BEAVERHEAD COUNTY

COMMUNITY NEEDS ASSESSMENT

2012 - 2013
CONTACT INFORMATION

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ACKNOWLEDGEMENTS

The Beaverhead County Public Health Department, the local agency charged with protecting and encouraging population-level health, embarked upon a county-wide planning process for public health in June of 2012. The process began with an assessment of public health needs, the purpose of which was to inform public health policy and priorities into the future and set a course for improving the health of Beaverhead County citizens. Results of the assessment can be found in Chapters one and two of this document. Information gathered and analyzed served as the foundation for a Community Health Improvement Plan (CHIP), included as Appendix B of this document, which will ultimately help direct important public resources to areas of greatest need.

The planning process relied upon the expertise, wisdom and knowledge of numerous community members and organizations. Broad participation that occurred throughout the process was necessary to make the assessment and planning process representative of important issues facing Beaverhead County. The work was made possible by funding from the Beaverhead County Public Health Department, the District XII Human Resources Council, Beaverhead County United Way and Barrett Hospital and Healthcare. The process involved broad participation from citizens, local government and organizations. A debt of gratitude is owed to the 110 community members and 24 organizations who gave valuable and scarce time to make this assessment and resulting plan a reality. (See Appendix D for a list of participants.)
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CHAPTER ONE: INDICATORS OF PUBLIC HEALTH
I. INTRODUCTION

This section of the Beaverhead County Health Needs Assessment examines a series of factors affecting public health. The examination is intended to inform stakeholders involved in the community planning process about the status of public health as they set out to create a vision and related goals for healthy communities in Beaverhead County. It provides information at the population-level related to geographic, demographic, socioeconomic, environmental, behavioral and general health factors. While these factors can stand alone in an analysis, they are also linked to population health outcomes. Thus, in reviewing the information, attention should be given to ways in which such things as the social environment and geography affect public health. Additionally, attention should be given to the link between land use and public health, recognizing the importance of community design to health of citizens and the necessary collaboration between public health officials and county planners.

II. METHODOLOGY/DATA SOURCES

The approach taken to this public health analysis was to examine factors that indicate patterns and behaviors on a population level. The report relies entirely upon secondary data analysis with no primary data generated. Data contained in this section was the most recent available at the time of the analysis and draws from a number of sources that address population and demographics, economics, housing and health related outcomes. The U.S. Census Bureau was a primary source for population, demographic, economic and housing data. The Census Estimates program was source for poverty and health insurance data. Woods & Pool Economics, Inc. is sourced for population projections. The Montana Department of Labor and Industry was a source for labor statistics. Other sources cited are the Montana Board of Crime Control and the Montana Office of Public Instruction. For health-related outcomes, sources included the County Health Rankings produced by a partnership between the Robert Wood Johnson Foundation and the University of Wisconsin Madison which compiles community health status reports based on a national Behavioral Risk Factor Surveillance System survey, the Montana Department of Public Health and Human Services and the U.S. Department of Health and Human Services. Local organizations providing data include the Western Montana Mental Health Center and the Butte Community Health Center. The Centers for Disease Control and Prevention was a source of national health-related data as was the National Cancer Institute, the American Association of Suicidology, the National Institute of Mental Health and the United Health Foundation. A number of scholarly publications were relied upon to provide deeper context to some of the discussions provided in the document. Sources are specifically cited throughout the document as end notes.
III. KEY FINDINGS

DEMOGRAPHIC CHARACTERISTICS AND FACTORS
- The Beaverhead County population is projected to increase by 14% by 2040, reaching a population of 10,547 by 2040.
- Along with overall growth, the county will experience significant growth in the number of people 65 years of age and older which will represent one of the most significant public health challenges for the county. By 2030, seniors will comprise 27.57% of the total population.

SOCIOECONOMIC CHARACTERISTICS AND FACTORS
- With higher rates of poverty and a higher proportion of low-income households than is seen in Montana and the nation overall, a greater proportion of the county population is at risk for poor health outcomes. The child poverty rate, at 25.3%, which is several points higher than state and national rates means that health development for over one-fourth of county children is at risk.

HOUSING FACTORS
- There is a housing affordability factor in Beaverhead County that is reflected in data showing that 41% of households have a housing cost burden, which means they are paying more than 30% of their income for housing.
- As the baby boom segment of the population ages, there will be a greater need for housing options to meet their needs; that demographic group tends to prefer housing options that include aging in their homes and living close to amenities.
- The county has two housing condition factors for public health consideration. First, 61.5% of were homes built prior to the enactment of lead paint standards; lead paint, when pathways of human absorption exist, can pose health problems, particularly for children. Second, 18.48% of the county’s housing units are mobile homes; an estimated 40% of the mobile homes were constructed prior to enactment of the National Manufactured Homes Safety Standards in 1976.

HEALTH RISK BEHAVIORS
- There are indicators that point to the need for focus and intervention is some health behavior areas. In a report entitled “Ranking of Counties by Severity of Targeted Health Behaviors” Beaverhead County was ranked number 1 among Montana Counties for the suicide rate per 100,000, prescription drug death per 1,000, drug arrest per 1,000, DUI’s per 1,000, liquor law violations per 1,000, and the percent of car crashes involving alcohol. Suicide and depression rates are significantly higher than national rates with particular environmental risk factors present including a higher proportion of senior citizens, being a rural area, and having a higher proportion of low-income households.
- The chlamydia occurrence rate has been up and down over the last six years, but increased significantly in 2012 going from 14 cases to 45.
YOUTH BEHAVIORS

- Youth in Beaverhead County appear to have a number of environmental risk factors at work that place a high percentage of them at high risk for problem behavior by 12th grade. Youth engaging in use of alcohol and other substances appears to grow from 8th grade to 12th and the percentage of youth using alcohol is higher in 12th grade that it is for the state overall and an 8-state norm. However, the community also has some important protective factors at work that help offset the risk, including community and peer opportunities for pro-social involvement and family attachment.
- The number of juvenile crimes in Beaverhead County increased 137% between 2009 and 2011 going from 49 to 116. The rate reached a five-year high of 109.4 per 1,000 in 2011 and then dropped significantly in 2012 to 75.5 per 1,000 (80 crimes).
- The teen birth rate is among the lowest in the state of Montana.

PREVENTION/WELLNESS BEHAVIORS

- An area of wellness that raises a public health concern is that 21% of adults are physically inactive, a behavior that contributes to poor health outcomes including obesity. Although lower than the national percentage, 23% of county residents are considered obese.
- Women have a relatively high rate of engagement in prevention and wellness activities in the county. 69% of pregnant women entering prenatal care in the first trimester, 88.2% of women 18 years of age and older receiving pap smear services and 69% of women 67-69 years of age having had mammograms.
- An area for improvement is in the area of diabetic screening; 77% of diabetic Medicare patients had blood sugar screenings in the last year compared with 79% for Montana and the national benchmark of 89%.

HEALTH RANKING AND OUTCOMES

- In the 2012 County Health Rankings, Beaverhead County ranked 18 out of 47 counties in Montana with consideration given to one mortality and four morbidity factors as well as ten health categories.
- The leading cause of death in the county is heart disease and the associated death rate is higher than the state and national rates.
- The cancer incidence rate at 405.1 per 100,000 is lower than both the state and national rates; lung cancer is the most commonly occurring form of cancer in the county.
- 11% of the county population reported “poor to fair health” in the 2012 survey; this is up from 9% in the 2010 survey and compares with 13% for Montana overall and the 8% national benchmark.

ACCESS TO HEALTHCARE

- An estimated 26.9% of the Beaverhead County population under 65 years of age have no form of health insurance which limits access to healthcare.
- Beaverhead County is designated as a Dental Health Professional Shortage Area with a dental shortage designation specific to the low-income population.
- The county is also designated as a Health Professional Shortage area for mental health services.
- The Big Hole Basin and Lima areas are designated as ‘medically underserved’.
IV. OVERARCHING RURAL HEALTH FACTORS

Beaverhead County is a vast agricultural county with a population density of 1.7 people per square mile, which qualifies it as a “frontier county” through the United States Department of Health and Human Services, Bureau of Primary Health Care. In this rural area and for rural communities across the United States, people are faced with many of the same health care challenges confronting the rest of the nation including rising health care costs, high numbers of uninsured and underinsured and an overextended health care infrastructure. But, the challenges are even greater in rural communities due to some unique trends.

First, access to healthcare is currently more inhibited in rural areas. Since the late 1990s, rural areas have witnessed a significant decline in jobs with higher rates of employer-sponsored health insurance while gaining jobs with much lower rates of employer-sponsored coverage. Lack of employer-sponsored health insurance is particularly acute for low-skilled jobs, which are more common in rural areas. The problem is also impacted by the fact that the rural economy is more likely to be based on self-employment and small businesses. Healthcare access may improve across the nation with changes mandated by the National Affordable Care Act, many of the components of which will take effect in 2014. If the intended results play out from the national policy changes, all individuals will have health insurance coverage, which should improve access to services for all.

Access in rural areas is also inhibited by a shortage of health care providers. More than a third of rural Americans live in Health Professional Shortage Areas. Nearly 82 percent of rural counties are classified as Medically Underserved Areas. All of Montana’s rural healthcare organizations—whether a community health center, rural health clinic, sole community hospital, Critical Access Hospital, nursing home, assisted living facility or home health agency—face a shortage of healthcare professionals and workers. Recruitment of medical professionals is made difficult by the geographic isolation as urban areas offer more amenities and collegial support for professionals.

Lack of access to mental health services is a critical issue for rural areas. Over half of the counties in the United States have no mental health professionals, a situation that has changed little in 45 years; the prevalence of major depression is significantly higher among rural than among urban populations and research has shown that for rural patients in need of mental health care, specialty general medical care is significantly more likely to be provided than specialty mental health care. Since patients receiving care in the specialty mental health sector are substantially more likely to receive adequate care than patients receiving care in the general medical sector, this indicates that rural individuals are receiving poorer quality care.

Delivery of emergency medical services (EMS) in rural areas presents challenges. EMS workers are often the first-line medical and health care providers in rural areas. Because of the demographic and health care system issues outlined here, EMS have had placed on them growing demands and health care responsibilities...
which can be difficult to meet, particularly because, at the same time, many rural EMS providers are underfunded and facing workforce and volunteer shortages.\textsuperscript{ix}

Rural areas across the United States are also facing demographic shifts that impact healthcare and health outcomes. Chief among them is an aging population.\textsuperscript{x} By 2030, Montana is projected to rank sixth among states for the percentage of people 65 and older.\textsuperscript{xii} This is of particular concern because two-thirds of people with chronic disease in the United States are 65 years of age or older.\textsuperscript{xii}

Finally, with regard to health outcomes, more rural people suffer from chronic conditions such as arthritis, asthma, heart disease, diabetes, hypertension and mental disorders than urban residents. The differences are not always large, but they are consistent.\textsuperscript{xii} As public health officials and communities in Southwest Montana plan for ways to improve health outcomes, these are some of the overarching issues that are impacting all rural areas and which should be factored into health improvement plans.

### V. COUNTY DEMOGRAPHIC FACTORS

#### 1.0 Population Trends

Beaverhead County is geographically the largest county in Montana. With a land area of 5,543.2 square miles and a current population of 9,246 (2010 Census), the overall population density is 1.7 people per square mile, giving the county “frontier status” through the U.S. Department of Health and Human Services, Bureau of Primary Health Care. The population has been in a growth trend since 1950, gaining over 2,700 people over a 60 year period. The trend continued during the last 10 years, growing 2.43% between the 2000 and 2010 decennial census count. (Refer to Figure 1.)

The upward growth trend is projected to continue with an increase of 14% projected into 2040 and the population reaching 10,500.\textsuperscript{xiv}

Just more than half of the Beaverhead County population resides outside of the two incorporated towns of Dillon and Lima. An estimated 65% - 70% of the county population is located within Dillon and a 10-mile radius of the city.\textsuperscript{xv} (Refer to Figures 2 and 3.)

The distribution of half the population outside incorporated town over the vast county presents challenges to the emergency response system. Additionally, it creates a barrier to healthcare access as people must travel long distances, to some extent on secondary highways, to access health services. Winter weather conditions that can
persist for up to nine months out of the year, add a further complication to travel and, therefore, healthcare access.

2.0 Characteristics of the Population

2.1 Race/Ethnicity
The Beaverhead County population is primarily comprised of people claiming “white” as one race (98.4%). There are small numbers of people of Asian descent (0.4%), Native Hawaiian or Pacific Islander (0.4%), American Indian/Alaska Native (0.4%) and Black or African American (0.2%) in the County. According to the U.S. Census Bureau, 3.7% of the population claims a Hispanic or Latino ethnicity. The County has a seasonal migrant population associated with agricultural work that is primarily made up of people with Hispanic or Latino ethnicity. A small migrant health clinic serves this population in the city of Dillon.

2.2 Age
Age distribution is an important factor in public health planning as different age groups have different healthcare needs. Age distribution in Beaverhead County is reflective of two primary influences that set it apart from the national distribution. First, as a community with a college, there is a higher proportion of people between the ages of 19 and 24 relative to the total population than there is in the general U.S. population. (Refer to Figure 4.) This population may impact the need for services to address contraception and sexually transmitted diseases. With regard to the younger adult age cohorts, the potential child-bearing population is also a factor for public health planning as this
group draws upon services often provided by public health agencies. In Beaverhead County, 24% of the total female population is between the ages of 20 and 39.

The second major influence of age distribution on public health planning relates to the aging population. As is true of many rural areas, there is a higher proportion of people 65 years of age and older in Beaverhead County’s population than there is nationally. An aging population is one of the most significant population level factors facing public health both locally and nationally; significant growth in this cohort is projected due to a national trend associated with increased births during the two decades after World War II (the “baby-boom”). Growth in the number of people 65 years of age and older as a result of this phenomenon began in 2010 and will continue through 2030. The impact of growth in this cohort will be even more intensely experienced in Southwest Montana where the proportion of seniors is already significantly higher than the state and the nation. People 65 and over currently comprise 16.9% of the Beaverhead County population (1,565 people) compared with 13% for the nation and 14.8% for Montana. The county’s median age jumped from 39.8 in 2000 to 42 currently. The median age is also higher than the state (39.8) and national (36.5) median ages. People in the “baby boom” age cohorts (45 to 63) currently comprise an estimated 30% of the Beaverhead County population.xvi With the aging of this group, by 2030, 27.57% of the county population is projected to be 65 or older, an increase of 1,200 seniors over the 2010 Census count.xvii (Refer to Figure 6.)

This phenomenon will not only increase the number of people needing health related services, but will increase the number of people requiring more intense medical services often provided by geriatric specialists or family/general practice providers with an emphasis on geriatric health issues. Aging “baby boomers” will contribute hugely to the prevalence of chronic illness into the future; today, approximately two-thirds of people living with a chronic illness are over the age of 65xviii. Thus, as this cohort grows so will the incidence
of chronic illness. Primary care physicians, including those in family practice and internal medicine who are at the forefront of managing chronic illness, are already in short supply. With a growing senior population, this shortage will become an even more pressing healthcare matter.

This wave of senior citizens will also have different lifestyle preferences that will change the way services are provided. For example, “baby boomers” tend to prefer living closer to amenities and aging in their homes. Home health services will, therefore, likely play a bigger role in service delivery for this group. In Beaverhead County, 34% of people 65 and older have annual incomes at or below 200% of the federal poverty line. This level of income is a threshold that qualifies people for certain types of public services. Provision of services to low-income seniors is more challenging as it adds an “affordability” layer to the equation and often requires special grants and pay sources to create access to services.

2.3 Households and Families

There are 4,014 households in Beaverhead County with an average size of 2.19 people per household. The average household size is smaller than the national average of 2.58. This correlates with a smaller average family size than the nation overall (2.79 compared with 3.14 people per family) and a higher rate of single-occupant households. Of the total county households, 41% have a single occupant compared with 34% nationally. (Refer to Figure 7.) This is, in turn, is related to a higher rate of people 65 and older in Beaverhead County; 27.6% of households have occupants that are 65 years of age or older compared with 24.9% for the national overall. According to the 2010 Census, there are 893 family households with children under 18 present. Of these households, 25% have only one parent present (223 households). (Refer to Figure 8.) This rate of single-parent households is lower than the national rate of 32%. The rate of single parent households is pertinent to a public health discussion as adults and children in these households are at higher risk for adverse health outcomes such as mental health problems (including substance abuse, depression, and suicide) and unhealthy behaviors such as smoking and excessive alcohol use. Single-parent households are also more likely to have
lower incomes, a status that adds to stress in the household which then can contribute to depression and conflict. In Beaverhead County, 25% of single-parent households have annual incomes at or below 185% of the federal poverty line. For all families with children under 18, 47% have incomes at or below 185% of poverty.xxii

### 2.4 Educational Attainment

Because there is a relationship between education and health outcomes, educational attainment level is one indicator of population level health. A 2009 report by the Robert Wood Johnson Foundation entitled “Reaching America’s Health Potential Among Adults: A State-by-State Look at Adult Health”, found that, “nationally and in every state, the percent of adults in less than very good health varied by level of education. Compared with the most-educated adults (college graduates), the least-educated adults (those who had not graduated from high school) were more likely—more than three times as likely, in some states—to be in “less than very good health”. However, differences were not seen only when comparing the most- and least-educated groups. Even high-school graduates were more likely than college graduates to be in less than very good health.” In the state analysis, Montana fell into the lower range in the health status gap between the more and less educated.

However, the Beaverhead County population is comparatively well-educated. Its percentage of the adult population 25 and older with a high school diploma is 91.8%, which is higher than the national rate of 85.9%. The rate is slightly below the state rate of 92.3%. The rate of adults attaining a bachelor’s degree or higher is 30.4%; this is higher than the national and state rates of 28.5% and 28.2%.xxiii

### 2.5 Veteran Status

Veterans often have special health issues that can result from their military experiences and may call upon the public health system either in the form of collaboration with veteran specific programs or in the form of direct services. This may be of even greater concern in Beaverhead County where the concentration of veterans is higher than in the general U.S. population. Of adults 18 years of age and older in the county, 15.3% have veteran status.

![FIGURE 9 Veteran Status by Period of Service](image-url)
compared with 9.9% nationally. Beaverhead County’s rate also exceeds the Montana rate of 13.5%. As is true nationally, the largest portion of the veteran population in the county is associated with the Vietnam War (35.6%). *(Refer to Figure 9.)* Over 40% of the veteran population in the county is 65 years of age or older.

VI. SOCIOECONOMIC FACTORS

1.0 Poverty

The impact of poverty and low-income on health is an important consideration for the public health system. Studies have firmly established that those with low incomes have lower health status than those with higher incomes.\(^{xiii}\) “Health United States, 1998”, the 22nd report on the health status of the Nation from the Secretary of Health and Human Services, draws a strong connection between income and health. According to the report, poor Americans are significantly more likely than those with high incomes to have health risk factors that include smoking, being overweight, and having a sedentary lifestyle. Socioeconomic status is also linked to depression; people with lower socioeconomic status are more likely to develop a depressive illness than those higher in the socioeconomic scale.\(^{xv}\) Poor and near poor Americans are less likely than those with high incomes to have insurance and, together, account for nearly two-thirds of uninsured people in the nation\(^{xxxvi}\), partially because low-wage workers are less likely to be offered health insurance as a job-related benefit.

In Beaverhead County, the poverty rate (the percentage of people living below the federal poverty line\(^{xxvii}\)) is comparatively high. At 17.2%, the rate is higher than both the state (15.2%) and national (15.9%) rates.\(^{xxviii}\) The rate increased significantly during the national recession that began in 2008, jumping from 15.7% to a high of 18.1% in 2010. The number of people living below the federal poverty line went from an estimated 1,322 in 2008 to 1,591 in 2010, an increase of 20%. The 2011 Census estimate shows the rate dropping to 17.2% which is an estimated 1,507 people. The rate of children living in poverty in the

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*FIGURE 10*

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<td>Beaverhead County</td>
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*FIGURE 11*

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<th>Percent of Children (&lt; 18) Below Federal Poverty Line (2011)</th>
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<td>Beaverhead County</td>
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<td>24.5</td>
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county is an estimated 24.5% and is also higher than the national (22.5%) and state (20.9%) rates. The child poverty rate reached 25.3% during the recession and, although it remains higher than the state and national rates, appears to have fallen to a rate of 24.5%, according to the 2011 Census estimate.\footnote{Refer to Figures 10 and 11.}

### 1.2 Low-Income Status

Another significant income factor to consider is the number and percentage of people who, although not considered poor, have low incomes. An estimated 39.7% of the Beaverhead County population subsides at 200% or less of the federal poverty level (3,390 people)\footnote{Refer to Figures 12 and 13.} making them eligible for various public assistance programs. The rate is higher in Beaverhead County than it is for both the state (36.7%) and nation (35.17%). The most recent and detailed Census data available illustrates that the county’s household income distribution is more heavily weighted toward lower income brackets than the national distribution. In Beaverhead County, 33.5% of households have annual incomes less than $25,000 compared with 23.2% for the nation.\footnote{Refer to Figures 12 and 13.} This is also seen in the median household income, which at $38,624 is 73% of the national figure of $51,914. Low wages appear to be a major contributing factor. The annual average wage for workers in the county is among the lowest in Southwest Montana and is 62% of the national average.\footnote{Since 73% of households have income from wages the impact of low wages on income distribution is significant.}

Another indicator of low-income status is the number of people receiving food and other public assistance. The number receiving help through the Supplemental Nutrition Assistance Program (SNAP) increased 49%
between 2008 and 2012 going from 593 people to 883. Over one-third of school-age children are eligible for free or reduced lunch in the school system. An estimated 1,370 households are eligible for heat assistance through the Low Income Energy Assistance Program, based on income data provided by the Census Bureau. However, only 210 households accessed the assistance in 2011, which is 15% of potentially eligible households.

The low-income population is more likely to be without health insurance which creates a barrier to healthcare access and therefore contributes to poor health outcomes. According to the most recent Census estimate of the uninsured, 26.9% of people under the age of 65 are without health insurance compared with 20.7% for Montana and 17.9% for the nation. The rate is significantly higher for low-income people; 40% of people living at or below 200% of the federal poverty line are without health insurance in the county compared with 34% for Montana and 35% for the nation. With implementation of the National Affordable Healthcare Act on the horizon, the rate of uninsured should improve and, if intended results play out, virtually disappear. However, threats to implementation exist and thus, the future for health insurance coverage remains uncertain.

VII. HOUSING FACTORS

1.0 Affordability and Condition

The built environment is a consideration in public health planning because the extent to which housing is safe and affordable can impact health outcomes. The concern is greater for lower income people who are more likely to be forced by the market into unsafe housing that can place them, and particularly children, at risk of health problems. Additionally, for lower-income people, a higher proportion of income is generally devoted to housing housing costs which can place health insurance out of reach and, therefore, impede access to healthcare.

In the United States, housing costs are considered a burden when they exceed 30 percent of income. In Beaverhead County, housing costs appear to be a burden for just over 41% of all households. Forty-four percent (44%) of renters and 39.4% of homeowners are paying more than 30% of their income for housing payments. (Refer to figures 14 and 15.) These rates have increased significantly since 2000 when the rate of renter-occupied households with a cost burden was 34% and for homeowners, the rate was 18.6%. The rate of renting households in the county with a cost burden is considerably higher for lower-income households.
Of these households with annual incomes of less than $35,000, 52% are paying more than 30% of income for rent compared with 39% for the renters nationally.xxxviii

Safety can be a pressing issue for lower income people who often live in the most undesirable units on the market. For this reason, two important indicators are considered. The first is the age of housing units which speaks not only to overall condition, but also to whether lead paint might be present. In Beaverhead County, 61.6% of housing units were built prior to 1978 when lead paint standards went into effect.xxxix Lead paint in the home can be a health risk, particularly for children. If lead paint in pre-1978 homes has not been addressed, lead testing of homes and people can be an effective public health approach to addressing dangers posed by exposure.

Condition of housing is the second indicator considered for public health planning. A 2005 “Condition of Housing in Montana” report was reviewed to determine the overall condition of the county housing stock. According to the report, 33.4% of housing units in Beaverhead County ranged from ‘fair’ to ‘unsound’ condition at the time of the report. Another 36% were in average condition. The remaining 30.48% ranged from ‘good’ to ‘excellent’ condition.xl Mobile homes, which are often the most affordable option for lower income people, but not always the safest option, now comprise an approximate 18.7% of occupied housing units in Beaverhead County which amounts to 729 units. According to the 2005 housing condition report, 62% of mobile homes were in conditions than ranged from ‘fair’ to ‘unsound’ at the time of the report. Although conditions may have changed since the time of that report with some substandard mobile homes being decommissioned, for example, it is clear, according to the 2010 Census data, that 41% of mobile homes were constructed prior to 1976 when national safety standards for manufactured homes went into effect or an estimated 298 units. The extent to which the conditions discussed here are contributing to
negative health outcomes is unknown. However, data pointing to a significant number of older, substandard housing points to a need for further investigation.

2.0 Housing Considerations for the Aging Population

Given the impact of the “baby boom” on the population, a discussion of housing for senior citizens is important to a public health needs assessment. People in the baby-boom age cohorts represent 30% of the county population and occupy 42% of housing units. As this age group grows in association with the ‘baby boom’ phenomenon into 2030 and occupies an ever-increasing percentage of the population, providing for their housing needs will become paramount to community planning efforts.

Trends among aging baby boomers nationally should be considered in current planning efforts. Foremost among those trends is the provision of services that allow seniors to age in place. Along with aging in place, comes a demand for home health services. According to Harvard University’s Housing America’s Seniors, only 10% of seniors lived in age-restricted communities in 2000. However, the Harvard study noted that the existing housing stock is not designed to meet the changing needs of seniors as they age. As a result, the market for home modifications and healthcare and other supportive services to help older Americans live safely and comfortably in their homes is large and growing. Yet, much of the current demand for modifications is unmet. Only about half of those who are over 65 with disabilities have the modifications they believe they need. (Schafer) The Harvard study also pointed to the need for housing to accommodate senior couples as men begin to live longer.

VIII. HEALTH RISK BEHAVIORS

In a public health discussion, risk behaviors are defined as lifestyle activities that place a person at risk of suffering particular health conditions. A variety of health problems can be caused by behaviors such as excessive alcohol and drug use, tobacco use, reckless driving, poor nutrition, sedentary lifestyle and unprotected sex. For this reason, indicators that speak to population risk behaviors among Beaverhead County residents were reviewed for this assessment.

1.0 Ranking Among Montana Counties for Targeted Health Behaviors

One existing analysis of risk behaviors considered for this assessment created a ‘composite severity score’ for Montana counties based on six measures that included the suicide rate, prescription drug death, drug arrests, DUI’s, liquor law violations and percent of car crashes involving alcohol or drugs. In this 2012 analysis, in
which a low composite score indicated higher severity, Beaverhead County had the lowest composite score (54) among all Montana counties when the six factors were considered, giving it the highest severity of risk behaviors considered (see Appendix C for a description of the methodology.) The county with the highest score and, therefore, the lowest severity of risk, was Treasure County with a composite score of 326. Table 1 illustrates the rankings Beaverhead County received in each of the six categories considered in the analysis. The County ranked number 1 in the category of liquor law violations per 1,000 population, number 6 for the average percent of car crashes involving alcohol over 5 years and number 8 for the average suicide rate over 9 years.

### 2.0 Suicide

Suicide rate is a critical public health issue, not just in Beaverhead County, but across Southwest Montana. The involvement of public health in addressing suicide is typically in the area of universal prevention which has a focus on decreasing suicide through public education and the enhancement of protective or mitigating factors. However, public health agencies might also be involved in selective prevention collaboratives that aim to identify people at risk and collaboratives that aim to increase the availability of mental health services, particularly in rural areas that are often plagued with shortages of mental health professionals. In light of the data reviewed for purposes of current public health planning in Beaverhead County, increased attention to methodologies that decrease suicide are called for and should be part of the county’s comprehensive public health strategies toward building a healthier county.

The suicide rate over the period 1997-2011 in Beaverhead County is 21.4 per 100,000 population (29 suicides as tracked by county of residence) compared with the 2011 national rate of 12.3 per 100,000.xlii With this rate, the county has the ninth highest rate among Montana counties. (Note: this rate covers a different period than the rate considered in the “Ranking

### TABLE 1

<table>
<thead>
<tr>
<th>RISK CATEGORY</th>
<th>RANK</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Suicide Rate per 100,000 population; average 2001-2009</td>
<td>8</td>
</tr>
<tr>
<td>2. Prescription Drug Death per 1,000 Residents; average 2005-2009</td>
<td>6</td>
</tr>
<tr>
<td>3. Drug Arrests per 1,000 residents; average 2005-2011</td>
<td>14</td>
</tr>
<tr>
<td>4. DUI's per 1,000 residents; average 2005-2011</td>
<td>9</td>
</tr>
<tr>
<td>5. Liquor law violations per 1,000; average 2005-2011</td>
<td>1</td>
</tr>
<tr>
<td>6. Percent of car crashes involving alcohol; average 2005-2009</td>
<td>16</td>
</tr>
<tr>
<td>TOTAL COMPOSITE SCORE</td>
<td>54</td>
</tr>
</tbody>
</table>

*Source: Ranking of Counties by Severity of Targeted Health Behaviors; Presentation prepared by William Connell, Economist, Montana Department of Labor, 2012*

### TABLE 2

<table>
<thead>
<tr>
<th>SUICIDE RATE (per 100,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beaverhead County</td>
</tr>
<tr>
<td>Montana</td>
</tr>
<tr>
<td>United States</td>
</tr>
</tbody>
</table>
of Counties by Severity of Targeted Health Behaviors' noted above.) It is important to note that Montana has consistently ranked in the top five among U.S. states for its high suicide rate over the last 35 years and ranked number one in 2009 with a rate of 22.5 per 100,000 population. The 2010 rankings placed Montana third among states, but with an increased rate of 22.9 per 100,000. (Refer to Table 2) Thus, Beaverhead County ranks high in a state that ranks high nationally. A major contributing factor to suicide is depression, another indicator reviewed for this report. The rate of major depression in Beaverhead County is an estimated 9% compared with 6.7% for the nation.

These rates are indicative of population level mental health problems that are present not just in Beaverhead County, but across rural Southwest Montana. Four counties in the region (including Beaverhead, Deer Lodge, Madison and Silver Bow Counties) have suicide rates that are in the top ten among Montana counties. A deeper study to determine the risk factors at work in southwest Montana is needed. However, three factors surfaced during this review. First, by virtue of being a rural area, southwest Montana has the potential for a higher prevalence of depression. According to a 2005 Rural Health Research Center report entitled “Depression in Rural Populations: Prevalence, Effects of Life Quality and Treatment-seeking Behavior”, “the prevalence of major depression is significantly higher among rural than among urban populations.” Second, in rural Southwestern Montana, the likelihood of depression is compounded by financial hardship for a significant portion of the population. “Research has shown that people with lower socioeconomic status (SES) are more likely to develop a depressive illness and that their depression is more severe than that of people higher on the SES scale.” Finally, lack of access to mental health services creates risk for people suffering from depression or who are in crisis. Beaverhead County is, in fact, a designated professional shortage area for mental health, a designation assigned by the U.S. Department of Health and Human Services.

3.0 Drug, Alcohol Use/Abuse

Alcohol and drug abuse are given separate consideration in this report because this type of abuse is a contributing factor to poor health outcomes for adults and children. Substance abuse is a factor in physical health outcomes, often co-occurs with mental illness, has negative impacts on the developmental environment for and well-being of children, contributes crime and has potential negative impacts on public safety. For this report, a number of indicators were reviewed to determine the extent of substance in Beaverhead County.

Montana, as a state, faces the challenge of high substance abuse rates. According to the 2010-2011 National Survey on Drug Use and Health, Montana had rates in a number of categories that were high enough to be among the top ten in the nation. Categories included: binge alcohol use in the past month for all age
Beaverhead County Community Needs Assessment 2012-2013

groupings considered in the survey; illicit drug use in the past month for all age groupings; alcohol dependence or abuse in the past year for all age groupings; and, dependence on or abuse of illicit drugs in the past year for all age groupings. The state ranked in the top ten for the percentage of people needing but not receiving treatment for alcohol use in the past year in all other age groupings.

In Beaverhead County, the percent of the population engaging in excessive drinking is estimated to be 14%, which is lower than the estimated state rate of 18%, but exceeds the national benchmark of 8% that comes from the County Health Rankings. The benchmark represents a rate for counties that are in the 90th percentile among all counties for having the most positive rates (meaning only 10% are better). It is important to note that, although Beaverhead County’s rate of excessive drinking is lower than the state rate, the percent of motor vehicle crashes involving alcohol is higher than the state rate—12.3% compared with the state rate of 10%.

Another public health concern related to substance abuse is its contribution to domestic abuse, including child abuse and neglect. "Research has demonstrated that children of substance abusing parents are more likely to experience physical, sexual and/or emotional abuse." Although statistics vary, substance abuse contributes to at least one-third and up to two-thirds of child welfare cases in the United States. At the time of this report, there were 5 children from 4 families in Beaverhead County in out-of-home placement due to child abuse or neglect. In 3 of the 4 affected families, substance abuse was a factor. Substance abuse is also related to the fact that over the period 2000 through 2012, 81 children from Beaverhead County had been evaluated for sexual abuse through the Child Evaluation Center in Butte, 36 of who were seen between 2009 and 2012.

Although substance abuse does not cause domestic violence, it can reduce inhibitions and exacerbate behaviors that may have otherwise been held in check. According to the National Coalition on Domestic Violence (NCADV), domestic violence batterers often use alcohol or illicit drugs during domestic violence incidents. Spousal abuse is a complex issue that can involve a number of risk factors like mental illness, depression, stress and low income. While the specific environmental factors to domestic abuse in Beaverhead County are difficult to identify, it is known that the number of people assisted through the Women's Resource/Community Support Center for domestic violence or sexual assault increased by 47.95% between 2010 and 2011, going from 811 to 1,200.

The relationship between mental health and substance abuse is another public health consideration. Research has shown that there is a strong association between mental health disorders and substance abuse disorders.
Adults and adolescents with a major depressive episode (MDE) within a year are more likely than those without MDE to have used alcohol heavily or to have used an illicit drug in the past year. The combination of relatively high rates of depression and suicide with a relatively high rate of excessive alcohol use in Beaverhead County may point to a problem of co-occurring mental illness and substance abuse that is worth further consideration and investigation.

4.0 Tobacco Use
Smoking has been a significant public health concern for decades, and though on the decline, continues to be a significant public health concern. According to “America’s Health Rankings: A Call to Action for Individuals and their Communities” the prevalence of smoking in the past year decreased from 17.9% to 17.3% of the adult population, the lowest in 22 years. Smoking prevalence was at a high of 29.5% in 1990. The Centers for Disease Control and Prevention’s 2012 annual Behavioral Risk Factor Surveillance Survey puts the U.S. rate of adult smoking at a higher rate of 19.6%. In Beaverhead County, the rate of adults who are current smokers and who have smoked at least 100 cigarettes in their lifetimes is an estimated 12% which is relatively low compared with the Montana rate of 19% and the national rate. Additionally, 13.1% of pregnant women in the county smoke during pregnancy, a rate that is also lower than the state rate of 18.3%.

Although these rates are relatively low, the detrimental effects on health for those portions of the population are an important factor in prevention planning efforts at the local level. Tobacco use is the leading preventable cause of death in the United States. Tobacco use, overall, is responsible for an estimated one out of five deaths in the U.S. annually (approximately 443,000 deaths per year. It increases the risk of coronary heart disease by 2 to 4 times, the risk of stroke by 2 to 4 times, the risk of men developing lung cancer by 23 times, the risk of women developing lung cancer by 13 times, and the risk of dying from chronic obstructive lung diseases (such as chronic bronchitis and emphysema) by 12 to 13 times.

5.0 Unsafe Sex
In the County Health Rankings program, which was used as a source of public health indicators for this report, the sexually transmitted infection (STI) rate is measured as chlamydia incidence or the number of new cases reported per 100,000 population. Although one of many STIs, chlamydia is associated with unsafe sexual activity, is one of the most common bacterial STIs in North America and remains the most commonly
reported infectious disease in the United States.\textsuperscript{lxvi} Chlamydia incidence rates are readily available and reliable for nearly all counties, which make them an important indicator of unsafe sexual activity. The groups most impacted by the disease are adolescent girls (15-19 years of age) and young women (20-24 years of age).

According to Montana Public Health and Human Services, the 2012 chlamydia incidence rate in Beaverhead County was 486 per 100,000, which amounted to 45 cases, and was higher than the state rate of 381 per 100,000.\textsuperscript{lxvii} The county rate has been up and down over the last six years, but increased significantly in 2012. According to County Health rankings, the 2010 rate was 292 per 100,000, which was lower than the Montana rate of 309 per 100,000 but significantly higher than the national benchmark of 84 per 100,000 (meaning only 10% of counties have a lower rate).\textsuperscript{lxiii} (Refer to Figure 16.)

In women, infection can result in pelvic inflammatory disease (PID), a major cause of infertility, ectopic pregnancy, and chronic pelvic pain. As with other inflammatory STDs, chlamydia infection can facilitate the transmission of HIV. In addition, pregnant women infected with chlamydia can pass the infection to their infants during delivery, potentially resulting in neonatal ophthalmia or pneumonia.\textsuperscript{lxiv} There is evidence that screening is an effective tool in reducing the incidence of chlamydia; data from a randomized controlled trial of chlamydia screening in a managed care setting suggested that screening programs can lead to a reduction in the incidence of PID by as much as 60%.\textsuperscript{lxv} Local health departments that are responsible for the direct delivery of free STD and HIV prevention and control services play a critical role in addressing STI's. The Centers for Disease Control and Prevention (CDC) recommends annual chlamydia screening for young women under the age of 25.

6.0 Youth Behaviors

The choices young people make and the behaviors in which they engage can have both short and long-term effects on public health and the healthcare system. Incompletion of high school and involvement with the criminal justice system can predict a future of low socioeconomic status which is linked to poor health outcomes; teen pregnancy can also lead to cyclical poverty or low-income status; and, use of tobacco, alcohol and drugs can have long-term, detrimental physical and developmental effects. A number of factors that relate to youth behaviors were reviewed for purposes of Beaverhead County’s public health planning effort. While the county shows strengths in some areas of youth behavior, some behaviors point to the need for attention and further investigation.

As one predictor of future health status, high school graduation rates were considered. The percentage of students in 2012 graduating from high school in four years (four-year adjusted cohort graduation rate) at Beaverhead County High School was 84%. While this number is on par with the state rate, it is down from 87.7% in 2011. And, while the Beaverhead County rate decreased, the Montana overall figure increased, going from 82.2% to 83.9%.\textsuperscript{lxvi} The way in which this data is compiled and tracked has changed and there are only...
two years of consistent data to track. Therefore, the data does not necessarily indicate a downward trend. It will be important to track the rate to ensure a downward trend does not develop.

The teen birth rate is another indicator of youth behaviors that factors into public health planning. It is defined as the rate of births per 1,000 to females aged 15-19. The rate in Beaverhead County is among the lowest teen birth rates in the state of Montana, according to the 2012 Montana Teen Birth and Pregnancy Report. The county had the lowest rate among 36 Montana counties for which a rate was calculated in the report. (Only counties for which there were 20 or more births in the interval were included in the analysis). With a rate of 17.6 per 1,000 over the period 2007-2011, the county rate was significantly lower than the state rate of 48.8 per 1,000.

Another source of insight into youth behaviors is the biennial Prevention Needs Assessment Survey conducted by the Montana Department of Health and Human Services in grades 8, 10 and 12 of Montana public schools. The survey gathers information about substance use, antisocial behavior as well as risk and protective factors for students in the family, peer, school and community environments. The most recent available survey results for Beaverhead County are from 2008; a 2010 survey was not conducted in the county schools.

The 2008 survey, which had a response rate of 81.4%, indicated a progressive pattern of youth alcohol use from 8th grade through high school. In three categories of use including binge drinking, use within the last 30 days, and lifetime use of alcohol, the percentage of youth responding that they had engaged in these types of alcohol use increased significantly between 8th and 12th grades. (Refer to Figures 17-19.)

In addition, in all three categories, the rate of 12th grade responders who had engaged in use was higher in Beaverhead County than it was among 12th graders statewide; in two categories, it was also higher than the rate for those included in an 8-state norm used for comparison purposes. According to survey results, just
over 87% of Beaverhead High School 12th graders responding had used alcohol at some time in their lives compared with 80.8% for Montana and 70.7% in the 8-state norm. *(Refer to Figure 19.)*

Just over 58% of 12th grade students responding to the survey reported having used alcohol during the last 30 days compared with 53.15% of Montana students of that age and responding to the survey and 44.4% within the 8-state comparison group. The percentage of students in the survey reporting they had engaged in binge drinking (consuming 5 or more consecutive drinks) during the last 2 weeks was 37.8%, which was only slightly higher than the state percentage of 36.9% (no 8-state norm was provided in this category). *(Refer to Figures 18 and 19.)*

Of consideration is whether there is a cultural acceptance of alcohol and drug abuse in the community which does not discourage substance abuse among youth. In the 2008 survey, 60.8% of 12th grade students responding to the survey indicated their parents had attitudes that were favorable toward drug use which was higher than the percentage for Montana 12th graders responding (51.4%) and significantly higher than the percentage in the 8-state norm (41.3%). Nearly 58% of responding Beaverhead County High School 12th graders indicated the laws and norms in their community were favorable toward drug use; this was also higher than the state percentage and the 8-state norm.

Overall, the 2008 survey indicated that 39% of 8th graders responding, 43% of 10th grade respondents and 60% of 12th grade respondents were at high risk for problem behavior. For purposes of the survey, high risk is defined as having 8 or more risk factors operating in an 8th grader’s life, 10 risk factors in a 10th grader’s life and 9 or more risk factors operating in a 12th grader’s life.

Although there are a significant number of youth at high risk in Beaverhead County, there is also a high degree of protection that can help offset the risk. Protective factors exert a positive influence or buffer against the negative influence of risk, thus reducing the likelihood that adolescents will engage in problem behaviors. According to the survey, 75.7% of 8th grade respondents, 77.9% of 10th grade respondents and 69.4% of 12th grade respondents had high protection in their lives, which means they had five or more protective factors at work to help buffer risk. Some of those include community and

![FIGURE 19 Youth Who Have Ever Had an Alcoholic Beverage](image-url)
peer opportunities and rewards for pro-social involvement and family attachment. In all three grades, the rate of high protection was higher in Beaverhead County than it was for Montana or the 8-state norm.

An accompanying measure of youth behavior is the juvenile crime rate. This is a measure of crime among juveniles 10-18 years of age. The number of juvenile crimes in Beaverhead County increased 137% between 2009 and 2011 going from 49 to 116. The 2011 juvenile crime rate reached a five-year high of 109.4 per 1,000 and then dropped significantly in 2012 to 75.5 per 1,000 (80 crimes).\textsuperscript{lx} (Refer to Figure 20.)

Note: the 2011 rate presented here differs from the one presented in the initial key findings document; the number of crimes in 2011 was adjusted within the Board of Crime Control system since the document was published and the population figure used to calculate the rate was adjusted in the calculation as well, creating a different rate.

For comparison purposes, juvenile crime rates in two Montana counties of similar size were reviewed for this report, including Deer Lodge and Stillwater Counties. The Beaverhead County rate was significantly higher than rates in both comparison counties in 2011. The decreased 2012 rate in Beaverhead County was lower than the 2012 rate in Deer Lodge County, but remained higher than the rate for Stillwater County. (Refer to Table 3 for rates.)

The most commonly occurring crimes reflected in the 2011 rate included crimes against property that comprised 20% of total crimes, drug offenses that comprised 17%, and juvenile status offences that

\begin{table}[h]
\centering
\begin{tabular}{|c|c|c|c|}
\hline
          & \textbf{JUVENILE POPULATION} & \textbf{2011 JUVENILE CRIME RATE PER 1,000} & \textbf{2012 JUVENILE CRIME RATE PER 1,000} \\
\hline
\textbf{Beaverhead County} & 1,060 & 109.4 & 75.5 \\
\hline
\textbf{Deer Lodge County} & 1,023 & 82.1 & 90.9 \\
\hline
\textbf{Stillwater County} & 1,065 & 16.9 & 24.4 \\
\hline
\end{tabular}
\caption{Juvenile Crime Rate}
\end{table}

\textit{Sources: Juvenile Population: Missouri Census Data Center; Summary File 1; P14, Sex by Age for the Population Under 20, 2010 Census}
\textit{Crimes: Montana Board of Crime Control; Juvenile Crime Statistics}
7.0 Prevention and Wellness Behaviors

One of public health's primary functions is to protect and promote the population's health through prevention activities. The public health system, through its prevention work, has the potential to reduce the need for expensive medical care. In order to gauge current population participation in prevention activities for this report and indicate the possible need for improved or stepped-up prevention work, a number of indicators were reviewed for Beaverhead County. Although there are many more prevention related behaviors, data limitations prevent the review of all related indicators.

Indicators related to women's health behaviors that were reviewed indicate that a relatively high engagement in health prevention areas. Just more than 88% of women 18 years of age and older received pap smear services compared with 80.9% nationally and 78.3% in the state of Montana. In addition, 69% of women 67-69 years of age have had mammograms which compares with 68% for Montana overall and is lower than the national benchmark of 74% in the County Health Rankings.

The percent of diabetic Medicare patients receiving blood sugar screenings in the last year, at 77%, was slightly lower than the Montana rate of 79% and much lower than the national benchmark (from the County Health Rankings meaning that only 10% of counties have higher rates) of 89%.

Immunizations are an important function of public health departments and healthcare providers. Childhood immunization rates are an important measure for the overall population. There are data limitations, particularly for rural areas, that inhibit assessment of the population who are up to date on vaccinations. A state immunization registry is now being used as a basis for data; however, the data is not yet regarded as complete. According to 2011 data generated from chart reports for Beaverhead County, only 35% of children 24 to 35 months were up to date on immunizations. The state regards this data as accurate for that year in Beaverhead County.

As part of planning for public health and population wellness, it is important to consider behaviors that support health and wellness. In 2011, the United Health Foundation set forth a set of findings related to public health in a report entitled, “America’s Health Rankings: A Call to Action for Individuals and their Communities”. Among the findings in the report were health concerns related to behaviors including overeating and lack of exercise that leads to obesity and diabetes, and smoking. According to the report, obesity is one of the fastest growing health issues in our nation and America is spending billions in direct

...
health care costs associated with poor diet and physical inactivity. Obesity has increased 137% since 1990, going from 11.6% of the adult population to 27.5% in 2011; today, more than one in four Americans are considered obese. Overall, the rate of obesity in Montana at 23.5% is lower than the national rate and in Beaverhead County, the rate at 23% of adults is slightly lower than the state rate. Although the rate is lower, it represents a significant portion of the population at risk for heart disease, diabetes and other poor health outcomes. The estimated rate of diabetes in Beaverhead County is higher than the national rate according to the 2012 County Health Rankings; 9% of county residents 20 years of age and older have been diagnosed with diabetes compared with 7% for Montana and 7.7% for the nation. Health issues associated with obesity are compounded by the lack of physical activity. The 2012 County Health Rankings report indicates that 21% of adults 20 years and older in Beaverhead County report no leisure time physical activity. Again, this rate is lower than the national rate of 25% and the state rate of 23%, but represents a significant portion of the adult county population.

IX. ENVIRONMENTAL FACTORS

1.0 Air, Water and Soil Quality

The physical environment in Beaverhead County appears to be a safe one for citizens. There are no known soil or water quality problems. Because ambient air pollution can have negative health consequences of including decreased lung function, chronic bronchitis, asthma, and other adverse pulmonary effects, indicators of air quality were reviewed for this report. Air quality appears to be relatively safe with only 4 reported days within the year in which the measure of fine particulate matter (PM2.5) is unhealthy for sensitive populations.

The average daily amount of fine particulate matter in micrograms per cubic meter is 7.8 within the county, which is well below the national ambient air quality standard of 35 established by the U.S. Environmental Protection Agency. On any particular day, air quality can vary. For example, forest fires, which have been more common in Southwest Montana over the last few years, can be a major contributor to fine particulate matter during the summer months. Wood smoke from wood burning stoves can also be a major contributor to unhealthy particulate matter, and therefore, the number and concentration of occupied housing units that utilize wood as a heat source is a consideration for public health. Although 16% of occupied housing units in Beaverhead County utilize wood as a heat source, the units are spread over a vast geographic area and, therefore, smoke does not apparently concentrate in a way that results in poor air
quality; only 14% of occupied housing units that utilize wood as a heat source are located in the population center of Dillon.\textsuperscript{lxxiii}

\section*{2.0 Availability of Healthy Food}

There is strong evidence that residing in a food desert is correlated with a high prevalence of overweight, obesity, and premature death. Additionally, lack of access to fresh fruits and vegetables is a substantial barrier to healthy food consumption and is related to premature mortality. Supermarkets, which traditionally provide healthier options than convenience stores or smaller grocery stores, are not always accessible to people residing in rural areas. For these reasons, the County Health Rankings project measures the percent of people who are low-income and do not live close to a grocery store, which in a rural area is defined as living within 10 miles of a healthy food source. Although Beaverhead County is geographically vast, an estimated 65\% - 70\% of the population lives within a ten-mile radius of the city of Dillon where there there is access to supermarkets and healthy food. The 2012 County Health Rankings project estimates that 10\% of the low-income county population (340 people), however, lives outside the ten-mile and does not have adequate access to healthy foods. Based on demographic trends in the county, this may be of concern most particularly for the aging, rural population.

\section*{X. HEALTH FACTORS AND OUTCOMES}

\subsection*{1.0 Overall Health Ranking (County Health Rankings)}

Through a collaborative project of the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute, county health rankings are conducted every year for counties across the nation. The County Health Rankings measure the health of nearly all counties in the nation and rank them within states. The Rankings are compiled using county-level measures from a variety of national and state data sources. The measures are standardized and combined using scientifically-informed weights. The rankings are based on an analysis of data for one mortality, four morbidity factors and ten health categories. In the 2012 rankings Beaverhead County ranked 18 out of 45 counties in Montana. The County’s rank fell from the 9th position in 2010 to 14th position in the 2011 rankings and then to 18th position in 2012. In the annual rankings process, it is important to note that rank is relative to what is occurring within all other counties under consideration. For example, the fall in rank can be related to improved outcomes in other counties and not necessarily poorer outcomes in Beaverhead County. Further, factors used in the health rankings do sometimes change, making time comparisons more difficult.
There are some notable factors that showed decline between the 2011 and 2012 rankings that are relevant to public health planning. First, the number of years of life lost due to premature death (prior to 75 years) increased; the 2012 figure is 6,816 compared with 5,586 in 2011. With this change, the County’s rank dropped in the mortality category from number 2 to number 9. Although the county’s overall rank in the morbidity category improved between 2011 and 2012, the percentage of adults reporting poor or fair health increased from 10% to 11% and is up from 9% in 2010. Changes in socioeconomic factors of note include an increase in childhood poverty and a rise in single-parent households. Beaverhead County’s rank in the category of social and economic factors fell from 19 in 2011 to 23 in 2012.

2.0 Leading Causes of Death

In 2010, the two leading causes of death in Beaverhead County were heart disease, and cancer. They were followed by unintentional injuries (external cause of death such as motor vehicle incident, drowning, fall, poisoning, etc.) and chronic lower respiratory disease. There were 22 deaths in the county attributed to heart disease, 14 to cancer, and 10 to unintentional injury. Another 7 deaths were attributed to chronic lower respiratory disease. In 2011, heart disease remained the leading cause of death with an increased associated death rate, going from 216.3 per 100,000 in 2010 to 239.2 per 100,000 in 2011. Chronic lower respiratory disease was the second leading cause of death in 2011 with 8 associated deaths. Cancer was the third leading cause in 2011 with 7 associated deaths.

2.1 Heart Disease

Heart disease is the leading cause of death in Beaverhead County and nationally. The associated death rate is higher in the county than it is for both Montana and the nation. (Refer to Table 4.) The prevalence of coronary heart disease in the county population is not known. However, the age adjusted prevalence of coronary heart disease in Montana is 5.5% which is lower than the national rate of 6%.

As the leading cause of death, it is important for planning purposes to assess health factors and behaviors in the population that increase the risk of heart disease. Tobacco use, excessive drinking, diets high in salt, saturated fat and cholesterol, and physical inactivity all raise the risk of developing heart disease. In Beaverhead County, 14% of adults engage in excessive drinking, 12% are current smokers and 21% are

| TABLE 4 |
| 2011 MORTALITY RATE FROM HEART DISEASE |
| Crude Rate per 100,000 |
| Beaverhead County<sup>1</sup> | 239.2 |
| Montana<sup>1</sup> | 191 |
| United States<sup>2</sup> | 191.4 |

<sup>1</sup> Selected Vital Statistics, Frequencies and Rates or Ratios by County, Montana, 2011
physically inactive. While the rate of excessive smoking is lower than the Montana rate and the national benchmark from the 2012 County Health Rankings, the rate of excessive drinking is much higher than the national benchmark of 8% from the Rankings. And, while the percent of adults that are physically inactive in the county is on par with the national benchmark (21%), physical inactivity is a nationwide phenomenon that is contributing to heart disease. Twenty-three percent (23%) of the county’s adult population is obese, which is also a rate lower than the national (27.5%), but is a significant portion of the adult population.

Diabetes and high blood pressure are additional health factors that increase the risk of heart disease and were considered for this report. In Beaverhead County, the percent of adults 20 years of age and older with a diabetes diagnosis is two percentage points higher than the national rate while the percent of adults with high blood pressure is much lower than the national rate. (Refer to Table 5.)

### 2.2 Cancer
Cancer, the second leading cause of death in Beaverhead County, has an incidence rate of 429.3 per 100,000 in the local population (rate period of 2006-2010) with an average of 49 occurrences per year over the rate period for all cancer types. This incidence rate is lower than both the state and national rates. Beaverhead is one of only 18 Montana counties to meet the Healthy People 2010 objective for cancer incidence. Additionally, the cancer death rate is lower than both the state and national rates and remained stable over the rate period 2006-2010. (Refer to Table 6) According to the State Cancer Profiles developed by the National Cancer Institute, Beaverhead County has the lowest cancer death rate among Montana counties.

#### TABLE 5
**DIABETES AND HIGH BLOOD PRESSURE INCIDENCE**

<table>
<thead>
<tr>
<th>% of Adults with Diabetes</th>
<th>% of Adults with High Blood Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beaverhead County</td>
<td>9%&lt;sup&gt;1&lt;/sup&gt;</td>
</tr>
<tr>
<td>Montana</td>
<td>7%&lt;sup&gt;1&lt;/sup&gt;</td>
</tr>
<tr>
<td>United States</td>
<td>7.7%&lt;sup&gt;2&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

<sup>1</sup> 2012 County Health Rankings  
<sup>2</sup> Centers for Disease Control and Prevention; Health United States, 2011  
<sup>3</sup> Community Health Status Report, 2009; U.S. Department of Health and Human Services  
<sup>4</sup> Montana Department of Public Health & Human Services; News Bulletin; Hypertension: What You Don’t Know Can Hurt You; January 20, 2011  
<sup>5</sup> Centers for Disease Control and Prevention; High Blood Pressure Facts; http://www.cdc.gov/bloodpressure/facts.htm

#### TABLE 6
**CANCER INCIDENCE AND MORTALITY**

<table>
<thead>
<tr>
<th>Rate Period (2006-2010)</th>
<th>Incidence Rate (Per 100,000)</th>
<th>Average Annual Death Rate (Per 100,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beaverhead County</td>
<td>429.3</td>
<td>151.7</td>
</tr>
<tr>
<td>Montana</td>
<td>455.9</td>
<td>166.3</td>
</tr>
<tr>
<td>United States</td>
<td>453.7</td>
<td>176.4</td>
</tr>
</tbody>
</table>

Source: National Cancer Institute; State Cancer Profiles
Institute, for the period 2006-2010, the most commonly occurring cancer type was cancer of lung and bronchus; over the period, there were 8 incidences of this form of cancer.lxxxvi

Behaviors that increase the risk of lung cancer are important considerations given that it is the most commonly occurring cancer in the county. According to the Centers for Disease Control and Prevention, cigarette smoking is the number one risk factor for lung cancer. In the United States, cigarette smoking causes about 90% of lung cancers and can cause cancer almost anywhere in the body. People who quit smoking have a lower risk of lung cancer than if they had continued to smoke, but their risk is higher than Smoke from other people’s cigarettes, pipes, or cigars (secondhand smoke) also causes lung cancer. When a person breathes in secondhand smoke, it is like he or she is smoking. Two out of five adults who don’t smoke and half of children in the United States are exposed to secondhand smoke. Every year in the United States, about 3,000 people who never smoked die from lung cancer due to secondhand smoke. Currently, 12% of adults in the county are smokers. Other risk factors for lung cancer include exposure to substances such as radon, asbestos, arsenic, diesel exhaust, and some forms of silica and chromium.lxxxvii There is currently no data available to determine a connection between exposure to these substances and lung cancer in Beaverhead County.

2.3 Chronic Lower Respiratory Disease

Chronic lower respiratory disease, which refers to chronic diseases that affect the lower respiratory tract (including the lungs), was the third leading cause of death in the United States in 2011. The most common form is Chronic Obstructive Pulmonary Disease, or COPD, which refers to a group of diseases that cause airflow blockage and breathing-related problems. It includes emphysema, chronic bronchitis, and in some cases asthma.

In the United States, tobacco smoke is a key factor in the development and progression of COPD, although exposure to air pollutants in the home and workplace, genetic factors, and respiratory infections also play a role. The following groups were more likely to report COPD: people aged 65–74 years; non-Hispanic whites; women; individuals who were unemployed, retired, or unable to work; individuals with less than a high school education; people with lower incomes; individuals who were divorced, widowed, or separated; current or former smokers; and, those with a history of asthma.lxxxviii

There were 8 deaths in 2011 attributed to chronic lower respiratory disease in Beaverhead County.lxxxix The state of Montana, in its “Selected Vital Statistics” report for 2011 did not apply a death rate because the small
figure does not meet standards of reliability or precision. The 2011 death rate nationally from the disease was 46 per 100,000 compared with 60.7 per 100,000 for Montana.

### 3.0 Morbidity

Morbidity is a term that refers to how healthy people feel while alive. The *County Health Rankings* provide data on measures related to quality of life including overall health as well as physical and mental health. In the annual survey, the *Rankings* pose questions aimed at ascertaining Health-Related Quality of Life (HRQoL). Measuring HRQoL helps characterize the burden of disabilities and chronic diseases in the population. Morbidity measures in the County Health Rankings are age adjusted figures.

According to the 2012 County Health Rankings, 11% of the Beaverhead County population perceives their health to be poor or fair. This is lower than the 13% of Montanans who perceive their health to be fair or poor, but is slightly higher than the national benchmark of 10%. The average number of physically unhealthy days in the last month was 3.4, which is on par with the Montana average, but higher than the national benchmark of 2.6 days.

The average number of mentally unhealthy days in the last month in Beaverhead County was 2.9, which was lower than the state average of 3.2, but higher than the average provided as the national benchmark (2.3 days). *(Refer to Table 7.)*

<table>
<thead>
<tr>
<th>TABLE 7</th>
<th>MORBIDITY From County Health Rankings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Perceived Poor or Fair Health</td>
</tr>
<tr>
<td>Beaverhead County</td>
<td>11%</td>
</tr>
<tr>
<td>Montana</td>
<td>13%</td>
</tr>
<tr>
<td>National Benchmark</td>
<td>10%</td>
</tr>
</tbody>
</table>

Source: County Health Rankings, 2012

### 4.0 Maternal and Infant Health

Pregnancy and childbirth have a significant impact on the physical, mental, emotional, and socioeconomic health of women and their families. Pregnancy-related health outcomes are influenced by a woman’s health and other factors like race, ethnicity, age, and income. For purposes of public health planning, maternal and infant health is an important consideration. A number of factors were reviewed to determine population level outcomes related to maternal, infant health in Beaverhead County, including entrance into prenatal care, pre-term births, low birth weight, gestational diabetes and infant mortality.

Appropriate prenatal care is important to preventing problems and helping women achieve the ideal result of full-term pregnancy without unnecessary interventions, the delivery of a healthy baby, and a healthy postpartum. An important indicator of appropriate prenatal care is the percentage of pregnant women who begin prenatal care during the first trimester of pregnancy. Over the period 2008-2010, 69% of pregnant
women in Beaverhead County entered prenatal care in the first trimester, which was on par with the state for the period. Both are lower than the national rate of 71% for 2008.

At 8.2%, the percent of infants born with low birth weight (less than 2,500 grams) is slightly higher than the national rate of 8.1% and higher than the Montana rate of 7.1%. The percentage of live births that were preterm (less than 37 weeks) in the county was 8.4%, which is lower than both the state and national percentages which were 9.7% and 11.3% respectively. No infant deaths were reported in 2011. The rate over the five-year period 2005-2009 was 4.3 per 100,000 compared with 6.3 per 100,000 for Montana. (Refer to Table 7.)

<table>
<thead>
<tr>
<th>TABLE 8</th>
<th>MATERNAL AND INFANT HEALTH MEASURES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrance into prenatal care in first trimester 2008-2010</td>
<td>United States</td>
</tr>
<tr>
<td></td>
<td>71%</td>
</tr>
<tr>
<td>Low birth weight (less than 2500 grams) as a percent of live births</td>
<td>8.1%</td>
</tr>
<tr>
<td>Infant Mortality (deaths per 1,000 live births, 2011)</td>
<td>6.05</td>
</tr>
<tr>
<td>Pre-term births (&lt; 37 weeks) as a percent of live births (MT and County Rate is for 2005-2009; National rate is 2011)</td>
<td>11.3%</td>
</tr>
<tr>
<td>Percent of live births involving gestational diabetes 2004-2008</td>
<td>NA</td>
</tr>
</tbody>
</table>

Sources:
1 Montana Kids Count; Beaverhead County, website: [http://www.montanakidscount.org/filelib/120.pdf](http://www.montanakidscount.org/filelib/120.pdf)
2 Centers for Disease Control and Prevention; Health United States, 2011; Table 5; Prenatal Care for Live Births; 2008
3 Centers for Disease Control and Prevention
4 Montana Department of Public Health and Human Services; Maternal, Infant, and Early Childhood Home Visiting Program; Beaverhead County Profile; 2005-2009
6 Montana Department of Public Health and Human Services; Selected Vital Statistics, Frequencies and Rates or Ratios by County, Montana, 2011
7 Montana Department of Health and Human Services; Data compiled for Community Health Assessments; Beaverhead County
### TABLE 9
HEALTH BEHAVIORS AND OUTCOMES

<table>
<thead>
<tr>
<th></th>
<th>NATIONAL BENCHMARK</th>
<th>BEAVERHEAD COUNTY</th>
<th>MONTANA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Alcohol Consumption</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excessive Drinking: % Heavy Drinkers (males-more than 2 drinks/day; females-more than one drink per day) and binge drinking (males-more than 5 drinks/day; females-more than 4 drink per day)</td>
<td>8%</td>
<td>14%</td>
<td>18%</td>
</tr>
<tr>
<td><strong>Adult Obesity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Obese (BMI of 30 or greater)</td>
<td>25%</td>
<td>23%</td>
<td>24%</td>
</tr>
<tr>
<td>% of adults aged 20 and over reporting no leisure time physical activity</td>
<td>21%</td>
<td>21%</td>
<td>23%</td>
</tr>
<tr>
<td><strong>Adult Smoking Prevalence</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Adults who smoke every day or most days</td>
<td>14%</td>
<td>12%</td>
<td>19%</td>
</tr>
<tr>
<td>% Mothers who smoked during pregnancy</td>
<td>NA</td>
<td>13.1%</td>
<td>18.3%</td>
</tr>
<tr>
<td><strong>Morbidity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-reported health status; % of adults reporting fair or poor health (age adjusted)</td>
<td>10%</td>
<td>11%</td>
<td>13%</td>
</tr>
<tr>
<td>Average number of physically unhealthy days reported in last 30 days</td>
<td>2.6</td>
<td>3.4</td>
<td>3.4</td>
</tr>
<tr>
<td>Average number of mentally unhealthy days reported in last 30 days</td>
<td>2.3</td>
<td>2.9</td>
<td>3.2</td>
</tr>
<tr>
<td><strong>Disability</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of Population 5 years of age and older with a disability</td>
<td>NA</td>
<td>16.2%</td>
<td>17.5%</td>
</tr>
<tr>
<td><strong>Mortality</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Median age at death (all races)</td>
<td>NA</td>
<td>80</td>
<td>78</td>
</tr>
<tr>
<td>Heart disease mortality rate per 100,000 population</td>
<td>191.4 National Rate</td>
<td>239.2 National Rate</td>
<td>191</td>
</tr>
<tr>
<td>Cancer mortality rate per 100,000 population</td>
<td>176.4 National Rate</td>
<td>151.7</td>
<td>166.3</td>
</tr>
<tr>
<td>Diabetes mellitus mortality rate per 100,000 population</td>
<td>23.5 National Rate</td>
<td>24.9 National Rate</td>
<td>27.1</td>
</tr>
<tr>
<td>Chronic liver disease and cirrhosis mortality rate per 100,000 population</td>
<td>NA</td>
<td>9.1</td>
<td>12.7</td>
</tr>
<tr>
<td>Cerebrovascular disease (including stroke) mortality rate per 100,000 population</td>
<td>NA</td>
<td>40.8</td>
<td>49.7</td>
</tr>
</tbody>
</table>
### Chapter One: Indicators of Public Health

<table>
<thead>
<tr>
<th>Indicator</th>
<th>NA</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pneumonia/Influenza mortality rate per 100,000 population</strong></td>
<td>NA</td>
<td>15.9</td>
<td>19.0</td>
</tr>
<tr>
<td><strong>Chronic lower respiratory disease mortality rate per 100,000 population</strong></td>
<td>NA</td>
<td>61.2</td>
<td>63.9</td>
</tr>
<tr>
<td><strong>Suicide rate per 100,000 population</strong></td>
<td>12</td>
<td>21.4</td>
<td>22.9</td>
</tr>
<tr>
<td><strong>Drug-related mortality rate per 100,000 population</strong></td>
<td>NA</td>
<td>9.1</td>
<td>13.8</td>
</tr>
<tr>
<td><strong>Motor Vehicle Crash Death Rate per 100,000 population</strong></td>
<td>12</td>
<td>27.2</td>
<td>25.5</td>
</tr>
<tr>
<td><strong>Unintentional injury death rate per 100,000 population</strong></td>
<td>NA</td>
<td>65.7</td>
<td>55.8</td>
</tr>
<tr>
<td><strong>Work-related injury death rate per 100,000 population</strong></td>
<td>NA</td>
<td>6.8</td>
<td>3.7</td>
</tr>
</tbody>
</table>

#### Immunizations

<table>
<thead>
<tr>
<th>Indicator</th>
<th>NA</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Childhood Immunization Up-to-Date (24-35 months) 2011</strong></td>
<td>77%</td>
<td>35%</td>
<td>71%</td>
</tr>
<tr>
<td><strong>Health Insurance</strong></td>
<td>15.7%</td>
<td>26.9%</td>
<td>20.7%</td>
</tr>
<tr>
<td><strong>Maternal and Child Health</strong></td>
<td>71%</td>
<td>69%</td>
<td>69%</td>
</tr>
<tr>
<td><strong>Entrance into prenatal care in first trimester 2008-2010</strong></td>
<td>8.1%</td>
<td>8.2%</td>
<td>7.1%</td>
</tr>
<tr>
<td><strong>Low birth weight (less than 2500 grams) as a percent of live births</strong></td>
<td>6.05%</td>
<td>0%</td>
<td>6.1%</td>
</tr>
<tr>
<td><strong>Infant Mortality (deaths per 1,000 live births, 2011)</strong></td>
<td>11.3%</td>
<td>8.4%</td>
<td>9.7%</td>
</tr>
<tr>
<td><strong>Percent of live births involving gestational diabetes 2004-2008</strong></td>
<td>NA</td>
<td>2.5%</td>
<td>4.5%</td>
</tr>
<tr>
<td><strong>Pre-term births (&lt; 37 weeks) as a percent of live births (MT and County Rate is for 2005-2009; National rate is 2011)</strong></td>
<td>11.3%</td>
<td>9.7%</td>
<td>11.3%</td>
</tr>
</tbody>
</table>

#### Cancer Incidence (2006-2010)

| Cancer incidence rate (diagnosis per 100,000) | 453.7 | 429.3 | 455.9 |

#### Communicable Disease (2012)

<table>
<thead>
<tr>
<th>Condition</th>
<th>NA</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlamydia; reported cases per 100,000 population</td>
<td>NA</td>
<td>486</td>
<td>381</td>
</tr>
<tr>
<td>Gonorrhea; reported cases per 100,000 population</td>
<td>NA</td>
<td>0</td>
<td>10.7</td>
</tr>
<tr>
<td>Hepatitis C (chronic) cases per 100,000 population</td>
<td>NA</td>
<td>129.78</td>
<td>137.3</td>
</tr>
<tr>
<td>Syphilis; reported cases per 100,000 population</td>
<td>NA</td>
<td>0</td>
<td>0.3</td>
</tr>
<tr>
<td>Tuberculosis; reported cases per 100,000 population</td>
<td>NA</td>
<td>0</td>
<td>0.5</td>
</tr>
<tr>
<td>Pertussis; reported cases per 100,000 population</td>
<td>NA</td>
<td>10.8</td>
<td>55.0</td>
</tr>
</tbody>
</table>
XI. HEALTHCARE ACCESS

Two primary indicators related to healthcare access were reviewed for this report—percent of the population without health insurance and the availability of health care providers. According to the most recent health insurance estimate from the U.S. Census Bureau, 26.9% of people (1,946) under the age of 65 have no form of health insurance in Beaverhead County compared with 20.7% for Montana and 15.1% for the nation. For people with incomes at or below 200% of the federal poverty line (low-income),

### TABLE 10

<table>
<thead>
<tr>
<th></th>
<th>Population &lt;65 Years</th>
<th>Population &lt;200% of Poverty</th>
<th>Population &lt;19 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beaverhead County</td>
<td>26.9%</td>
<td>40.2%</td>
<td>18.5%</td>
</tr>
<tr>
<td>Montana</td>
<td>20.7%</td>
<td>34.3%</td>
<td>12.5%</td>
</tr>
<tr>
<td>United States</td>
<td>17.9%</td>
<td>36.3%</td>
<td>9.7%</td>
</tr>
</tbody>
</table>

Sources: U.S. Census Bureau; Small Area Health Insurance Estimates
the percentage without health insurance increases dramatically. Overall, 40.2% of low-income people under 65—just over 1,250—have no health insurance. *(Refer to Table 10.)*

For children, health care coverage is higher, due in part to the availability of health insurance programs for poor and lower income children including the Children’s Health Insurance Program (CHIP) and the Healthy Montana Kids program administered by the State of Montana. Medicaid also provides access to healthcare for the very poorest of children; 425 or 23.7% of Beaverhead County children are enrolled in Medicaid.*xciii*

According to the most recent Census estimate, 18.5% (336) of people under the age of 19 in the county have no health insurance. *(Refer to Table 10.)* The national Affordable Healthcare Act, much of which will take effect in 2014 has the potential to greatly increase the rate of uninsured people, and therefore, increase healthcare access. Outcomes will likely not be seen in data until 2015.

The availability of health care providers is critical to maintaining population level health. Beaverhead County has a number of healthcare professional shortage designations as assessed by the U.S. Department of Health and Human Services that are important to note for planning purposes. The county is designated as a dental health professional shortage area and also has a dental shortage designation specific to the low-income population.*xciv* The Big Hole Basin and Lima areas are designated as ‘medically underserved’ and the county as a whole is designated as a mental health professional shortage area. *xcv* The county is also designated as a mental health professional shortage area, which is a critical issue in a county with relatively high rates of depression and suicide.
CHAPTER TWO: SERVICES AND GAPS
I. INTRODUCTION

The gap analysis portion of the health assessment for Beaverhead County is the second part of the community health needs assessment process. While the first part examines various indicators of public health, this portion provides a means to identify gaps and deficiencies in health related services and programs. The following section of the report summarizes existing initiatives and also notes those that are missing or are in some way inadequate to address identified needs.

II. METHODOLOGY

In the months of August through October, 2012, representatives of service agencies and organizations were contacted by telephone to learn the nature and extent of existing services and programs in Beaverhead County. Each interviewee was presented with the following questions:

- What services (and areas of service) does your program/agency provide?
- Do these services meet the need?
- Are there needs which are currently unmet?

Interviews were conducted with the following people:

- Sue Hansen, Director, Beaverhead County Health Department, August 31, 2012
- Jim Sommers, Office Director, Western Montana Mental Health Center, September 6, 2012
- Dr. Glen Johnson, Superintendent, Dillon Elementary Schools (District 10), September 13, 2012
- Fred Chouinard, Principal, Beaverhead County High School, September 14, 2012
- Millie Brown, Beaverhead County Food Pantry, September 10, 2012
- Terry Hursh, Dillon Medical Clinic, September 17, 2012
- Ken Westman, CEO, Barrett Hospital and Healthcare, September 18, 2012 and September 5, 2013
- Kim Lemhouse, Coordinator, Youth Connections Mentoring, September 21, 2012
- Kelly McIntosh, Executive Director, Women’s Resource/Community Support Center, September 24, 2012
- Mike Strang, Director, Lima Food Commodities, September 25, 2012
- Jen Titus, Wise River Community Foundation, October 1, 2012
- Linda Marsh, Beaverhead County Superintendent of Schools, October 5, 2012
- Tracy Nourse, Montana Migrant Council, October 9, 2012
- Rick Hartz, Planning Director, Beaverhead County, October 12, 2012
- Frank Allen, Beaverhead Allied Senior Services, September 4, 2013
III. CURRENT SERVICES

1.0. PUBLIC HEALTH AND PREVENTION SERVICES

Immunizations
The Beaverhead County Public Health Department immunization clinic is held every Wednesday and targets people of all ages. The Department also provides immunization outreach services to schools, clinics, UM-Western and other entities as needed. All recommended immunizations are provided, with the exception of those required for international travel.

The immunizations are divided into two stocks including vaccines for private pay patients, who have insurance or other means to pay and vaccines for children which is provided through Vaccines for Children (VFC), a federally funded program for children through the age of 18, who are uninsured. There is no charge for the vaccines, but a federally set administrative fee of $20 is charged for each shot.

While the Health Department had been the primary provider of vaccines in Beaverhead County, recently more providers are giving shots. Therefore it is difficult to know what percentage of residents is immunized each year. However, most children entering the public schools are immunized as required by law. Children who are home-schooled are more difficult to track.

It is estimated that 1050 persons, age 0-22 are immunized each year.

Family Planning
Beaverhead Family Planning, a satellite clinic to the Butte-Silver Bow County Family Planning and administered by Beaverhead County Public Health, provides reproductive health services to both men and women, although the services are primarily accessed by women. Family planning services include reproductive health examinations, the provision of contraceptives, and pregnancy tests. Clients are referred to healthcare providers for follow-up care. While some clients are as young as 12 years of age, most are between 15 and 44 years of age. A total of 331 women were served in 2011, of which 33% were insured and 67% were not. The clinic offers a sliding fee scale and depends on donations to offset costs.

Sexually Transmitted Diseases
The Department also serves people who contract sexually transmitted diseases (STDs), providing testing, follow-up and treatment. State law requires healthcare providers to report STD information to county health
departments, which in turn reports the information to the State Department of Health and Human Services (DPHHS). The names of persons with whom the infected person has been in physical contact must also be reported and the Health Department is required to notify those persons of potential infection. Clients are given treatment and public health nurses provide follow-up as well. The number of cases increases when college is in session. There were 14 reported cases of chlamydia (the most common STD observed) in 2011.

**Disease Reporting and Investigation**

Beaverhead County Public Health is responsible for reporting communicable diseases including those that are vaccine preventable. State law requires that these diseases be reported to the DPHHS and that follow-up be conducted. The Health Department works to educate providers, reminding them to report the occurrence of over 100 diseases and conditions including Hepatitis (A, B and C), AIDS, Influenza, STDs and other less common ones such as Rocky Mountain Spotted Fever. Information about other conditions – heart disease, diabetes, etc. is provided by the hospital to DPHHS using the system of diagnostic codes.

**American Heart Association – CPR Training**

The Health Department facilitates CPR instructor training and offers classes directly to the community throughout the year.

**Emergency Preparedness and Response**

A considerable amount of Department time and effort is directed to emergency preparedness and response, with support from federal grant funds. The staff works with the Beaverhead County Disaster and Emergency Service (DES) to make sure local communities are prepared through good communication and emergency exercises.

The biggest concern is that individuals are not prepared and have no plan if a disaster were to occur. Often residents lack specific home evacuation plans including providing safe conditions for animals – livestock and family pets. The County, in conjunction with various farm agencies, is working on an “Agri-Security” Plan to address agricultural issues associated with disaster preparedness.

**Community Health Fair**

Beaverhead County Public Health holds a Community Health Fair in Dillon every two years. The Fair features 50 to 70 booths that provide health-related services information and screenings. The Fair draws an average of 1000 attendees. Barrett Hospital and Healthcare has agreed to coordinate the Health Fair and plans to provide it on an annual basis at the hospital.
School Health Services Program
Beaverhead County, with the exception of Lima, has no school nurse program. The Health Department helps to fill in the gaps by providing educational services for school staff and students and provides immunizations as needed in the schools.

With funding from the Office of Public Instruction (OPI), the Department is launching a new Health Enhancement Program. The Program, funded through grants and Family Planning, will target 6th through 9th graders, and will on behavioral health issues including reproductive health. During the first year (2012-2013), the program will include the 6th and 9th grade and 7th and 8th will be added later.

Rural Area Schools Health Fairs
Each year the Department holds three health fairs, serving schools in Polaris, Grant, Wisdom, Jackson, Wise River and Glen (Riechle School). Students are provided with hearing, vision and dental screening along with height and weight and wellness education.

Note: The Sanitarian (a separate department) conducts inspections of restaurants.

2.0 Hospital Services
Barrett Hospital and HealthCare (BHH) serves Beaverhead, Madison and Jefferson Counties and is named one of the top 100 critical access hospitals in the country. The new state of the art hospital has become a central health care provider for more than 1,200 people. BBH is operated under a County Hospital District and is governed by an elected board. Currently, there are 225 employees, volunteers, and physicians providing the best care for the surrounding counties. The hospital offers numerous services and visiting specialists. The staff consists of 12 full time physicians including three family practice physicians, five family practice physicians, two of which also provide obstetric care, one geriatrician, one gynecologist, one hospice and palliative care physician, and two internists. The hospital has 20 visiting specialists practicing urology, gynecology, interventional pain management, ophthalmology, orthopedics, pathology, podiatry, and radiology.
Additionally, BHH has a contract with an independent practice within the hospital, which includes one general surgeon and one orthopedic surgeon. While BHH does not have a walk-in clinic, patients can set up a same day appointment with their personal care provider or the next available physician on staff. At all times, a family practice and obstetrics physician is on call for baby deliveries.

Overall, approximately 85 percent of the patients who seek care have insurance through Medicare (45-50%), Medicaid (55-60%), or a private provider (25-30%), while 15 percent are uninsured. The hospital offers
Beaverhead County Community Needs Assessment 2012-2013

financial help through their “Charity Care Program” for those patients who are unable to afford insurance or simply cannot pay.

Services and Specialties include:

- 24 Hour Provider Staffed Emergency Care (20 volunteer EMTs from the community)
- Anesthesia
- Cardiac Rehab
- Cardiopulmonary Services: Respiratory Therapy and Echocardiography
- Clinical Laboratory
- Diabetes Education
- Health Education Classes/Seminars
- Home Health & Hospice (Medicare Certified)
- ICU/CCU
- Inpatient/Skilled Nursing
- Nutritional Services/Dietary Counseling
- OB Services/Childbirth Preparation Classes
- Occupational Therapy
- Pharmacy (Hospital Only): Anticoagulation Clinic
- Physical Therapy/Sports Medicine
- Physician/Primary Care Services
- Radiology/Diagnostic Imaging: CT, MRI, Digital Mammography, Nuclear Medicine, Radiographics, and Ultra Sound
- Social Services
- Speech Pathology (Contracted)
- Surgery: Inpatient, Outpatient, General, Orthopedic, Gynecology, Ophthalmology, Podiatry, and Urology

3.0 Clinics

- The Dillon Medical Clinic is an urgent care clinic for southwest Montana and northeast Idaho. The clinic is both public and private and serves approximately 12,000 people of all ages. The clinic does not have any income restrictions and will serve anyone in need of help.

- The Community Health Center in Sheridan provides primary medical care to people throughout Beaverhead, Madison and Silver Bow Counties and provides a sliding fee for people at or below 200% of the federal poverty line.
4.0 NURSING HOMES AND ASSISTED LIVING FACILITIES

- **Kindred-Parkview Nursing and Rehabilitation**: The facility has 87 Medicare/Medicaid beds. It provides a full range of nursing care and social services to treat and support residents. A variety of conditions can be treated. Services include but not limited to:
  - Respiratory conditions such as pneumonia and post-acute COPD episodes
  - Cardiac conditions and postsurgical care (grafts, valves, stints)
  - Wound
  - Stroke
  - Orthopedic
  - Neurological illnesses
  - Diabetes

- **Renaissance Assisted Living** has two facilities located in the city of Dillon with a total capacity of 15. Services include:
  - 24-hour staff to supervise all activities
  - Three dietitian designed meals per day
  - Assistance with personal needs including, bathing, grooming and dressing
  - Housekeeping and personal laundry services
  - Daily activities programs and supervised social events
  - Nursing oversight and assessments
  - Medication assistance & incontinence management

- **Legacy Senior Living**, 1000 Highway 91 South, Dillon, Assisted Living Facility with 10 beds and 10 additional rooms under construction. Each room accommodates one person or a married couple. One of the current residents is on Medicaid, while all others are self-pay. Services include:
  - Three meals daily
  - Registered Nurse on premises
  - Medication monitoring
  - Activities of Daily Living assistance
  - Transportation services

5.0. HOSPICE ORGANIZATIONS

- Barrett Hospital and Healthcare manages a hospice program in conjunction with area nursing homes and incorporates both palliative care within the hospital and home health hospice services.
- **Kindred Nursing**, at 200 Oregon Street in Dillon provides hospice care as part of its overall services.
- **Rocky Mountain Hospice**: The Butte office of Rocky Mountain Hospice is Medicare-certified and serves Dillon. The organization currently has five clients in Sheridan.
6.0. SENIOR SERVICES

- Beaverhead Allied Senior Services, contact: Frank Allen, provides the following services:
  - Beaverhead County Senior Bus – providing two trips monthly to Dillon from Lima and two trips monthly to Butte, based on demand.
  - Meals on Wheels program
  - Congregant meals every Wednesday, rotating locations by month – This program is funded in part by the Area 5 Agency and in part by the participants, based on income. The City of Dillon provides bus service for those within town who want to participate. An average of 15 persons attend and numbers are increasing.
  - Beaverhead Senior Citizens hosts a senior center at 126 South Montana Street in Dillon where residents can socialize, play cards and have lunch.

7.0. DENTISTS

The following is a list of dentists practicing in Dillon, Montana, based on Internet advertising information:

- Scott C Olsen, DDS, 115 S Pacific St, Dillon, MT 59725, (406) 683-2671
- Chris Malloy, DDS, 236 E Glendale St, Dillon, MT 59725, (406) 683-6536
- Robert W Malloy Jr., DDS, 327 E Helena St, Dillon, MT 59725, (406) 587-1811
- Dillon Dental Clinic, 327 E Helena St, Dillon, MT 59725, (406) 683-5121
- John B McCollum, Dentist, State Bank Bldg, Dillon, MT 59725, (406) 683-5125
- Aaron Orme, 35 Johnson Ave, Dillon, MT 59725, (406) 683-2550
- George R Johnston, DDS, 41 Barrett St, Dillon, MT 59725, (406) 683-4440
- Justin H Rhodes Justin, DDS, 327 E Helena St, Dillon, MT 59725, (406) 683-5121
- Derek & Lynn Brown, 2150 Overland Rd, Dillon, MT 59725 » Map (406) 683-2385

8.0 YOUTH ACTIVITIES AND SERVICES

- School Based Programs
  Beaverhead County High School (BCHS) serves 351 students in grades 9th-12th. The staff includes 33 teachers, one therapist and behavior specialist, one mental health associate, and five administrators. The following programs support youth:
  - Montana Behavioral Initiative (MBI) The purpose of MBI is to “improve academics and behavior by enhancing engagement, encouraging respect, and building relationships among all Beaverhead County High School students and staff. We dedicate ourselves to making BCHS incredible by
teaching and modeling the necessary skills to be successful” (http://bchsmt.schoolwires.com/). The MBI team consists of students, faculty members, and two behavioral specialists. Many of these specialists also work with students in the Special Education Program.

- **Gifted and Talented Education Program (GATE)** This program has been established to challenge and stimulate students who are capable of high performance and possess high intellectual ability in comparison to the general population. Students who participated in the gifted and talented program while enrolled in a District #10 school are automatically accepted into GATE at BCHS.

- **The high school counselor offers students guidance and a number of resources for college preparation including:** information about financial aid, admission policies, PSAT/SAT/ACT testing dates, scholarship opportunities, and military recruiter dates.

- **BCHS has an extensive library providing students with:** full computer access, writing and researching guidance, career exploring, college scholarship opportunities, financial aid information and eligibility, and The Accelerated Reader Program utilized by some English classes. A tutoring service is also provided to students who need additional help.

- **BCHS has numerous student organizations including:** Academic Olympics, American politics club, art club, chess club, drama club, FCCLA (Family, Career, Community, Leaders of American), FFA (Future Farmers of America), Honors Society, IT (Industrial Technology), key club, MBI Youth (Making BCHS Incredible), pep club, rodeo club, SADD (Students Against Destructive Decisions), student council, yearbook, and youth legislature.

- **Renaissance Program** This program encourages students to attain high achievement through positive reinforcement. Students who maintain good grades, and or retain a GPA above a certain set point are given rewards including movie tickets, local event invitations, and “get out of detention free” passes. Students who win awards or are recognized for academic achievement are given positive reinforcements. The program provides students with a great motivation to excel and continues to be very advantageous.

- **Peer Mediation** This program helps students resolve their problems without adult intervention. For example, if two students were to engage in a physical fight, under school policy, they would be expelled; however, if the students are willing to partake in peer mediation and talk to one another and other peers in order to resolve the issue the students will receive a less harsh punishment. Some of the high school faculty has noticed that peer mediation has helped decrease the number of bullying incidences.

- **BCHS offers a Driver’s Education Summer Program for all eligible students.**

- **Altacare provides a licensed therapist a mental health associate for a school-based counseling service to help students in need of mental health assistance. Altacare offers the following services:** individual therapy, family therapy, therapeutic process groups, social skills training, general case management, and psycho-education groups.
- **Youth Connections Mentoring (YCM)**
  YCM is a non-profit organization that provides services to Beaverhead County, primarily in Dillon. YCM offers two separate programs, both of which provide mentoring services to elementary students without charge. First, the Lunch Program involves volunteer high school students spending time at the elementary school during their lunch hour to help those children in need. Many of the high school students who volunteer are members of the Honors Society, which requires students to actively volunteer in the community. The second program is similar to Big and Brothers, such that volunteer adults from the community spend time with the elementary students offering advice and guidance. 80 percent of the 50 volunteers are high school students, while the remaining 20 percent are adults from the community participate in the mentoring program that serves approximately 50 elementary students. The elementary students do not have to report to a teacher or faculty student after mentoring sessions; however, the students are required to sign in. Additionally, the students and volunteers are under supervision at all times by one of the YCM coordinators.

- **Youth Employment and Training Program**
  This program is provided through the District XII Human Resources Council headquartered in Butte. Youth between the ages of 14 and 21 have the opportunity to become more prepared for the workforce by participating in the Youth Employment and Training Program. The program provides both educational and employment experience for participants. Case managers travel to Beaverhead County from Butte.

### 9.0. NUTRITION SERVICES

- The Beaverhead Food Pantry provides food for people who are in need including singles, couples, and families. On average, approximately 150-200 people are served per week. Most of the people who utilize the food pantry are elderly, people with disabilities, and those who have low-income jobs and are uninsured. The Pantry provides a three-day supply of groceries and offers referrals in order to apply to programs such as L.I.E.A.P. and the Supplemental Nutrition Assistance Program or “SNAP. The pantry does not have any income restrictions and offers food to anyone in need. The staff consists of many volunteers and the program director. The Food Pantry depends on donations, grants, and local business contributions.

- The Montana Department of Public Health and Human Services provides the Supplemental Nutrition Assistance Program for needy people in Beaverhead County who must qualify based on income and other resources. The associated Office of Public Assistance is located in Dillon.
10.0 SOCIAL SERVICES

- The Women’s Resource/Community Support Center (CSC/WRC) is a non-profit organization serving Beaverhead County and Madison County. The Center offers several services including: immediate domestic violence crisis intervention, immediate sexual assault crisis intervention, victim advocacy, prevention of domestic violence, and awareness events. CSC/WRC also works closely with the University of Montana Western educating students about violence awareness and victim prevention. The center provides a separate shelter unit, which has two bedrooms and is typically occupied by a single family. CSC/WRC has four full time staff members and one part-time member. CSC/WRC served approximately 1,200 people in 2012 compared to a total of 811 people in 2011. Approximately 95% of the clients are provided insurance by Medicaid or state insurance.

- The Montana Department of Health and Human Services provides Temporary Assistance to Need Families (TANF), Supplemental Nutrition Assistance Program, Child and Adult Protective Services to Beaverhead County through an office in Dillon.

- The Human Resources Council, District XII is the Community Action Agency serving Beaverhead County. Although headquartered in Butte, it provides Section 8 rental assistance, Youth Employment and Training services, home weatherization services and low income energy assistance to low-income households in Beaverhead County.

- The Montana Mental Health Center in Dillon provides adult case management, adult day treatment, adult outpatient treatment, client housing, and psychiatric services. The Butte Center is responsible for all crisis situations for the Mental Health Center. Last year, approximately 38 crisis response calls were made (32 calls from the hospital and six from the jail). The center provides services for families, adolescents, and adults who are typically 18 years of age and over. The Dillon staff consists of two therapists, one psychiatrist, and one administrator. Jim is one of the two therapists and also serves as the office director. The psychiatrist is under contract for the center and serves four days per month, commuting from Bozeman.

The center serves 225 clients in Beaverhead County. On an annual basis the Center records more than 6,000 client events which includes the following:

- 1,400 day treatments
- 3,000 who are provided with case management
- 1,300 therapy sessions
- 500 psychiatric sessions

The center does not have any income restrictions and offers care to anyone with any type of mental disorder. Over the past fiscal year, Medicaid insured approximately 94 percent of the clients while the remainder used alternative commercial insurance. Medicaid provides a statewide program specifically for mental health centers, which allows all mental health patients to seek care. The Center receives a few
AWARE, Inc. offers help for children who suffer from mental disorders.

11.0 EMERGENCY SERVICES AND COMMUNICATIONS

- Beaverhead County Disaster and Emergency Services (DES) or Emergency Management is an integrated effort to prevent or minimize the seriousness of emergencies and disasters and to plan and coordinate the community’s response to those emergencies and/or disasters. It requires establishing partnerships among emergency response and management personnel to Prevent, Respond to, Recover from and Mitigate emergencies and disasters. Coordination is a key factor of the emergency management program to protect lives, property and resources.

- Barrett Hospital provides 24 hour services for health-related emergencies. The service is staffed by 20 volunteer Emergency Medical Technicians from the community.

- The Wise River Fire Department has two fire trucks and one ambulance along with four fire fighters and one EMT. The department is responsible for attending to all emergencies within approximately a 12-mile radius including Wise River, Divide, and Dewey. If the fire department cannot respond to an emergency, a fire truck or ambulance from Butte is ordered to attend to the emergency. The emergency response team from Butte can take up to an hour to arrive on the scene and unfortunately, is too late for urgent crisis situations. Due to the lack of funding, fire fighters, and certified EMTs, very little can be done to improve the emergency response team in Wise River. The hospital works with police and fire emergency services personnel.

- As noted above, the Beaverhead County Health Department devotes considerable resources to preparedness and response, and works with the Beaverhead County Disaster and Emergency Service (DES) to make sure that local communities are prepared through good communication and emergency exercises.
IV. IDENTIFIED GAPS

1.0 MENTAL AND BEHAVIORAL HEALTH ISSUES
   - There is little access to mental health services for victims.
   - Once the victims of abuse have received care and gain stability, they return home to the same negative or abusive living environment, which prevents long-term recovery.
   - The University of Montana Western lacks victim advocacy, crisis intervention, and programs to improve awareness of violent crime.

2.0 YOUTH AT RISK
   - School Nursing – There are no school nurses (except in the Lima school district) due to lack of funding
   - There are not enough volunteer mentors for students with behavioral issues
   - Rural schools are in great need of emotional and mental health services
   - Several rural schools do not offer any in-depth drug and alcohol prevention programs

3.0 HEALTH OUTCOMES
   - There is a lack of follow-up, through home visits for maternal and child health services in particular
   - Emergency Preparedness Training and Planning – for individual residents and families is needed
   - There is inadequate emergency services in the rural areas
   - Few translators are readily available to non-English speaking patients
   - The Hospital (BHH) is in immediate need of a dermatologist, a chemotherapist and more mental health care providers, specifically child and adolescent therapists.
   - Mental health nurse practitioners are needed.
   - The Hospital would benefit from a Telepsychiatry program, which provides patients with 24/7 online counseling through video communication.
   - BHH would like to provide an inpatient drug and alcohol detoxification unit.

4.0 POVERTY AND INCOME
   - People are underinsured or have no insurance
   - The food pantry is operating at a deficit as utility costs increase
   - Limited transportation services make accessing health services difficult for those living in poverty
   - 40 percent of students in the elementary and middle schools are utilizing the reduced-priced hot lunch program due to an increase of students living in low-income or poverty-stricken households
   - There is a lack of affordable housing
   - Homelessness is a problem in Beaverhead County
5.0 AGING POPULATION

- The senior housing need has not been adequately documented
- Due to limited resources, many of the older adults who need more specialty care (e.g. Chemotherapy) have to travel long distances to larger communities where they can receive proper care or treatment. Unfortunately, some of the older adults are unable to access transportation, or cannot drive themselves.
- The hospital is anticipating a large demand for geriatricians as the number of older adults in the community increases
- Nearly half of the population in Wise River consists of older adults who have limited mobility and support.
END NOTES

1 The U.S. Department of Health and Human Services, Bureau of Primary Health Care, defines counties with populations of 50 or more people per square mile as ‘urban’, fewer than 50 and more than 6 people per square mile as ‘rural’ and 6 or fewer people per square mile as frontier.
2 Beyond Rural; Montana; Montana State Rural Health Plan, Department of Health and Human Services, Quality Assurance Division, July, 2008
3 “Top Ten Rural Issues for Healthcare Reform; A series examining healthcare issues in rural America”; No. 2; John M. Bailey, Center for Rural Affairs, March, 2009
4 Beyond Rural; Montana; Montana State Rural Health Plan, Department of Health and Human Services, Quality Assurance Division, July, 2008
5 “Top Ten Rural Issues for Healthcare Reform; A series examining healthcare issues in rural America”; No. 2; John M. Bailey, Center for Rural Affairs, March, 2009
6 “Depression in Rural Populations: Prevalence, Effects of Life Quality and Treatment-seeking Behavior”; Rural Health Resource Center; 2005
7 “Depression in Rural Populations: Prevalence, Effects of Life Quality and Treatment-seeking Behavior”; Rural Health Resource Center; 2005
8 “Top Ten Rural Issues for Healthcare Reform; A series examining healthcare issues in rural America”; No. 2; John M. Bailey, Center for Rural Affairs, March, 2009
9 “Top Ten Rural Issues for Healthcare Reform; A series examining healthcare issues in rural America”; No. 2; John M. Bailey, Center for Rural Affairs, March, 2009
10 “Top Ten Rural Issues for Healthcare Reform; A series examining healthcare issues in rural America”; No. 2; John M. Bailey, Center for Rural Affairs, March, 2009
11 Woods and Poole Economics, Population Projections for People 65 and older
12 The Impending Collapse of Primary Care Medicine and Its Implications for the State of the Nation’s Health Care: A Report from the American College of Physicians, January 30, 2006
13 “Top Ten Rural Issues for Healthcare Reform; A series examining healthcare issues in rural America”; No. 2; John M. Bailey, Center for Rural Affairs, March, 2009
14 Woods and Poole Economics; Population Projections by County
15 Montana Census and Economic Information Center; Map based on 2010 Decennial Census by Block
16 U.S. Census Bureau; 2010 Decennial Census
17 Wood and Pool Economics, Inc.; 2006
18 The Impending Collapse of Primary Care Medicine and Its Implications for the State of the Nation’s Health Care: A Report from the American College of Physicians January 30, 2006
19 U.S. Census Bureau; American Community Survey; 2006-2010
20 U.S. Census Bureau; 2010 Decennial Census
21 County Health Rankings, 2010; Robert Wood Johnson Foundation, University of Wisconsin Institute of Public Health
22 U.S. Census Bureau; American Community Survey; 2006-2010
23 U.S. Census Bureau; American Community Survey; 2006-2010
25 Medical News Today; Article Date: 04 Jan 2006
26 Medical News Today; Article Date: 04 Jan 2006
27 The poverty line is an arbitrary income level established by the federal government that is based on an income required for the purchase of basic necessities and is adjusted for household size. Thus, for those living below the poverty line, income is inadequate for the purchase of even basic necessities.
28 U.S. Census Bureau; Small Area Income and Poverty Estimates, 2011
29 U.S. Census Bureau; Small Area Income and Poverty Estimates, 2007-2011
30 U.S. Census Bureau; American Community Survey; 2007-2011
31 U.S. Census Bureau; American Community Survey; 2007-2011
32 Montana Department of Labor and Industry; Madison County Profile; 2010
33 U.S. Census Bureau; American Community Survey; 2005-2009
34 Montana Department of Public Health and Human Services; Statistical Report, Fiscal Year End 2010, 2012
35 Montana Office of Public Instruction
ADULT OBESITY MEASURE
The adult obesity measure represents the percent of the adult population (age 20 and older) that has a body mass index (BMI) greater than or equal to 30 kg/m². Estimates of obesity prevalence by county were calculated by the CDC’s National Center for Chronic Disease Prevention and Health Promotion, Division of Diabetes Translation, using multiple years of Behavioral Risk Factor Surveillance System (BRFSS) data. BRFSS data are representative of the total non-institutionalized U.S. population over 18 years of age living in households with a land-line telephone.

Obesity is often the end result of an overall energy imbalance due to poor diet and limited physical activity. Obesity increases the risk for health conditions such as coronary heart disease, type 2 diabetes, cancer, hypertension, dyslipidemia, stroke, liver and gallbladder disease, sleep apnea and respiratory problems, and osteoarthritis.

ADULT SMOKING PREVALENCE
Adult smoking prevalence is the estimated percent of the adult population that currently smokes every day or “most days” and has smoked at least 100 cigarettes in their lifetime. This measure was calculated by the National Center for Health Statistics using data from the Centers for Disease Control and Prevention’s Behavioral Risk Factor Surveillance System (BRFSS), a random-digit dial survey. BRFSS data are representative of the total non-institutionalized U.S. population over 18 years of age living in households with a land-line telephone. The estimates are based on seven years of data.

Each year approximately 443,000 premature deaths occur primarily due to smoking. Cigarette smoking is identified as a cause in multiple diseases including various cancers, cardiovascular disease, respiratory conditions, low birth weight, and other adverse health outcomes. Measuring the prevalence of tobacco use in the population can alert communities to potential adverse health outcomes and can be valuable for assessing the need for cessation programs or the effectiveness of existing programs.

BINGE DRINKING
The binge drinking measure reflects the percent of the adult population that reports consuming more than 4 (women) or 5 (men) alcoholic beverages on a single occasion in the past 30 days. The definition of binge drinking for women changed from 5 drinks on an occasion to 4 drinks in 2006.

This measure was obtained from the Centers for Disease Control and Prevention’s Behavioral Risk Factor Surveillance System (BRFSS), a random-digit dial survey. BRFSS data are representative of the total non-institutionalized U.S. population over 18 years of age living in households with a land-line telephone. The estimates are based on seven years of data.

CEREBROVASCULAR DISEASE
Cerebrovascular disease includes subarachnoid, intracerebral, and intracranial hemorrhage, cerebral infarction, other strokes and certain other forms of Cerebrovascular diseases and their sequelae.
CHRONIC LOWER RESPIRATORY DISEASE MORTALITY RATE
Chronic Lower Respiratory Disease death rate is a death from bronchitis, emphysema, asthma or certain other obstructive pulmonary diseases. This group of causes is very similar to Chronic Obstructive Pulmonary Diseases (COPD). The categories differ in that CLRD does not contain “extrinsic allergic alveolitis,” i.e. allergic alveolitis and pneumonitis due to inhaled organic dust.

COUNTY HEALTH RANKINGS
Published by the University of Wisconsin Population Health Institute and the Robert Wood Johnson Foundation, the Rankings help counties understand what influences how healthy residents are and how long they will live. The Rankings look at a variety of measures that affect health such as the rate of people dying before age 75, high school graduation rates, access to healthier foods, air pollution levels, income, and rates of smoking, obesity and teen births. The Rankings, based on the latest data publically available for each county, are unique in their ability to measure the overall health of each county in all 50 states on the multiple factors that influence health.

The Rankings are based on a model of population health that emphasizes the many factors that, if improved, can help make communities healthier places to live, learn, work and play. Building on the work of America’s Health Rankings, the University of Wisconsin Population Health Institute has used this model to rank the health of Wisconsin’s counties every year since 2003.

DRUG RELATED MORTALITY RATE
The “drug related mortality rate” refers to deaths for which the medical certifier of cause of death (usually a coroner, in such cases) believed the role of drugs to play important enough role in the death to mention them as one of several causes on the death certificate. Alcohol and tobacco use and abuse are not included in this measure. Because only a small percentage of death certifications have the benefit of autopsy findings or toxicology screens, this measure is likely under-reported.

ENTRANCE INTO PRENATAL CARE
“Entrance into prenatal care” is the number of live births with prenatal care (PNC) reported as starting in the first trimester (first three months) of pregnancy, divided by the total number of live births (records with unknown timing of PNC initiation excluded), times 100.

EXCESSIVE DRINKING MEASURE
The excessive drinking measure reflects the percent of the adult population that reports either binge drinking, defined as consuming more than 4 (women) or 5 (men) alcoholic beverages on a single occasion in the past 30 days, or heavy drinking, defined as drinking more than 1 (women) or 2 (men) drinks per day on average.
Excessive drinking is a risk factor for a number of adverse health outcomes such as alcohol poisoning, hypertension, acute myocardial infarction, sexually transmitted infections, unintended pregnancy, fetal alcohol syndrome, sudden infant death syndrome, suicide, interpersonal violence, and motor vehicle crashes.

This measure was calculated by the National Center for Health Statistics using data obtained from the Centers for Disease Control and Prevention’s Behavioral Risk Factor Surveillance System (BRFSS), a random-digit dial survey. BRFSS data are representative of the total non-institutionalized U.S. population over 18 years of age living in households with a land-line telephone. The estimates are based on seven years of data.

**FINE PARTICULATE MATTER STANDARD**

The air pollution particulate matter measure represents the annual number of days that air quality was unhealthy for sensitive populations due to fine particulate matter (FPM, < 2.5 µm in diameter).

The Public Health Air Surveillance Evaluation (PHASE) project, a collaborative effort between the Centers for Disease Control and Prevention (CDC) and the EPA, used Community Multi-Scale Air Quality Model (CMAQ) output and air quality monitor data to create a spatial-temporal model that estimated fine particulate matter concentrations throughout the year. The PHASE estimates were used to calculate the number of days per year that air quality in a county was unhealthy for sensitive population due to FPM. The state and national values are an average of county values weighted by population size.

The relationship between elevated air pollution—particularly fine particulate matter and ozone—and compromised health has been well documented. The negative consequences of ambient air pollution include decreased lung function, chronic bronchitis, asthma, and other adverse pulmonary effects.

**GRADUATION RATE (Four-Year Adjusted Cohort)**

The four-year adjusted cohort graduation rate is the number of students who graduate in four years with a regular high school diploma divided by the number of students who form the adjusted cohort for the graduating class. From the beginning of 9th grade, students who are entering that grade for the first time form a cohort that is subsequently “adjusted” by adding any students who transfer into the cohort later during the 9th grade and the next three years and subtracting any students who transfer out, emigrate to another country, or pass away during that same period.

**HPSA: HEALTH PROFESSIONAL SHORTAGE AREA**

Health Professional Shortage Areas (HPSAs) are designated by the U.S. Department of Health and Human Services’ Health Resource Services Administration (HRSA) as having shortages of primary medical care, dental or mental health providers and may be geographic (a county or service area), demographic (low income population) or institutional (comprehensive health center, federally qualified health center or other public facility).
IMMUNIZATIONS
Aggregated results from clinic reviews - proportion of children 24-35 months who have received all age-appropriate vaccines (4:3:1:3:3:1) by 24 months as recommended by the Advisory Committee on Immunization Practices (ACIP).

JUVENILE STATUS OFFENSE
A status offender is a juvenile charged with or adjudicated for conduct that would not, under the law of the jurisdiction in which the offense was committed, be a crime if committed by an adult. The most common examples of status offenses are chronic or persistent truancy, running away, being ungovernable or incorrigible, violating curfew laws, or possessing alcohol or tobacco.

LIMITED ACCESS TO HEALTHY FOODS
Limited access to healthy foods captures the proportion of the population who are low-income and do not live close to a grocery store. Living close to a grocery store is defined differently in rural and non-rural areas; in rural areas, it means living less than 10 miles from a grocery store whereas in non-rural areas, it means less than 1 mile. Low-income is defined as having an annual family income of less than or equal to 200 percent of the federal poverty threshold for the family size.

MEDIAN AGE AT DEATH
The “Median Age at Death” is a figure that includes both sexes and all races and represents the age for which half the deaths in a population are at a younger age and half at an older age. In a population with an even number of decedents, the median is the average of the two “middle” ages.

MOTOR VEHICLE CRASH DEATHS
Motor vehicle crash deaths are measured as the crude mortality rate per 100,000 population due to on- or off-road accidents involving a motor vehicle. Motor vehicle deaths includes traffic and non-traffic accidents involving motorcycles and 3-wheel motor vehicles; cars; vans; trucks; buses; street cars; ATVs; industrial, agricultural, and construction vehicles; and bikes & pedestrians when colliding with any of the vehicles mentioned. Deaths due to boating accidents and airline crashes are not included in this measure. A strong association has also been demonstrated between excessive drinking and alcohol-impaired driving, with approximately 17,000 Americans killed annually in alcohol-related motor vehicle crashes.

These data were calculated for the County Health Rankings by National Center for Health Statistics (NCHS), part of the Centers for Disease Control and Prevention (CDC), based on data reported to the National Vital Statistics System (NVSS). NCHS used data for a seven-year period to create more robust estimates of cause-specific mortality, particularly for counties with smaller populations.
NATIONAL BENCHMARK (COUNTY HEALTH RANKINGS)
The National Benchmark is used in the County Health Rankings (see “County Health Rankings”) to provide a point of comparison for counties. The benchmark represents the 90th percentile of counties included in the rankings and indicates that only 10% are better.

PHYSICAL INACTIVITY
Physical inactivity is the estimated percent of adults aged 20 and over reporting no leisure time physical activity. Estimates of physical inactivity by county are calculated by the CDC’s National Center for Chronic Disease Prevention and Health Promotion, Division of Diabetes Translation using multiple years of Behavioral Risk Factor Surveillance System (BRFSS) data.

POOR PHYSICAL HEALTH DAYS MEASURE
The poor physical health days measure represents one of four measures of morbidity used in the County Health Rankings, and is based on responses to the question: “Thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?” The average number of days a county’s adult respondents report that their physical health was not good is presented. The measure is age-adjusted to the 2000 U.S. population. In addition to measuring how long people live, it is also important to include measures of how healthy people are while alive; people’s reports of days when their physical health was not good are a reliable estimate of their recent health.

This measure was calculated by the National Center for Health Statistics using data from the Centers for Disease Control and Prevention’s Behavioral Risk Factor Surveillance System (BRFSS), a random-digit dial survey. BRFSS data are representative of the total non-institutionalized U.S. population over 18 years of age living in households with a land-line telephone. Seven years of data are used to generate more stable estimates of poor physical health days.

POOR MENTAL HEALTH DAYS MEASURE
The poor mental health days measure is a companion measure to the poor physical health days reported in the County Health Rankings. The estimates are based on responses to 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?” We present the average number of days a county’s adult respondents report that their mental health was not good. The measure is age-adjusted to the 2000 U.S. population. Overall health depends on both physical and mental well-being. Measuring the number of days when people report poor mental health represents an important facet of health-related quality of life.

The measure was calculated by the National Center for Health Statistics using data from the Centers for Disease Control and Prevention’s Behavioral Risk Factor Surveillance System (BRFSS), a random-digit dial survey. BRFSS data are representative of the total non-institutionalized U.S. population over 18 years of age.
living in households with a land-line telephone. NCHS used seven years of data to generate more stable estimates of poor mental health days.

PREMATURE DEATH
Premature death is represented by the years of potential life lost before age 75 (YPLL-75). Every death occurring before the age of 75 contributes to the total number of years of potential life lost. For example, a person dying at age 25 contributes 50 years of life lost, whereas a person who dies at age 65 contributes 10 years of life lost to a county’s YPLL. The YPLL measure is presented as a rate per 100,000 population and is age-adjusted to the 2000 U.S. population.

Data on deaths, including age at death, are based on death certificates and are routinely reported to the National Vital Statistics System (NVSS) at the National Center for Health Statistics, part of the Centers for Disease Control and Prevention (CDC). NVSS calculates age-adjusted YPLL rates based on three-year averages to create more robust estimates of mortality, particularly for counties with smaller populations.

Age-adjusted YPLL-75 rates are commonly used to represent the frequency and distribution of premature deaths. Measuring YPLL allows communities to target resources to high-risk areas and further investigate the causes of death.

SELF-REPORTED HEALTH STATUS
Poor or Fair Health, a self-reported health status, is a general measure of health-related quality of life in a population. This measure is based on survey responses to the question: “In general, would you say that your health is excellent, very good, good, fair, or poor?” The value reported in the County Health Rankings is the percent of adult respondents who rate their health “fair” or “poor.” The measure is age-adjusted to the 2000 U.S. population.

This measure was calculated by the National Center for Health Statistics using data from the Centers for Disease Control and Prevention’s Behavioral Risk Factor Surveillance System (BRFSS), a random-digit dial survey. BRFSS data are representative of the total non-institutionalized U.S. population over 18 years of age living in households with a land-line telephone. Seven years of data are used to generate more stable estimates of self-reported health status.

UNINTENTIONAL INJURY (as a cause of death)
Unintentional injuries include those injuries that are of an external cause often but not necessarily due to drowning, fall, fire/burn, motor vehicle/traffic related incident, other transportation related incidents, poisoning and suffocation.
APPENDIX B

COMMUNITY HEALTH IMPROVEMENT PLAN
# BEAVERHEAD COUNTY COMMUNITY HEALTH IMPROVEMENT PLAN

## FOCUS AREA: GENERAL HEALTH

**GENERAL HEALTH GOAL:** Improve health outcomes among citizens of Beaverhead County in support of a healthier population.

**Objective 1.** Access to healthcare services and standard of care will be improved, particularly in the more remote portions of the county.

<table>
<thead>
<tr>
<th>Strategies In Priority Order</th>
<th>Potential Lead Agency or Agencies/Champions</th>
<th>Suggested Time Frame</th>
</tr>
</thead>
</table>
| Identify stakeholders and convene meetings to explore grants to:  
  - Support a mobile clinic that can provide healthcare services in remote areas of the county.  
  - Explore use of Retired Physicians Program for a house call approach. | Beaverhead County Health Department | Near Term |
| Provide certification training to meet new rules for EMS personnel (first responders) in order to avoid a reduction in the standard of care and service. | | Near Term |
| Increase the number of EMS volunteers through incentives including a school loan repayment program in return for volunteer time. | | Long Term |
## FOCUS AREA: GENERAL HEALTH

### Objective 2. The incidence of heart disease will be reduced.

<table>
<thead>
<tr>
<th>Strategies In Priority Order</th>
<th>Potential Lead Agency or Agencies/Champions</th>
<th>Suggested Time Frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete the trail system to encourage physical activity.</td>
<td>Dan Downey and Deanna Nelson</td>
<td>Near Term</td>
</tr>
<tr>
<td>Repair/Install sidewalks to encourage more walking.</td>
<td></td>
<td>Long Term</td>
</tr>
<tr>
<td>Explore implementation of the “Complete Streets” program to encourage more walking.</td>
<td></td>
<td>Near Term</td>
</tr>
<tr>
<td>Develop an educational program to encourage wellness that includes an annual health fair.</td>
<td></td>
<td>Near Term</td>
</tr>
</tbody>
</table>

### Objective 3. The number of people engaging in preventative healthcare will increase.

<table>
<thead>
<tr>
<th>Strategies In Priority Order</th>
<th>Potential Lead Agency or Agencies/Champions</th>
<th>Suggested Time Frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop a community outreach plan that reaches as many citizens as possible and encourages preventative healthcare.</td>
<td></td>
<td>Near Term</td>
</tr>
<tr>
<td>Create a health services directory.</td>
<td></td>
<td>Near Term</td>
</tr>
<tr>
<td>Increase the availability of wellness programs for citizens of all income levels.</td>
<td></td>
<td>Near Term</td>
</tr>
</tbody>
</table>
**FOCUS AREA: BEHAVIORAL AND MENTAL HEALTH**

**BEHAVIORAL AND MENTAL HEALTH GOAL 1:** Reduce suicide and depression rates in Beaverhead County

**Objective 1.** Mental health services will be expanded, improved and made more accessible.

<table>
<thead>
<tr>
<th>Strategies In Priority Order</th>
<th>Potential Lead Agency or Agencies/Champions</th>
<th>Suggested Time Frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foster collaboration among mental health professionals to improve patient outcomes.</td>
<td>University of Montana Western Barrett Hospital</td>
<td>Near Term</td>
</tr>
<tr>
<td>Within 1 year, establish a multi-county task force on mental health to include representatives from hospitals and local governments.</td>
<td>Beaverhead County</td>
<td>Near Term</td>
</tr>
<tr>
<td>Double the number therapy hours currently available in the community (from 760 hours/yr. to 1,520/yr.)</td>
<td></td>
<td>Long Term</td>
</tr>
<tr>
<td>Secure a full-time mental health prescriber within 18-24 months and at a salary of $125,000 to $300,000/yr.</td>
<td></td>
<td>Near Term</td>
</tr>
<tr>
<td>Develop a peer support program within 2 years.</td>
<td></td>
<td>Near Term</td>
</tr>
<tr>
<td>Research approaches for addressing suicide and stress used by the Veteran’s Administration.</td>
<td></td>
<td>Near Term</td>
</tr>
</tbody>
</table>
**FOCUS AREA: BEHAVIORAL AND MENTAL HEALTH**

Explore ways to increase response times with the mental health crisis response team.

<table>
<thead>
<tr>
<th><strong>Objective 2.</strong> Awareness of mental health services will increase.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strategies</strong></td>
</tr>
<tr>
<td>In Priority Order</td>
</tr>
<tr>
<td>Develop a series of community seminars and workshops through collaboration among mental health professionals.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Objective 3.</strong> The stigma associated with mental illness and seeking help will be diminished.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strategies</strong></td>
</tr>
<tr>
<td>In Priority Order</td>
</tr>
<tr>
<td>Provide public education about mental illness and its effects through participation in annual health fair and other public outreach activities.</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
# Focus Area: Behavioral and Mental Health

**Behavioral and Mental Health Goal 2:** Reduce the rate of substance abuse in support of a healthier population

**Objective:** People with substance addictions will have access to treatment services.

<table>
<thead>
<tr>
<th>Strategies In Priority Order</th>
<th>Potential Lead Agency or Agencies/Champions</th>
<th>Suggested Time Frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within 2-3 years, develop an inpatient drug and alcohol detoxification program.</td>
<td>MHC and Barrett Hospital</td>
<td>Long Term</td>
</tr>
<tr>
<td>Support changes regarding certification and licensing requirements for addiction counselors.</td>
<td>MHC and Barrett Hospital</td>
<td>Long Term</td>
</tr>
</tbody>
</table>

**Behavioral and Mental Health Goal 3:** Reduce the number of deaths related to vehicle crashes.

**Objective:** Seat belt use will increase in the county.

<table>
<thead>
<tr>
<th>Strategies In Priority Order</th>
<th>Potential Lead Agency or Agencies/Champions</th>
<th>Suggested Time Frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop awareness building campaign regarding seat belt use.</td>
<td></td>
<td>Near Term</td>
</tr>
<tr>
<td>Explore ordnance making driving without seat belt a primary offense.</td>
<td>Beaverhead County Public Health Department, Beaverhead County Sherriff</td>
<td>Long Term</td>
</tr>
</tbody>
</table>
# FOCUS AREA: BEHAVIORAL AND MENTAL HEALTH

**Objective:** Drinking and Driving will decrease in the County

<table>
<thead>
<tr>
<th>Strategies In Priority Order</th>
<th>Potential Lead Agency or Agencies/Champions</th>
<th>Suggested Time Frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop awareness building campaign regarding the consequences of drinking and driving.</td>
<td></td>
<td>Near Term (1-2 years) Long Term (3-5 years)</td>
</tr>
</tbody>
</table>

Near Term

Long Term
**FOCUS AREA: THE AGING POPULATION**

**AGING GOAL:** Work to ensure a good quality of life for the growing senior citizen population in Beaverhead County through expanded programs and offerings.

**Objective 1.** Social and physical activities offered for senior citizens in the community will be expanded.

<table>
<thead>
<tr>
<th>Strategies In Priority Order</th>
<th>Potential Lead Agency or Agencies/Champions</th>
<th>Suggested Time Frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foster interest among seniors in utilizing existing programs.</td>
<td>Beaverhead Area Senior Services (BASS)</td>
<td>Near Term</td>
</tr>
<tr>
<td>Expand meals to 5 days per week at the Senior Center.</td>
<td></td>
<td>Near Term</td>
</tr>
<tr>
<td>Begin offering field trips through the Senior Center.</td>
<td></td>
<td>Near Term</td>
</tr>
<tr>
<td>Expand activities for senior citizens offered through the YMCA.</td>
<td></td>
<td>Near Term</td>
</tr>
<tr>
<td>Expand the senior companion program to allow for younger companions.</td>
<td></td>
<td>Near Term</td>
</tr>
<tr>
<td>Create a volunteer program for seniors so they can offer their services to others in need.</td>
<td></td>
<td>Long Term</td>
</tr>
<tr>
<td>Explore development of a senior “adoption” program where community</td>
<td></td>
<td>Long Term</td>
</tr>
</tbody>
</table>
**FOCUS AREA: THE AGING POPULATION**

<table>
<thead>
<tr>
<th>Members were adopting seniors who lack family and support networks and check on them regularly and help them with errands.</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify grants/resources to support expansion of services and employ a professional grant writer.</td>
<td>Near Term</td>
</tr>
<tr>
<td>Increase availability and use of transportation services.</td>
<td>Near Term</td>
</tr>
<tr>
<td>Develop senior day care program for respite purposes.</td>
<td>Long Term</td>
</tr>
</tbody>
</table>

**Objective 2.** Healthcare services for senior citizens will be expanded, particularly in remote areas of the county.

<table>
<thead>
<tr>
<th>Strategies In Priority Order</th>
<th>Potential Lead Agency or Agencies/Champions</th>
<th>Suggested Time Frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explore development of mobile clinics that provide healthcare services in remote areas, making use of schools and community centers.</td>
<td></td>
<td>Near Term</td>
</tr>
<tr>
<td>Develop strategy for recruiting geriatric healthcare specialists.</td>
<td></td>
<td>Long Term</td>
</tr>
</tbody>
</table>
## FOCUS AREA: THE AGING POPULATION

**Objective 3.** Awareness and utilization of programs and services among the senior population will be enhanced.

<table>
<thead>
<tr>
<th>Strategies In Priority Order</th>
<th>Potential Lead Agency or Agencies/Champions</th>
<th>Suggested Time Frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop a directory of services for senior citizens that includes transportation services.</td>
<td></td>
<td>Long Term</td>
</tr>
</tbody>
</table>

**Objective 4.** Housing choices for seniors of all incomes will be expanded.

<table>
<thead>
<tr>
<th>Strategies In Priority Order</th>
<th>Potential Lead Agency or Agencies/Champions</th>
<th>Suggested Time Frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop additional retirement housing, including assisted living, in the city of Dillon.</td>
<td></td>
<td>Long Term</td>
</tr>
<tr>
<td>Develop additional affordable housing for senior citizens.</td>
<td></td>
<td>Long Term</td>
</tr>
</tbody>
</table>
### FOCUS AREA: YOUTH AT RISK

**YOUTH AT RISK GOAL:** Work to improve opportunities for achievement and success among youth in Beaverhead County

#### Objective 1. Drug, alcohol and tobacco use will be decreased.

<table>
<thead>
<tr>
<th>Strategies In Priority Order</th>
<th>Potential Lead Agency or Agencies/Champions</th>
<th>Suggested Time Frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expand and increase participation in evidence-based parenting and life skills education for parents.</td>
<td>Women’s Resource Center, Barrett Hospital</td>
<td>Near Term</td>
</tr>
<tr>
<td>Create presence of law enforcement in public schools by creating resources offices in each school.</td>
<td>Beaverhead County Sheriff, Middle School, High School, Students Against Drunk Driving</td>
<td>Near Term</td>
</tr>
<tr>
<td>Implement the D.A.R.E. Program from Kindergarten through high school.</td>
<td>Law Enforcement</td>
<td>Long Term</td>
</tr>
<tr>
<td>Establish a program similar to Mariah’s Challenge in the county.</td>
<td></td>
<td>Long Term</td>
</tr>
</tbody>
</table>

#### Objective 2. The impact of poverty on children will be reduced.

<table>
<thead>
<tr>
<th>Strategies In Priority Order</th>
<th>Potential Lead Agency or Agencies/Champions</th>
<th>Suggested Time Frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continue and expand the Backpack program in schools.</td>
<td>Public Schools</td>
<td>Near Term</td>
</tr>
<tr>
<td>Develop summer nutrition/meal program for kids.</td>
<td>Public Schools and Human Resources Council, District XII</td>
<td>Near Term</td>
</tr>
</tbody>
</table>
## FOCUS AREA: YOUTH AT RISK

**Objective 3.** Youth will have access to more activities to fill their time.

<table>
<thead>
<tr>
<th>Strategies In Priority Order</th>
<th>Potential Lead Agency or Agencies/Champions</th>
<th>Suggested Time Frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop afterschool programs for kids K-12 including in the areas of sports, video games, snacks and hikes.</td>
<td></td>
<td>Near Term</td>
</tr>
<tr>
<td>Identify venues for activities.</td>
<td></td>
<td>Near Term</td>
</tr>
<tr>
<td>Provide further support for the Youth Connections Program.</td>
<td></td>
<td>Near Term</td>
</tr>
</tbody>
</table>
## FOCUS AREA: LOW - INCOME AND POVERTY

### LOW-INCOME AND POVERTY GOAL 1: Improve opportunities for low-income people to increase income.

**Objective:** The economic base will become more diversified and provide more jobs.

<table>
<thead>
<tr>
<th>Strategies In Priority Order</th>
<th>Potential Lead Agency or Agencies/Champions</th>
<th>Suggested Time Frame, Near Term (1-2 years) Long Term (3-5 years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop plan for creating living-wage jobs.</td>
<td>Beaverhead County Local Development Corporation, Chamber of Commerce, Beaverhead County</td>
<td>Long Term</td>
</tr>
<tr>
<td>Develop strategies for marketing the community.</td>
<td></td>
<td>Long Term</td>
</tr>
</tbody>
</table>

### LOW-INCOME AND POVERTY GOAL 2: Ensure all persons, regardless of income, have safe, affordable housing.

**Objective:** The number of affordable housing units in the county will be increased.

<table>
<thead>
<tr>
<th>Strategies In Priority Order</th>
<th>Potential Lead Agency or Agencies/Champions</th>
<th>Suggested Time Frame – Near Term (1-2 years) Long Term (3-5 years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop affordable housing by pursuing public grant and loan programs.</td>
<td></td>
<td>Long Term</td>
</tr>
<tr>
<td>Explore programming and funding sources to address homelessness.</td>
<td></td>
<td>Near Term</td>
</tr>
</tbody>
</table>
APPENDIX C

METHODOLOGY: RANKING OF COUNTIES FOR SEVERITY OF TARGETED HEALTH BEHAVIORS
Methodology for

Ranking of Counties by Severity of Targeted Health Behaviors

Presentation prepared William Connell, Economist, Montana Department of Labor,

wconnell@mt.gov  (406)444-9284.

The table entitled: Ranking of Counties by Severity of Targeted Health Behaviors ranks each county by level of risk on six measures of the targeted health problems and/or consequences of the health problems. The measures are: 1) Suicide rate per 100,000 averaged: 2001-2009; 2) Prescription drug death per 1,000 averaged: 2008-2009; 3) Drug arrest per 1,000 residents averaged: 2005-2011; 4) DUls per 1,000 residents averaged: 2005-2011; 5) Liquor Law violates per 1,000 averaged: 2005-2011; and 6) percentage of car crashes involving alcohol averaged: 2005-2009. Counties were also assigned a composite severity score (sum of the rankings for each measure) that is used to rank the counties from very high risk to lowest risk.

Using this table, the reader can quickly identify what targeted health problems are evident in the county based on these six measures. The lower the score for a health problem the more severe that problem is in the county. For example, Beaverhead County, has low scores in four out of the six health problems; that is: liquor law violations (ranked 1), prescription drug deaths (ranked 6), suicide rate (ranked 8), and DUIs per 1,000 (ranked 9). As a result, the composite score for Beaverhead is 54 (highest is 326) and is considered a very high risk county.

The measures used are the best available direct measures or indicators of the targeted health problems. Some health problems are considered emerging issues such as Prescription Drug misuse/abuse with fewer years of data collection and imperfect measures.

1. **Suicide rate per 100,000 averaged 2001-2009**
   County average suicide rate per 100,000 people from 2001-2009
   Source: (Montana Department of Health and Human Services)
   Note: Both due to data disclosure rules and because suicide rates can fluctuate considerably from year to year, suicide rates are averaged from 2001-2009 to get a clearer picture of the information.

2. **Prescription drug death per 1,000 average 2008-2010**
   Total number of deaths with State Crime Lab’s “top 20 Rx drugs” in system by county – averaged 2008-2010
   Source: Montana Department of Justice
   Note: Drug is not known to be the exact cause of death, just in a person’s system at the time of death.

3. **Drug arrest per 1,000 resident’s average 2005-2011**
   Source: (Montana Board of Crime Control)
4. **DUIs per 1,000 residents average 2005-2011**
   Average DUI rate per 1,000 county residents 2005-2011
   Source: (Montana Board of Crime Control) ¹

5. **Liquor law violations per 1,000 average 2005-2011**
   The vast majority of “Liquor Law” violations are “Minor in Possession of Alcohol”, someone under the age of 21 with or under the influence of alcohol. So this measure is intended to capture underage drinking prevalence within a particular county
   Source: (Montana Board of Crime Control)

6. **Percent of car crashes involving drugs or alcohol average 2005 – 2009**
   Source: (Montana Department of Transportation 2012)

**Ranking System Methodology**

In order to create the *composite severity score* based on all six measures, each county was first ranked 1-56 depending on how high the rate was on each measure in that county. For example, Beaverhead Country has the highest rate of underage drinking liquor law violations per 1,000 people; it is ranked “1”. The lower the score, the more severe is the problem. The numbers in each column represent where a county is ranked relative to all the counties in the state. For example, the county with the most severe suicide ranking is Deer Lodge (ranked 1), Mineral County for prescription drug deaths, Toole County for drug arrests, and so on.

The column entitled *Composite Severity Score* is the sum of the rankings for each measure. As noted earlier, Beaverhead County has low scores in four out of the six health problems; that is: liquor law violations (ranked 1), prescription drug deaths (ranked 6), suicide rate (ranked 8), and DUIs per 1,000 (ranked 9). As a result, the composite score for Beaverhead is 54 (lowest is 326) and is considered a very high risk county.

By ranking each county on each variable, it is easier to compare counties to each other and to identify how severe of a problem exists within a respective county.

---

¹ Montana Board of Crime Control data do not include statistics from state or federal law enforcement agencies such as the Montana High Patrol, the U.S. Marshal’s Office or Fish, Wildlife and Parks.
APPENDIX D

LIST OF MEETING PARTICIPANTS
<table>
<thead>
<tr>
<th>Participant Name</th>
<th>Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Achter, Dick</td>
<td>Barrett Hospital</td>
</tr>
<tr>
<td>Andrew, David</td>
<td></td>
</tr>
<tr>
<td>Bauers, Connie</td>
<td></td>
</tr>
<tr>
<td>Bowman, Matt</td>
<td>Barrett Hospital Pharmacist</td>
</tr>
<tr>
<td>Brissette, Jacqui</td>
<td></td>
</tr>
<tr>
<td>Caddy, Jean</td>
<td></td>
</tr>
<tr>
<td>Carrick, Pat</td>
<td></td>
</tr>
<tr>
<td>Carter, Mike</td>
<td></td>
</tr>
<tr>
<td>Chambers, Harriet</td>
<td></td>
</tr>
<tr>
<td>Chichester, Virginia</td>
<td></td>
</tr>
<tr>
<td>Chouinard, Fred</td>
<td>Beaverhead County High School</td>
</tr>
<tr>
<td>Craft, Paul</td>
<td></td>
</tr>
<tr>
<td>DeGroot, Brad</td>
<td></td>
</tr>
<tr>
<td>Dietrich, Shelly</td>
<td></td>
</tr>
<tr>
<td>Eason, Raelene</td>
<td>Beaverhead County Public Health</td>
</tr>
<tr>
<td>Evans, Megan</td>
<td>Community Health Center</td>
</tr>
<tr>
<td>Frost, Tammie</td>
<td>Community Health Center</td>
</tr>
<tr>
<td>Gains, Howard</td>
<td></td>
</tr>
<tr>
<td>Given, Jenny</td>
<td>MSW</td>
</tr>
<tr>
<td>Goins, Renda</td>
<td></td>
</tr>
<tr>
<td>Gross, Jim</td>
<td>Wise River CPR Instructor/Fire</td>
</tr>
<tr>
<td>Hale, Kristin</td>
<td></td>
</tr>
<tr>
<td>Hansen, Burke</td>
<td>Physician</td>
</tr>
<tr>
<td>Hansen, Crissie</td>
<td>Tobacco Prevention Specialist</td>
</tr>
<tr>
<td>Hansen, Jay</td>
<td>Beaverhead County Sheriff's Office</td>
</tr>
<tr>
<td>Hansen, Sue</td>
<td>Beaverhead County Public Health Director</td>
</tr>
<tr>
<td>Hartz, Rick</td>
<td>Beaverhead County Planning Office</td>
</tr>
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<td>Haugland, Garth</td>
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<td>Johnson, Glen</td>
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Miene, Kirsten
Miles, Carl
Miller, Claire
Mitchell, Elissa Human Resources Council, XII
Moorehouse, Bergen
Mulkey, Dan Beaverhead County Sheriff’s Office
Mussard, Pam Community Health Center
Nelson, Deanna Barrett Hospital
Nourse, Tracy Montana Migrant Council
Regan, Mike
Rice, Tom
Robinson, Debbie Beaverhead County Public Health
Ryan, Melainya Women's Resource Center
Shipman, Randy Dillon Middle School
Snow, Colette
Sommers, Jim Western Montana Mental Health Center
Stewart, Dale Pastor, Sheriff Chaplain
Stewart, Michelle New Hope
Stockett, Sam Beaverhead County High School
Sutton, Jackie Lima School
Swanson, Ann
Swanson, Bill
Tollett, Teresa
Turner, J.S.
Weidinger, Carla Town of Lima
Weidinger, Kylee Lima Student
Westman, Ken Barrett Hospital
White, Cynthia
White, Cynthia Barrett Hospital
Williamson, Bree

33 Participants at the Springhill Senior Services Dinner