividing the number of deaths from a specific cause in a given year by the total number of deaths in the given county for the given year times 100. ((Percent of all deaths = [(number of deaths from a specific cause/total number of deaths)] multiplied by 100.

The leading cause of death in West Virginia is heart disease followed by malignant neoplasms. The percent of deaths caused by heart disease decreased from 30.9% in 2000 to 23.8% in 2009 while cancer related deaths in the state remained stable.

Similar to WV, the two most common causes of death in Berkeley County are cancer and heart disease. Between 2000 and 2009, the percentage of deaths attributed to heart disease decreased from 27.5% to 23% of all deaths. Cancer related deaths decreased from 27.8% to 24.5% during the same time frame. The decrease in cancer and heart disease related deaths may well reflect an improvement in primary and secondary prevention efforts and medical management. Deaths attributed to chronic lower respiratory diseases, however, increased slightly and deaths attributed to unintentional injuries increased by 2%. These increases are important to note as they warrant further investigation. The most common causes of death in Jefferson County in 2009 were cancer and heart disease. The percentage of deaths caused by cancer and heart disease decreased between 2000 and 2009. By contrast, deaths attributed to chronic lower respiratory diseases increased from 5.8% to 6.4% of all deaths, and unintentional injury related deaths increased from 2.4% to 6.1% of deaths during the same time frame. The most common causes of death in Morgan County remained heart disease and cancer, with neither rate changing significantly.

Table 20: Leading Causes of Death in U.S., WV and Eastern Panhandle Counties 2000 and 2009

| Cause | 2000 Percent of All Deaths | | | | | 2009 Percent of All Deaths | | | | |
|-----------------------------------|-------------------------------|------------------------------|--------------------------------|---------------------------------|------------------------------|-------------------------------|------------------------------|--------------------------------|---------------------------------|------------------------------|
| | United States ¹¹⁹ | West Virginia ¹²⁰ | Berkeley County ¹²¹ | Jefferson County ¹²² | Morgan County ¹²³ | United States ¹²⁴ | West Virginia ¹²⁵ | Berkeley County ¹²⁶ | Jefferson County ¹²⁷ | Morgan County ¹²⁸ |
| Heart Disease | 29.6% | 30.9% | 27.5% | 33.9% | 26.3% | 24.6% | 23.8% | 23.0% | 25.3% | 26.7% |
| Malignant Neoplasms | 23.0% | 22.4% | 27.8% | 26.5% | 21.7% | 23.3% | 22.4% | 24.5% | 25.8% | 22.0% |
| Cerebrovascular | 7.0% | 6.0% | 6.3% | 5.3% | 6.6% | 5.3% | 5.1% | 5.4% | 4.3% | 3.0% |
| Chronic Lower Respiratory Disease | 5.1% | 6.4% | 5.2% | 5.8% | 6.6% | 5.6% | 7.1% | 5.9% | 6.4% | 5.6% |
| Unintentional Injury/Accidents | 4.1% | 3.9% | 5.2% | 2.4% | 3.9% | 4.8% | 5.4% | 7.2% | 6.1% | 4.1% |
| Alzheimer's Disease | - | - | - | - | 5.2% | - | - | - | - | 3.6% |

¹¹⁹ http://www.cdc.gov/nchs/data/nvsr/nvsr50/nvsr50_15.pdf Page 9, Table C

¹²⁰ http://www.wvdhhr.org/bph/oehp/vital00/vs_30.htm

¹²¹ http://www.wvdhhr.org/bph/oehp/vital00/vs_44_02.htm

¹²² http://www.wvdhhr.org/bph/oehp/vital00/vs_44_19.htm

¹²³ http://www.wvdhhr.org/bph/oehp/vital00/vs_44_33.htm

¹²⁴ http://www.cdc.gov/nchs/data/nvsr/nvsr60/nvsr60_03.pdf Page 5, Table B

¹²⁵ <http://www.wvdhhr.org/bph/hsc/pubs/vital/2009/2009Vital.pdf> Page 45, Table 20

¹²⁶ <http://www.wvdhhr.org/bph/hsc/pubs/vital/2009/2009Vital.pdf> Page 123, Table 60

¹²⁷ <http://www.wvdhhr.org/bph/hsc/pubs/vital/2009/2009Vital.pdf> Page 127, Table 60, cont.

¹²⁸ <http://www.wvdhhr.org/bph/hsc/pubs/vital/2009/2009Vital.pdf> Page 131, Table 60, cont.

Years of Potential Life Lost

Years of Potential Life Lost (YPLL) is a measure of premature or preventable mortality occurring before the age of 65, calculated as the difference between age 65 and the age at death. The sum of YPLL over all causes is the total YPLL from all persons dying before the age of 65. For example, a person dying at the age of 45 contributes 20 years total to the total YPLL (65-45 = 20 YPLL). YPLL is an important tool for emphasizing and evaluating causes of death among persons less than 65 years of age.

Table 21: Years of Potential Life Lost Before Age 65 U.S. and WV 2000, 2005, 2010¹²⁹

| | 2000 | | | | 2005 | | | | 2010 | | | |
|--|---------------|--------|---------------|--------|---------------|-------|---------------|--------|---------------|--------|---------------|--------|
| | United States | | West Virginia | | United States | | West Virginia | | United States | | West Virginia | |
| | YPLL | % | YPLL | % | YPLL | % | YPLL | % | YPLL | % | YPLL | % |
| All Causes | 11,261,211 | 100.0% | 82,954 | 100.0% | 11,822,941 | 100% | 90,296 | 100.0% | 11,043,870 | 100.0% | 90,585 | 100.0% |
| Unintentional Injury | 2,022,483 | 18.0% | 16,363 | 19.7% | 2,292,894 | 19.4% | 17,897 | 19.8% | 2,083,297 | 18.9% | 22,004 | 24.3% |
| Malignant Neoplasms | 1,866,815 | 16.6% | 15,215 | 18.3% | 1,892,406 | 16.0% | 15,256 | 16.9% | 1,843,612 | 16.7% | 14,690 | 16.2% |
| Heart Disease | 1,376,937 | 12.2% | 12,331 | 14.9% | 1,422,345 | 12.0% | 11,250 | 12.5% | 1,348,874 | 12.2% | 10,523 | 11.6% |
| Perinatal Period | 913,066 | 8.1% | 4,742 | 5.7% | 943,945 | 8.0% | 4,810 | 5.3% | 786,472 | 7.1% | 4,016 | 4.4% |
| Suicide | 635,028 | 5.6% | 5,244 | 6.3% | 679,282 | 5.7% | 4,699 | 5.2% | 764,776 | 6.9% | 4,880 | 5.4% |
| Homicide | 51,612 | 4.9% | 2,308 | 2.8% | 595,553 | 5.0% | 2,875 | 3.2% | 522,701 | 4.7% | 2,682 | 3.0% |
| Congenital Anomalies | 490,687 | 4.4% | 3,240 | 3.9% | 482,051 | 4.1% | 2,382 | 2.6% | 439,731 | 4.0% | 2,395 | 2.6% |
| HIV | 320,582 | 2.8% | NA | NA | 244,072 | 2.1% | NA | NA | NA | NA | NA | NA |
| Cerebrovascular | 248,446 | 2.2% | NA | NA | 246,386 | 2.1% | 1,657 | 1.8% | 230,587 | 2.1% | NA | NA |
| Liver Disease | 233,500 | 2.1% | 1,821 | 2.2% | 232,733 | 2.0% | NA | NA | 263,317 | 2.4% | 2,062 | 2.3% |
| Diabetes Mellitus | NA | NA | 2,118 | 2.6% | NA | NA | 2,019 | 2.2% | 216,229 | 2.0% | 2,376 | 2.6% |
| Chronic Lower Respiratory Disease | NA | NA | 1,589 | 1.9% | NA | NA | 1,632 | 1.8% | NA | NA | NA | NA |
| All Others | 2,602,055 | 23.1% | 17,983 | 21.7% | 2,791,274 | 23.6% | 25,819 | 28.6% | 2,544,274 | 23.0% | 22,916 | 25.3% |

Injury Mortality

Table 21 shows the leading causes of deaths resulting from injury. While motor vehicle accidents were the most common causes of injury deaths and the rates remained relatively stable in West Virginia from 2001 – 2009, poisoning rose significantly from 13.9 during 2001-2003 to 21.5 during 2007 - 2009. Nationally, drugs—both legal and illegal—cause the vast majority of poisoning deaths. Misuse or abuse of prescription drugs, including opioid analgesic pain relievers, is responsible for much of the increase in drug poisoning deaths.¹³⁰

¹²⁹ <http://webappa.cdc.gov/sasweb/ncipc/vpl10.html>

¹³⁰ <http://www.cdc.gov/nchs/data/databriefs/db81.htm>

In 2010, there were 282 fatal motor vehicle accidents in WV, in which 199 drivers and 67 passengers were killed. Of these accidents, 107 involved a single vehicle with only one occupant: the driver.¹³¹ Current literature would suggest that, although research into driver suicide is relatively sparse because of the methodological difficulties associated with establishing the intent, at least one in 15 motor vehicle crashes are intentional and remain largely unrecognized.¹³²

| | 2001-2003 | | 2004 - 2006 | | 2007 -2009 | |
|-----------------------|---------------|---------------|---------------|---------------|---------------|---------------|
| | United States | West Virginia | United States | West Virginia | United States | West Virginia |
| Motor Vehicle/Traffic | 15.0 | 20.7 | 14.7 | 21.5 | 12.5 | 20.0 |
| Poisoning | 9.0 | 13.9 | 11.3 | 17.0 | 13.4 | 21.5 |
| Firearms | 10.4 | 14.5 | 10.2 | 14.4 | 10.3 | 13.9 |
| Suicide | 10.8 | 15.3 | 11.1 | 15.1 | 11.8 | 14.9 |

Health Risk Factors

The percent of adults who report their general health is only fair or poor has improved slightly but is still higher in all Eastern Panhandle counties than it is nationally. While there has been a slight improvement in the percent of Eastern Panhandle residents who participate in physical activity, the percent of individuals who are obese is on an upward trend. The percent of adults who smoke remains significantly higher than the national rate. Only Jefferson County has a lower percentage of smokers than the state.

Personal health practices and behaviors are important determinants of overall health, even among persons with a genetic predisposition to chronic disease. Health behaviors such as tobacco use, poor diet and physical inactivity alone contribute to more than a third of the premature deaths in the United States. Evidence-based preventive strategies help reduce the burden of disease through the delivery of appropriate clinical preventive services, through community-level interventions and through appropriate treatment.¹³⁴

Behavioral Risk Factor Surveillance System

The Behavioral Risk Factor Surveillance System (BRFSS) is a state-based system of health surveys that collects information on health risk behaviors and health conditions. Random telephone surveys are conducted monthly in all 50 states, the District of Columbia, Guam, Puerto Rico and the U.S. Virgin Islands. In West Virginia, the survey is conducted by the West Virginia Health Statistics Center in collaboration with the CDC. More than 3,000 West Virginia adults are interviewed each year. Because of sample size, county data are aggregate data for multiple years, and Morgan County and Hampshire County data were grouped.

¹³¹ <http://www.fars.nhtsa.dot.gov/Main/index.aspx>

¹³² <http://www.sciencedirect.com/science/article/pii/S0020138311002968#>

¹³³ Centers for Disease Control Health Data Interactive <http://205.207.175.93/HDI/ReportFolders/reportFolders.aspx>

¹³⁴ <http://www.uspreventiveservicestaskforce.org/uspstf07/methods/tfmethods.htm>

The survey indicates that the percentage of adults who are current smokers is higher in all three Eastern Panhandle counties than it is nationally, and it is higher in Berkeley and Morgan/Hampshire counties than it is in West Virginia. In all three counties, the percentage of adults who are obese remains higher than that of the nation.

In 2010, more than one-fifth (21.4%) of West Virginia adults age 18 to 64 had no health care coverage in comparison to 17.8% nationally. Also in 2010, 17.7% of West Virginia adults reported they had needed medical care within the past 12 months but could not afford it, in comparison with 14.9% nationally. Individuals in the 18-24 age group were most affected by not being able to afford medical care.¹³⁵

From 2001 to 2010, the percent of adults who do not have health insurance decreased in Berkeley and Jefferson counties but remained relatively stable in Morgan/Hampshire counties.

Table 23: Health Risk Factors U.S. and WV 2003, 2006, 2008 and 2010

| | 2003 ¹³⁶ | | 2006 ¹³⁷ | | 2008 ¹³⁸ | | 2010 ¹³⁹ | |
|---|---------------------|---------------|---------------------|---------------|---------------------|---------------|---------------------|---------------|
| | United States | West Virginia | United States | West Virginia | United States | West Virginia | United States | West Virginia |
| General health is “fair or “poor” | 15.7% | 24.5% | 16.4% | 24.3% | 16.3% | 23.0% | 14.9% | 23.4% |
| No Health Insurance (aged 18-64) | 16.4% | 23.0% | 18.5% | 20.9% | 17.9% | 20.5% | 17.8% | 21.4% |
| Could Not Afford Needed Medical Care | 12.9% | 17.8% | 13.3% | 17.2% | 14.1% | 17.9% | 14.9% | 17.7% |
| No Personal Doctor or Health Care Provider | 20.5% | 21.6% | 20.0% | 20.3% | 19.4% | 22.0% | 18.2% | 24.1% |
| No Physical Activity in Past Month | 26.4% | 30.4% | 24.2% | 27.6% | 25.5% | 30.2% | 23.9% | 32.9% |
| Obesity | 21.6% | 25.7% | 25.1% | 30.3% | 26.7% | 31.6% | 27.5% | 32.9% |
| Adults who Are Current Smokers | 22.7% | 27.4% | 19.6% | 26.5% | 18.4% | 26.3% | 17.3% | 26.8% |
| Binge Drinking | 10.1% | 14.5% | 15.1% | 9.7% | 15.1% | 9.6% | 15.1% | 9.0% |
| Current Asthma | 7.7% | 9.2% | 8.2% | 9.3% | 8.5% | 8.7% | 9.1% | 7.3% |

Table 24: Health Risk Factors Eastern Panhandle Counties 2001 – 2010

| | 2001-2005 ¹⁴⁰ | | | 2004-2008 ¹⁴¹ | | | 2006-2010 ¹⁴² | | |
|---|--------------------------|------------------|---------------------------|--------------------------|------------------|---------------------------|--------------------------|------------------|---------------------------|
| | Berkeley County | Jefferson County | Morgan/Hampshire Counties | Berkeley County | Jefferson County | Morgan/Hampshire Counties | Berkeley County | Jefferson County | Morgan/Hampshire Counties |
| General Health is “Fair” or “Poor” | 19.0% | 16.4% | 22.2% | 16.3% | 15.8% | 21.3% | 15.1% | 16.8% | 20.9% |
| No Health Insurance | 19.2% | 16.5% | 22.5% | 16.9% | 12.6% | 22.3% | 17.7% | 9.6% | 22.6% |
| No Physical Activity | 32.0% | 21.7% | 24.9% | 27.1% | 22.2% | 24.6% | 26.4% | 27.4% | 29.8% |
| Obesity | 28.9% | 30.4% | 26.1% | 30.2% | 26.3% | 29.4% | 32.4% | 28.9% | 32.6% |
| Adults who Are Current Smokers | 30.2% | 28.5% | 28.0% | 29.5% | 26.7% | 21.8% | 28.8% | 24.4% | 28.4% |
| Binge Drinking | 8.5% | 10.4% | 17.4 | 12.4% | 12.7% | 11.5% | 13.6% | 12.3% | 11.9% |
| Current Asthma | 9.9% | 10.6% | 5.8% | 8.6% | 10.0% | 7.8% | 8.2% | 10.2% | 9.2% |

¹³⁵ http://www.wvdhhr.org/bph/hsc/pubs/brfss/2009_2010/BRFS2009_2010.pdf

¹³⁶ <http://www.wvdhhr.org/bph/hsc/pubs/brfss/2003/default.htm>

¹³⁷ <http://www.wvdhhr.org/bph/hsc/pubs/brfss/2006/2006westvirginiabehavioralriskfactorsurveyreport.pdf>

¹³⁸ http://www.wvdhhr.org/bph/hsc/pubs/brfss/2007_2008/brfs2007_2008.pdf

¹³⁹ http://www.wvdhhr.org/bph/hsc/pubs/brfss/2009_2010/BRFS2009_2010.pdf

¹⁴⁰ http://www.wvdhhr.org/bph/hsc/pubs/BRFSS/2004_2005/appendL.pdf

¹⁴¹ http://www.wvdhhr.org/bph/hsc/pubs/brfss/2007_2008/BRFS2007_2008.pdf

¹⁴² http://www.wvdhhr.org/bph/hsc/pubs/brfss/2009_2010/BRFS2009_2010.pdf

Primary and Secondary Prevention

Trend data indicate that the percentage of West Virginians who do not get recommended screening and immunizations remained relatively stable between 2004 and 2010 except for adults aged 50 or older who did NOT perform a home stool blood test which increased. The percent of West Virginia women who had never had a Pap test also increased.

Table 25: Primary and Secondary Prevention U.S. and WV for Selected Years¹⁴³

| | 2004 | | 2006 | | 2008 | | 2010 | |
|--|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| | United States | West Virginia | United States | West Virginia | United States | West Virginia | United States | West Virginia |
| Adults aged 65 and older who had NOT had a flu shot in the past 12 months. | 32.0% | 32.1% | 30.4% | 33.65 | 28.9% | 28.9% | 32.5% | 33.6% |
| Adults aged 65 and older who had never had a pneumonia shot | 35.4% | 35.3% | 33.1% | 34.6% | 33.1% | 31.8% | 31.2% | 37.6% |
| Adults aged 50 and older who did NOT perform a home stool blood test (FOBT) in the past year. | 73.5% | 72.8% | 75.8% | 74.8% | 79.0% | 78.1% | 82.8% | 80.2% |
| Adults aged 50+ who have ever had a sigmoidoscopy or colonoscopy | 46.6% | 53.7% | 42.9% | 46.6% | 37.8% | 45.3% | 34.8% | 45.6% |
| Men aged 50 and older who have not had a PSA (prostate specific antigen) test in the two years | 48.2% | 47.6% | 46.5% | 45.9% | 45.2% | 43.3% | 46.8% | 47.6% |
| Women aged 40 and older who did not have a mammogram in the past two years | 25.2% | 27.5% | 23.5% | 25.5% | 24.0% | 26.3% | 24.8% | 27.7% |
| Adult women who had NOT had a Pap test in last three years. | 14.0% | 17.4% | 16.0% | 16.2% | 17.1% | 19.2% | 18.7% | 21.0% |

Youth Risk Behavior Surveillance System

The Youth Risk Behavior Surveillance System (YRBSS) monitors six types of health-risk behaviors that contribute to the leading causes of death and disability among youth and young adults. YRBSS includes a national school-based survey, the Youth Risk Behavior Survey (YRBS), conducted by the Centers for Disease Control and Prevention and state, territorial, tribal and local surveys conducted by state, territorial and local education, health agencies and tribal governments.

The West Virginia High School Youth Risk Behavior Survey (YRBS) is an 86-item self-reporting questionnaire that has been administered every two years since 1993 by the West Virginia Department of Education. No county specific data are available.

Overall, data from the Youth Risk Behavior Survey indicate that West Virginia adolescents are less likely to participate in identified risk behaviors than teens nationally. The exceptions are in cigarette smoking and alcohol consumption. The percentage of West Virginia teens who smoked dropped from 28.5% to 19.1% in West Virginia between 2007 and 2011 and the percentage of teens who reported drinking alcohol dropped from 44.4% to 34.3% during the same time frame.

¹⁴³ <http://apps.nccd.cdc.gov/brfss/>

Table 26: Youth Risk Behavior Survey Public School Students Grades 9 -12 U.S. and WV for Selected Years

| | 2003 | | 2007 | | 2011 | |
|--|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| | United States ¹⁴⁴ | West Virginia ¹⁴⁵ | United States ¹⁴⁶ | West Virginia ¹⁴⁷ | United States ¹⁴⁸ | West Virginia ¹⁴⁹ |
| Rode with a driver who had been drinking alcohol one or more times (in a car or other vehicle during the 30 days before the survey) | 30.2% | 24.3% | 29.1% | 23.8% | 24.1% | 18.7% |
| Did not go to school because they felt unsafe at school or on their way to or from school on at least 1 day (during the 30 days before the survey) | 5.4% | 5.9% | 5.5% | 6.8% | 5.9% | 4.9% |
| Attempted suicide one or more times (during the 12 months before the survey) | 8.5% | 9.3% | 6.9% | 9.1% | 7.8% | 5.5% |
| Smoked cigarettes on a least 1 day (during the 30 days before the survey) | 21.9% | 28.5% | 20.0% | 27.6% | 18.1% | 19.1% |
| Had at least one drink of alcohol on at least one day (during the 30 days before the survey) | 44.9% | 44.4% | 44.7% | 43.5% | 38.7% | 34.3% |
| Used marijuana one or more times (during the 30 days before the survey) | 22.4% | 23.1% | 19.7% | 23.5% | 23.1% | 19.7% |
| Ever had sexual intercourse | 46.7% | 52.0% | 47.8% | 53.7% | 47.4% | 50.9% |
| Had sexual intercourse with four or more persons (during their life) | 14.4% | 16.5% | 14.9% | 16.5% | 15.3% | 12.4% |
| Used a condom during last sexual intercourse (among students who were currently sexually active) | 63.0% | 64.7% | 61.5% | 61.0% | 60.2% | 60.3% |
| Obese (students who were ≥ 95th percentile for body mass index, based on sex- and age-specific reference data from the 2000 CDC growth charts) | 12.0% | 13.6% | 12.8% | 14.5% | 13.0% | 14.6% |

Maternal and Child Health

The Centers for Disease Control and Prevention (CDC) and the WV Health Statistics Center collect data from birth certificate information. This has included information about low birth weight, prenatal care and tobacco use during pregnancy. As changes were made as to what information was collected for birth certificates, some national data was no longer available to compare to state and county level information. Pregnancy Risk Assessment Monitoring System (PRAMS) is a surveillance project of the CDC and state health departments. States participating in PRAMS collect state-specific, population-based data on maternal attitudes and experiences before, during and shortly after pregnancy. Not all states participate or ask the same questions each year.

Compared with unexposed infants, babies whose mothers smoked before and after birth are at three to four-fold greater risk of Sudden Infant Death Syndrome.¹⁵⁰ Chronic diseases in the mother, including hypertension, diabetes and asthma, have been also been associated with poor birth outcomes. Because of this, implementing strategies that shift from a narrow focus on prenatal and infant care to a broader emphasis on women’s health has been identified as strategy for lowering the infant mortality rate.¹⁵¹

¹⁴⁴ http://www.cdc.gov/healthyyouth/yrbs/pdf/us_summary_all_trend_yrbs.pdf

¹⁴⁵ http://wvde.state.wv.us/healthyschools/documents/2011WVHTrendReport_000.pdf

¹⁴⁶ http://www.cdc.gov/healthyyouth/yrbs/pdf/us_summary_all_trend_yrbs.pdf

¹⁴⁷ http://wvde.state.wv.us/healthyschools/documents/2011WVHTrendReport_000.pdf

¹⁴⁸ http://www.cdc.gov/healthyyouth/yrbs/pdf/us_summary_all_trend_yrbs.pdf

¹⁴⁹ http://wvde.state.wv.us/healthyschools/documents/2011WVHTrendReport_000.pdf

¹⁵⁰ http://www.cdc.gov/tobacco/data_statistics/sgr/2004/highlights/children/index.htm

¹⁵¹ <http://www.aecf.org/~media/Pubs/Initiatives/KIDS%20COUNT/K/KIDSCOUNTIndicatorBriefReducingInfantMortality/ReducingInfantMortality.pdf>

Hospital discharge data from 2011 indicate almost 29% and 31% of neonate discharges from WVUH-East's City Hospital and Jefferson Memorial Hospital had other significant problems.¹⁵² Further information about primary and secondary diagnoses is necessary to understand what the underlying issues are. For example, they include maternal chronic conditions and/or substance use as well as neonatal jaundice. When coupled with the dramatic increase in infant mortality in the region, understanding the root causes of these trends is an imperative.

Infant Mortality

The infant mortality rate is the rate of death of infants under one year (age 0 – 364 days) per 1,000 or 100,000 live births, depending on the population size. Nationally infant mortality rates are based on birth and infant death certificates registered in all states, DC, Puerto Rico, the Virgin Islands, and Guam. As part of the Vital Statistics Cooperative Program, each state provided matching birth and death certificate numbers for each infant under age one year who died in the state during the designated year. The West Virginia Vital Statistics office collects and reports this information.

The infant mortality rates in all three Eastern Panhandle counties rose steadily between 2000 and 2009. Such increases are significant, and the underlying reasons must be identified. Additionally, because national and statewide infant mortality data show racial disparities, it is vitally important to analyze the role of race, ethnicity and class in the rising infant mortality in the region and develop targeted strategies that address the root causes of the trend.

| Table 27: Infant Mortality U.S., WV and Eastern Panhandle Counties Rates per 1,000 population | | | |
|--|--------------------------------------|--------------------------------------|--------------------------------------|
| | 2000 | 2005 | 2009 |
| United States | 6.89 ¹⁵³ | 6.86 ¹⁵⁴ | 6.39 ¹⁵⁵ |
| | Source for data below ¹⁵⁶ | Source for data below ¹⁵⁷ | Source for data below ¹⁵⁸ |
| West Virginia | 7.6 | 8.1 | 7.8 |
| Berkeley County | 7.4 | 9.2 | 13.3 |
| Jefferson County | 3.4 | 4.6 | 9.6 |
| Morgan County | 6.8 | 6.3 | 18.5 |

| Table 28: Infant Mortality by Cause U.S. and WV 2000 – 2008 Rates per 100,000 Population¹⁵⁹ | | | | | | |
|---|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| | 2000-2002 | | 2003 - 2005 | | 2006 -2008 | |
| | United States | West Virginia | United States | West Virginia | United States | West Virginia |
| All Causes | 689.3 | 789.2 | 682.6 | 773.2 | 668.3 | 737.5 |
| Birth Defects | 139.8 | 144.0 | 136.5 | 132.6 | 135.3 | 142.1 |
| Prematurity and Low Birth Weight | 111.1 | 101.8 | 114.7 | 76.8 | 112.7 | 86.1 |
| Sudden Infant Death Syndrome | 58.3 | 108.6 | 53.8 | 99.0 | 55.6 | 127.4 |
| Maternal Complications of Pregnancy | 38.0 | 64.6 | 42.0 | 46.3 | 40.7 | 36.0 |

¹⁵² WVUH-East

¹⁵³ http://www.cdc.gov/nchs/data/nvsr/nvsr57/nvsr57_02.pdf Page 4, Table C

¹⁵⁴ http://www.cdc.gov/nchs/data/nvsr/nvsr57/nvsr57_02.pdf Page 4, Table C

¹⁵⁵ http://www.cdc.gov/nchs/data/nvsr/nvsr60/nvsr60_03.pdf Page 11, Table D

¹⁵⁶ www.wvdhhr.org/bph/oehp/vital00/vs_39.htm

¹⁵⁷ http://www.wvdhhr.org/bph/hsc/pubs/vital/2006/vs_41.htm

¹⁵⁸ <http://www.wvdhhr.org/bph/hsc/pubs/vital/2009/2009Vital.pdf> Page 119, Table 58

¹⁵⁹ <http://www.cdc.gov/nchs/hdi.htm> Mortality and life expectancy; Infant mortality by cause: US/State 2000-2008

| | 2000-2002 | | | | 2003 - 2005 | | | | 2006 -2008 | | | |
|--|-----------|-------|---------|----------|-------------|-------|---------|----------|------------|-------|---------|----------|
| | All | White | Black | Hispanic | All | White | Black | Hispanic | All | White | Black | Hispanic |
| All Causes | 689.3 | 573.3 | 1,353.9 | 573.7 | 682.6 | 570.5 | 1,333.0 | 560.3 | 668.3 | 558.3 | 1,273.2 | 550.3 |
| Birth Defects | 139.8 | 136.1 | 166.7 | 145.5 | 136.5 | 131.9 | 166.5 | 140.6 | 135.3 | 131.4 | 162.8 | 143.2 |
| Prematurity and Low Birth weight | 111.1 | 77.6 | 300.3 | 81.3 | 114.7 | 82.3 | 298.7 | 90.5 | 112.7 | 80.5 | 284.6 | 86.7 |
| Sudden Infant Death Syndrome | 58.3 | 48.6 | 115.3 | 30.4 | 53.8 | 45.9 | 102.0 | 27.1 | 55.6 | 47.7 | 102.3 | 29.3 |
| Maternal Complications of Pregnancy | 38.0 | 29.5 | 86.6 | 23.0 | 42.0 | 32.2 | 99.7 | 29.2 | 40.7 | 32.2 | 87.8 | 29.4 |

| | 2000-2002 | | | 2003 - 2005 | | | 2006 -2008 | | |
|--|-----------|-------|-------|-------------|-------|---------|------------|-------|---------|
| | All | White | Black | All | White | Black | All | White | Black |
| All Causes | 789.2 | 776.4 | 1,205 | 773.2 | 757.4 | 1,238.1 | 737.5 | 713.7 | 1,479.7 |
| Birth Defects | 144.0 | 140.1 | NA | 132.6 | 133.5 | NA | 142.1 | 143.9 | NA |
| Prematurity and Low Birth weight | 101.8 | 99.5 | NA | 76.8 | 70.2 | NA | 86.1 | 82.0 | NA |
| Sudden Infant Death Syndrome | 108.6 | 111.6 | NA | 99.0 | 96.7 | NA | 127.4 | 125.3 | NA |
| Maternal Complications of Pregnancy | 64.6 | 67.4 | NA | 46.3 | 46.7 | NA | 36.0 | 32.8 | NA |

Prenatal Care

The quality, quantity, and timing of prenatal care influence pregnancy outcome, and inadequate prenatal care increases a woman’s risk for poor pregnancy outcomes. Prenatal care allows health care providers to identify and manage a woman’s risk factors and health conditions and to provide expectant parents with relevant health care advice. Women who begin prenatal care after the first trimester are at a higher risk for poor pregnancy outcomes with infants being born premature, low birth weight or growth retarded.¹⁶² Changes at the national level to the standard birth certificate in 2003, which are gradually being adopted, have made recent state and local comparisons with national data impossible.

In 2009, 82.1% of West Virginia mothers with known prenatal care began their care during the first trimester of pregnancy. Among those with known prenatal care, 82.5% of white mothers began care during the first trimester and 72.2% of black mothers did.¹⁶³ From 2000 to 2009, the percentage of mothers receiving care during the first trimester increased in Berkeley and Jefferson counties but decreased in Morgan County.

¹⁶⁰ <http://www.cdc.gov/nchs/hdi.htm> Mortality and life expectancy; Infant mortality by cause: US/State 2000-2008

¹⁶¹ <http://www.cdc.gov/nchs/hdi.htm> Mortality and life expectancy; Infant mortality by cause: US/State 2000-2008

¹⁶² http://www.cdc.gov/pednss/what_is/pnss_health_indicators.htm

¹⁶³ <http://www.wvdhhr.org/bph/hsc/pubs/vital/2009/2009Vital.pdf> Pages 28-29, Table 9

| | 2000 | 2005 | 2009 |
|-------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
| United States | 83.2% ¹⁶⁴ | 83.9% ¹⁶⁵ | NA |
| | Source for data below ¹⁶⁶ | Source for data below ¹⁶⁷ | Source for data below ¹⁶⁸ |
| West Virginia | 82.0% | 81.5% | 82.1% |
| Berkeley County | 82.5% | 87.9% | 85.0% |
| Jefferson County | 85.7% | 87.6% | 88.2% |
| Morgan County | 85.6% | 89.9% | 77.6% |

Low birth weight is when a baby is born weighing less than 5 pounds, 8 ounces. Some low birth weight babies are healthy, even though they're small. But low birth weight is often the result of prematurity which can be associated with serious health problems, including respiratory distress syndrome (RDS), bleeding on the brain, heart problems and more. While the percentage of low birth weight births rose slightly from 2000 to 2009 in both the United States and West Virginia, the percentage actually declined in Berkeley County and remained fairly stable in Jefferson County. The percentage in Morgan County fluctuated.

Low Birth Weight

| | 2000 | 2005 | 2009 |
|-------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
| United States ¹⁶⁹ | 7.57% | 8.19% | 8.16% |
| | Source for data below ¹⁷⁰ | Source for data below ¹⁷¹ | Source for data below ¹⁷² |
| West Virginia | 8.4% | 9.5% | 9.2% |
| Berkeley County | 8.9% | 8.5% | 7.8% |
| Jefferson County | 6.1% | 6.5% | 6.2% |
| Morgan County | 8.9% | 6.3% | 10.5% |

Smoking during Pregnancy

Smoking during pregnancy can cause a baby to be born too early or to have low birth weight—making it more likely the baby will be sick and have to stay in the hospital longer and for the baby to have certain birth defects, like a cleft lip or cleft palate. Smoking during and after pregnancy is a risk factor for Sudden Infant Death Syndrome (SIDS). Among the West Virginia mothers who reported smoking during pregnancy in 2009, 14.1% of the babies born were low birth weight, compared with 7.4% among non-smoking mothers.¹⁷³

¹⁶⁴ http://www.cdc.gov/nchs/data/nvsr/nvsr50/nvsr50_05.pdf Page 11, Table E

¹⁶⁵ http://www.cdc.gov/nchs/data/nvsr/nvsr56/nvsr56_06.pdf Page 69, Table 26 (B)

¹⁶⁶ <http://www.wvdhhr.org/bph/hsc/statserv/viewer.asp?target=http://www.wvdhhr.org/bph/hsc/pubs/vital/2005/index.htm&Source=pub.asp&DocID=1> 2000 County Data – Trimester Prenatal Care Began by County

¹⁶⁷ <http://www.wvdhhr.org/bph/hsc/statserv/viewer.asp?target=http://www.wvdhhr.org/bph/hsc/pubs/vital/2005/index.htm&Source=pub.asp&DocID=1> County Data – Trimester Prenatal Care Began by County

¹⁶⁸ <http://www.wvdhhr.org/bph/hsc/pubs/vital/2009/2009Vital.pdf> Page 108, Table 48

¹⁶⁹ http://www.cdc.gov/nchs/data/nvsr/nvsr60/nvsr60_01.pdf Page 59, Table 24

¹⁷⁰ http://www.wvdhhr.org/bph/oehp/vital00/vs_10.htm

¹⁷¹ http://www.wvdhhr.org/bph/hsc/pubs/vital/2005/vs_10.htm

¹⁷² <http://www.wvdhhr.org/bph/hsc/pubs/vital/2009/2009Vital.pdf> Page 103, Table 43

¹⁷³ <http://www.wvdhhr.org/bph/hsc/pubs/vital/2009/2009Vital.pdf> Page 18

The Centers for Disease Control and the WV Health Statistics Center collect data from birth certificate information. As changes were made to information collected for birth certificates, some national data, such as tobacco use during pregnancy, were no longer available to compare to state and county level information collected from West Virginia birth certificates by the WV Health Statistics Center.

Although the percentage of pregnant Eastern Panhandle mothers who used tobacco during pregnancy declined from 2000 – 2009, the percentages still remained high with Berkeley County at 20.6%, Jefferson County at 15.8% and Morgan County at 24.8%, and the percentage was on an upward trend from 2005 to 2009.

Table 33: Percent of All Birth Mothers Who Used Tobacco During Pregnancy as Reported on Birth Certificates U.S. West Virginia and Eastern Panhandle Counties 2000, 2005, 2009

| | 2000 | 2005 | 2009 |
|-------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
| United States | 12.2 ¹⁷⁴ | NA | NA |
| | Source for data below ¹⁷⁵ | Source for data below ¹⁷⁶ | Source for data below ¹⁷⁷ |
| West Virginia | 26.0% | 26.4% | 27.2% |
| Berkeley County | 28.4% | 20.2% | 20.6% |
| Jefferson County | 21.3% | 15.3% | 15.8% |
| Morgan County | 27.4% | 20.1% | 24.8% |

Of the states participating in the PRAMS survey in 2008, West Virginia had the highest rate of smoking (28.7%) during the last three months of pregnancy, which was much higher than Alabama, which was next highest at 24.0% and well above the overall average among participating states (12.8%). A complete chart of the PRAMS findings is available in Appendix C.

Table 34: Percent of Women Who Smoked During Last Three Months of Pregnancy¹⁷⁸ West Virginia 2000, 2005, 2008

| | 2000 | | 2005 | | 2008 | |
|--|---------------------|---------|---------------------|---------|---------------------|---------|
| | Rank (of 19 states) | Percent | Rank (of 26 states) | Percent | Rank (of 27 states) | Percent |
| Overall (of states participating in survey) | NA | 13.2% | NA | 12.2% | NA | 12.8% |
| West Virginia | 1 | 24.5% | 1 | 31.9% | 1 | 28.7% |
| Arkansas | 2 | 20.3% | 3 | 20.9% | 2 | 24.0% |
| Maine | 3 | 17.5% | 5 | 17.5% | 4 | 19.5% |
| Ohio | 4 | 17.1% | 2 | 21.6% | 5 | 18.9% |
| New York | 5 | 17.0% | NA | 12.9% | NA | 11.9% |
| Tennessee | NA | NA | NA | NA | 3 | 19.7% |

¹⁷⁴ http://www.cdc.gov/nchs/data/nvsr/nvsr50/nvsr50_05.pdf, Page 44, Table 24

¹⁷⁵ <http://www.wvdhhr.org/bph/hsc/statserv/viewer.asp?target=http://www.wvdhhr.org/bph/hsc/pubs/vital/2005/index.htm&Source=pub.asp&DocID=1>, 2000 County Data Pregnancy Risk Factors, C-Sections, Complications, Anomalies and Abnormal Conditions

¹⁷⁶ http://www.wvdhhr.org/bph/oehp/hsc/pubs/vital05/vs_21.htm

¹⁷⁷ <http://www.wvdhhr.org/bph/hsc/pubs/vital/2009/2009Vital.pdf>, Page 110

¹⁷⁸ <http://www.cdc.gov/prams/DATA-TobaccoTables.htm#n13>, Table 2

Drinking Alcohol during Pregnancy

The West Virginia PRAMS questionnaire includes questions specifically related to drinking during pregnancy. Data regarding the consumption of alcohol during the last three months of pregnancy indicate that older women (age 36+) are more likely to drink alcohol than younger women. Also, pregnant women who do not receive Medicaid are more likely than Medicaid recipients to drink alcohol during pregnancy.

Table 35: Percent Mothers Reported Having Any Alcoholic Drinks During the Last 3 Months of Pregnancy¹⁷⁹
West Virginia and Comparison to Other States 2000, 2005, 2008

| | 2000 | | 2005 | | 2008 | |
|----------------------|---------------------|---------|---------------------|---------|---------------------|---------|
| | Rank (of 19 states) | Percent | Rank (of 26 states) | Percent | Rank (of 29 states) | Percent |
| West Virginia | 19 | 2.1% | 25 | 2.9 | 29 | 3.0% |
| Vermont | NA | NA | 1 | 11.3% | 1 | 12.1% |
| Massachusetts | NA | NA | NA | NA | 2 | 11.0% |
| Colorado | 1 | 9.0% | 2 | 11.1% | 3 | 10.7% |
| Washington | 4 | 6.0% | 5 | 8.7% | 4 | 9.8% |
| Rhode Island | NA | NA | 3 | 9.2% | 5 | 9.5% |
| New Jersey | NA | NA | 4 | 8.9% | 13 | 7.2% |
| Illinois | 2 | 6.9% | NA | NA | NA | NA |
| New York | 3 | 6.5% | 16 | 7.0% | 12 | 7.3% |

Table 36: Prevalence of Maternal Drinking the Last Three Months of Pregnancy by Annual Income¹⁸⁰
West Virginia 2005, 2007 and 2009

| | <\$10,000 | \$10,000- \$14,999 | \$15,000- \$19,999 | \$20,501- \$24,999 | \$25,000- \$34,999 | \$35,000- \$49,000 | ≥\$50,000 |
|-------------|-----------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------|
| 2005 | 3.1% | 1.5% | 3.8% | 0.2% | 7.0% | 1.6% | 2.5% |
| 2007 | 2.8% | 2.2% | 4.2% | 0.6% | 8.4% | 2.9% | 5.3% |
| 2009 | 2.5% | 1.0% | 1.8* | 3.6% | 1.7% | 3.2% | 6.4% |

Table 37: Prevalence of Maternal Drinking Last Three Months of Pregnancy by Age¹⁸¹
West Virginia 2000, 2005, 2009

| | 2000 | 2005 | 2009 |
|-------------|------|------|------|
| < 20 years | 2.5% | 2.6% | 2.7% |
| 20-24 years | 1.4% | 2.5% | 2.7% |
| 25-35 years | 1.2% | 2.5% | 4.1% |
| 36+ years | 3.8% | 7.0% | 5.7% |

Table 38: Prevalence of Maternal Drinking Last Three Months of Pregnancy Among Medicaid Recipients¹⁸²
West Virginia 2000, 2005, 2009

| | 2005 | 2007 | 2009 |
|--------------|------|------|------|
| Medicaid | 2.8% | 2.9% | 2.4% |
| Non-Medicaid | 3.2% | 4.9% | 4.8% |

¹⁷⁹ <http://apps.nccd.cdc.gov/cPONDER/>

¹⁸⁰ <http://www.dhhr.wv.gov/bhfh/resources/Documents/WV%202012%20Behavioral%20Health%20Profile.pdf> page. 36

¹⁸¹ <http://www.dhhr.wv.gov/bhfh/resources/Documents/WV%202012%20Behavioral%20Health%20Profile.pdf> page. 35

¹⁸² <http://www.dhhr.wv.gov/bhfh/resources/Documents/WV%202012%20Behavioral%20Health%20Profile.pdf> page. 37

Teen Birth Rates

National teen birth rate data are collected through the Centers for Disease Control and Prevention Vital Statistics Reporting System through data reported on birth certificates. The teen birth rate = (number of live births to females in the defined age group/total number of females in the defined age group) X 1,000. The number of females in an age group is based on U.S. 2000 census and estimates derived from the U.S. 2000 census. The WV teen birth rates are calculated in the same manner by the WV Vital Statistics office.

Although West Virginia's teen birth rates were below the nation in 2000, they rose above the national rates in 2009. During this same time period, Morgan County rates have steadily declined while there has been more variability in Berkeley and Jefferson County, with rates down from the previous ten years.

| | United States | | | West Virginia | | |
|--------------|---------------------|---------------------|---------------------|---------------------|--------------------------|---------------------|
| | 2000 ¹⁸³ | 2005 ¹⁸⁴ | 2009 ¹⁸⁵ | 2000 ¹⁸⁶ | 2002-2006 ¹⁸⁷ | 2009 ¹⁸⁸ |
| Ages 15 - 19 | 48.5 | 40.5 | 39.1 | 46.4 | 41.5 | 48.6 |
| Ages 15 - 17 | 27.4 | 21.4 | 20.1 | 22.8 | 20.4 | 24.6 |
| Ages 18 - 19 | 79.2 | 69.9 | 66.2 | 79.8 | 70.7 | 79.7 |

| | 1999 - 2003 ¹⁸⁹ | | | 2002 - 2006 ¹⁹⁰ | | | 2009 ¹⁹¹ | | |
|--------------|----------------------------|------------------|---------------|----------------------------|------------------|---------------|---------------------|------------------|---------------|
| | Berkeley County | Jefferson County | Morgan County | Berkeley County | Jefferson County | Morgan County | Berkeley County | Jefferson County | Morgan County |
| Ages 15 - 19 | 66.6 | 44.6 | 55.3 | 66.4 | 38.0 | 46.0 | 46.8 | 40.3 | 34.0 |
| Ages 15 - 17 | 32.7 | 24.5 | 27 | 34.1 | 22.4 | 22.2 | 20.9 | 18.8 | 15.5 |
| Ages 18 - 19 | 123.7 | 68.1 | 108.1 | 119.6 | 56.3 | 90.4 | 94.8 | 65.1 | 67.8 |

Communicable Diseases

Most communicable disease data was available only on a national and state level, with little county level data available because the numbers are often very small or they are not released in order to protect the confidentiality of persons with communicable diseases such as sexually transmitted diseases. Data are also collected on rates of vaccinations for specific preventable illnesses.

The Centers for Disease Control and Prevention (CDC) works in partnership with local and state health departments to track the incidence of specific diseases such as tuberculosis, Hepatitis, HIV/AIDS among other illnesses that impact the nation's overall health. Rates of Hepatitis B & C are have been linked by public health officials to rates of injectable drug. In 2000, the incidence of acute, symptomatic Hepatitis B in West Virginia was below the national average (1.7/100,000 compared to 2.9/100,000. By 2010, the incidence in the state was 4.7/100,000, much higher than the national rate of 1.1/100,000.

¹⁸³ http://www.cdc.gov/nchs/data/nvsr/nvsr50/nvsr50_09.pdf Page 2, Table 1

¹⁸⁴ http://wonder.cdc.gov/wonder/sci_data/natal/detail/type_txt/natal05/Births05.pdf Page 6, Table A

¹⁸⁵ http://www.cdc.gov/nchs/data/nvsr/nvsr60/nvsr60_01.pdf Page 5, Table A

¹⁸⁶ http://www.cdc.gov/nchs/data/nvsr/nvsr50/nvsr50_09.pdf Page 2, Table 1

¹⁸⁷ http://www.wvdhhr.org/bph/hsc/pubs/vital/2006/vs_12.htm

¹⁸⁸ Report from the WV Health Statistics Center, August 2012

¹⁸⁹ http://www.wvdhhr.org/bph/oehp/vital03/vs_12.htm

¹⁹⁰ http://www.wvdhhr.org/bph/hsc/pubs/vital/2006/vs_12.htm

¹⁹¹ Report from the WV Health Statistics Center, August 2012

While the rate of people in West Virginia diagnosed with AIDS (4.5/100,000 in 2010) and living with a diagnosis of AIDS (53.9/100,000 in 2009) are both lower than the national rates (13.0 and 188.0 respectively), the Eastern Panhandle counties are in very close proximity to areas with some of the highest incident rates in the country. In 2010, the rate of AIDS diagnosis was 130.6/ 100,000 in Washington D.C., 26.5 in Maryland, 10.00 in Pennsylvania and 13.0 in Virginia.

The incidence of people living with a diagnosis of AIDS in 2009 was 1,704.7/100,000 in Washington, DC; 370.3 in Maryland, 171.2 in Pennsylvania and 142.9 in Virginia. Twenty-one percent of individuals diagnosed with either HIV or AIDS in West Virginia between 2006 and 2010 were women. Fifty-five percent of all HIV/AIDS cases from 2006-2010 were attributed to men who have sex with men, 16% were attributed to heterosexual contact and 10% were attributed to injecting drug use. The mode of transmission in 16% of cases was unknown.¹⁹²

Table 41: Communicable Diseases U.S. and WV 2000, 2005, 2010

| | 2000 | | 2005 | | 2010 | |
|---|-----------------------|--------------------|-----------------------|--------------------|-----------------------|--------------------|
| | United States | West Virginia | United States | West Virginia | United States | West Virginia |
| People Diagnosed with AIDS per 100,000 population ¹⁹³ | 17.3 | 2.9 | 15.0 | 4.7 | 13.0 | 4.9 |
| People Living with an AIDS Diagnosis per 100,000 Population ¹⁹⁴ | 133.8 | 30.6 | 168.5 | 45.9 | 188 (2009) | 53.9 (2009) |
| Tuberculosis Cases | 16,309 ¹⁹⁵ | 33 ¹⁹⁶ | 14,068 ¹⁹⁷ | 28 ¹⁹⁸ | 11,182 ¹⁹⁹ | 15 ²⁰⁰ |
| Tuberculosis Rate per 100,000 population | 5.8 ²⁰¹ | 1.8 ²⁰² | 4.8 ²⁰³ | 1.5 ²⁰⁴ | 3.6 ²⁰⁵ | .82 ²⁰⁶ |
| Hepatitis B: Reported Number of Acute Cases | 8,036 ²⁰⁷ | 30 ²⁰⁸ | 5,494 ²⁰⁹ | 69 ²¹⁰ | 3,350 ²¹¹ | 88 ²¹² |
| Hepatitis B: Incidence per 100,000 Population of Acute, Symptomatic Hepatitis B | 2.9 ²¹³ | 1.7 ²¹⁴ | 1.8 ²¹⁵ | 3.8 ²¹⁶ | 1.1 ²¹⁷ | 4.7 ²¹⁸ |
| Hepatitis C Reported Number of Acute Cases | 3,197 ²¹⁹ | 22 ²²⁰ | 694 ²²¹ | 19 ²²² | 850 ²²³ | 21 ²²⁴ |
| Hepatitis C Incidence per 100,000 Population of Acute, Symptomatic Hepatitis C | 1.1 ²²⁵ | NA | 0.2 ²²⁶ | 1 ²²⁷ | 0.3 ²²⁸ | 1.1 ²²⁹ |

¹⁹² http://www.dhhr.wv.gov/oeps/std-hiv-hep/HIV_AIDS/Documents/HIV%20Surveillance%20Summary%202011%20Update%20V2.pdf Page 17
¹⁹³ <http://gis.cdc.gov/GRASP/NCHHSTPAtlas/main.html>
¹⁹⁴ <http://gis.cdc.gov/GRASP/NCHHSTPAtlas/main.html>
¹⁹⁵ <http://www.cdc.gov/tb/statistics/reports/2010/table1.htm>
¹⁹⁶ <http://www.dhhr.wv.gov/oeps/tuberculosis/Documents/2010%20WV%20TB%20Profile.pdf> Page 131
¹⁹⁷ <http://www.cdc.gov/tb/statistics/reports/2010/table1.htm>
¹⁹⁸ <http://www.dhhr.wv.gov/oeps/tuberculosis/Documents/2010%20WV%20TB%20Profile.pdf> Page 131
¹⁹⁹ <http://www.cdc.gov/tb/statistics/reports/2010/table1.htm>
²⁰⁰ <http://www.dhhr.wv.gov/oeps/tuberculosis/Documents/2010%20WV%20TB%20Profile.pdf> Page 131
²⁰¹ <http://www.cdc.gov/tb/statistics/reports/2010/table1.htm> Page 131
²⁰² <http://www.dhhr.wv.gov/oeps/tuberculosis/Documents/2010%20WV%20TB%20Profile.pdf> Page 131
²⁰³ <http://www.cdc.gov/tb/statistics/reports/2010/table1.htm>
²⁰⁴ <http://www.dhhr.wv.gov/oeps/tuberculosis/Documents/2010%20WV%20TB%20Profile.pdf> Page 131
²⁰⁵ <http://www.cdc.gov/tb/statistics/reports/2010/table1.htm> Page 131
²⁰⁶ <http://www.dhhr.wv.gov/oeps/tuberculosis/Documents/2010%20WV%20TB%20Profile.pdf> Page 131
²⁰⁷ <http://www.cdc.gov/hepatitis/Statistics/2008Surveillance/Table1b.htm>
²⁰⁸ <http://www.dhhr.wv.gov/oeps/std-hiv-hep/hepatitis/Documents/Hepatitis%20B%20Acute%20Cases%202000-2010.pdf>
²⁰⁹ <http://www.cdc.gov/hepatitis/Statistics/2008Surveillance/Table1b.htm>
²¹⁰ <http://www.dhhr.wv.gov/oeps/std-hiv-hep/hepatitis/Documents/Hepatitis%20B%20Acute%20Cases%202000-2010.pdf>
²¹¹ <http://www.cdc.gov/hepatitis/Statistics/2010Surveillance/Table3.1.htm>
²¹² <http://www.dhhr.wv.gov/oeps/std-hiv-hep/hepatitis/Documents/Hepatitis%20B%20Acute%20Cases%202000-2010.pdf>
²¹³ <http://www.cdc.gov/hepatitis/Statistics/2008Surveillance/Table1b.htm>
²¹⁴ <http://www.cdc.gov/hepatitis/Statistics/2008Surveillance/Table2b.htm>
²¹⁵ <http://www.cdc.gov/hepatitis/Statistics/2008Surveillance/Table1b.htm>
²¹⁶ <http://www.cdc.gov/hepatitis/Statistics/2008Surveillance/Table2b.htm>
²¹⁷ <http://www.cdc.gov/hepatitis/Statistics/2010Surveillance/Table3.1.htm>
²¹⁸ <http://www.cdc.gov/hepatitis/Statistics/2010Surveillance/Table3.1.htm>
²¹⁹ <http://www.cdc.gov/hepatitis/Statistics/2008Surveillance/Table1a.htm>
²²⁰ <http://www.dhhr.wv.gov/oeps/disease/Surveillance/Documents/TABLE%201.pdf>
²²¹ <http://www.cdc.gov/hepatitis/Statistics/2008Surveillance/Table1a.htm>
²²² <http://www.cdc.gov/hepatitis/Statistics/2009Surveillance/Table4.1.htm>
²²³ <http://www.cdc.gov/hepatitis/Statistics/2010Surveillance/Table4.1.htm>
²²⁴ <http://www.cdc.gov/hepatitis/Statistics/2010Surveillance/Table4.1.htm>
²²⁵ <http://www.cdc.gov/hepatitis/Statistics/2008Surveillance/Table1c.htm>
²²⁶ <http://www.cdc.gov/hepatitis/Statistics/2008Surveillance/Table1a.htm>
²²⁷ <http://www.cdc.gov/hepatitis/Statistics/2009Surveillance/Table4.1.htm>

Chronic Disease

The CDC Division for Heart Disease and Stroke Prevention maintains an on line tool that provides national and state data trends and maps regarding heart attack incidence and the prevalence of coronary heart disease, high blood pressure and high cholesterol. The WV Behavioral Risk Factor Surveillance System (BRFSS) provides similar data by county. The WV BRFSS collects information on health risk behaviors and health conditions by conducting random telephone surveys monthly. Currently, the survey is conducted by the West Virginia Health Statistics Center in collaboration with the CDC, and more than 3,000 West Virginia adults are interviewed each year.

The prevalence of chronic illnesses such as chronic obstructive pulmonary disease (COPD), heart disease and failure, high blood pressure and diabetes is higher in West Virginia and in the Eastern Panhandle than the United States. The economic impact of chronic illness in the state is compelling. In 2003, the cost of treating chronic illness and complications was \$2.3 billion with an additional economic loss of \$8.1 billion associated with lower worker productivity and missed work days.²³⁰

The following from the “West Virginia Behavioral Risk Factor Survey Report 2009-2010” provide a snapshot of chronic health issues in West Virginia.²³¹

- West Virginia ranked highest in the nation in 2009 and 2nd in the nation in 2010 in the prevalence of heart attack among adults. The prevalence of heart attack was 6.5% in 2009 and 6.3% in 2010.
- Men had a significantly higher prevalence of heart attack than women.
- West Virginia also ranked higher than any other state in 2009 and 3rd highest in 2010 in prevalence of angina or coronary heart disease among adults (7.1% in 2009 and 6.0% in 2010).
- West Virginia ranked 4th highest nationally in 2009 and 11th highest in 2010 (3.7% in 2009 and 3.5% in 2010) for prevalence of stroke.
- The prevalence of heart attack, angina and stroke was significantly higher among those 65 and older, those with less than a high school education and those with an annual household income of less than \$15,000.

The prevalence of individuals who have had a heart attack as well as those who have been diagnosed with heart disease and high cholesterol in the Eastern Panhandle counties is higher than the national prevalence, with the exception of coronary heart disease in Jefferson County. The percentage of individuals who have been diagnosed with high cholesterol in all three Eastern Panhandle counties is higher than for the United States.

²²⁸ <http://www.cdc.gov/hepatitis/Statistics/2010Surveillance/Table4.1.htm>

²²⁹ <http://www.cdc.gov/hepatitis/Statistics/2010Surveillance/Table4.1.htm>

²³⁰ http://www.chronicdiseaseimpact.com/state_sheet/WV.pdf

²³¹ http://www.wvdhhr.org/bph/hsc/pubs/brfss/2009_2010/brfs2009_2010.pdf (page 54)

**Table 42: Prevalence of Selected Chronic Disease and Risk Factors Heart Disease
U.S., WV and Eastern Panhandle Counties 2000 – 2009**

| | Had Heart Attack | | | Had Coronary Heart Disease | | | Had High Blood Pressure | | | Had High Cholesterol | | |
|---|------------------|-----------|------|----------------------------|-----------|------|-------------------------|------------------|-----------|----------------------|------------------|-----------|
| | 2000 | 2004-2009 | 2009 | 2000 | 2004-2009 | 2009 | 2001 | 2002,03,05,07,09 | 2008-2009 | 2000-2001 | 2002,03,05,07,09 | 2007-2008 |
| United States ²³² | 3.2% | NA | 3.2% | 3.6% | NA | 4.5% | 28.0% | NA | 29.7% | 25.4% | NA | 27.9% |
| West Virginia ²³³ | 7.1% | NA | 5.6% | 8.7% | NA | 6.2% | 30.8% | NA | 34.8% | 34.1% | NA | 38.6% |
| Berkeley County ²³⁴ | NA | 4.9% | NA | NA | 6.9% | NA | NA | 26.8% | NA | NA | 36.9% | NA |
| Jefferson County ²³⁵ | NA | 4.5% | NA | NA | 4.2% | NA | NA | 25.9% | NA | NA | 29.9% | NA |
| Morgan/Hampshire Counties (grouped) ²³⁶ | NA | 4.0% | NA | NA | 7.8% | NA | NA | 31.7% | NA | NA | 39.0% | NA |

The Work-Related Lung Disease (WoRLD) Surveillance System, a CDC national surveillance system, is maintained by the National Institute for Occupational Safety and Health (NIOSH) and includes up-to-date state and national data related respiratory disease surveillance data on the pneumoconioses, occupational asthma and other airways diseases and several other respiratory conditions including chronic obstructive pulmonary disease. Rates of COPD are higher in the Eastern Panhandle than in the United States.

Table 43: Chronic Obstructive Pulmonary Disease in U.S., WV and Eastern Panhandle Counties

| | COPD Mortality Rates (Per 100,000 Population) | | | COPD Hospital Discharge Rates (Per 10,000 Population) | | |
|-------------------------|--|---------------------|---------------------|--|--------------------------------------|--------------------------------------|
| | 2000 | 2005 | 2008 ²³⁷ | 2000 | 2005 | 2008 |
| United States | 42.2 ²³⁸ | 41.6 ²³⁹ | NA | 23.8 ²⁴⁰ | 24.4 ²⁴¹ | NA |
| | Data Source for below ²⁴² | | | Data Source for below ²⁴³ | Data Source for below ²⁴⁴ | Data Source for below ²⁴⁵ |
| West Virginia | 63.2 | 59.4 ²⁴⁶ | 68.5 | 52.7 | 47.2 | 52.8 |
| Berkeley County | 50.9 | NA | 54.3 | 20.4 | NA | 18.9 |
| Jefferson County | 61.3 | NA | 66.5 | 21.6 | NA | 13.9 |
| Morgan County | 52.3 | | 40.7 | 11.4 | NA | 19.0 |

²³² http://apps.nccd.cdc.gov/NCVDSS_DTM/#

²³³ http://apps.nccd.cdc.gov/NCVDSS_DTM/#

²³⁴ http://www.wvdhhr.org/bph/hsc/pubs/other/chronicdiseasemanandprev2011/advocating_for_chronic_disease_management_and_prevention_2011.pdf Page 23 Appendix D

²³⁵ http://www.wvdhhr.org/bph/hsc/pubs/other/chronicdiseasemanandprev2011/advocating_for_chronic_disease_management_and_prevention_2011.pdf Page 23 Appendix D

²³⁶ http://www.wvdhhr.org/bph/hsc/pubs/other/chronicdiseasemanandprev2011/advocating_for_chronic_disease_management_and_prevention_2011.pdf Page 23 Appendix D

²³⁷ http://www.wvdhhr.org/bph/hsc/pubs/other/COPD_an_overview_in_WV/COPD2010.pdf Page 22, Appendix B

²³⁸ <http://www.cdc.gov/copd/data.htm>

²³⁹ <http://www.cdc.gov/copd/data.htm>

²⁴⁰ http://www.wvdhhr.org/bph/hsc/pubs/other/COPD_an_overview_in_WV/COPD2010.pdf Page 12

²⁴¹ http://www.wvdhhr.org/bph/hsc/pubs/other/COPD_an_overview_in_WV/COPD2010.pdf Page 12

²⁴² <http://www.wvdhhr.org/bph/hsc/pubs/other/clrd/appendix.htm#c>

²⁴³ <http://www.wvdhhr.org/bph/hsc/pubs/other/clrd/appendix.htm#c>

²⁴⁴ http://www.wvdhhr.org/bph/hsc/pubs/other/COPD_an_overview_in_WV/COPD2010.pdf Page 12

²⁴⁵ http://www.wvdhhr.org/bph/hsc/pubs/other/COPD_an_overview_in_WV/COPD2010.pdf Page 21, Appendix A

²⁴⁶ http://www.wvdhhr.org/bph/hsc/pubs/other/COPD_an_overview_in_WV/COPD2010.pdf

While the percentage of persons who have been diagnosed with asthma is increasing nationally, it is decreasing in West Virginia, Berkeley County and Jefferson County. The rate is rising in Morgan and Hampshire counties.

| | 2003 ²⁴⁷ | 2006 ²⁴⁸ | 2008 ²⁴⁹ | 2010 ²⁵⁰ |
|--------------------------------------|---------------------|--------------------------|--------------------------|---------------------|
| United States | 7.7% | 8.2% | 8.5% | 8.6% |
| West Virginia | 9.2% | 8.6% | 9.6% | 7.3% |
| | 2001- 2005 | 2004-2008 ²⁵¹ | 2006-2010 ²⁵² | |
| Berkeley County | 9.9% | 8.6% | 8.2% | NA |
| Jefferson County | 10.6% | 10.0% | 10.2% | NA |
| Morgan and Hampshire Counties | 5.8% | 7.8% | 9.2% | NA |

In 2009, more than one in 10 West Virginia adults (10.8%) and Eastern Panhandle adults (10.5% in Berkeley County, 10.6% in Jefferson County and 11.0% in Morgan County) had been diagnosed with diabetes.

The following bullets from the “West Virginia Behavioral Risk Factor Survey Report 2009-2010” provide a snapshot of the incidence of diabetes in West Virginia:²⁵³

- In 2010, West Virginia ranked fourth highest in the nation for the prevalence of diabetes.
- The prevalence of diabetes among adults has increased steeply and significantly since 1995.
- There was no significant gender difference in diabetes prevalence in either 2009 or 2010.
- The oldest adults (65 and older) had the highest diabetes prevalence among all age groups, and prevalence of diabetes generally increased as age increased.
- Adults with less than a high school education had the highest prevalence of diabetes while college graduates had the lowest prevalence of diabetes for both 2009 and 2010. Each increase in education was associated with a lower prevalence of diabetes, although the differences were not significant between every group.
- There was a significant income difference in the prevalence of diabetes. The prevalence generally decreased with increasing income.

Ambulatory care is medical care for patients who do not need to be admitted to a hospital for treatment. Ambulatory Care Sensitive (ACS) discharges indicate inpatient admissions for diabetes, perforated appendixes, COPD, hypertension, congestive heart failure, dehydration, bacterial pneumonia, urinary tract infection, asthma and other conditions that, in theory, could have been prevented if adequate ambulatory care resources were available and/or accessed.

²⁴⁷ http://www.wvdhhr.org/bph/hsc/pubs/BRFSS/2004_2005/appendL.pdf
²⁴⁸ <http://www.wvdhhr.org/bph/hsc/pubs/brfss/2006/2006westvirginiabehavioralriskfactorsurveyreport.pdf> Page 36
²⁴⁹ http://www.wvdhhr.org/bph/hsc/pubs/brfss/2007_2008/BRFS2007_2008.pdf Page 59
²⁵⁰ http://www.wvdhhr.org/bph/hsc/pubs/brfss/2009_2010/BRFS2009_2010.pdf Page 62
²⁵¹ http://www.wvdhhr.org/bph/hsc/pubs/brfss/2007_2008/BRFS2007_2008.pdf Page 87 , Appendix O
²⁵² http://www.wvdhhr.org/bph/hsc/pubs/brfss/2009_2010/brfs2009_2010.pdf Page 81, Appendix E
²⁵³ http://www.wvdhhr.org/bph/hsc/pubs/brfss/2009_2010/brfs2009_2010.pdf

In 2011, 36.4% of City Hospital’s ACS discharges were among persons with diabetes. Of these discharges, 53% were uncontrolled diabetes and 22.8% were long-term complication of diabetes. Also in 2011, 22.5% of Jefferson Memorial Hospital ACS discharges were among persons with diabetes. Fifty percent of these diabetes-related discharges were due to uncontrolled diabetes and 33.3% due to long-term complications of the disease.²⁵⁴

In 2012, 31.5% of War Memorial’s inpatient discharges were among persons with diabetes. Of these diabetes-related inpatient discharges, 15.7% were due to uncontrolled diabetes and 28.1% were due to long-term complications of the disease.²⁵⁵

| | 2000 | 2005 | 2009 |
|--|-------------|-------------|-------------|
| United States ²⁵⁶ | 6.0% | 7.3% | 8.4% |
| West Virginia ²⁵⁷ | 7.3% | 10.1% | 10.8% |
| Berkeley County ²⁵⁸ | NA | 10.1% | 10.5% |
| Jefferson County ²⁵⁹ | NA | 9.0% | 10.6% |
| Morgan County ²⁶⁰ | NA | 11.0% | 11.0% |

Cancer

The National Cancer Institute provides an online tool for determining cancer incidence rates by state, county, sex, race and cancer type. The data are collected by the National Center for Health Statistics.

About one in 10 West Virginia adults are cancer survivors (10.4% in 2009 and 8.8% in 2010). Cancer prevalence is higher among females than males, and about one-fifth of WV seniors had cancer during their lives.²⁶¹

From 2005-2009, Berkeley County’s overall cancer rate and lung cancer rate were higher than the national rate but lower than the state rate. While Jefferson and Morgan counties show overall cancer rates that are below both the state and national rate, the death rates are higher than those of the nation.

Jefferson County’s female breast cancer rate was higher than both the national and state rate. No county cancer death rates were below the U.S. rate, and the lung and bronchus cancer death rates among women are rising in Berkeley County.

²⁵⁴ WVU Hospitals East

²⁵⁵ Valley Health

²⁵⁶ <http://www.cdc.gov/diabetes/statistics/prev/national/figageadult.htm>

²⁵⁷ <http://apps.nccd.cdc.gov/ddtstrs/Index.aspx?stateId=54&state=West%20Virginia&cat=prevalence&Data=data&view=TO&trend=prevalence&id=1>

²⁵⁸ http://apps.nccd.cdc.gov/DDT_STRS2/CountyPrevalenceData.aspx?StateId=54&mode=DBT

²⁵⁹ http://apps.nccd.cdc.gov/DDT_STRS2/CountyPrevalenceData.aspx?StateId=54&mode=DBT

²⁶⁰ http://apps.nccd.cdc.gov/DDT_STRS2/CountyPrevalenceData.aspx?StateId=54&mode=DBT

²⁶¹ http://www.wvdhhr.org/bph/hsc/pubs/brfss/2009_2010/brfs2009_2010.pdf Page V.

| | All Cancer Sites | Lung and Bronchus | Male Prostrate | Female Breast |
|-------------------------|------------------|-------------------|----------------|---------------|
| United States | 465.0 | 67.2 | 151.4 | 122.0 |
| West Virginia | 490.8 | 90.4 | 138.4 | 112.2 |
| Berkeley County | 478.1 | 89.4 | 133.3 | 115.5 |
| Jefferson County | 412.7 | 66.00 | 101.8 | 126.4 |
| Morgan County | 391.2 | 90.1 | 98.8 | 89.9 |

| | All Cancer Sites | Lung and Bronchus | Male Prostrate | Female Breast |
|-------------------------|------------------|-------------------|----------------|----------------|
| United States | 178.7 (falling) | 50.6 (Falling) | 23.6 (falling) | 23.0 (falling) |
| West Virginia | 206.6 (falling) | 67.0 (Falling) | 21.7 (falling) | 23.6 (falling) |
| Berkeley County | 199.2 (falling) | 61.2 (Falling) | 25.2 (stable) | 22.9 (stable) |
| Jefferson County | 202.3 (falling) | 59.3 (Stable) | 24.2 (NA) | 25.0 (NA) |
| Morgan County | 218.5 (stable) | 77.6 (Stable) | NA | NA |

Similar to other Appalachian communities, the rates of cancer are either falling or stable in the Eastern Panhandle. However, more cases of cancer are detected in the later stages for many reasons. Another noteworthy trend is rising lung cancer among women.

| | Above U.S. Rate | Similar to U.S. Rate | Below U.S. Rate |
|----------------------|---|--|-----------------|
| Rising Trend | Berkeley County (Lung and Bronchus- Females) | None | None |
| Stable Trend | Jefferson County (all cancers; colon and rectum – females;) Morgan County (all cancers) | Berkeley County (breast – females; colon and rectum – males; prostate-males) Morgan County (lung and bronchus-males) | None |
| Falling Trend | Berkeley County (all cancers) | Berkeley County (colon and rectum – females; lung and bronchus – males; ovary – females) Jefferson County (Lung and Bronchus – males) | None |

²⁶² <http://statecancerprofiles.cancer.gov/incidencerates/>

²⁶³ <http://statecancerprofiles.cancer.gov/>

²⁶⁴ <http://statecancerprofiles.cancer.gov/incidencerates/>

ENVIRONMENTAL FACTORS

Because people constantly interact with the environment, maintaining a healthy environment is essential for increasing quality of life and years of a healthy life. Globally, nearly 25% of all deaths and the total disease burden can be attributed to environmental factors.²⁶⁵

Environmental issues include:

- Exposure to hazardous substances in the air, water, soil and food
- Natural and technological disasters
- Physical hazards
- Nutritional deficiencies
- The built environment

Radon

Radon is an invisible, odorless cancer-causing, radioactive gas that is linked to lung cancer. It comes from the natural breakdown of uranium in soil, rock and water and gets into the air. It can enter a building through cracks and other holes in the foundation and can build up in homes over time.

The Surgeon General has warned that radon is the second leading cause of lung cancer in the United States today and the number one cause of lung cancer among non-smokers. The risk of lung cancer is especially high among individuals who smoke and live in homes with high radon levels. Radon gas in America's homes poses a serious health risk.²⁶⁶

The average indoor radon level is estimated to be about 1.3 pCi/L (picocuries per liter), and the U.S. Environmental Protection Agency (EPA) has established that the "action level" for deciding when you need to "do something" about radon is 4 pCi/L.²⁶⁷ The average radon levels in Berkeley, Jefferson and Morgan are all well above the "action level" and pose an increased risk of lung cancer to residents. Radon testing is strongly encouraged so steps can be taken to reduce the risk of developing lung cancer.

| United States²⁶⁸ | Berkeley County²⁶⁹ | Jefferson County²⁷⁰ | Morgan County²⁷¹ |
|------------------------------------|--------------------------------------|---------------------------------------|------------------------------------|
| 1.3 pCi/L | 8.7 pCi/L | 8.1 pCi/L | 12.8pCi/L |

| | Berkeley County²⁷² | Jefferson County²⁷³ | Morgan County²⁷⁴ |
|---------------------------------|--------------------------------------|---------------------------------------|------------------------------------|
| Results under 2pCi/L | 29% | 27% | 25% |
| Results between 2 and 3.9 pCi/L | 19% | 18% | 21% |
| Results 4 pCi/L and higher | 52% | 56% | 54% |

²⁶⁵ World Health Organization (WHO). Preventing disease through healthy environments. Geneva, Switzerland: WHO; 2006

²⁶⁶ <http://www.epa.gov/radon/healthrisks.html>

²⁶⁷ http://www.epa.gov/radon/pubs/citguide.html#El_Radon

²⁶⁸ <http://county-radon.info/WV/Berkeley.html>

²⁶⁹ <http://county-radon.info/WV/Berkeley.html>

²⁷⁰ <http://county-radon.info/WV/Jefferson.html>

²⁷¹ <http://county-radon.info/WV/Morgan.html>

²⁷² <http://county-radon.info/WV/Berkeley.html>

²⁷³ <http://county-radon.info/WV/Jefferson.html>

²⁷⁴ <http://county-radon.info/WV/Morgan.html>

Air Quality

Air Quality Index (AQI) is an indicator of overall air quality, because it takes into account all of the criteria air pollutants measured within a geographic area. AQI includes all available pollutant measurements. The summary values include both qualitative measures (days of the year having "good" air quality, for example) and descriptive statistics (median AQI value, for example).

- **# Days with AQI:** The number of days in the year when AQI measurements from the monitoring site were taken
- **Good AQI:** 0 through 50
- **Moderate AQI:** 51 through 100
- **Unhealthy for Sensitive Groups:** 101 through 150
- **Unhealthy:** 151 through 200
- **Very Unhealthy:** 201 or higher
- **Maximum:** The highest daily AQI value in the year
- **Median:** Half of daily AQI values during the year that were less than or equal to the median value, and half equaled or exceeded it

The only AQI monitoring in the Eastern Panhandle is in Berkeley County. Both the number of days air quality is monitored and the percent of good air days are rising.

| | Number of Days when Air Quality Was.... | | | | | | | | AQI Statistics | |
|-------------|---|------|-------------|----------|-----------------|--------------------------------|-----------|----------------|----------------|--------|
| | # Days with AQI | Good | % good days | Moderate | % moderate days | Unhealthy for Sensitive Groups | Unhealthy | Very Unhealthy | Maximum | Median |
| 2000 | 113 | 65 | 57.5% | 45 | 39.82% | 3 | 0 | 0 | 116 | 46 |
| 2005 | 264 | 173 | 65.53% | 89 | 33.71% | 2 | 0 | 0 | 137 | 44 |
| 2010 | 263 | 194 | 73.76% | 67 | 25.47% | 2 | 0 | 0 | 135 | 44 |

SOCIAL AND MENTAL HEALTH

Poor mental health is a major source of distress, disability and social burden²⁷⁶. In 2011, one in five American adults had mental illness (defined as a diagnosable mental, behavioral or emotional disorder excluding developmental and substance use disorders.) The rate was twice as high among those aged 18 to 25 (29.8%) than those aged 50 and older (14.3%).²⁷⁷

The Behavioral Risk Factor Surveillance System (BRFSS), a continuously conducted, telephone health survey, monitors many health factors, including mental health. It includes the question, "Thinking about your mental health, which includes stress, depression and problems with emotions, for how many days during the past 30 days was your mental health not good?"

From 2006 – 2010, 14.9% of West Virginia's population and 10.4% of the population in the United States reported having 14 or more mentally unhealthy days. The average number of mentally unhealthy days was 4.4 in West Virginia and 3.5 nationally.²⁷⁸

²⁷⁵ http://www.epa.gov/airdata/ad_rep_aqi.html

²⁷⁶ <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5341a1.htm>

²⁷⁷ <http://www.samhsa.gov/newsroom/advisories/1211273220.aspx>

²⁷⁸ <http://apps.nccd.cdc.gov/HRQOL/>

Key informant interviews and focus groups demonstrate serious concerns about issues of mental health, substance abuse and interpersonal violence in the Eastern Panhandle. While these issues are intertwined, services remain fragmented. The current health and social services system is designed to address specific incidents or issues rather than to provide holistic services to an individual and/or family unit. Substance abuse treatment services are very limited, particularly for lower-income individuals and families, so there are often waiting lists for services.

Hospital discharge data validate widespread concern about the availability of quality community-based behavioral health programs and providers in the Eastern Panhandle. The number one discharge-related group from WVU-H City Hospital in 2011 was psychoses (551 discharges with the next highest being 513 discharges for normal newborn.)²⁷⁹

Representatives of Shenandoah Valley Medical System’s Behavioral Health Services report that adults wait one or more months for services and children wait three months or more. Persons who are already patients have priority access since they are already established, but they still wait two or three weeks for service. The wait for children who are already patients may decrease by one month. Children may have to wait five months for an intake.²⁸⁰

Suicide

Nationally, suicide was the tenth leading cause of death for all ages in 2010 and resulted in an estimated \$34.6 billion in combined medical and work loss costs. Based on a 2009 study in 16 states, 33.3% of suicide decedents tested positive for alcohol, 23% for antidepressants and 20.8% for opiates, including heroin and prescription pain killers.²⁸¹

Nationally, there is one suicide for every 25 attempted suicides.²⁸² In 2010, there were 282 fatal motor vehicle accidents in WV, in which 199 drivers and 67 passengers were killed. Of these accidents, 107 involved a single vehicle with only one occupant: the driver.²⁸³ Current literature would suggest that, although research into driver suicide is relatively sparse because of the methodological difficulties associated with establishing the intent, at least one in 15 motor vehicle crashes are intentional and remain largely unrecognized.²⁸⁴

In 2011, the national rate for self-harm with nonfatal injuries was 156.54/100,000²⁸⁵ with an estimated \$6.5 billion in combined medical and work loss costs.²⁸⁶

| | 2000 | 2005 | 2010 |
|---------------------------------|-------|-------|-------|
| United States ²⁸⁷ | 10.43 | 11.04 | 12.43 |
| West Virginia ²⁸⁸ | 13.6 | 15.1 | 15.9 |
| Berkeley County ²⁸⁹ | 10.5 | 16.2 | 11.5 |
| Jefferson County ²⁹⁰ | 4.7 | 4.1 | 11.2 |
| Morgan County ²⁹¹ | 6.7 | 18.9 | 0.0 |

²⁷⁹ WVUH East

²⁸⁰ Key informant interview, December 2012, Jeanne Marzell, MSN, CNS-AP, APN-MAC

²⁸¹ <http://www.cdc.gov/violenceprevention/pdf/suicide-datasheet-a.PDF>

²⁸² http://www.cdc.gov/mmwr/preview/mmwrhtml/ss6013a1.htm?s_cid=ss6013a1_w

²⁸³ <http://www.fars.nhtsa.dot.gov/Main/index.aspx>

²⁸⁴ <http://www.sciencedirect.com/science/article/pii/S0020138311002968#>

²⁸⁵ <http://webappa.cdc.gov/sasweb/ncipc/nfirates2001.htm>

²⁸⁶ <http://www.cdc.gov/violenceprevention/pdf/suicide-datasheet-a.PDF>

²⁸⁷ http://webappa.cdc.gov/sasweb/ncipc/mortrate10_us.html

²⁸⁸ WV Suicides by County 2000-2010, Report provided for WV Health Statistics Center; December 2012

²⁸⁹ WV Suicides by County 2000-2010, Report provided for WV Health Statistics Center, December 2012

²⁹⁰ WV Suicides by County 2000-2010, Report provided for WV Health Statistics Center, December 2012

²⁹¹ WV Suicides by County 2000-2010, Report provided for WV Health Statistics Center, December 2012

Alcohol and Drug Use

Both alcohol and drug abuse or misuse can have an immediate effect on a person's health and can increase the risk of many harmful health conditions and social issues. In 2011, the financial impact of drug and alcohol abuse in West Virginia was more than \$1.6 billion with a projected cost of more than \$2.3 billion by 2017 if action is not taken.²⁹² These costs include the cost on West Virginia's criminal justice, healthcare, education, workforce and welfare systems.

From 2000 to 2010, the amount of drugs being seized by the West Virginia State Police greatly increased. Of particular significance was the rise in heroin (from 25 dose units/items to 1,527.28 dose units/items) and other narcotics, including codeine, Demerol, Dilaudid and methadone, (from 5,133.06 dose units/items to 31,369.37 dose unit/items.)

| Table 53: West Virginia State Police Seized Drugs Report 2000, 2005 and 2010 | | | |
|--|---------------------------|----------------------------|----------------------------|
| | 2000 ²⁹³ | 2005 ²⁹⁴ | 2010 ²⁹⁵ |
| Amphetamines/Methamphetamines | 374.80 dose units/items | 1,155.02 dose units/items | 497.05 dose units/items |
| Crack cocaine | 287 dose units/items | 444.27 dose units/items | 59.10 dose units/items |
| Cocaine | 32 dose units/items | 135.08 dose units/items | 131.03 dose units/items |
| Heroin | 25 dose units/items | 331 dose units/items | 1,527.58 dose units/items |
| Other drugs (antidepressants, tranquilizers, etc.) | 1,867.00 dose units/items | 1,845.51 dose units/items | 6,670.79 dose units/items |
| Other Narcotics (Codeine, Demerol, Dilaudid, methadone, etc.) | 5,133.06 dose units/items | 20,797.49 dose units/items | 31,369.37 dose units/items |

The rate of drug offenses (the number of reported offenses/population for that year x 1,000) increased both statewide and in the Eastern Panhandle from 2000 – 2010. Drug offense rates were calculated by adding all of the drug offenses from reporting entities in each county. A drug offense is defined as the violation of the laws prohibiting the production, distribution and/or use of certain controlled substances and the equipment or devices utilized in their preparation and/or use.

Note: in Berkeley County, the Eastern Panhandle Drug and Violence Task Force reported offenses for the first time in 2010. In Jefferson County, only three entities - Charles Town Police Department, the Jefferson County Sheriff's Office and the State Police - reported offenses in 2000. In future years, reports would also come from the Harpers Ferry Police Department, the Ranson Police Department, Shepherdstown Police Department and Shepherd University. In Morgan County, the Berkeley Springs and Paw Paw Police Departments reported offenses only in 2000, with no reports in 2005 or 2010.

²⁹² <http://www.pvnet.org/Funding%20Study/reports.htm>

²⁹³ <http://www.statepolice.wv.gov/about/Documents/CrimeStatistics/2000wvcrimes.pdf> Special Reports: Seized Drug Report Summary

²⁹⁴ <http://www.statepolice.wv.gov/about/Documents/CrimeStatistics/2005wvcrimes.pdf> Pages 666-668

²⁹⁵ <http://www.statepolice.wv.gov/about/Documents/CrimeStatistics/2010wvcrimes.pdf> Pages 646-650

Table 54: Drug and Narcotic Offenses WV and Eastern Panhandle Counties 2000, 2005 and 2010
Rates Per 1,000 Population

| | 2000 ²⁹⁶ | 2005 ²⁹⁷ | 2010 ²⁹⁸ |
|-------------------------|---------------------|---------------------|---------------------|
| West Virginia | 2.934 | 5.496 | 7.043 |
| Berkeley County | 3.310 | 3.278 | 9.984 |
| Jefferson County | 2.015 | 3.406 | 4.038 |
| Morgan County | 1.740 | 1.595 | 4.219 |

From 2001 to 2011, the death rate for drug overdoses more than doubled in West Virginia, as well as in all three Eastern Panhandle counties. At the same time, the *prescription* drug overdose death rate more than tripled in West Virginia and all three Eastern Panhandle counties.

In 2000, the death rate for *illicit drugs* in West Virginia was 6.7/100,000, just slightly below the national rate of 6.9/100,000. By 2007, the WV rate had risen to 22.2/100,000 in comparison to the national rate of 12.7/100,000.²⁹⁹

Table 55: Drug Overdose Deaths per 100,000 WV and Eastern Panhandle Counties³⁰⁰
2001, 2003, 2005, 2007, 2009, 2011

| | 2001 | 2003 | 2005 | 2007 | 2009 | 2011 |
|-------------------------|------|------|------|------|------|------|
| West Virginia | 9.2 | 14.5 | 20.5 | 25.3 | 23.7 | 34.7 |
| Berkeley County | 12.8 | 23.7 | 20.6 | 17.1 | 25.3 | 27.7 |
| Jefferson County | 4.6 | 15.2 | 12.3 | 27.3 | 26.4 | 18.6 |
| Morgan County | 6.5 | 31.7 | 30.4 | 11.5 | 17.1 | 22.8 |

A drug overdose death is defined as one that may have been prescribed to the decedent by a physician or any appropriate health professional. It does not specify where the drug was obtained whether legally or illegally. The data only applies to deaths occurring in West Virginia, not any residents who died out of state.

Table 56: Any Drug Overdose With at Least One Possible Prescription Drug Involved³⁰¹
Rate per 100,000 Population

| | 2001 | 2003 | 2005 | 2007 | 2009 | 2011 |
|----------------------|------|------|------|------|------|------|
| West Virginia | 8.7 | 13.7 | 19.2 | 24.4 | 22.4 | 33.5 |
| Berkeley | 8.9 | 21.3 | 19.5 | 15.1 | 23.3 | 25.8 |
| Jefferson | 4.6 | 15.2 | 10.3 | 23.4 | 20.7 | 16.8 |
| Morgan | 6.5 | 31.7 | 24.3 | 11.5 | 11.4 | 22.8 |

West Virginia has the highest annual per capita number of retail prescription drugs filled at pharmacies nationwide, and the West Virginia Prescription Drug Abuse Quitline reported in 2010 that 73% of the calls they received were for abuse of Opioids.³⁰²

The data in Table 57 reflect the total number of prescription drugs filled at retail pharmacies only. All products were filled by retail pharmacies, including new prescription and refills of both brand name and generic drugs.

²⁹⁶ <http://www.statepolice.wv.gov/about/Documents/CrimeStatistics/2000wvcrimes.pdf>

²⁹⁷ <http://www.statepolice.wv.gov/about/Documents/CrimeStatistics/2005wvcrimes.pdf>

²⁹⁸ <http://www.statepolice.wv.gov/about/Documents/CrimeStatistics/2010wvcrimes.pdf>

²⁹⁹ <http://www.dhhr.wv.gov/bhhf/resources/Documents/WV%202012%20Behavioral%20Health%20Profile.pdf> Page 119

³⁰⁰ WV Drug Overdose Deaths 2001 – 2011 Report provided by the WV Health Statistics Center, January 2013

³⁰¹ WV Drug Overdose Deaths 2001 – 2011 Report provided by the WV Health Statistics Center, January 2013

³⁰² <http://www.dhhr.wv.gov/bhhf/resources/Documents/WV%202012%20Behavioral%20Health%20Profile.pdf> Page 101

| | 2008 | | 2009 | | 2010 | |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|
| | United States | West Virginia | United States | West Virginia | United States | West Virginia |
| Ages 0 – 18 | 3.8 | 6.0 | 3.9 | 6.3 | 3.8 | 6.0 |
| Ages 19 – 64 | 11.6 | 17.4 | 11.3 | 18.4 | 11.3 | 18.3 |
| Ages 65+ | 30.1 | 41.9 | 31.2 | 38.7 | 31.1 | 36.4 |

The driving under the influence arrest rate is higher in Berkeley and Jefferson counties than it is in West Virginia.

| | DUI Arrest Rate Per 10,000 Population | | | Alcohol-Related Fatal Vehicle Crashes (Data reflects % of persons killed in motor vehicle crashes where driver's blood alcohol content was .01% or higher) | | |
|---------------------------------|---------------------------------------|------|------|--|--------------------|--------------------|
| | 2008 | 2009 | 2010 | 2005 | 2007 | 2009 |
| United States | NA | n | NA | 38% ³⁰⁴ | 37% ³⁰⁵ | 38% ³⁰⁶ |
| West Virginia ³⁰⁷ | 38.0 | 36.4 | 33.2 | 31% | 39% | 38% |
| Berkeley County ³⁰⁸ | 47.2 | 53.1 | 52.9 | 36% | 39% | 43% |
| Jefferson County ³⁰⁹ | 84.9 | 71.3 | 78.9 | 25% | 42% | 43% |
| Morgan County ³¹⁰ | 23.0 | 18.3 | 40.5 | 20% | 33% | 20% |

Crime

While West Virginia's crime rate has consistently been well below the national rate, the violent crime rate is growing statewide while falling nationally. Violent crime is composed of four offences: murder and non-negligent manslaughter, forcible rape, robbery and aggravated assault as defined below:

- Murder - The willful (non-negligent) killing of one human being by another.
- Forcible Rape - The carnal knowledge of a female forcibly and against her will. Assaults or attempts to commit rape by force are also included.
- Robbery - The taking or attempting to take anything of value from the care, custody, or control of a person or persons by force or threat of force or violence, and/or by putting the victim in fear.
- Aggravated Assault - An unlawful attack by one person upon another for the purpose of inflicting severe bodily injury. This type of assault is usually accompanied by the use of a weapon or other means likely to produce death or serious bodily harm.

In West Virginia, forcible rape, robbery and aggravated assault all rose from 2003 -2010 although these crime rates fell nationally.

³⁰³ <http://www.dhhr.wv.gov/bhhf/resources/Documents/WV%202012%20Behavioral%20Health%20Profile.pdf> Page 111

³⁰⁴ <http://www.nrd.nhtsa.dot.gov/Pubs/811002.pdf> Page 32, Table 13

³⁰⁵ <http://www.nrd.nhtsa.dot.gov/Pubs/811002.pdf> Page 32, Table 13

³⁰⁶ <http://www.nrd.nhtsa.dot.gov/Pubs/811385.PDF> Page 6, Table 4

³⁰⁷ <http://www.dhhr.wv.gov/bhhf/sections/programs/ProgramsPartnerships/AlcoholismandDrugAbuse/Research/Documents/Berkeley%20County.pdf> Page 2

³⁰⁸ <http://www.dhhr.wv.gov/bhhf/sections/programs/ProgramsPartnerships/AlcoholismandDrugAbuse/Research/Documents/Berkeley%20County.pdf> Page 2

³⁰⁹ <http://www.dhhr.wv.gov/bhhf/sections/programs/ProgramsPartnerships/AlcoholismandDrugAbuse/Research/Documents/Jefferson%20County.pdf> Page 2

³¹⁰ <http://www.dhhr.wv.gov/bhhf/sections/programs/ProgramsPartnerships/AlcoholismandDrugAbuse/Research/Documents/morgan%20County.pdf> Page 2

All data are based on the uniform crime reporting system, in which state data are collected in the same manner that national data are collected. West Virginia data are somewhat limited by police departments that do not comply with the national standards and/or do not provide reports.

In Berkeley County, the Eastern Panhandle Drug and Violence Task Force reported offenses for the first time in 2010. In Jefferson County, only three entities – the Charles Town Police Department, the Jefferson County Sheriff’s Office and the State Police - reported offenses in 2000. In future years, reports would also come from the Harpers Ferry Police Department, the Ranson Police Department, Shepherdstown Police Department and Shepherd University. In Morgan County, the Berkeley Springs and Paw Paw Police Departments reported offenses only in 2000, with no reports in 2005 or 2010.

County crime rates equal the # of reported incidents/county population during the given year x 100,000. Consistent with the manner in which forcible rape rates are determined by the FBI, county forcible rape rates were determined based on the female population (all ages) in a given year.

Table 59: Uniform Crime Report Rates per 100,000 Population U.S. and WV 2003, 2005 and 2010

| | 2003 | | 2005 | | 2010 ³¹¹ | |
|--|------------------------------|------------------------------|------------------------------|------------------------------|---------------------|---------------|
| | United States ³¹² | West Virginia ³¹³ | United States ³¹⁴ | West Virginia ³¹⁵ | United States | West Virginia |
| Violent Crime | 475.8 | 255.4 | 469.2 | 272.8 | 403.6 | 314.6 |
| Murder and non-negligent manslaughter | 5.7 | 4.0 | 5.6 | 4.4 | 4.8 | 3.3 |
| Forcible Rape | 32.2 | 17.2 | 31.7 | 17.7 | 27.5 | 19.1 |
| Robbery | 142.5 | 38.7 | 140.7 | 44.6 | 119.0 | 44.7 |
| Aggravated Assault | 295.4 | 195.5 | 291.1 | 206.1 | 252.5 | 247.5 |

Domestic Violence

Domestic violence, or abuse, in West Virginia is defined as the occurrence of one or more of the following acts between family or household members:

- Attempting to cause or intentionally knowingly or recklessly causing physical harm to another with or without dangerous or deadly weapons;
- Placing another in reasonable apprehension of physical harm;
- Creating fear of physical harm by harassment, psychological abuse or threatening acts;
- Committing either sexual assault or sexual abuse;
- Holding, confining detaining or abducting another person against that person’s will.

The prevalence of domestic violence in the Eastern Panhandle is difficult to measure. Domestic violence data from the West Virginia State Police is based on the West Virginia Incident-Based Reporting (WV-IBR.), which is compatible with the National Incident-Based Reporting System (NIBRS).

³¹¹ <http://www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2010/crime-in-the-u.s.-2010/tables/10tbl04.xls>

³¹² http://www2.fbi.gov/ucr/05cius/data/table_01.html

³¹³ http://www2.fbi.gov/ucr/cius_04/documents/CIUS_2004_Section2.pdf Page 8, Table 4

³¹⁴ http://www2.fbi.gov/ucr/05cius/data/table_01.html

³¹⁵ http://www2.fbi.gov/ucr/05cius/data/table_05.html

As of January 1, 1999, West Virginia fully committed to IBR by only accepting data in the WV-IBR format. Full conversion and adjustment to the new system is still ongoing. Local agency systems must meet both NIBRS and the state-specific requirements that address state-level criminal justice issues. Before a local agency begins submitting data to WV-IBR and the FBI, the agency must demonstrate its ability to meet NIBRS and WV-IBR reporting requirements.

All reporting agencies that have data in the West Virginia Uniform Crime report must have successfully demonstrated that their record systems are capable of producing reliable crime information in the NIBRS and WV-IBR format. Some agencies were unable or unwilling to submit any data in some years. Also, some agencies only reported six months of data.³¹⁶ Because of this, crime reports, including domestic violence reports, may not be included.

The issue of domestic violence cannot be separated from behavioral health needs. The West Virginia Coalition Against Domestic Violence highlights the following factors in the 2010-2011 fiscal year:

- Alcohol and drugs were involved in 30% of cases of abuse against children and 34% of cases of abuse against another adult;
- A history of either being abused or being abusive was documented in 51% of cases of abuse against children and 42% cases of abuse against adults;
- Stress was documented as a contributing factor in 21% of cases of abuse against children and 15% of abuse against adults.³¹⁷

Information obtained from key informant interviews reveals that not all offenses are reported to law enforcement, and not all victims seek services. The severity of violence is increasing and the numbers don't reflect the magnitude of the problem.

Shenandoah Women's Center, which serves Berkeley, Jefferson and Morgan counties, lost significant funding between 2005 and 2010, which limited the number of people who could be served.³¹⁸ While the number of individuals seeking shelter steadily declined between 2000 and 2010, professionals in the field report this is not necessarily an indicator that the incidence of violence is declining. They do report the following have a substantial impact on if and where victims of domestic violence seek shelter:

- **A poor economy:** While domestic violence is more than three times as likely to occur when couples are experiencing high levels of financial strain, a bad economy also discourages many victims from leaving their partners as they are afraid they won't be able to get a job or may lose a job.³¹⁹
- **Changes in the law:** In West Virginia, protective orders are now easier to get and last for a longer period of time.³²⁰
- **Location of the shelter:** The shelter in Martinsburg, which serves all three counties, is very centrally located and visible and well-known address for many. Bordered by Maryland and Virginia, many victims seek shelter in other communities, and key informant interviews with staff in out-of-state-shelters report regularly serving West Virginians.³²¹

³¹⁶ <http://www.statepolice.wv.gov/about/Documents/CrimeStatistics/2005wvcrimes.pdf> Page 3

³¹⁷ WV Coalition Against Domestic Violence Fiscal Year 2010-2011 Summary of Selected Data, Pages 7 - 8

³¹⁸ Ann Smith, Executive Director of Shenandoah Women's Center

³¹⁹ <http://www.wvcadv.org/2012%20DV%20Fact%20Sheet.pdf>

³²⁰ Ann Smith, Executive Director of Shenandoah Women's Center

³²¹ Raine Johnson, the Laurel Center, Winchester Virginia; Terri Hamrick, Survivors Incorporated, Gettysburg, PA

Data from the West Virginia State Police Uniform Crime Reports demonstrate no significant trends in the Eastern Panhandle.

| Table 60: Number of Reported Domestic Violence Investigations WV and Eastern Panhandle Counties 2000, 2005 and 2010 | | | |
|--|---------------------|---------------------|---------------------|
| | 2000 ³²² | 2005 ³²³ | 2010 ³²⁴ |
| West Virginia | 12,208 | 12,083 | 11,174 |
| Berkeley | 1,118 | 394 | 663 |
| Jefferson | 190 | 189 | 214 |
| Morgan | 75 | 46 | 63 |

Tables 61 – 62 reflect data provided directly by Shenandoah Women’s Center:

| Table 61: Number of Unduplicated Individuals Sheltered at Shenandoah Women’s Center 2000, 2005, 2010 | | | | | | |
|---|--------|------|------|----------|------|------|
| | Adults | | | Children | | |
| | 2000 | 2005 | 2010 | 2000 | 2005 | 2010 |
| Berkeley County | 51 | 34 | 36 | 44 | 30 | 16 |
| Jefferson County | 15 | 9 | 6 | 10 | 7 | 3 |
| Morgan County | 3 | 6 | 4 | 1 | 4 | 1 |
| Total | 69 | 49 | 46 | 55 | 41 | 20 |

In addition to providing shelter, Shenandoah Women’s Center provides assistance with protection orders, hotline calls, court advocacy, counseling, etc.

| Table 62: Number of Non-Sheltered Individuals Receiving Services from Shenandoah Women’s Center 2000, 2005, 2010 | | | | | | |
|---|--------|------|------|----------|------|------|
| | Adults | | | Children | | |
| | 2000 | 2005 | 2010 | 2000 | 2005 | 2010 |
| Berkeley County | 380 | 572 | 496 | 69 | 50 | 74 |
| Jefferson County | 200 | 289 | 272 | 37 | 32 | 68 |
| Morgan County | 46 | 82 | 67 | 6 | 8 | 36 |
| Total | 626 | 943 | 835 | 112 | 90 | 178 |

Child Abuse

Child abuse and neglect can have a long-lasting impact on children, families and communities. Abuse has been shown to damage a child’s growing brain and is linked to cognitive delays and emotional difficulties as well as numerous physical and mental health problems throughout life.

In 2010, the State of West Virginia changed the definition of child abuse, and this affected how cases are reported and tracked. Because of this, data gathered after 2010 cannot be accurately compared to previous years.³²⁵ This definition change has also affected the scope of work that DHHR can do with a family.

³²² <http://www.statepolice.wv.gov/about/Documents/CrimeStatistics/2000wvcrimes.pdf> Special Reports: Domestic Violence

³²³ <http://www.statepolice.wv.gov/about/Documents/CrimeStatistics/2005wvcrimes.pdf> Pages 684 - 701

³²⁴ <http://www.statepolice.wv.gov/about/Documents/CrimeStatistics/2010wvcrimes.pdf> Pages 663- 680

³²⁵ Kathy Bradley, Region 3 Community Services Manager, DHHR.

Prior to 2010, the West Virginia Department of Health and Human Resources (DHHR) pursued cases in which a child may be at risk for abuse and investigated “incidents” to determine if they had occurred. Since 2010, the definition shifted from risk to safety. Now child protective workers are looking for clearly observable family conditions that are actively occurring or in the process of occurring that will likely result in severe harm to the child. Also, DHHR no longer provides services to help prevent child abuse in families. While workers can make referrals to families, DHHR has no authority to ensure families follow up on this.

From 2010-2011, there was an upward trend in all reports related to child abuse:

- Reports, or referrals, from mandated reporters and other concerned citizens
- The number of referred calls that were accepted for further investigation
- The total caseload (including cases that were opened in the prior year)
- The number of cases so severe they went to court

All of the data below was provided by the WV Department of Health and Human Resources, Bureau for Children and Families:³²⁶

| Table 63: Child Abuse Referrals and Investigations Eastern Panhandle Counties 2010 and 2011 | | | | |
|--|-----------------------------------|-------------|---|-------------|
| | Referrals Received by DHHR | | Referrals Accepted for Investigation | |
| | 2010 | 2011 | 2010 | 2011 |
| Berkeley County | 1,681 | 2,000 | 786 | 818 |
| Jefferson County | 532 | 658 | 248 | 253 |
| Morgan County | 246 | 287 | 103 | 124 |
| Total | 2,459 | 2,945 | 1,137 | 1,195 |

| Table 64: Child Abuse Cases Eastern Panhandle Counties 2010 and 2011 | | | | |
|---|---|-------------|-------------------------------------|-------------|
| | Total Child Protective Services Caseload | | Cases Opened (Went to Court) | |
| | 2010 | 2011 | 2010 | 2011 |
| Berkeley County | 850 | 974 | 92 | 102 |
| Jefferson County | 383 | 405 | 39 | 38 |
| Morgan County | 73 | 78 | 4 | 9 |
| Total | 1,306 | 1,475 | 135 | 149 |

³²⁶ Report for the West Virginia Department of Health and Human Resources, Bureau for Children and Families, June 2012

MAPP VISIONING

The first step of the MAPP process was the Community Visioning to ensure input from a broad cross section of the community. During a three month period from May- July 2010, representatives of the MAPP core group met with more than 300 people in 27 locations, ranging from Chamber of Commerce meetings to Kindergarten registration to the Hispanic Festival. Participating community members were asked one question: *“What do we need in our county to make it a healthy place to live, work and play?”*

With 1,756 responses (approximately 3-4 responses per person), the feedback obtained through the visioning process was varied. The responses were first condensed into broad strategy categories, including: (1) Programs and interventions (2) Policies and political reform (3) Education and outreach (4) Built environment and (5) Tapping into voluntary networks. Priorities were initially established by the number of times specific types of strategies were suggested. Visioning data was then re-categorized using overarching community health subsystems for each category. Data were prioritized based on both the number of times specific strategies were suggested weighted by the breadth of support across dissimilar visioning groups.

The visioning results helped guide the MAPP process by identifying broad categories and key themes, including:

- Recreation and community programs, such as walking and bike trails, a community pool and teen programs;
- Health care, including access and affordability, quality, behavioral health and substance abuse, health promotion and risk reduction;
- Environment, including better air quality, better water quality and mandatory recycling;
- Access to healthy foods, including community gardens, increased access to farmer’s markets and healthier options in restaurants and schools;
- Economic security, including better jobs with benefits, better higher education and job training and transitioning requirements for public assistance programs;
- Safety, including more police, concerns about drug trafficking, racial and ethnic tensions and better traffic safety/roads.

COMMUNITY STRENGTHS AND THEMES

The MAPP Community Strengths and Themes Survey asked questions to assess the community's satisfaction with various factors, self-reported health status, and perceptions about barriers to health care. The survey incorporated findings from the visioning results and was developed by a small task force, including Dr. Joy Buck. The survey was distributed in 2011 through Survey Monkey using a snowball email distribution process. Additional data were collected through distribution of a paper survey and then entered into a database. There were 1,512 respondents to the MAPP survey with 804 from Berkeley County, 521 from Jefferson County and 187 from Morgan County.

Priority areas identified from the Community Survey and Assessment were: (1) Access and Quality of Health Care includes medical services, behavioral health services, community-based health and social services and long-term care; (2) Economic Security includes development, better/higher paying jobs and education/training; (3) Environment includes better/cleaner air quality, more open green spaces; (4) Recreation/Community includes parks and recreational activities for families, teens, young adults; (5) Safety and Law Enforcement related issues; and, (6) Community/Public Health includes health promotion for adults, teens, and children, spaces for hiking, swimming, smoking cessation, etc.

The findings of the survey were presented at a Health and Human Services Collaborative (HHSC) quarterly meeting, and participants were then asked to complete a Delphi Survey to help prioritize the top three priorities for strategic planning.

Charts 1 – 32 provide the survey findings results.

Survey Findings

Respondent Demographics

Charts 1 -3 provide demographic and socioeconomic data about survey respondents.

- More than 70% of respondents in all three counties were female.
- Fewer than half of the MAPP respondents (Berkeley County – 48%; Jefferson County – 29%; and Morgan County – 37%) worked full time, and many were unemployed (Berkeley County – 28%; Jefferson County – 41%; Morgan County – 38%).
- The majority of MAPP respondents (Berkeley County – 54%; Jefferson County – 68%; Morgan County -69%) had a household income of less than \$40,000.
- Only 16% of Berkeley County, 13% of Jefferson County and 7% of Morgan County respondents had incomes of over \$100,000.

Chart 1: Sex or gender of MAPP respondents

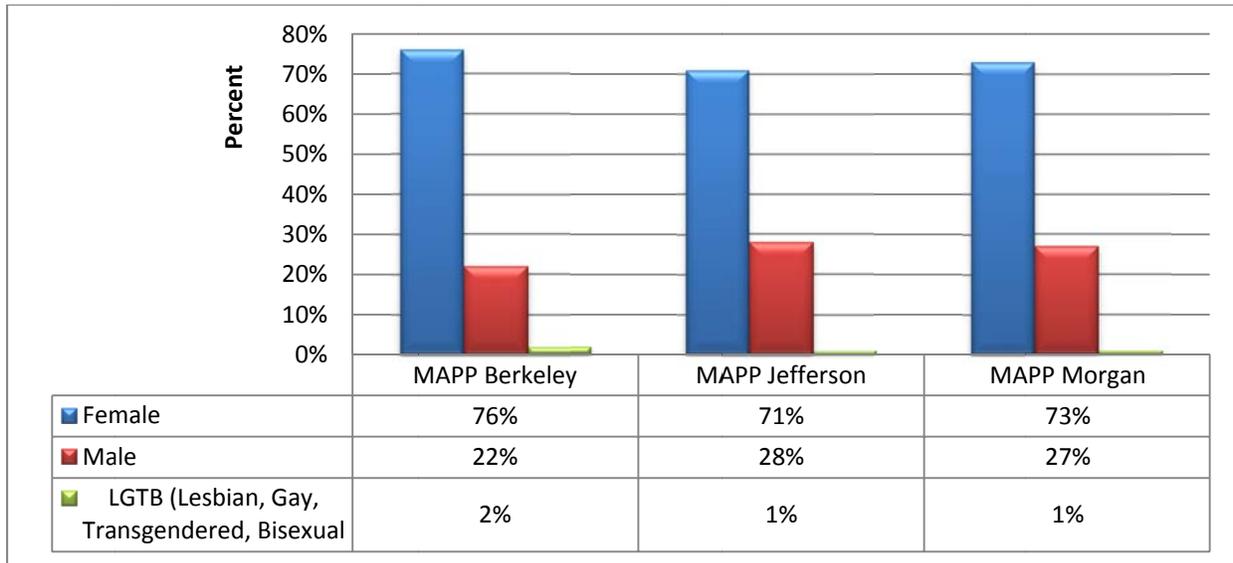


Chart 2: Job status of MAPP Respondents

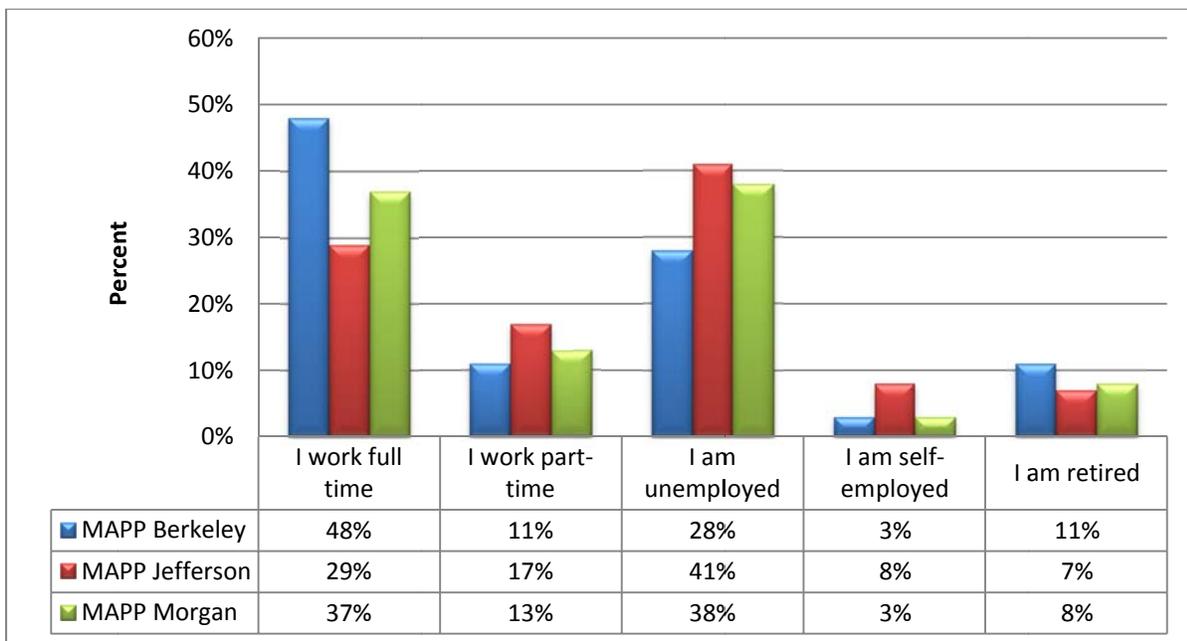
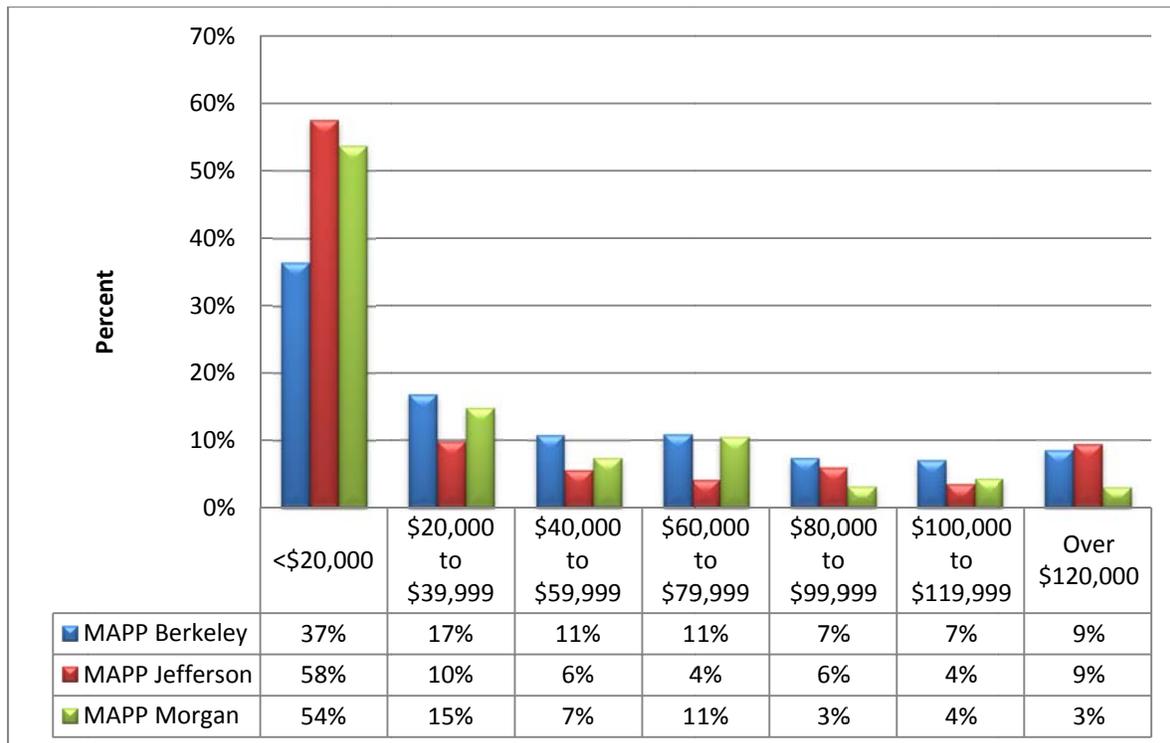


Chart 3: Household income of MAPP respondents



Quality of Life

Charts 4 -23 show responses to questions about the respondents' satisfaction with various factors that affect quality of life.

Highlights:

- The majority of survey respondents indicated that they feel either safe or very safe (Berkeley County – 68%; Jefferson County – 73%; Morgan County – 78%). Nevertheless, 13% of Berkeley County, 12% of Jefferson County and 10% of Morgan County respondents reported feeling unsafe or very unsafe. Eighty-one percent of respondents who reported feeling very unsafe had annual family incomes of less than \$20,000.
- In response to the question regarding satisfaction with access to quality health care, 48% of Berkeley County, 48% of Jefferson County and 52% of Morgan County respondents reported being satisfied or very satisfied, but a significant percentage also reported being dissatisfied or very dissatisfied (Berkeley County – 32%; Jefferson County – 29%; Morgan County – 31%). Those with higher incomes expressed less dissatisfaction.
- Overall, survey respondents indicated being satisfied or very satisfied with the quality of schools (Berkeley County – 53%; Jefferson County - 53% Morgan County – 66%).

- Many survey respondents indicated being either dissatisfied or very dissatisfied in response to the question “How satisfied are you with transportation services in our county?” (Berkeley County – 39%; Jefferson County – 38%; Morgan County – 47%).
- A majority of survey respondents were dissatisfied or very dissatisfied with jobs and career growth in their county. (Berkeley County – 56%; Jefferson County – 54%; Morgan County – 65%)
- A large percentage of survey respondents reported being “not sure” in response to the question “how satisfied are you with job training programs in our county?” However, many MAPP respondents reported being dissatisfied or very dissatisfied (Berkeley County – 46%; Jefferson County – 34%; Morgan County - 33%).
- The majority of survey respondents reported being satisfied or very satisfied with their county’s outdoor air quality (Berkeley County – 56%; Jefferson County – 61%; Morgan - 69%). The percent of respondents who were satisfied or very satisfied with indoor air policy in public places was just as high (Berkeley County – 59%; Jefferson County - 61%; Morgan County – 70%).

Chart 4: “How safe do you feel in our county?”

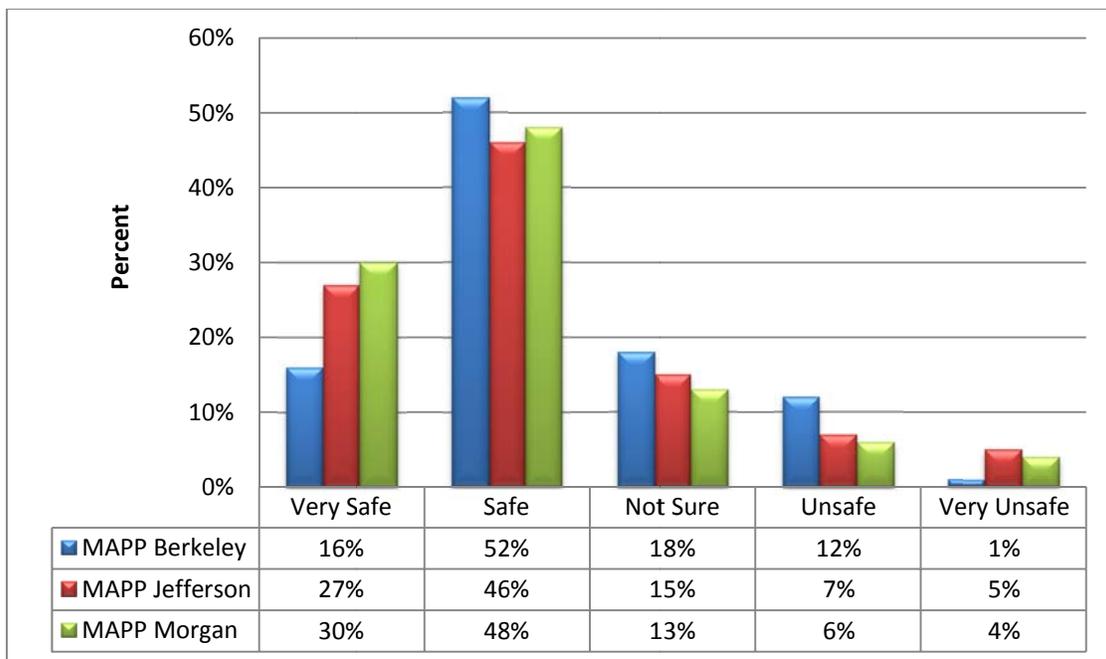


Chart 5: “How satisfied are you with opportunities to participate in community activities in our county?”

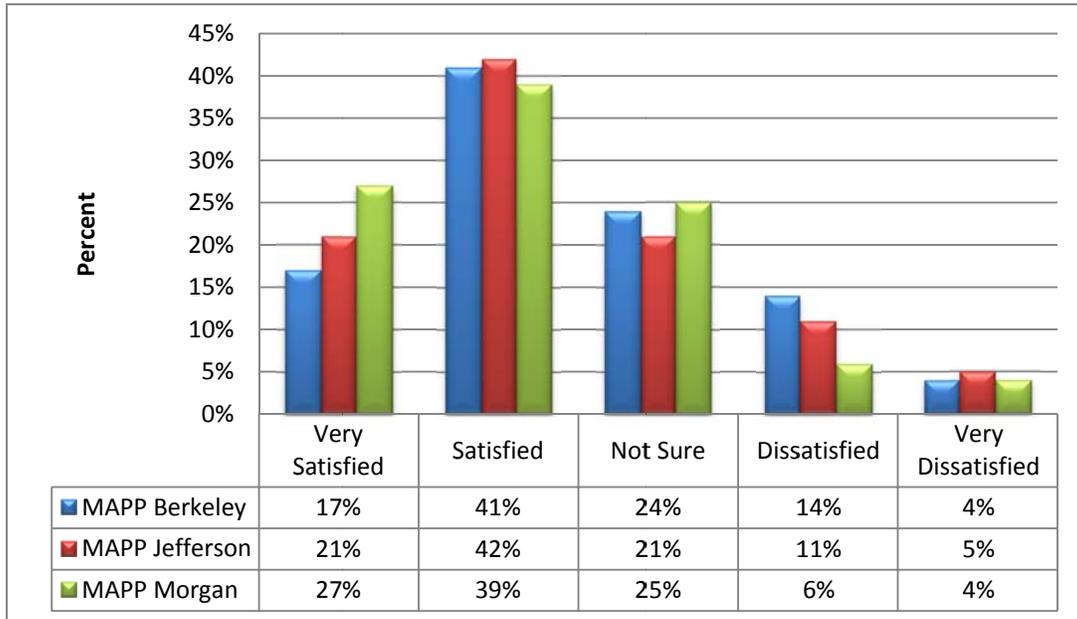


Chart 6: “How satisfied are you with access to quality health care in our county?”

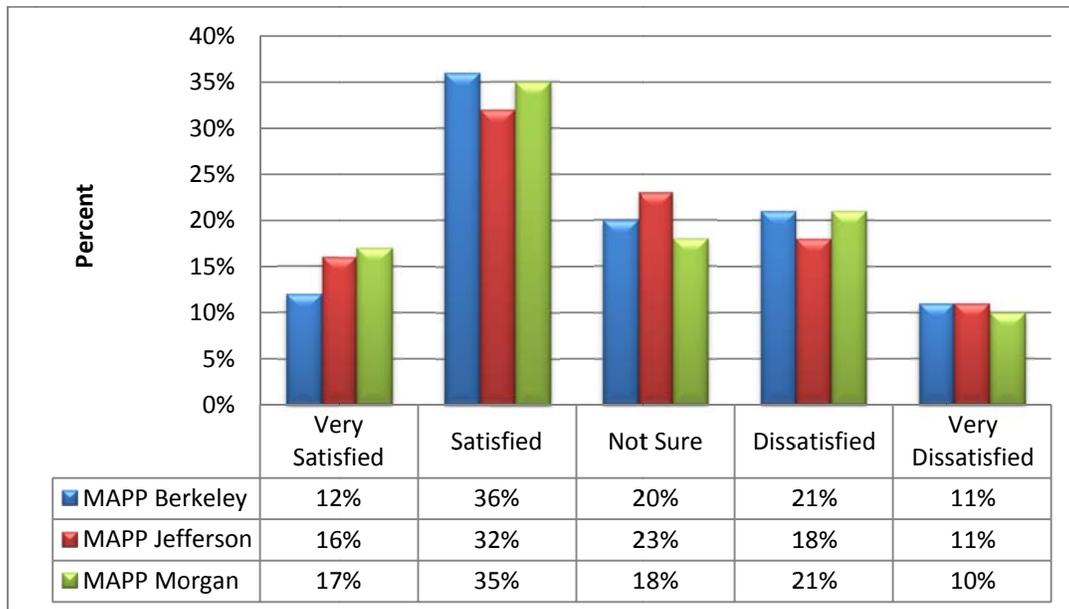


Chart 7: “How satisfied are you with health services in our county?”

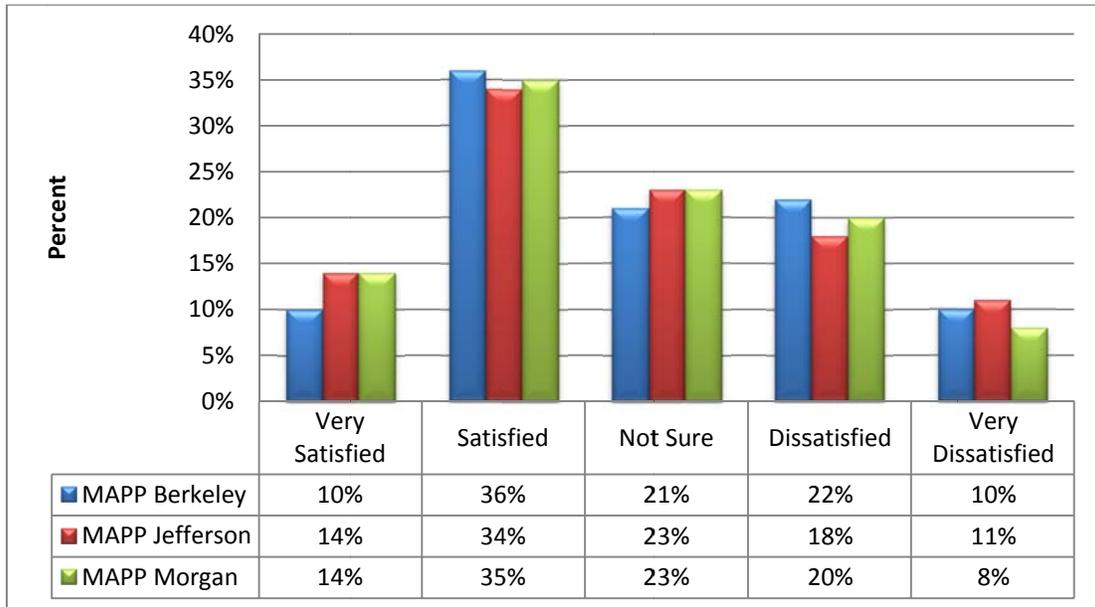


Chart 8: “How satisfied are you with the quality of schools in our county?”

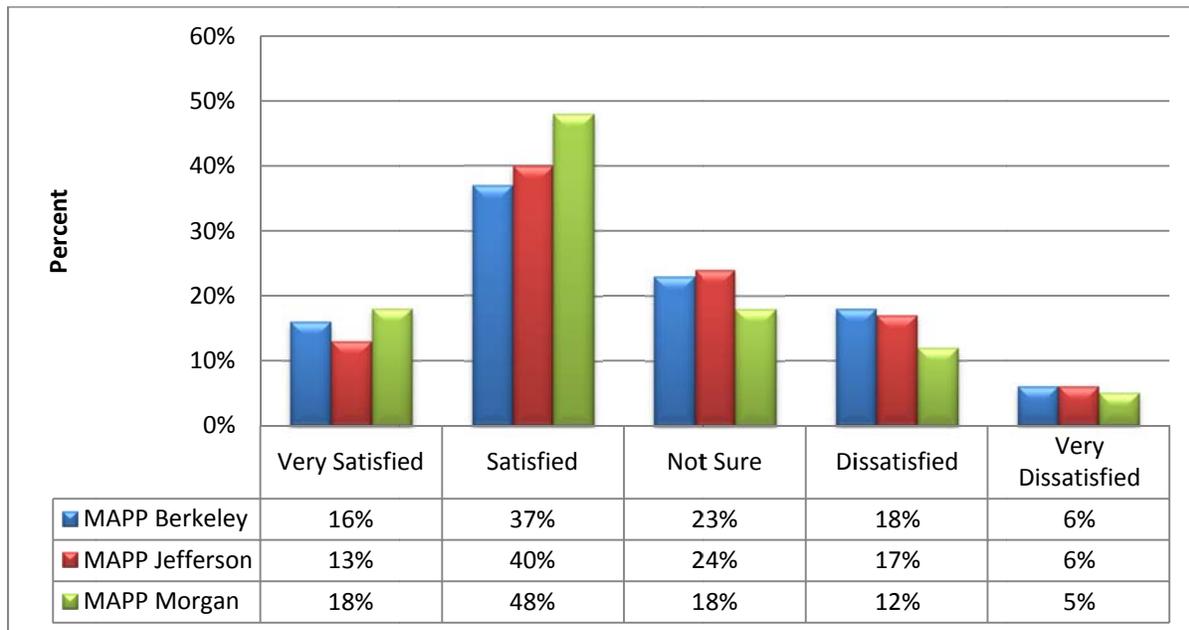


Chart 9: “How satisfied are you with the quality of day care in our county?”

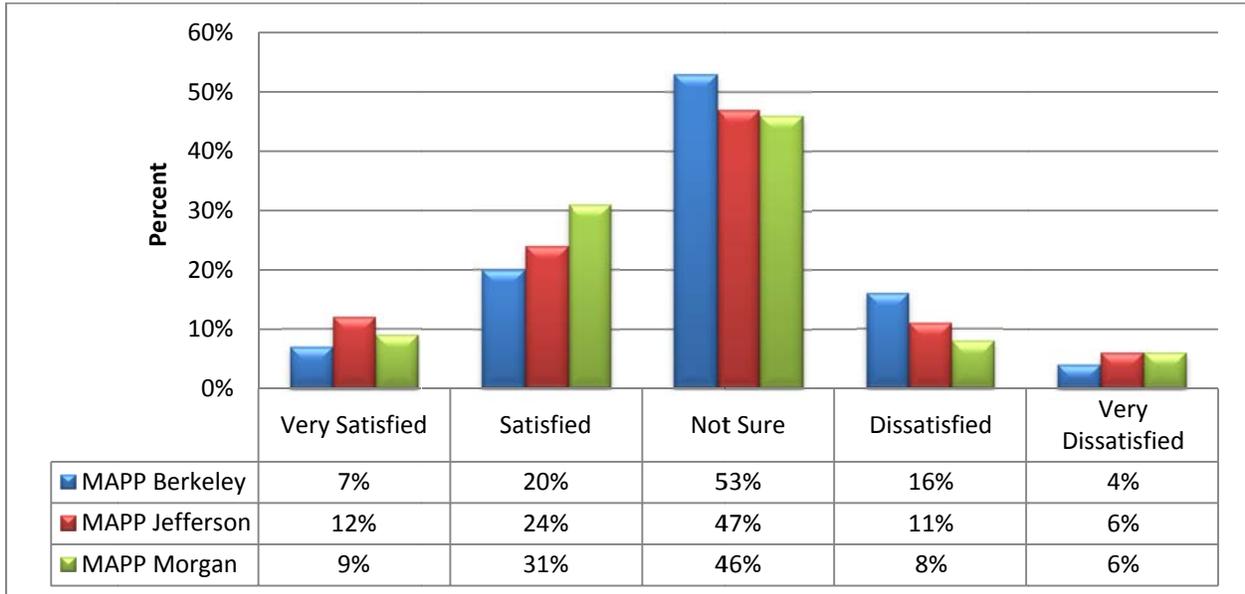


Chart 10: “How satisfied are you with the quality of after school programs in our county?”

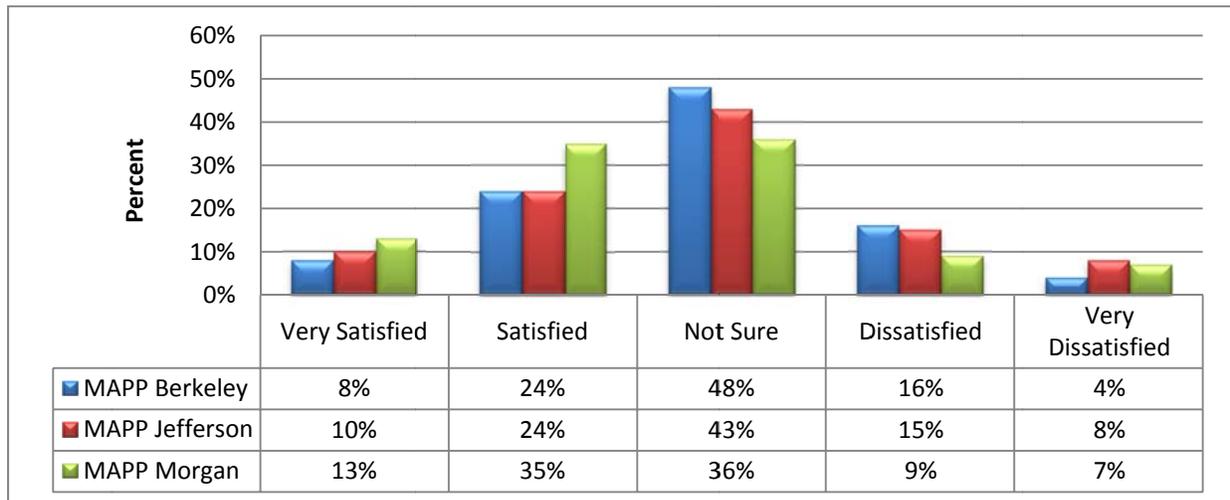


Chart 11: “How satisfied are you with the quality of recreation programs in our county?”

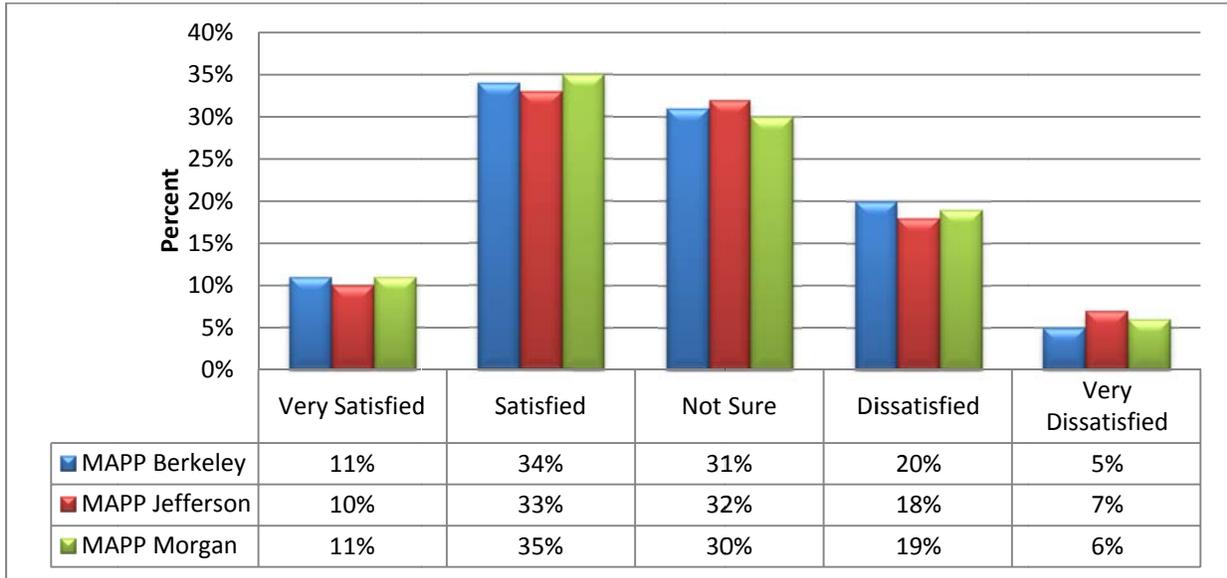


Chart 12: “How satisfied are you with transportation services in our county?”

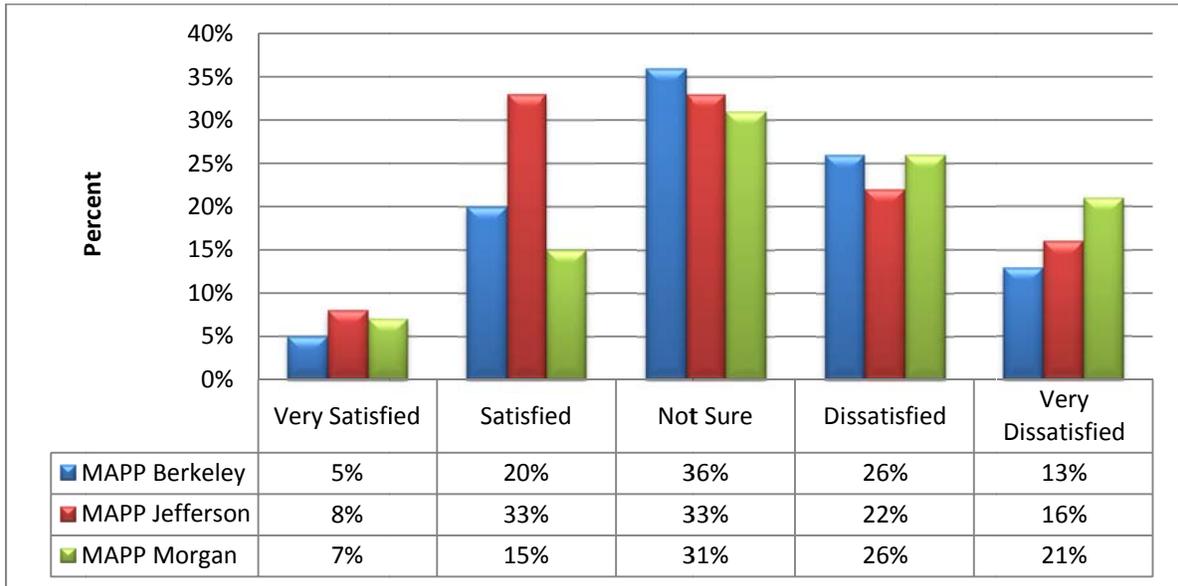


Chart 13: “How satisfied are you with programs that support senior citizens in our county?”

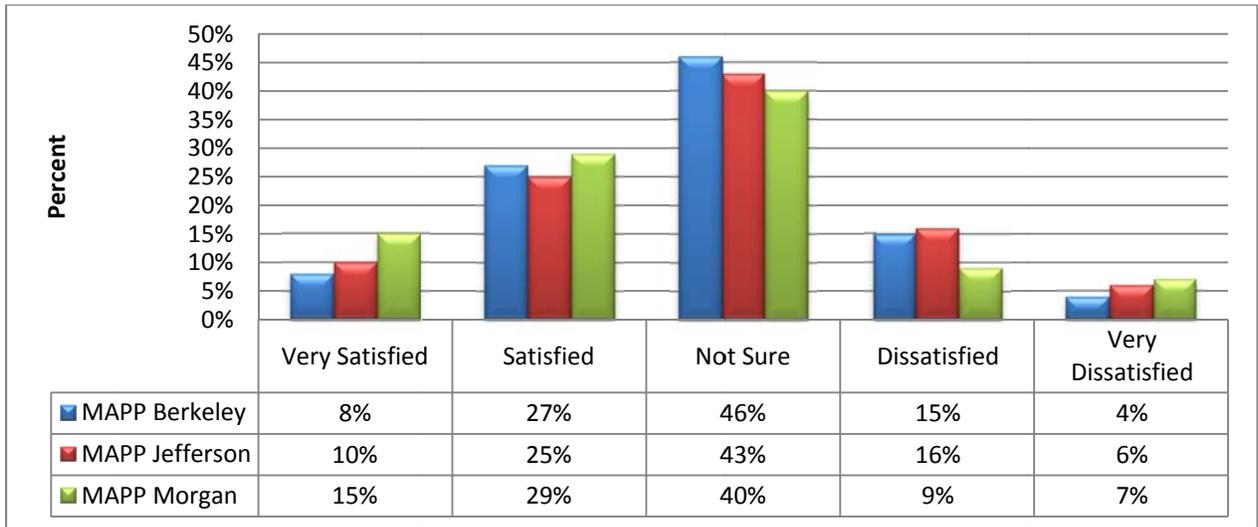


Chart 14: “How satisfied are you with jobs and career growth in our county?”

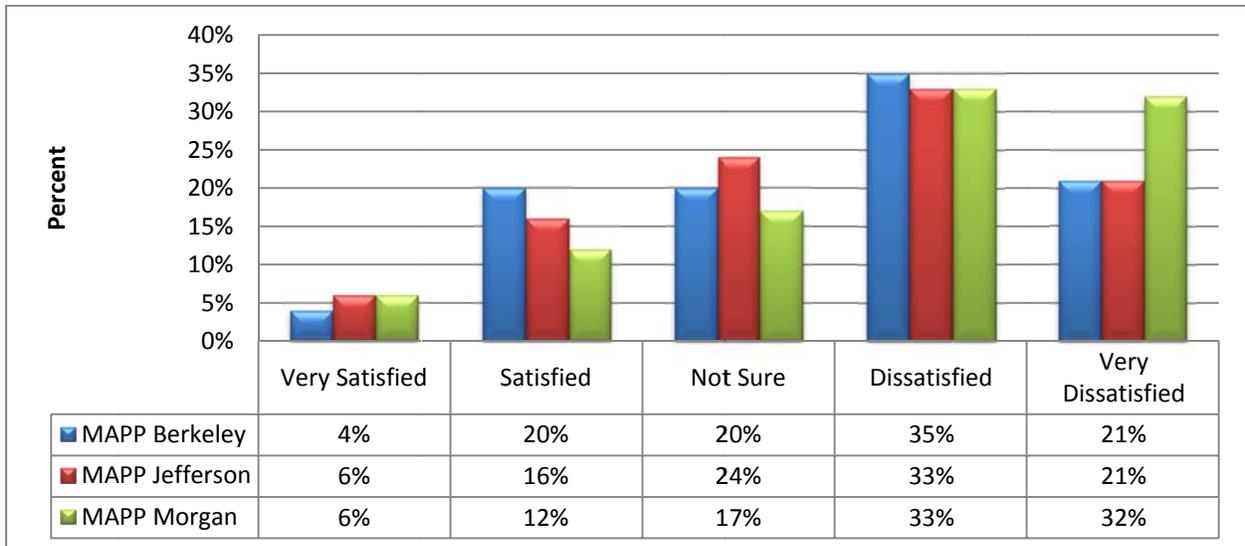


Chart 15: “How satisfied are you with job training programs in our county?”

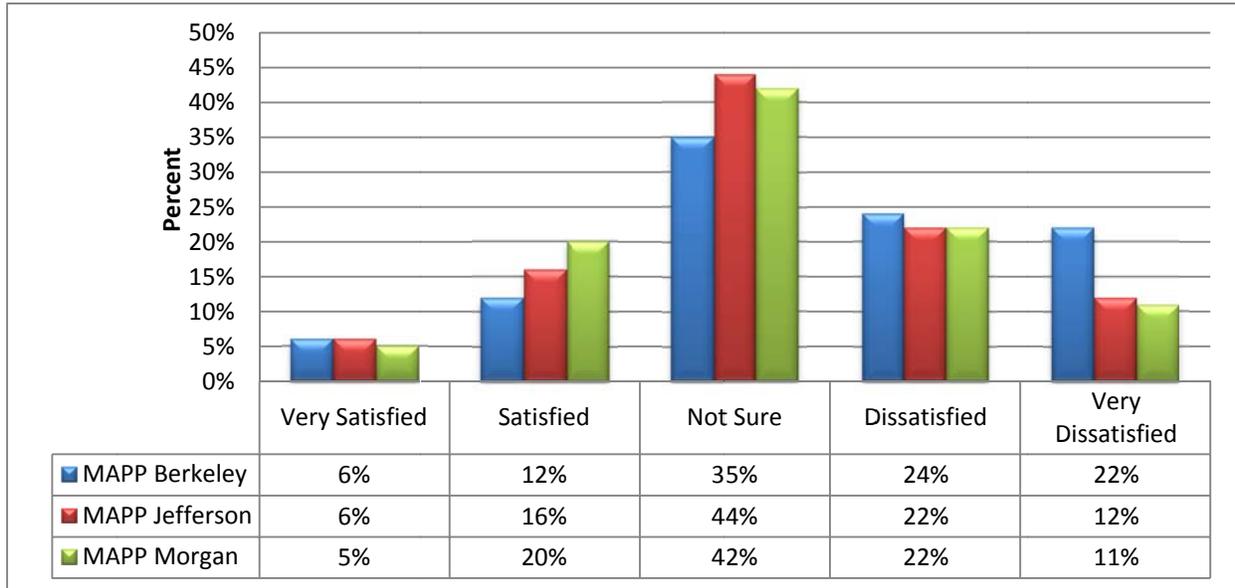


Chart 16: “How satisfied are you with higher education in our county?”

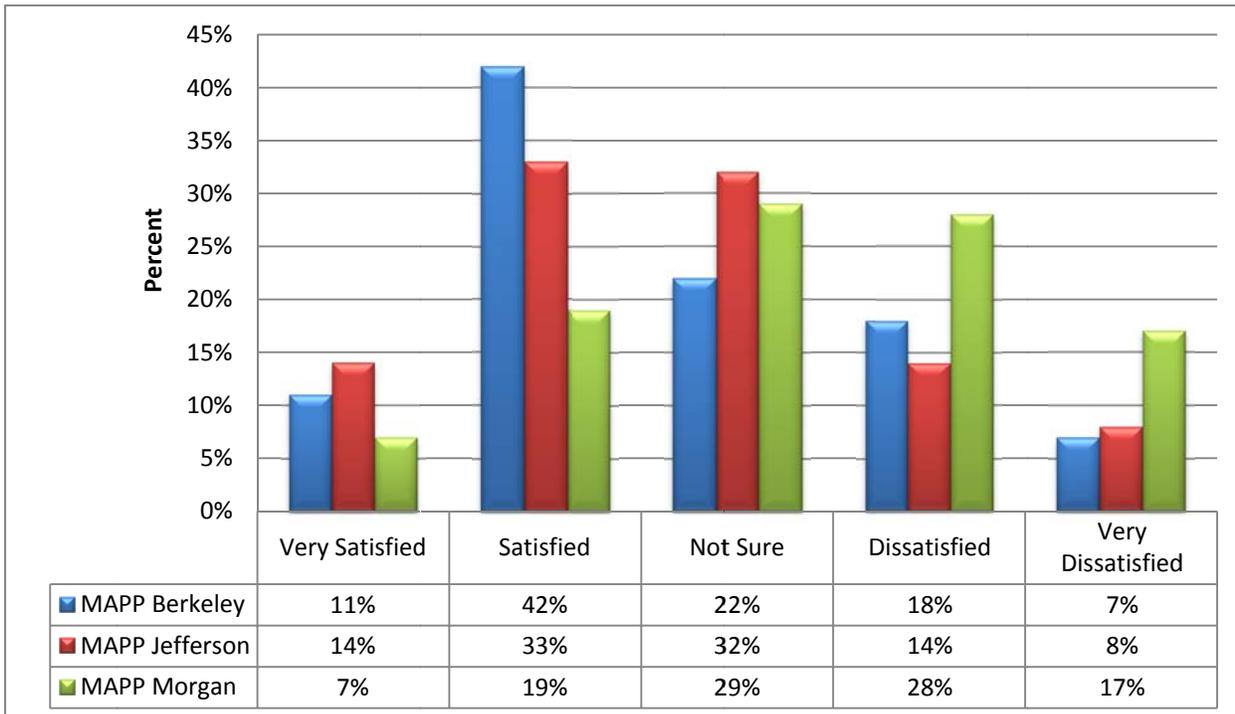


Chart 17: “How satisfied are you with availability of affordable housing in our county?”

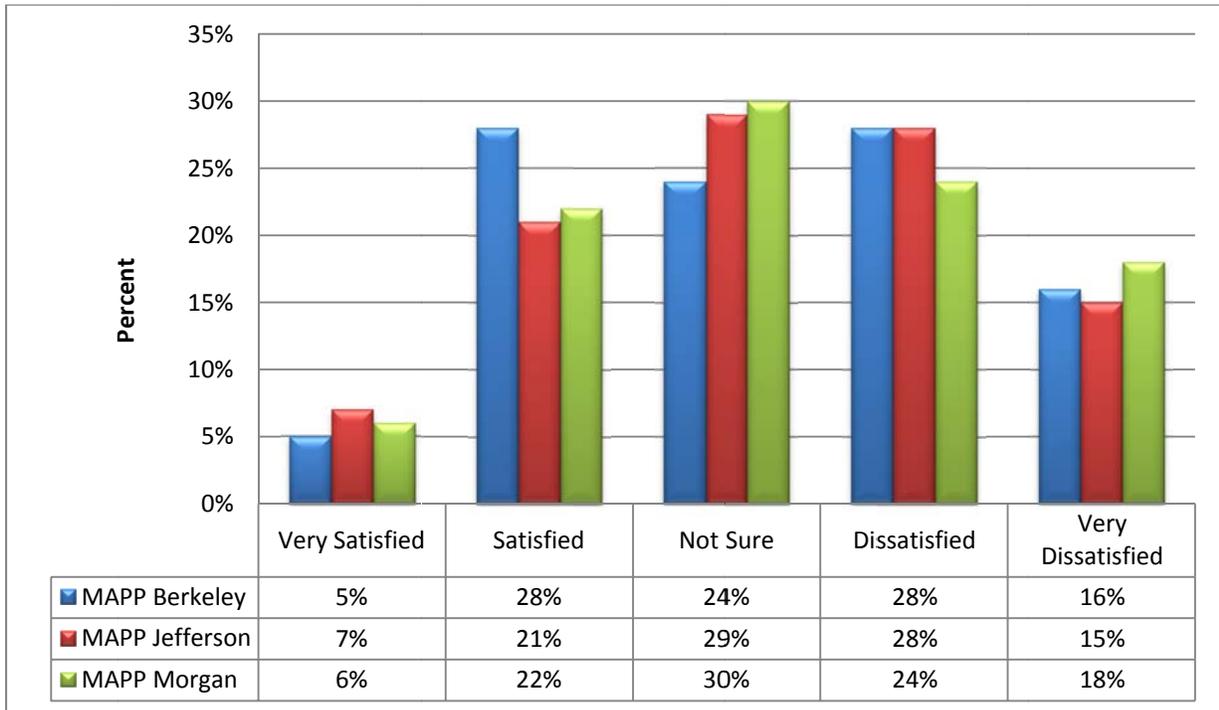


Chart 18: “How satisfied are you with how far you have to drive to work?”

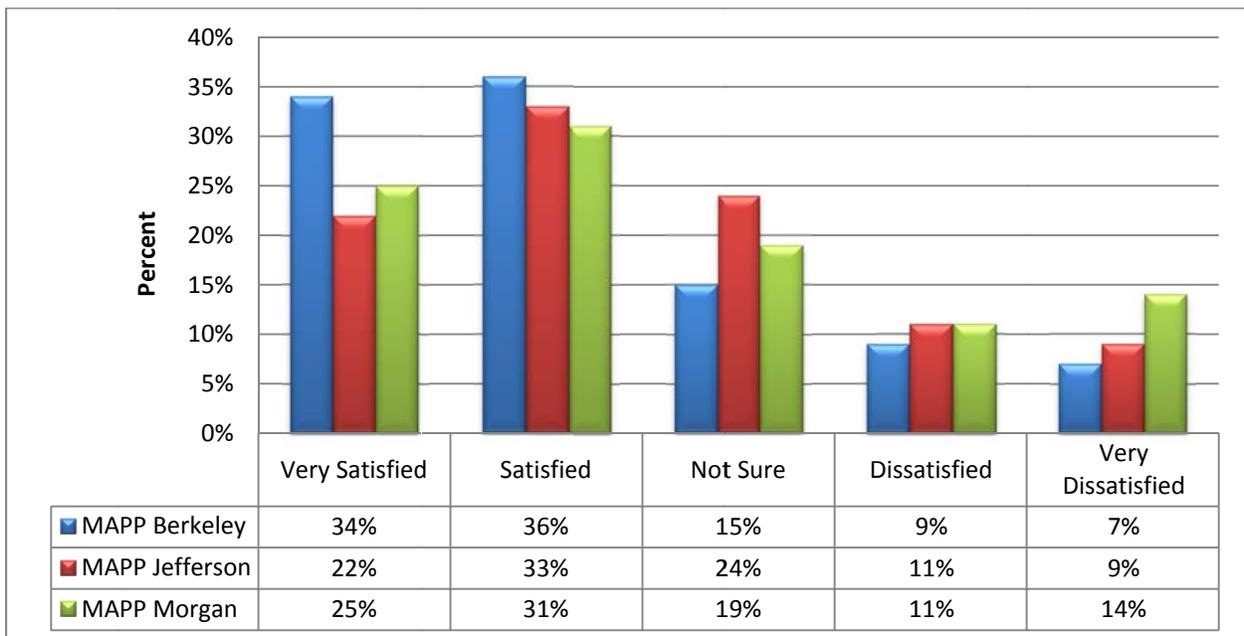


Chart 19: “How satisfied are you with our county’s outdoor air quality?”

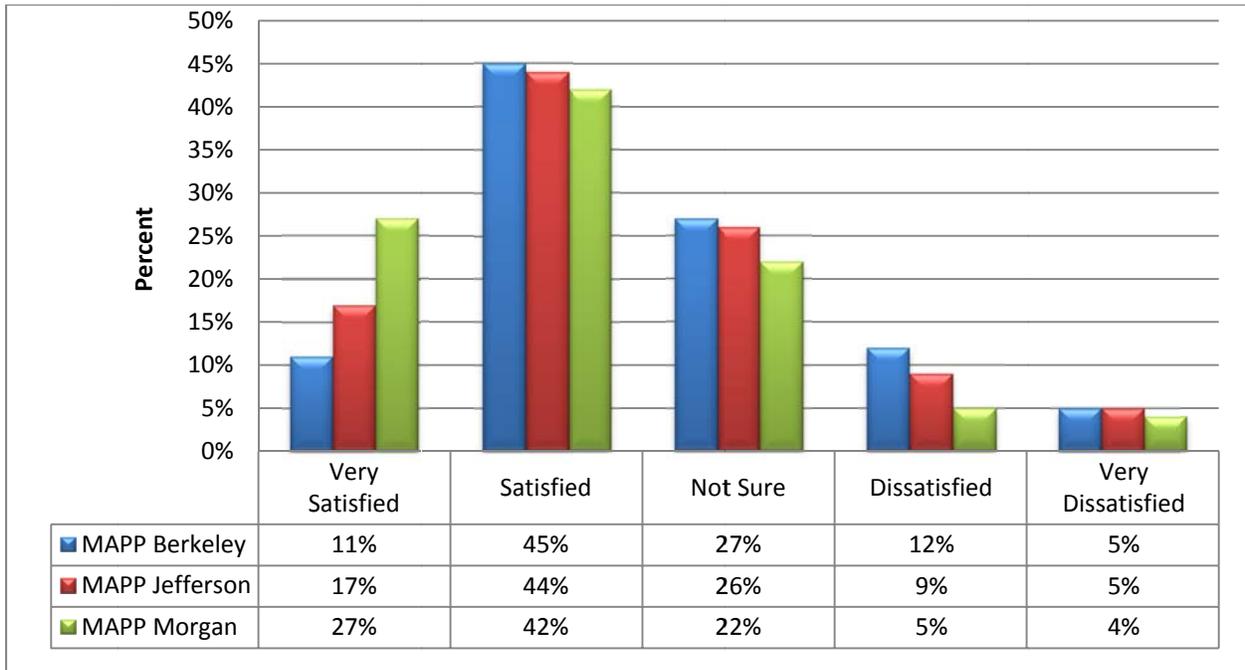


Chart 20: “How satisfied are you with the indoor air quality in public places?”

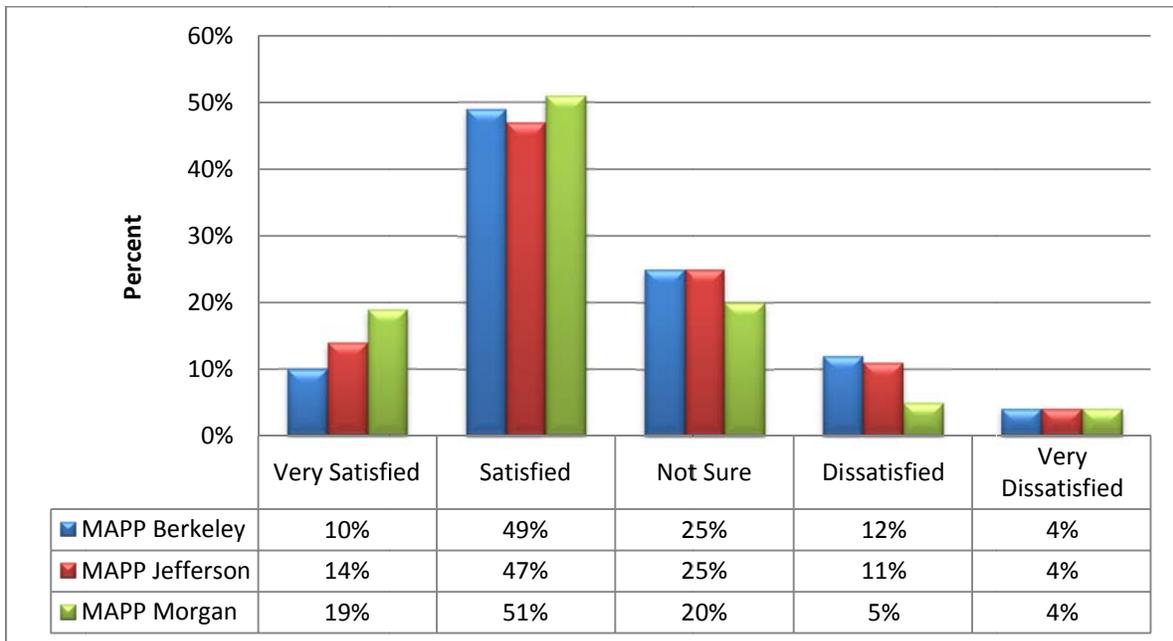


Chart 21: “How satisfied are you with the county’s public water supply quality?”

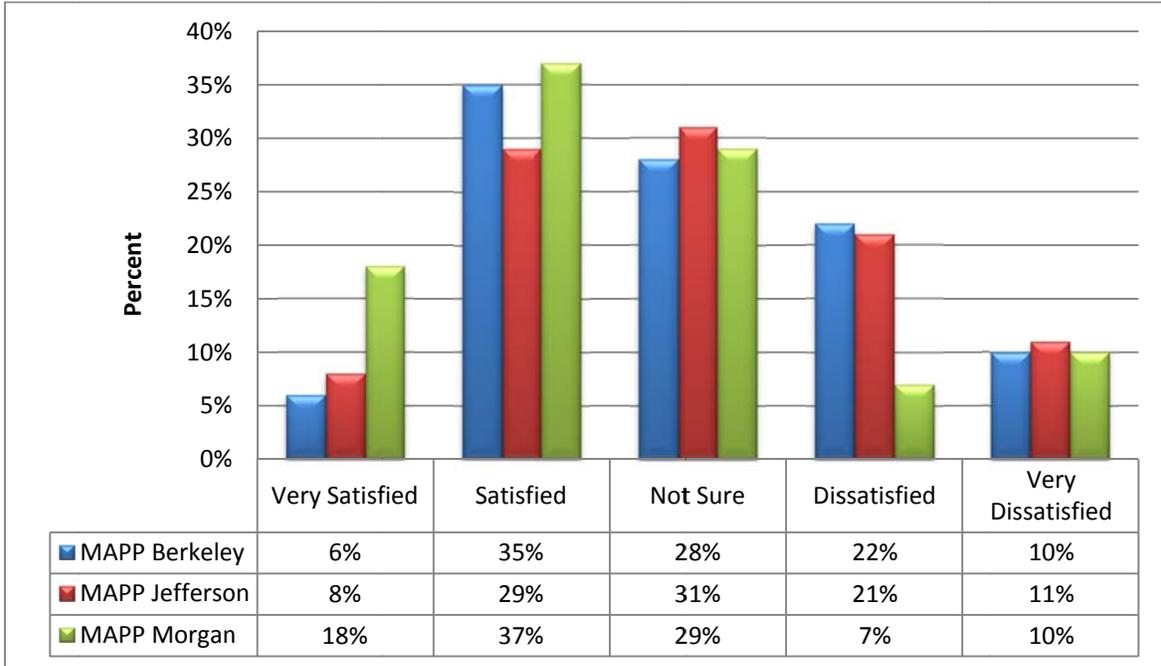


Chart 22: “How satisfied are you with the county’s well water supply quality?”

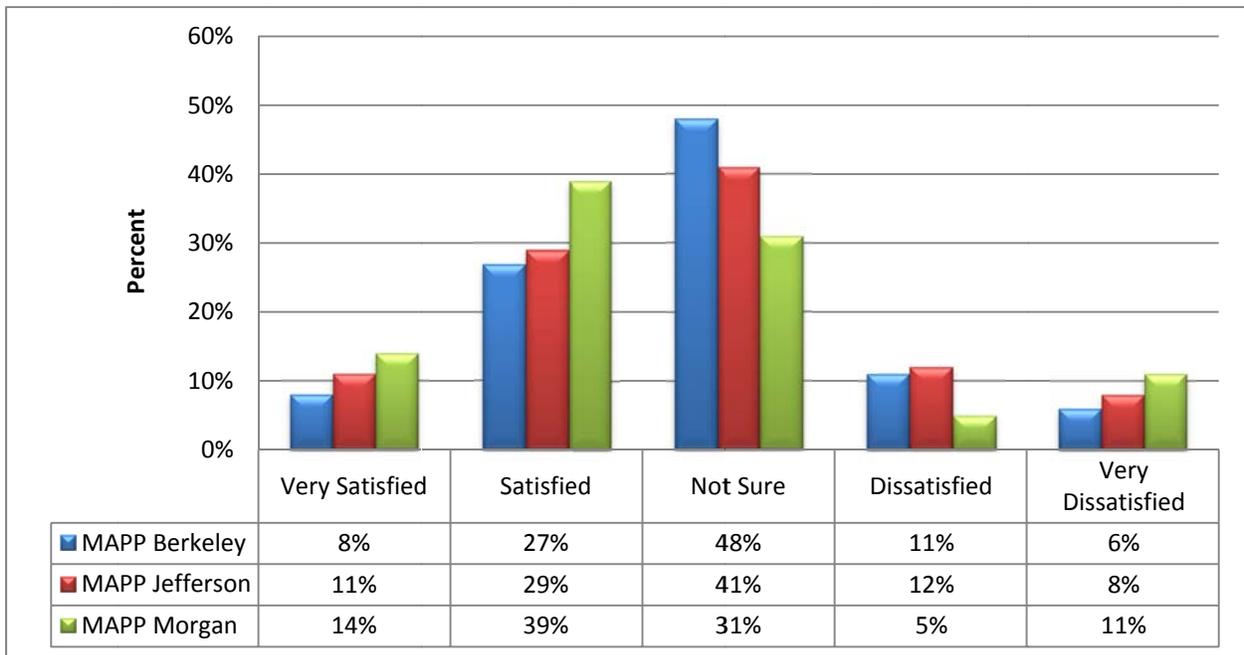
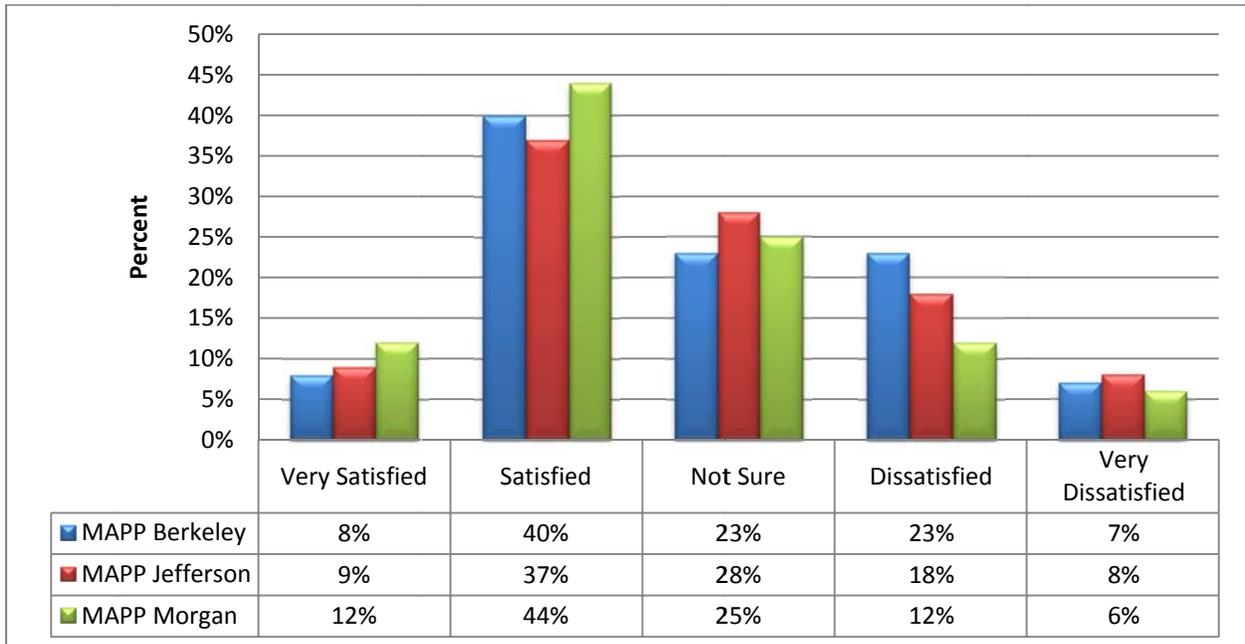


Chart 23: “How satisfied are you with the quality of public services related to environmental hazards (e.g. sewage, garbage collection, littering) in our county?”



Charts 24 – 26 show responses regarding key concerns about quality of life and health issues. Survey participants were asked to choose their top three responses from a list of issues.

Highlights:

- MAPP survey respondents in all three counties placed a high priority on “a good place to raise children” and “low crime and safe neighborhoods” in response to the question “What do you think are the three factors which most improve quality of life?”
- Substance abuse was identified as the most critical health and safety issue in all three counties (Berkeley County – 45%; Jefferson County – 37%; Morgan County – 51%). Obesity identified as the second most critical issue in all three counties.
- MAPP survey respondents in all three counties identified illegal drug abuse as the most important attitude or behavior that causes health problems (Berkeley County – 53%; Jefferson County – 50%; Morgan County - 61%).

Chart 24: “What do you think are the three factors which most improve your quality of life?”
 (Top six responses shown)

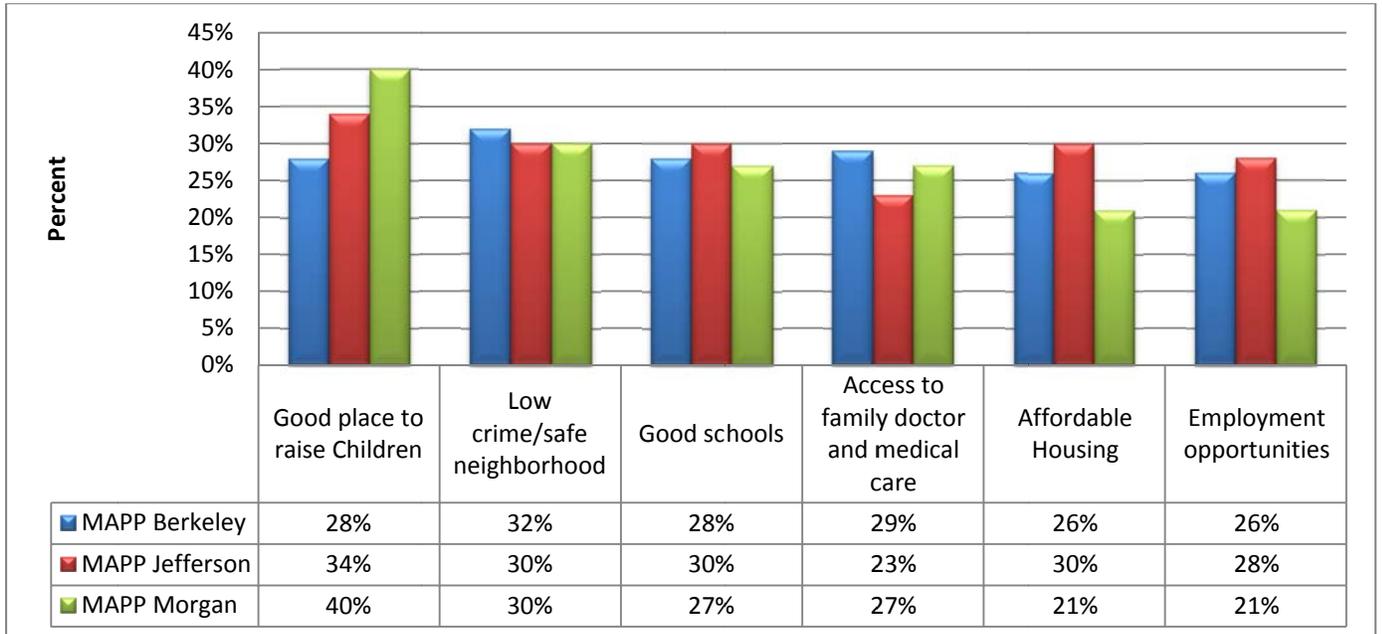


Chart 25: “In your opinion, which are the three most critical health and safety issues facing our county?”
 (Top six responses shown)

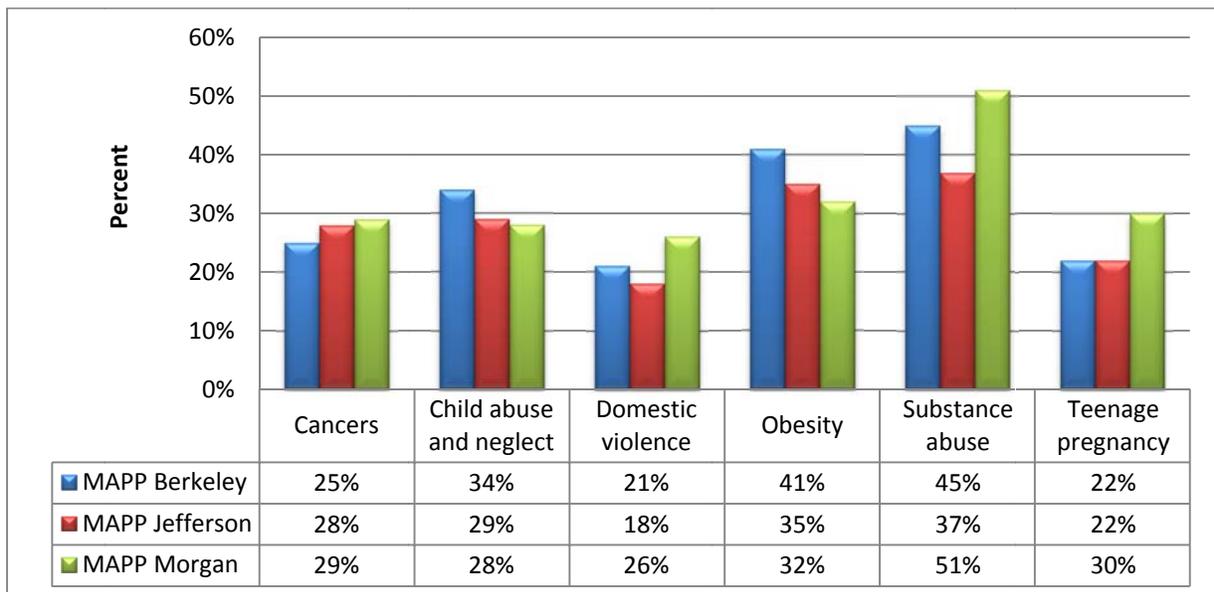
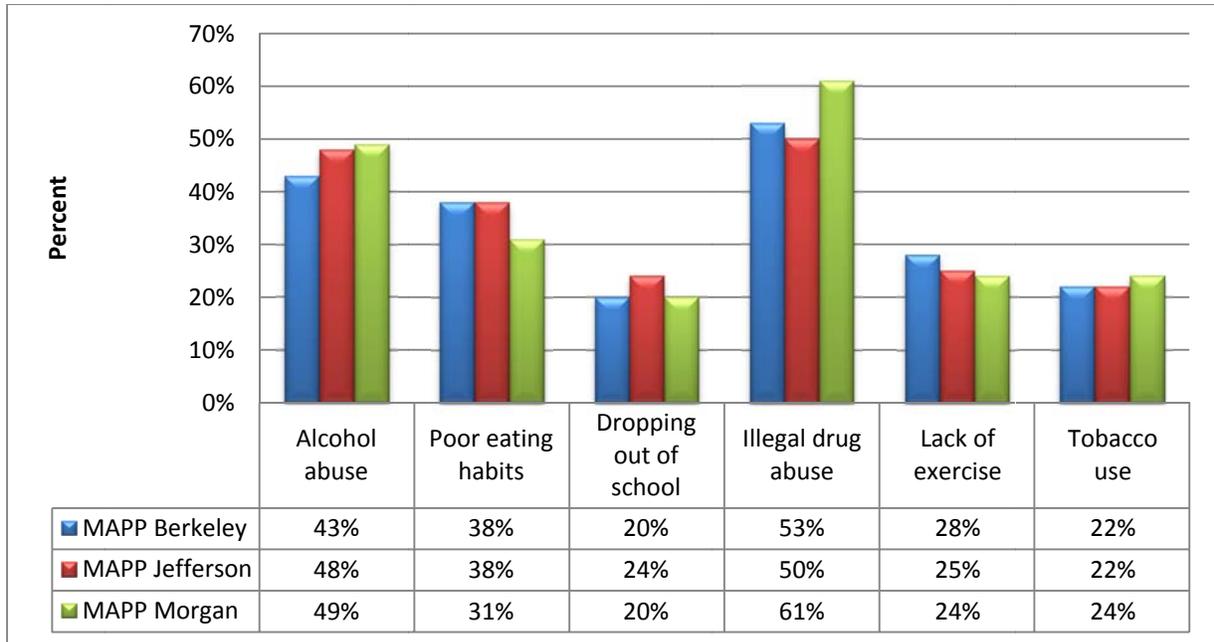


Chart 26: “What do you think are the three most important attitudes or behaviors that cause health problems in our county?”
 (Top six responses shown)



Health and Access to Health Care

Charts 27 – 32 show information about the respondents’ health and health care resources.

Highlights

- The majority of survey respondents indicated that they usually go to the doctor’s office when they are sick or need medical care (Berkeley County – 72%; Jefferson County – 63%; Morgan County – 72%). About one-third of respondents reported going to the emergency room, with a much higher percentage in Jefferson County (Berkeley County – 31%; Jefferson County – 45%; Morgan County – 35%).
- The majority of respondents replied “yes” in response to the question “Are you satisfied with your overall health?” (Berkeley County – 67%; Jefferson County – 65%; Morgan County – 60%).
- The cost of medical care, lack of insurance and the cost of prescription drugs were identified as the most common barriers to getting health care.
- Responses varied to the question “Where do you get information about health resources in our county?” Overall, MAPP survey respondents were most likely to depend on family.

Chart 27: “Where do you usually go when you are sick or need medical care? “
 (Respondents could check all that apply.)

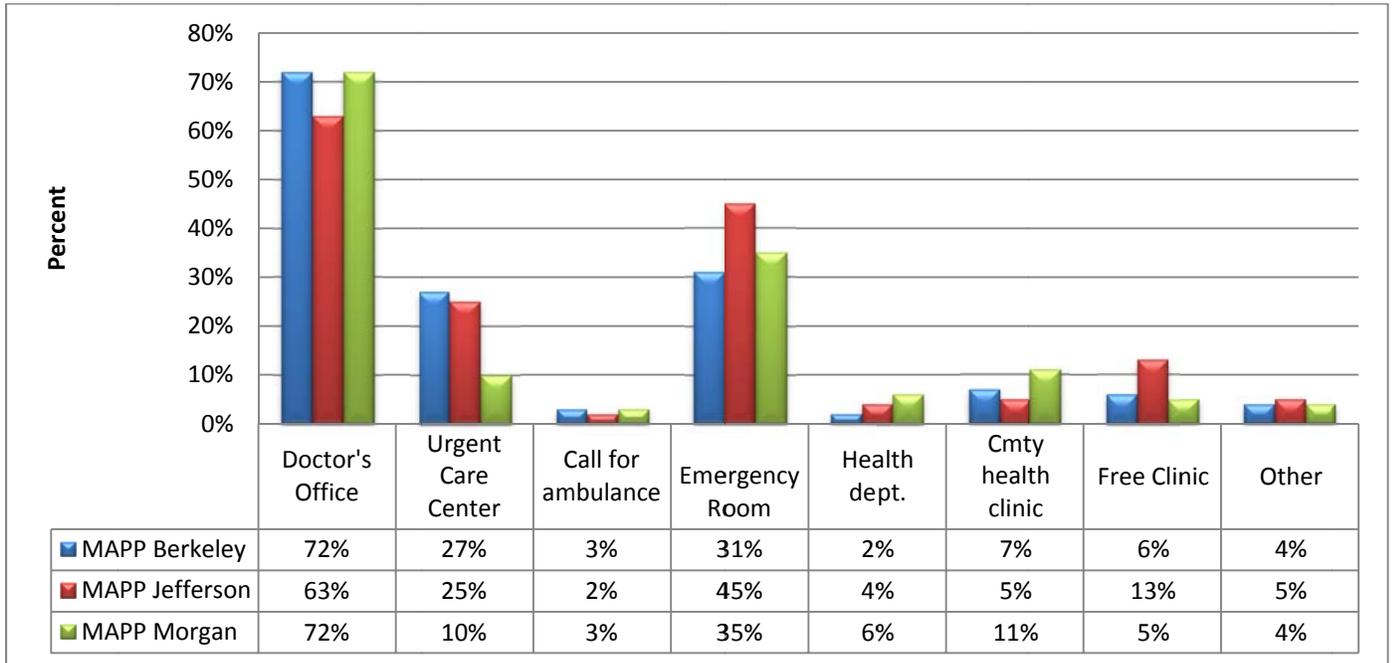


Chart 28: “Where do you usually go when you need dental care? “
 (Respondents could check all that apply.)

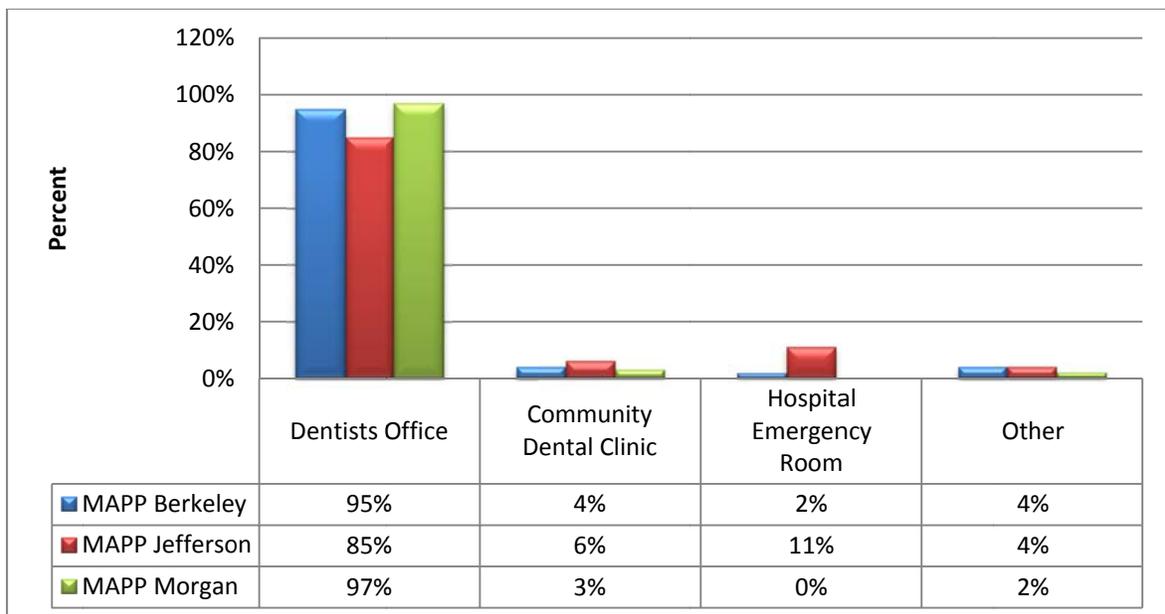


Chart 29: “Overall, how would you describe your health status?”

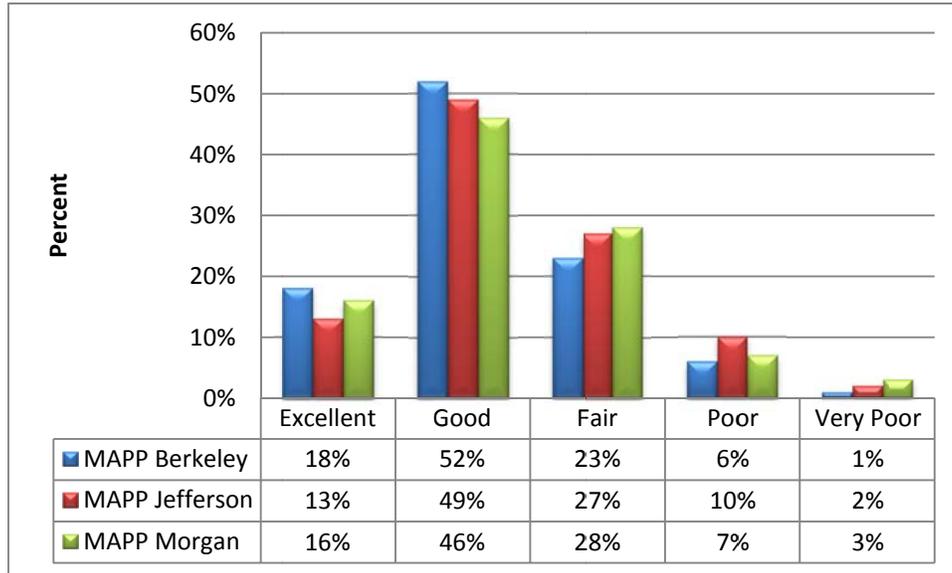


Chart 30: “Are you satisfied with your overall health?”

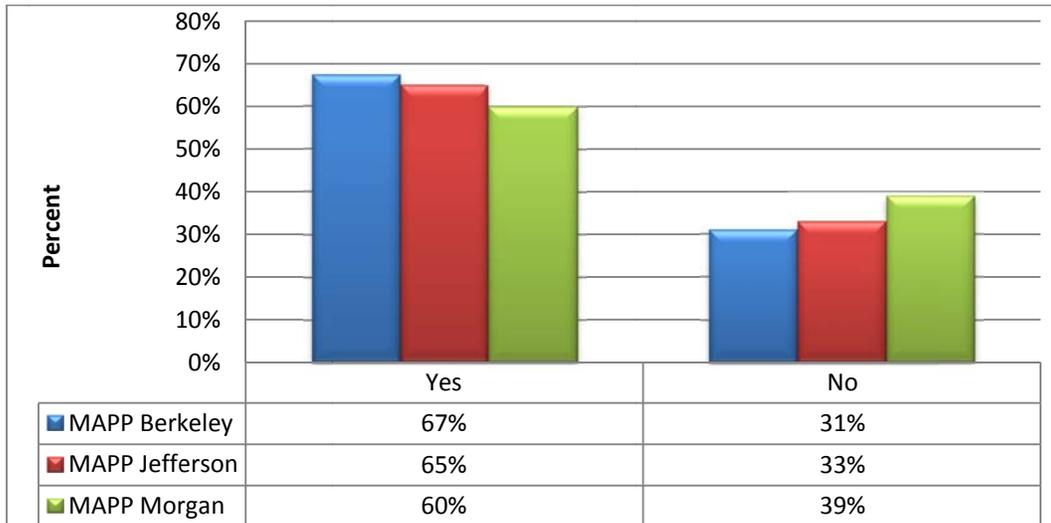


Chart 31: “What do you feel are the barriers to getting health care in our county?”
 (Top six answers)

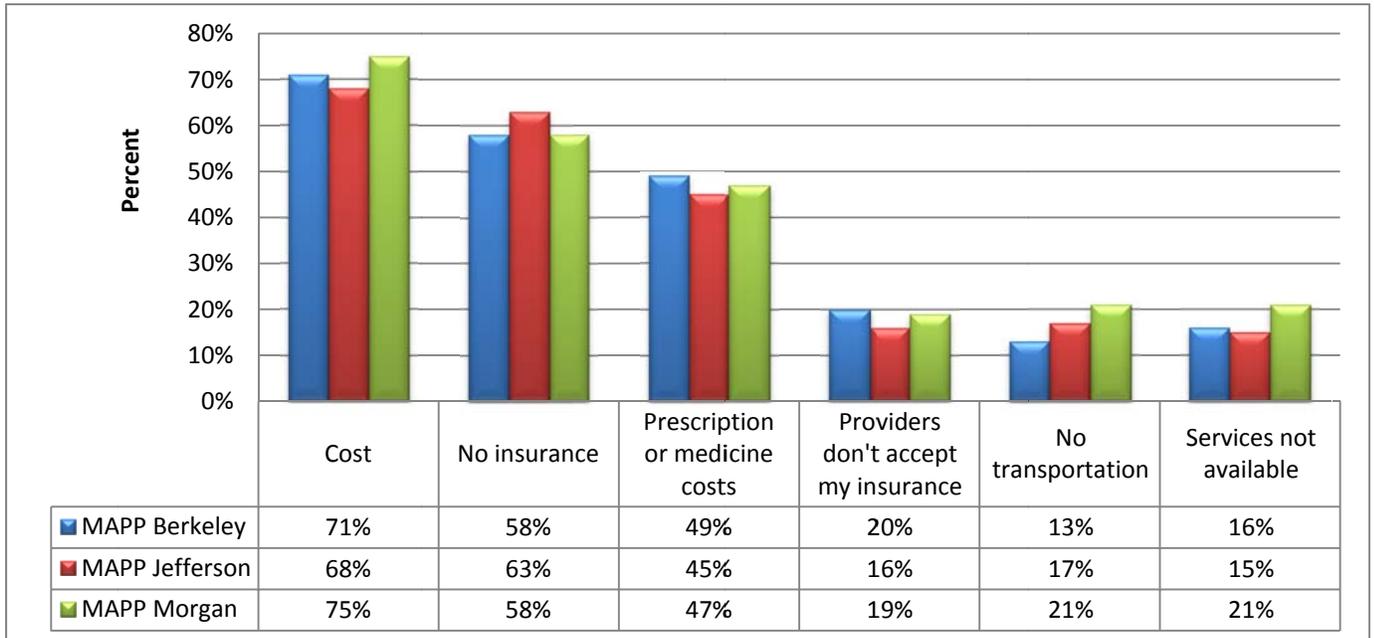
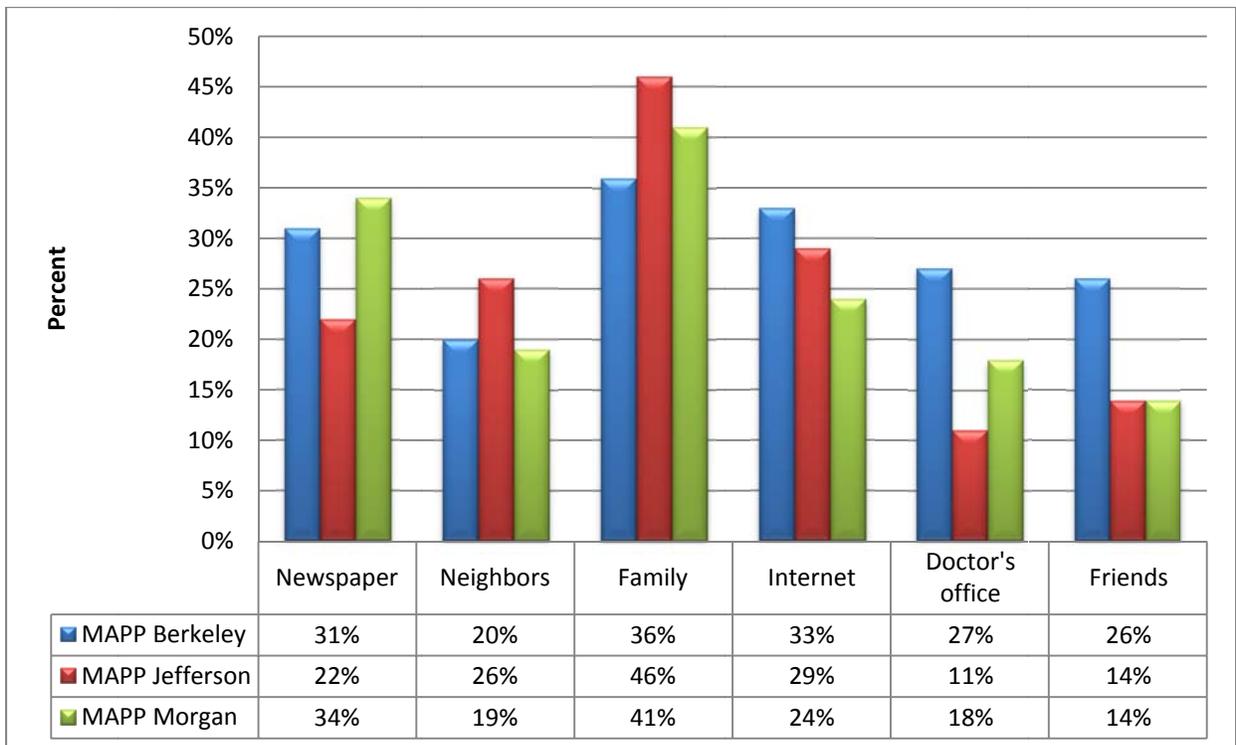


Chart 32: “Where do you get information about health resources in our county?”
 (Top six responses shown)



FORCES OF CHANGE FOCUS GROUPS AND KEY INFORMANT INTERVIEWS

Eighteen focus group and 28 key informant interviews were conducted with individuals representing health care, banking, advocacy and nonprofit and community organizations. Additional focus groups were conducted with hospital employees, administrative staff and clinicians. Common trends and themes across groups are reported.

The two most consistent themes were concerns about the economy and the issue of substance abuse in the region along with the lack of an inpatient treatment facility. While there were common positive themes and trends, for the most part, comments reflected a fairly negative impression of the health of residents of the Eastern Panhandle with serious concerns about behavioral health issues, lack of personal responsibility for health and relative uncertainty about the future of health care.

| <i>Common Identified Trends:</i> | <i>Common Forces:</i> |
|--|---|
| Increase in population and diversity | Economic changes |
| Fractured sense of community | Proximity to urban areas |
| Decrease in sense of personal responsibility among local residents | High rate of prescription drug use/abuse |
| Increase in substance abuse | High illegal/street drug use (heroin) |
| Increase in obesity and diabetes | Lack of behavioral health services |
| Decrease in local/state/federal funding | Lack of substance abuse treatment |
| Changes in economic base | Low paying/low skill jobs |
| More fast food eating patterns | Lack of transportation |
| Globalization | Interstate 81 influences |
| Uncertainty due to the Affordable Care Act and changes in local health care administration | Federal health care legislation |
| | Undervaluing education |
| | Distance from Charleston |
| | Lack of awareness of personal health issues |
| | Substance abuse |
| | New/expanding businesses |

| <i>Common Events:</i> | <i>Common Issues:</i> | <i>Common Barriers:</i> |
|------------------------------|--|--|
| New Route 9 completion | Illegal drug abuse | Lack of funding |
| Real Estate changes | Lack of mental health services | Lack of common vision |
| Local workforce changes | Local culture is resistance to/fearful of change | Lack of resiliency and hope |
| Unemployment | Fearful of “outsiders” | Lack of mental health services |
| Improving economy | Generational poverty | Lack of knowledge about health care reform |
| Healthy Smiles Dental Clinic | Lack of education | Lack of a unified vision |
| | Proximity to Washington DC and Baltimore | |
| | Low income residents | |
| | Lack of funding from all avenues | |
| | Personal health responsibility | |

PUBLIC HEALTH ASSESSMENT

| <i>Common Strengths:</i> | <i>Common Challenges:</i> |
|--|---|
| <ol style="list-style-type: none">1. Enforce public health laws2. Maintain competent public health work force3. Monitor health status and understand issues4. Investigate hazards in the community5. Develop public health plans and policies6. Engage with the community to identify and address public health issues. | <ol style="list-style-type: none">1. Evaluation of programs and processes2. Applying the evidence base of public health3. Promoting strategies to access health care services4. Informing the public about public health issues and functions. |

APPENDICES

Appendix A: US. Census Poverty Thresholds

This U.S. Poverty Threshold is used for statistical purposes and is estimated by the Census Bureau to report how many Americans live in poverty each year. The poverty threshold is also used as the official Federal poverty definition by the Office of Management and Budget (OMB). The Census Bureau uses a set of money income thresholds that vary by family size and composition to determine who is in poverty. If a family's total income is less than the family's threshold, then that family and every individual in it is considered in poverty. The official poverty thresholds do not vary geographically, but they are updated for inflation using Consumer Price Index). The official poverty definition uses money income before taxes and does not include capital gains or noncash benefits.

| 2010 Poverty Thresholds by Size of Family and Number of Related Children Under 18 Years | | | | | | | | | |
|---|-----------------------------|---------------------------------|----------|-----------|----------|----------|----------|----------|----------|
| Size of Family Unit | Weighted Average Thresholds | Related Children Under 18 Years | | | | | | | |
| | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| <i>One person (unrelated individual)</i> | \$11,139 | | | | | | | | |
| <i>Under 65 years</i> | \$11,344 | \$11,344 | | | | | | | |
| <i>65 Years and Over</i> | \$10,458 | \$10,458 | | | | | | | |
| <i>Two People</i> | \$14,218 | | | | | | | | |
| <i>Householder under 65</i> | 14,676 | \$14,602 | \$15,030 | | | | | | |
| <i>Householder 65+</i> | \$13,194 | \$13,180 | \$14,973 | | | | | | |
| <i>Three people</i> | \$17,374 | \$17,057, | \$17,552 | \$17,568 | | | | | |
| <i>Four people</i> | \$22,314 | \$22,491 | \$22,859 | \$22,113 | \$22,190 | | | | |
| <i>Five People</i> | \$26,439 | \$27,123 | \$27,518 | \$26,675 | \$26,023 | \$25,625 | | | |
| <i>Six People</i> | \$29,897 | \$31,197 | \$31,320 | \$30,675 | \$30,056 | \$29,137 | \$28,591 | | |
| <i>Seven People</i> | \$34,009 | \$35,896 | \$36,120 | \$35,347 | \$34,809 | \$33,805 | \$32,635 | \$31,351 | |
| <i>Eight People</i> | \$37,934 | \$40,146 | \$40,501 | \$39,.772 | \$39,133 | \$38,227 | \$37,076 | \$35,879 | \$35,575 |

Appendix B: Federal Poverty Level

The Federal Poverty Level is used not for statistical purposes but to determine who receives federal subsidies or aid as well as to provide financial guidelines for receiving assistance from health and social service organizations.

| 2010 Federal Poverty Level | |
|--|-------------------------------|
| Size of family unit | 100 Percent of Poverty |
| 1 | \$10,830 |
| 2 | \$14,570 |
| 3 | \$18,310 |
| 4 | \$22,050 |
| 5 | \$25,790 |
| 6 | \$29,530 |
| 7 | \$33,270 |
| 8 | \$37,010 |
| For families with more than 8 persons, add \$3,740 for each additional person. | |

Appendix C: Percent of Women who Smoked During Last Three Months of Pregnancy

| Percent of Women Who Smoked During The Last Three Months of Pregnancy³²⁷ | | | |
|--|--------------|--------------|--------------|
| | 2000 | 2005 | 2008 |
| Alabama | 14.0% | - | - |
| Alaska | 16.8% | 16.0% | 15.0% |
| Arkansas | 20.3% | 20.9% | 24.0% |
| Colorado | 10.2% | 10.2% | 8.1% |
| Delaware | - | - | 13.3% |
| Florida | 9.1% | 8.3% | - |
| Georgia | - | 10.3% | 8.1% |
| Hawaii | 8.4% | 8.4% | 8.5% |
| Illinois | 12.5% | 10.4% | 9.6% |
| Louisiana | 11.9 | - | - |
| Maine | 17.5% | 17.5% | 19.5% |
| Maryland | - | 10.0% | 10.9% |
| Massachusetts | - | - | 9.8% |
| Michigan | - | 15.8% | 16.0% |
| Minnesota | - | 15.6% | 11.6% |
| Mississippi | - | - | 15.6% |
| Nebraska | 14.0% | 15.2% | 14.0% |
| New Jersey | - | 6.7% | 6.8% |
| New Mexico | 9.3 | 8.6 | - |
| New York | 17.0% | 12.9% | 11.9% |
| New York City | - | 5.0% | - |
| North Carolina | 13.9% | 13.3% | 12.5% |
| Ohio | 17.1 % | 21.6% | 18.9% |
| Oklahoma | 16.9 | 19.6 | 16.9 |
| Oregon | - | 13.7% | 11.2% |
| Pennsylvania | - | - | 15.6% |
| Rhode Island | - | 11.7% | 10.8% |
| South Carolina | 12.4% | 14.9% | - |
| Tennessee | - | - | 19.7% |
| Utah | 7.3% | 5.1% | 5.16% |
| Vermont | - | 16.4% | 18.1% |
| Washington | 11.1% | 9.2% | 11.2% |
| West Virginia | 24.5% | 31.9% | 28.7% |
| Wisconsin | - | - | 13.2% |
| Wyoming | - | - | 16.1% |
| Overall | 13.2% | 12.2% | 12.8% |

³²⁷ <http://www.cdc.gov/prams/DATA-TobaccoTables.htm#n13>

Appendix D: MAPP Community Health Needs Assessment Survey

MAPP Community Health Needs Assessment Survey

1. Part 1: Quality of Life Questions

Please take a few moments to complete this survey. It should take approximately 10 minutes. The purpose of this survey is to get your opinions about health issues and quality of life in the Eastern Panhandle. We plan to collect this information and use it to develop a plan for improving health in the tricounty area. All responses are voluntary and kept confidential.

Please rate the Quality of Life questions according to your satisfaction level. Choose only one response.

1. How safe do you feel in our county?

- Very Safe
- Safe
- Not Sure
- Unsafe
- Very unsafe

2. How satisfied are you with opportunities to participate in community activities in our county?

- Very Satisfied
- Satisfied
- Not Sure
- Dissatisfied
- Very Dissatisfied

3. How satisfied are you with access to quality health care in our county?

- Very Satisfied
- Satisfied
- Not Sure
- Dissatisfied
- Very Dissatisfied

MAPP Community Health Needs Assessment Survey

4. How satisfied are you with health services in our county?

- Very Satisfied
- Satisfied
- Not Sure
- Dissatisfied
- Very Dissatisfied

5. How satisfied are you with the quality of schools in our county?

- Very Satisfied
- Satisfied
- Not Sure
- Dissatisfied
- Very Dissatisfied

6. How satisfied are you with the quality of day care in our county?

- Very Satisfied
- Satisfied
- Not Sure
- Dissatisfied
- Very Dissatisfied

7. How satisfied are you with the quality of after school programs in our county?

- Very Satisfied
- Satisfied
- Not Sure
- Dissatisfied
- Very Dissatisfied

8. How satisfied are you with recreation programs in our county?

- Very Satisfied
- Satisfied
- Not Sure
- Dissatisfied
- Very Dissatisfied

9. How satisfied are you with transportation services in our county?

- Very Satisfied
- Satisfied
- Not Sure
- Dissatisfied
- Very Dissatisfied

10. How satisfied are you with programs that support senior citizens in our county?

- Very Satisfied
- Satisfied
- Not Sure
- Dissatisfied
- Very Dissatisfied

11. How satisfied are you with jobs and career growth in our county?

- Very Satisfied
- Satisfied
- Not Sure
- Dissatisfied
- Very Dissatisfied

12. How satisfied are you with job training programs in our county?

- Very Satisfied
- Satisfied
- Not Sure
- Dissatisfied
- Very Dissatisfied

MAPP Community Health Needs Assessment Survey

13. How satisfied are you with higher education opportunities in our county?

- Very Satisfied
- Satisfied
- Not Sure
- Dissatisfied
- Very Dissatisfied

14. How satisfied are you with the availability of affordable housing in our county?

- Very Satisfied
- Satisfied
- Not Sure
- Dissatisfied
- Very Dissatisfied

15. How satisfied are you with how far you have to drive to work?

- Very Satisfied
- Satisfied
- Not Sure
- Dissatisfied
- Very Dissatisfied

16. How satisfied are you with our county's indoor air?

- Very Satisfied
- Satisfied
- Not Sure
- Dissatisfied
- Very Dissatisfied

17. How satisfied are you with the indoor air quality in public places?

- Very Satisfied
- Satisfied
- Not Sure
- Dissatisfied
- Very Dissatisfied

MAPP Community Health Needs Assessment Survey

18. How satisfied are you with our county's public water supply quality?

- Very Satisfied
- Satisfied
- Not Sure
- Dissatisfied
- Very Dissatisfied

19. How satisfied are you with our county's well water supply?

- Very Satisfied
- Satisfied
- Not Sure
- Dissatisfied
- Very Dissatisfied

20. How satisfied are you with the quality of public services related to environmental hazards (e.g. sewage, garbage collection, littering) in our county?

- Very Satisfied
- Satisfied
- Not Sure
- Dissatisfied
- Very Dissatisfied

2. Key Concerns

In the following three questions, we ask that you check only three responses. Only the first three responses you check will be recorded.

MAPP Community Health Needs Assessment Survey

1. What do you think are the three health facts which most improve your quality of life? Please choose only 3.

- | | |
|---|---|
| <input type="checkbox"/> Access to family doctor and medical care | <input type="checkbox"/> Good place to raise children |
| <input type="checkbox"/> Access to full service grocery store | <input type="checkbox"/> Good schools |
| <input type="checkbox"/> Access to healthy foods | <input type="checkbox"/> Indoor recreational facilities |
| <input type="checkbox"/> Access to public transportation | <input type="checkbox"/> Long life expectancy |
| <input type="checkbox"/> Affordable housing | <input type="checkbox"/> Low crime/safe neighborhood |
| <input type="checkbox"/> Arts and cultural events | <input type="checkbox"/> Organized activities for seniors |
| <input type="checkbox"/> Clean environment | <input type="checkbox"/> Organized teen events |
| <input type="checkbox"/> Cost of living | <input type="checkbox"/> Outdoor recreational facilities |
| <input type="checkbox"/> Economic growth | <input type="checkbox"/> Parks and green spaces |
| <input type="checkbox"/> Emphasis on family values | <input type="checkbox"/> Presence of higher educational institution |
| <input type="checkbox"/> Employment opportunities | <input type="checkbox"/> Pro-business environment |
| <input type="checkbox"/> Ethnic and racial diversity | <input type="checkbox"/> Religious or spiritual values |
| <input type="checkbox"/> Other (please specify) | |

2. The following problems exist in most communities. In your opinion, which are the three most critical health and safety issues facing our county? Please choose only 3.

- | | |
|---|--|
| <input type="checkbox"/> Aging problems (e.g. arthritis, hearing/vision loss, etc.) | <input type="checkbox"/> Motor vehicle crash injuries |
| <input type="checkbox"/> Cancers | <input type="checkbox"/> Infant death |
| <input type="checkbox"/> Child abuse/neglect | <input type="checkbox"/> Other infectious disease (e.g. hepatitis, TB, etc.) |
| <input type="checkbox"/> Dental problems | <input type="checkbox"/> Mental health problems |
| <input type="checkbox"/> Diabetes | <input type="checkbox"/> Substance abuse |
| <input type="checkbox"/> Domestic Violence | <input type="checkbox"/> Rape/sexual assault |
| <input type="checkbox"/> Firearms related injuries | <input type="checkbox"/> Respiratory/lung disease |
| <input type="checkbox"/> Obesity | <input type="checkbox"/> Sexually Transmitted Diseases (STDs) |
| <input type="checkbox"/> Heart disease and stroke | <input type="checkbox"/> Suicide |
| <input type="checkbox"/> High blood pressure | <input type="checkbox"/> Teen pregnancy |
| <input type="checkbox"/> HIV/AIDS | <input type="checkbox"/> Terrorist activities |
| <input type="checkbox"/> Other | |

3. In the following list, what do you think are the three most important attitudes or behaviors that cause health problems in our county? (Those behaviors and attitudes which have the greatest negative impact on overall county health.) Please choose only 3

- | | |
|--|--|
| <input type="checkbox"/> Alcohol abuse | <input type="checkbox"/> Not using birth control |
| <input type="checkbox"/> Apathy/lack of community | <input type="checkbox"/> Not using seat belts/child safety seats |
| <input type="checkbox"/> Dropping out of school | <input type="checkbox"/> Poor eating habits |
| <input type="checkbox"/> Illegal drug abuse | <input type="checkbox"/> Prescription drug abuse |
| <input type="checkbox"/> Lack of exercise | <input type="checkbox"/> Racism/prejudice |
| <input type="checkbox"/> Lack of prenatal care | <input type="checkbox"/> Tobacco use |
| <input type="checkbox"/> No preventive medical screening | <input type="checkbox"/> Unsafe sex |
| <input type="checkbox"/> Not getting "shots" to prevent diseases/no vaccines | <input type="checkbox"/> Unsecured firearms |
| <input type="checkbox"/> Other (please specify) | |

3. County Health Questions

Please answer these questions about your health and health care resources in our county.

1. Where do you usually go when you are sick or need medical care? Please check all that apply.

- | | |
|--|---|
| <input type="checkbox"/> Doctor's office | <input type="checkbox"/> County Health Department |
| <input type="checkbox"/> Urgent Care Center | <input type="checkbox"/> Community Health Clinic |
| <input type="checkbox"/> Call for an ambulance | <input type="checkbox"/> Free Clinic |
| <input type="checkbox"/> Hospital Emergency Room | |
| <input type="checkbox"/> Other (please specify) | |

2 Where do you go when you need dental care? Please check all that apply.

- | | |
|--|--|
| <input type="checkbox"/> Community Dental Clinic | <input type="checkbox"/> Hospital Emergency Room |
| <input type="checkbox"/> Dentist's Office | |
| <input type="checkbox"/> Other (please specify) | |

MAPP Community Health Needs Assessment Survey

3. Overall, how would you describe your health status? Please choose one.

- Excellent
- Good
- Fair
- Poor
- Very Poor

4. Are you satisfied with your overall health?

- Yes
- No
- If not, why not?

5. What do you feel are the barriers to getting health care in our county? Please check all that apply.

- | | |
|--|---|
| <input type="checkbox"/> Too much paperwork | <input type="checkbox"/> No transportation |
| <input type="checkbox"/> Cost | <input type="checkbox"/> No doctor/staff speak my language |
| <input type="checkbox"/> No insurance | <input type="checkbox"/> Fear or distrust of health care system |
| <input type="checkbox"/> Prescription or medicine cost | <input type="checkbox"/> Services not available |
| <input type="checkbox"/> Providers don't accept my insurance | <input type="checkbox"/> No appointments outside work hours |
| <input type="checkbox"/> Other | |

MAPP Community Health Needs Assessment Survey

6. Where do you get information about health resources in our county?

- | | |
|---|---|
| <input type="checkbox"/> School | <input type="checkbox"/> Community health referral line |
| <input type="checkbox"/> TV | <input type="checkbox"/> Family |
| <input type="checkbox"/> Community bulletin or newsletter | <input type="checkbox"/> Internet |
| <input type="checkbox"/> Hospital referral line | <input type="checkbox"/> Doctor's Office |
| <input type="checkbox"/> Church | <input type="checkbox"/> Dentist's Office |
| <input type="checkbox"/> Newspaper | <input type="checkbox"/> Telephone Book |
| <input type="checkbox"/> Neighbors | <input type="checkbox"/> Friends |
| <input type="checkbox"/> Radio | |
| <input type="checkbox"/> Other (please specify) | |

3. Demographic Information

Please answer the following questions about you and your household to complete the survey. All responses are kept.

1. What is your zip code?

2. Please select the county in which you live.

- Berkeley
- Jefferson
- Morgan

Other (please specify)

3. What is your age?

4. What is your sex or gender?

- Female
- Male
- LGTB (Lesbian, Gay, Transgender, Bisexual)

MAPP Community Health Needs Assessment Survey

5. What is your household income?

- | | |
|---|---|
| <input type="checkbox"/> Less than \$20,000 | <input type="checkbox"/> \$80,000 to \$99,999 |
| <input type="checkbox"/> \$20,000 to 39,000 | <input type="checkbox"/> \$100,000 to \$119,999 |
| <input type="checkbox"/> \$40,000 to \$59,999 | <input type="checkbox"/> Over \$120,000 |
| <input type="checkbox"/> \$60,000 to \$79,999 | |

- Or what is your hourly pay rate and the number of hours you work each week?

6. How many people live in your household, including adults and children?

7. Tell us about your job status. Please check one.

- I work full time
- I work part-time
- I am unemployed
- I am self-employed
- I am retired
- Other

Appendix E: Forces of Change – Focus Group Questions

Forces of Change Focus Group Questions

- What has occurred recently that may affect the health of our community or the local public health system?
- What may occur in the future?
- Are there any trends occurring that will have impact? Describe the trends
- What forces are occurring locally, regionally, nationally, globally that might impact our counties?
- What characteristics of our area or state may pose an opportunity or threat?
- What may occur or has occurred that may pose a barrier to achieving the shared vision?]
- What do you think are the three factors which most improve your quality of life?
- Which are the three most critical health and safety issues facing our county?
- What do you think are the three most important attitudes or behaviors that cause health problems in our county?

Appendix F: Forces of Change – Key Informant Interview Form

KEY INFORMANT INTERVIEW
Community Themes & Strengths Assessment
Eastern Panhandle MAPP

Interviewer’s Initials: _____

Date: _____ Start time: _____ End time: _____

Name: _____ Title: _____

Agency/Organization: _____

of years living in _____ County: _____ # of years in current position: _____

Introduction: Good morning/afternoon. My name is [interviewer’s name].

I am... (Introduce yourself) Thank you for taking time out of your busy day to speak with me. Please know that I understand how valuable your time is. I’ll try to keep our time to 60 minutes, but we may find that we run over – up to 90 minutes total - once we get into the interview. Is now still a good time for us to speak?

We are gathering this information to help us develop a plan to improve health and quality of life in the Eastern Panhandle. Input from the community and its leaders are essential to this process. Surveys, focus groups and key informant interviews are being used to engage community members.

You have been selected for a key informant interview because of your knowledge, insight and familiarity with the community. The themes that emerge from these interviews will be summarized and made available to the public; however, individual interviews will be kept strictly confidential.

To get us started, can you tell me briefly about the work that you and your organization do in the community? [Allow time for them to answer the question – ask clarifying questions and summarize when they are done]

Thank you. Next I’ll be asking you a series of questions about health and quality of life in _____ County. As you consider these questions, keep in mind the broad definition of health adopted by the World Health Organization: *'Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity,'* while sharing the local perspectives you have from your current position and from experiences in this community

Questions:

1. In general, how would you rate health and quality of life in _____ County?
2. In your opinion, has health and quality of life in _____ County improved, stayed the same, or declined over the past few years?
3. Why do you think it has (based on answer from previous question: improved, declined, or stayed the same)?
4. What other factors have contributed to the (based on answer to question 2: improvement, decline or to health and quality of life staying the same)?
5. Are there people or groups of people in _____ County whose health or quality of life may not be as good as others?
 - a. Who are these persons or groups (whose health or quality of life is not as good as others)?
 - b. Why do you think their health/quality of life is not as good as others?
6. What barriers, if any, exist to improving health and quality of life in _____ County?
7. In your opinion, what are the most critical health and quality of life issues in _____ County?
8. What needs to be done to address these issues?
 - Possible probe: What specific actions, policy or funding priorities would you support because they would contribute to a healthier _____ County?
9. In your opinion, what else will improve health and quality of life in _____ County?-
10. Is there someone (who) you would recommend as a “key informant” for this assessment?

Name: _____ Contact: _____

Close: Thanks so much for sharing your concerns and perspectives on these issues. The information you have provided will contribute to develop a better understanding about factors impacting health and quality of life in our community. Is there anything that you would like to add before we conclude the interview?

As a reminder, summary results will be made available by the Eastern Panhandle MAPP and used to develop a community-wide health improvement plan. Should you have any questions, please feel free to contact _____ at _____. Thank you very much for sharing your thoughts about the community. Your input is valuable and I appreciate your generosity of time and information.

Appendix G: Local Health Department Self -Assessment

Local Health Department Standards Self-Assessment

*Please rate how well your County Health Department accomplishes all of the goals of the NACCHO standards.
Please use the following scale:*

A. Fully successful B. Largely successfully C. Somewhat successful D. Failing

1. Monitor health status and understand health issues facing the community _____

Collect and Maintain Population Health Data
Analyze Public Health Data
Use Data for Public Health Action

Observations or comments _____

2. Investigate hazards within the community _____

Investigate Health Problems and Environmental Public Health Hazards
Contain/Mitigate Health Problems and Environmental Public Health Hazards
Maintain Provision for Epidemiological, Laboratory, and Support Response Capacity
Maintain Policies for Communication

Observations or comments _____

3. Inform and educate about public health issues and functions _____

Provide Prevention and Wellness Policies, Programs, Processes, and Interventions
Communicate Information on Public Health Issues and Functions

Observations or comments _____

4. Engage with the community to identify and address health problems _____

Engage the Public Health System and the Community in Identifying and Addressing Health Problems
Engage the Community to Promote Policies to Improve the Public's Health

Observations or comments _____

5. Develop public health policies and plans _____

- Establish, Promote, and Maintain Public Health Policies
- Develop and Implement a Strategic Plan
- Conduct a Community Health Improvement Planning Process
- Maintain All Hazards/Emergency Response Plan

Observations or comments _____

6. Enforce public health laws and regulations _____

- Maintain Up-to-Date Laws
- Educate About Public Health Laws
- Conduct Enforcement Activities

Observations or comments _____

7. Promote strategies to improve access to healthcare services _____

- Assess Healthcare Capacity and Access to Healthcare Services
- Implement Strategies to Improve Access to Healthcare Services

Observations or comments _____

8. Maintain a competent public health workforce _____

- Maintain a Qualified Public Health Workforce
- Maintain a Competent Public Health Workforce

Observations or comments _____

9. Evaluate and continuously improve processes, programs, and interventions _____

- Evaluate the Effectiveness of Public Health Processes, Programs, and Interventions
- Implement Quality Improvement

Observations or comments _____

10. Contribute to and apply the evidence base of public health _____

Identify and Use Evidence-Based and Promising Practices
Promote Understanding and Use of Research

Observations or comments _____
