

MADISON COUNTY



2011 HEALTH NEEDS ASSESSMENT COMMUNITY HEALTH IMPROVEMENT PLAN



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ACKNOWLEDGEMENTS

The Madison 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 the fall of 2010. It began by engaging in 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 Madison 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, that will ultimately help direct important public resources to areas of greatest need.

The planning process relied upon 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 Madison County. The work was made possible by funding from the Madison County Public Health Department and the District XII Human Resources Council. The process involved broad participation from citizens, local government and organizations. A debt of gratitude is owed to community members who gave valuable and scarce time to make this assessment and resulting plan a reality. Participants included the following individuals.

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CHAPTER ONE: INDICATORS OF PUBLIC HEALTH

MADISON COUNTY 2011 HEALTH NEEDS ASSESSMENT

INTRODUCTION

This section of the Madison County Health Needs Assessment examines a series of factors affecting public health. The examination is intended to inform stakeholders involved in a community planning process about the status of public health as they set out to create a vision and related goals for healthy communities in Madison County. It provides information at the population-level on 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, for example, 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.

METHODOLOGY

The approach taken to this public health analysis was to examine those factors that indicate patterns and behaviors on a population level. To that end, data contained in this section 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. More particularly, the American Community Survey covering the period 2005-2009 was relied upon for the most recent available data. A private, national economics firm (Wood & Pool Economics, Inc.) is sourced for population-related 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 Department of Transportation. For health-related outcomes, sources included the Montana Department of Public Health and Human Services and the United States Department of Health and Human Services that compiles community health status reports based on a national Behavioral Risk Factor Surveillance System survey.

KEY FINDINGS

FINDINGS RELATED TO POPULATION

- The Madison County population increased by 12.2% over the last decade; it is projected to increase by 42.3% by the year 2030 and reach a population of 11,000
- The most pressing demographic shift occurring in Madison County is the growing senior population; people 65 and older are projected to increase by 148% increase by the year 2030, an increase of over 2,000 people.

FINDINGS RELATED TO GEOGRAPHY

The geography of Madison County presents a number of challenges to the delivery of public health services including the following:

- The sparse population spread over a vast land area places a strain on emergency response services, which may be staffed at a level commensurate with the county population, but are inadequate to cover the physical area, particularly when emergencies arise simultaneously in different parts of the county
- Resources are inadequate to provide important services in every town
- The population base may be too small to justify the appropriation of funding for some kinds of services, i.e., mental health facilities
- Geographic isolation, long distances between towns and healthcare organizations, and a lack of public transportation are barriers to healthcare access, particularly for low-income people and senior citizens
- Travel in the county is on secondary, two-lane highways that make car travel riskier, particularly in winter months

FINDINGS RELATED TO THE ECONOMY AND INCOME

- 37% of the population is at 200% or less of the federal poverty line
- The unemployment rate, at 9.5%, has been on the rise over the last year which coincides with a 50% increase in the number of people receiving assistance from the Supplemental Nutrition Assistance Program (SNAP), a 28% increase in the number of students eligible for free or reduced-priced school, and a 63% increase in the number of people receiving Medicaid assistance
- The annual average wage at \$27,210 is 19% lower than the state average (\$33,759) and 40% lower than the national average (\$45,551)
- Median Household Income at \$42,054 is 81.78% of the national figure (\$51,425)

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FINDINGS RELATED TO HOUSING

- There is a shortage of affordable rental units in the county; rent payments are a cost burden for 35% renters and there are only 24 designated affordable housing units county-wide
- Home values increased by 120% over the last ten years; mortgage payments are a cost burden for over 38% of homeowners according to Department of Housing and Urban Development standards
- Half of the housing stock was constructed prior to the enactment of lead paint standards in 1978

FINDINGS RELATED TO THE SOCIAL AND BEHAVIORAL ENVIRONMENT

- The percentage of adults that engage in binge and heavy drinking is 21% compared with the overall Montana rate of 19%
- The percent of motor vehicle crashes involving alcohol is 14% which is higher than the state rate of 10%; Montana has one of the highest alcohol-related fatality rates in the nation per vehicle mile traveled
- Half of tenth grade students in 2010 were at risk for anti-social behaviors in the County due to such factors as positive parental attitudes toward anti-social behavior and drug use, academic failure, peer attitudes favorable toward antisocial behavior and drug use, sensation seeking and intention to use drugs.
- The suicide rate in Madison County has been higher than the state rate over the last several years (23.2 per 100,000 people between 1999 and 2008); a shorter term rate covering the period 2004-2008 shows a rate of 19.4 per 100,000 people which is lower than the state rate of 20.3 for that period.

FINDINGS RELATED TO THE PHYSICAL ENVIRONMENT

- Madison County presents a healthy physical environment for people with few poor air quality days and no known water and soil quality problems

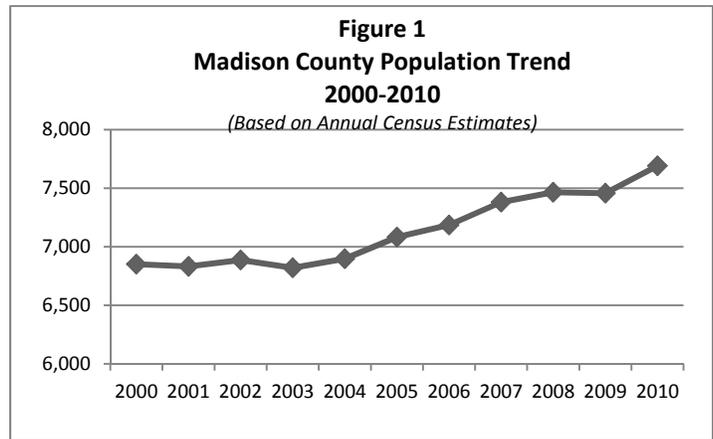
FINDINGS RELATED TO HEALTH OUTCOMES

- The leading cause of death in Madison County is heart disease; the associated county death rate of 235.8 per 100,000 population far exceeds the state death rate of 198.3 per 100,000 population
- The rate of unintentional death related to motor vehicles at 52.7 per 100,000 population is significantly higher than the state rate of 25.5
- 21% of adults have high blood pressure compared to 31% of people nationally; 14% of adults aged 21-64 and 37% of people over 65 years of age have a disability

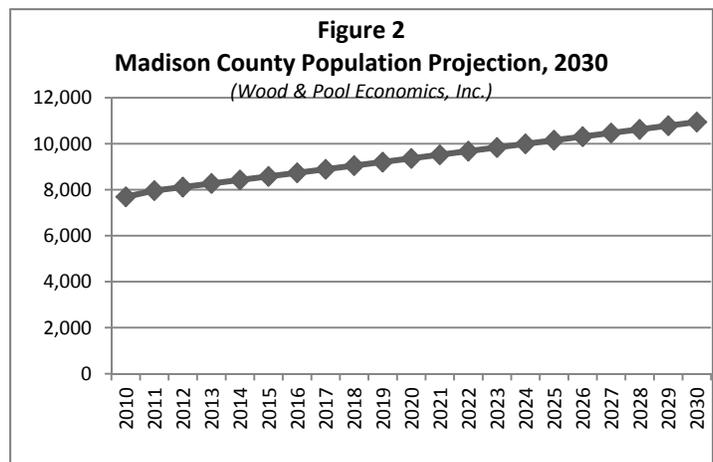
I. POPULATION AND DEMOGRAPHIC FACTORS

1.0 Population Trends

The Madison County population has been in a growth trend for the twenty years examined for this report. The recent 2010 Census of population shows the county population at 7,691, which is a 28.4% increase over the 1990 population and a 12.3% over the last ten years. The new Census count moved the County from its ranking of 30th among 56 counties in Montana, to the 27th most populous ranking.

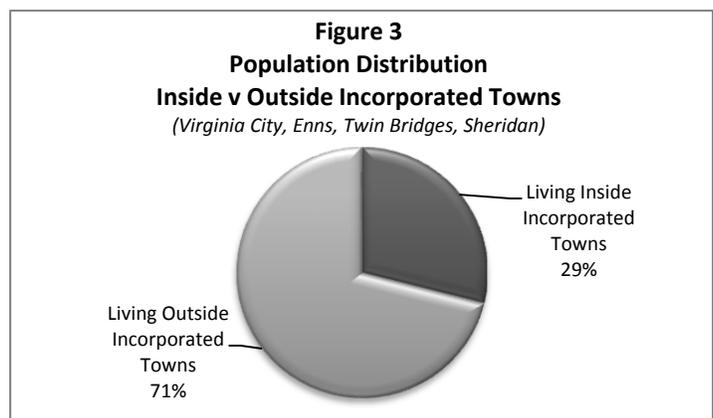


The growth trend is expected to continue. The County is projected to gain over 7,600 people by 2030, a 42.31% increase over the next 20 years.ⁱ Growth in this scenic area of Montana is more associated with a relocation of urbanites and retiring “baby boomers” than economic opportunity. The impact of baby boomers on population trends will be felt in Madison County as this group seeks recreation-rich, affordable, rural areas in which to enjoy retirement. Members of the baby boom cohort, now 45-63 years old, are approaching a period in their lives when moves to rural and small-town destinations increase.ⁱⁱ



2.0 Population Distribution

Madison County can be characterized as a very sparsely populated county with no significant population center. With only 2.1 people per square mile,ⁱⁱⁱ the county has “frontier” status with the U.S. Department of Health and Human Services which is applied to counties with fewer



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than 6 people per square mile.^{iv} The nearly 7,700 people are spread across nearly 3,600 square miles of land with less than one-third of the population residing in incorporated places. The county's four incorporated towns that include the county seat of Virginia City, Ennis, Twin Bridges and Sheridan, have a combined population of approximately 2,224. When the towns of Alder and Harrison are added, the combined "town" population rises to 2,557 and brings the percentage of people living in towns to 33%. Sheridan is the most populated town in the county with 918 people. (*Refer to Table 1.*) There are no population figures for the towns of Pony, McAllister, Laurin, Norris and Cameron. The town of Big Sky has a population of 1,148, but because its boundaries span parts of both Madison and Gallatin counties, it is not known what portion of that population figure relates to Madison County.

As described in the Madison County Growth Policy, residents often identify with regions in the county as well as towns or places. In order to provide a regional understanding of the county, data for the three county Census Tracts was examined for this study. Population is distributed relatively evenly among the Tracts. Tract One, which includes Ennis and Big Sky has 32% of the county population as does Tract Three which encompasses Sheridan and Virginia City. Tract Two which includes the towns of Twin Bridges and Harrison has a slightly larger population and comprises 36% of the county population. (*Refer to Figure 5 for an illustration of Census Tracts.*)

That the Madison County population is decentralized across a large area presents challenges to health care and service delivery and is a primary consideration in public health planning. Emergency response is particularly challenging with limited and primarily volunteer personnel to cover a vast area. Travel distances for services also presents a barrier to healthcare access, particularly for lower income people who may not own a car or for whom gas prices are prohibitive. While senior citizens have access to special transportation

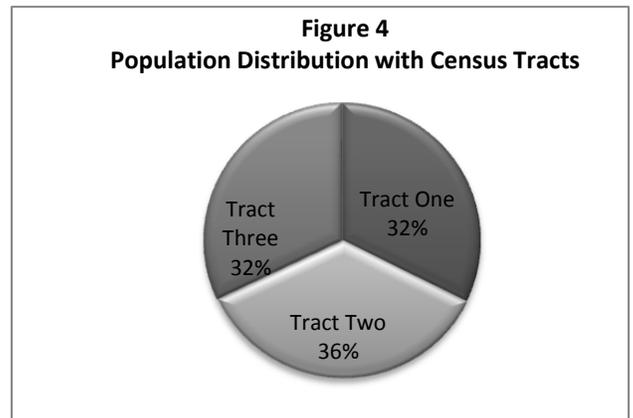


Table 1
Town Populations

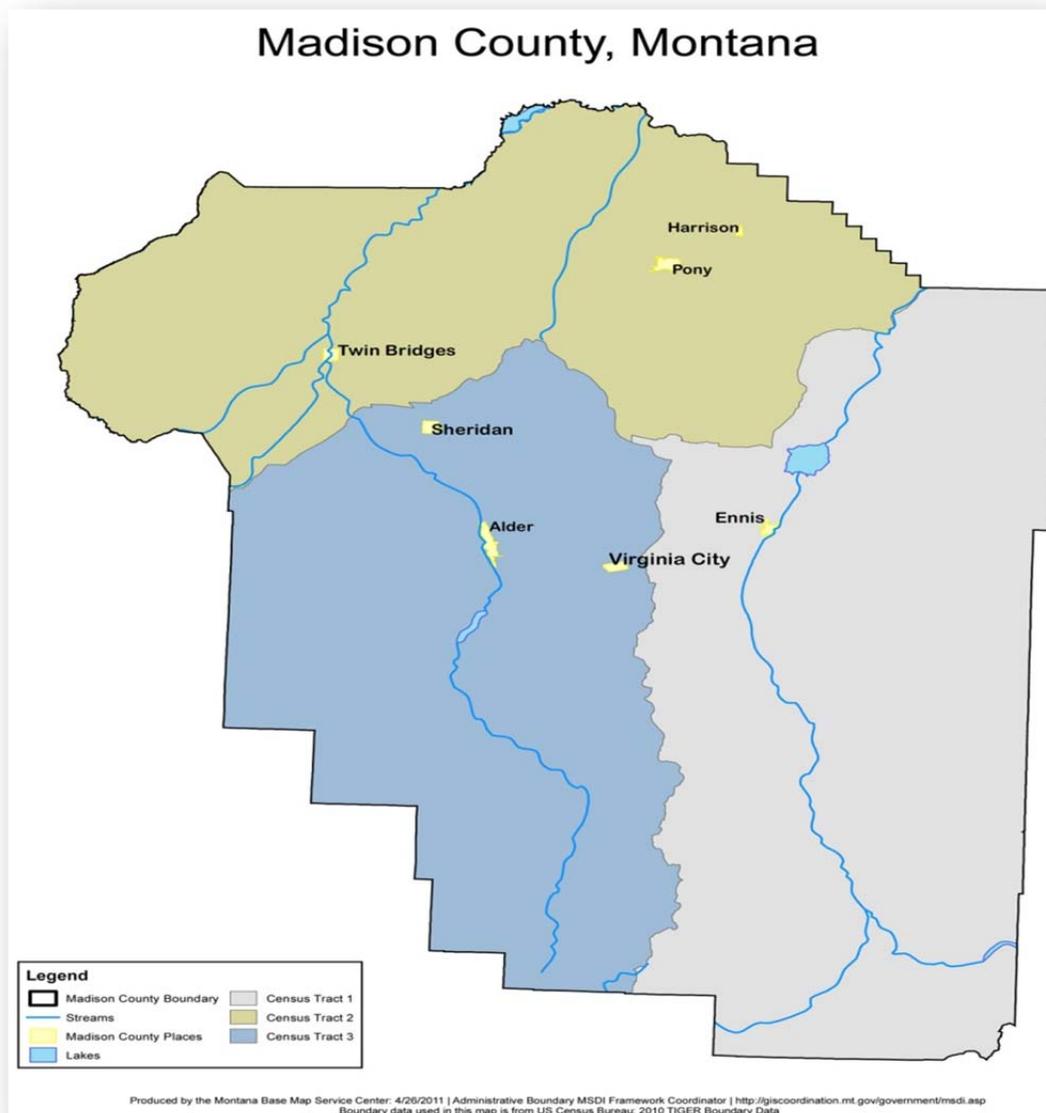
Incorporated Towns	
Ennis	722
Sheridan	918
Twin Bridges	444
Virginia City	140
Total	2,224
Other Towns	
Alder	61
Harrison	272
Subtotal	333
Total	2,557

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services, there is no public transportation system that enables travel in the county. Travel on the county's secondary roads in winter months also presents challenges to people needing healthcare services.

The county's rural geography also presents challenges for recruitment of healthcare professionals. The county is a designated Health Professional Shortage Area (HPSA) for primary care, dental and mental health professionals. Like other rural areas through the United State, Madison County is faced with recruitment challenges. Shortages of physicians and other providers are common as many health care professionals seek work in more urbanized areas. Thus, there is a current need to address shortages in the areas of gynecology, urology and general medicine.

Figure 5

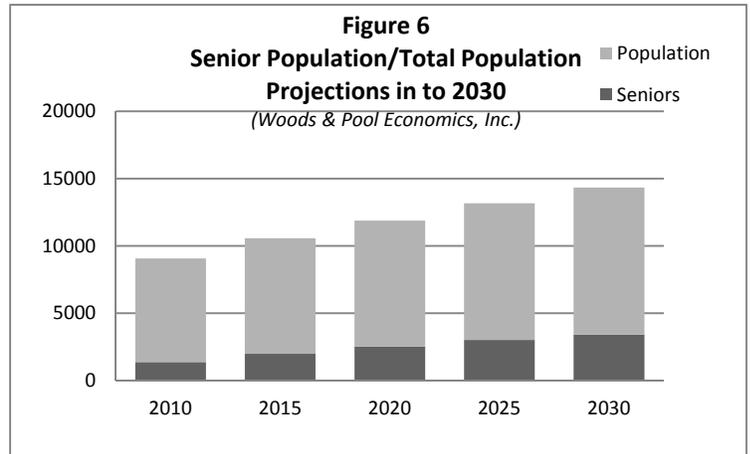


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3.0 Characteristics of the Population

3.1 Race/Ethnicity

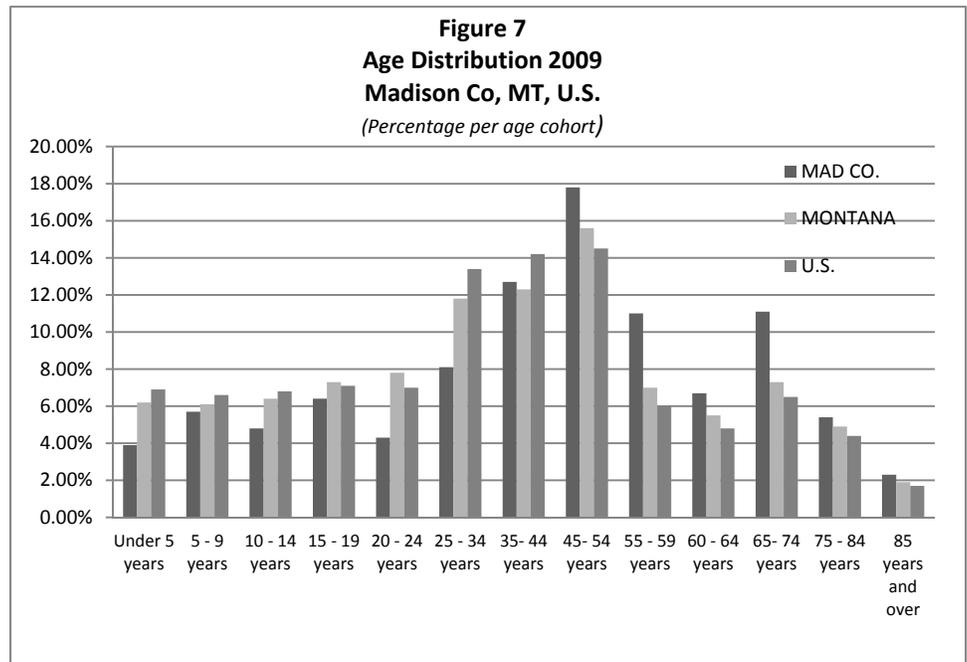
The Madison County population is relatively homogenous. It is primarily comprised of people claiming “white” as one race. There are small numbers of people who are of Asian descent (0.8%), American Indian/Alaska Native (0.4%) and Black or African American (0.3%) in the County.



3.2 Age

One of the most significant population level factors facing public health both locally and nationally is growth in the number and proportion of people 65 and older. 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 more intensely experienced in Madison County where the proportion of seniors is already significantly higher than the state and the nation.



People 65 and over currently comprise 18.7% of the Madison County population (1,370 people) compared with 12.6% for the nation and 14.1% for Montana. This is seen in a jump in the median age from 43.4 in 2000 to 47.3 currently. The number is significantly higher than the state (39) and national (36.5) median ages. People in the “baby boom” age cohorts (45 to 63) currently comprise an estimated 35% of the Madison County population. An in-migration of retiring ‘baby boomers’ seeking the recreation-rich lifestyle afforded by Madison County will likely

contribute to growth in this age group as well. A combination of aging citizens and in-migration of retirees will contribute to what is projected to be a 148% increase in the number of seniors by 2030, an increase of over 2,000 people.^v The number will go from 1,300 to 3,400 under this growth scenario.

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 65^{vi}. 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.

“Baby boomers”, as a group have adapted life styles that may call for new approaches to service delivery and community planning. For example, they tend to prefer living closer to amenities and aging in their homes. Planning for the provision of services to senior citizens who have different living preferences is a significant and pressing need. For example, home health services will play a bigger role in service delivery for this population. In Madison County, over one-third of people over 65 had annual incomes below \$15,000. 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.

3.3 Households

There are 2,963 households in Madison County with an average size of 2.42 which is fewer people per household than the national average of 2.6. The lower figure correlates with the fact that only 19.7% of family households in the county have children present which compares with 31% nationally and 26.8 for the state of Montana. The County has a higher rate of single-parent households than both the state and the nation; 32% of households with children are single-parent households in Madison County compared with 28.6% for Montana and 30.9% for the nation. This is pertinent to a public health discussion as adults and children in single-parent households are both at 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.^{vii}

3.4 Educational Attainment

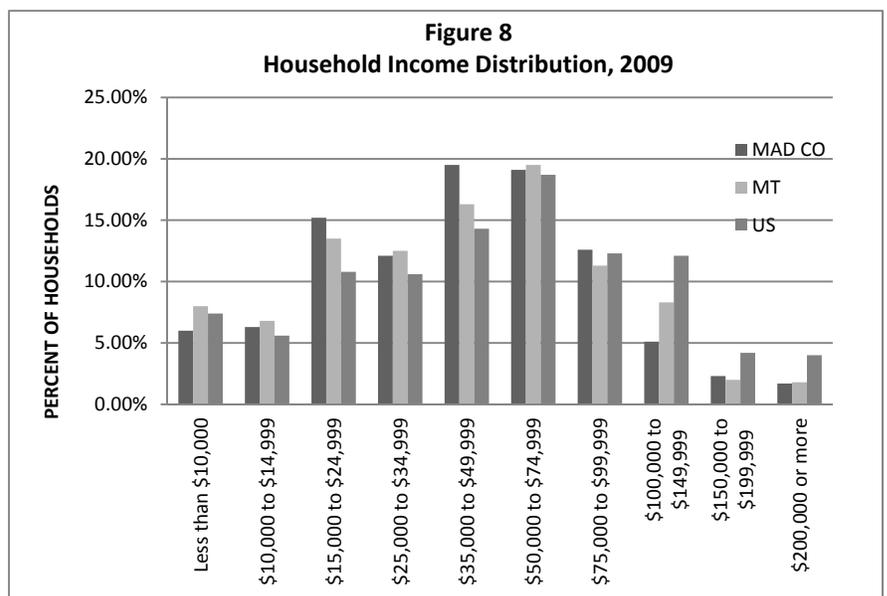
The Madison County population is comparatively well-educated. Its percentage of the adult population that is a high school graduates is 93.3% and is higher than the national rate of 84.6% and the state rate of 90.4%. The rate of adults attaining a bachelors degree or higher is 27.5%; this is on par with the national rate and slightly higher than the state rate (27%).

I. INCOME AND HOUSING FACTORS

1.0 Income and 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.^{viii} “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.^{ix} 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^x, partially because low-wage workers are less likely to be offered health insurance as a job-related benefit.

In Madison County, the poverty rate (the percentage of people living below the federal poverty line^{xi}) is comparatively low. At 13.1%, the rate is lower than both the state (14.7%) and national (13.5%) rates.^{xii} Although the rate is comparatively low, it has been on the rise. In 2007, an estimated 829 people were living in poverty; the number has risen to 958—a 15% increase over 2 years.



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The rate of children living in poverty in the county is 18.1% which is also lower than the national and state rates (20%), but slightly up from 2007 when the rate was 17.9%.

What is perhaps more significant for the county is the number and percentage of people who, although not considered poor, have low incomes. An estimated 37% of the population subsides at 200% or less of the federal poverty level^{xiii}. At this income level, households are eligible for reduced fees at the Community Health Center and for low-income assistance programs like Low-income Energy Assistance (LIEAP). The most recent and detailed Census data available for the County illustrates that the county's income distribution is somewhat more heavily weighted toward lower incomes than the national distribution. (*Refer to Figure 8*) In Madison County, 27.5% of households have annual incomes of less than \$25,000 compared with 23.7% for the nation.^{xiv} Low wages appear to be a major contributing factor. At \$27,210, the annual average wage for workers in the county is among the lowest in Southwest Montana and is 60% of the national average.^{xv} Since 77% of households have income from wages^{xvi} the impact of low wages on income distribution is significant.

Rising unemployment in the county is likely to have at least a short-term impact on household income. At 9.4%, unemployment has been on the rise. The number of unemployed people went from 182 to 382 between February, 2008 and February, 2011—a 110% increase over the period. A rise in unemployment coincides with an increase in the number of people receiving assistance from the Supplemental Nutrition Assistance Program (SNAP). The number increased 50% between 2009 and 2010 going from 187 people to 281 and continues to increase; as of January, 2011, 308 people in the county were receiving SNAP benefits.^{xvii} The number of students eligible for free or reduced-priced school lunches increased by 28% during the same period; 349 (27%) children in the county meet criteria for the program.^{xviii}

This 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. Nearly one-third of the county population under the age of 65 is without health insurance which is the second highest rate of uninsured in the state.^{xix} According to 2007 Census figures, 45.5% of people living at or below 200% of the federal poverty line were without health insurance in Madison County during that reporting period.^{xx} This number may be less today because the number of people receiving Medicaid assistance increased 63% between January, 2010 and January 2011 going from 240 to 391. Of those recipients, 54% are children, 12% are elderly and 34% are blind or disabled^{xxi}

2.0 Housing

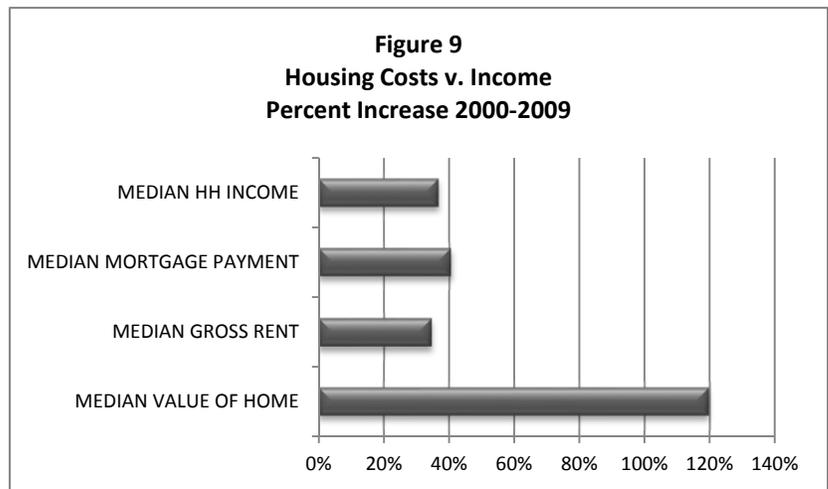
The extent to which housing is safe and affordable for people is a factor in a public health discussion. Lower income people are often forced by the market into the most unsafe housing which can place them, and particularly children, at risk of health problems. They are more likely to live in housing that presents exposure to hazardous environmental conditions. In addition, people whose housing costs consume a high percentage of their income will be less able to afford health insurance which impedes access to healthcare.

In the United States, housing costs are considered a burden when they exceed 30 percent of income. In Madison County, housing costs appear to be a burden for over 600 households. Thirty-five percent (35%) of renters and over 38% of homeowners are paying more than 30% of their income for housing payments. These rates have increased since 2000; the rate of renter-occupied households with a cost burden increased 19% percent and for homeowners, the rate increased 74%. (*Refer to Table 2.*) The level of cost burden for homeowners has been impacted by the fact that rising housing prices are outpacing income increases. The median value of homes increased by nearly 120% in the county between 2000 and 2009 and the median mortgage payment increased by 40%. Meanwhile, median income increased by only 37%. For a significant proportion of households who fall into the lower income cohorts, homeownership is out of reach or a cost burden; the current median monthly mortgage payment (\$1,165) would constitute a cost burden for an approximate 55% of county households.^{xxii}

Safety becomes a more pressing issue for lower income people who often live in the most undesirable units on the market. It deserves noting that half of the housing stock in Madison County was built prior to 1978 when lead paint standards went into effect. 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.

County	Renters		Homeowners	
	2000	2009	2000	2009
Madison	29.35%	35.00%	22.15%	38.44%

Source: U.S. Census Bureau; American Community Survey; 2005-2009



Condition of housing is also indicated in the 2005 “Condition of Housing in Montana” report^{xxiii}. According to the report, slightly more than 16% of housing units were in only fair to unsound condition at the time of the report. Another 36% were in average condition. The remaining 48% were in good to excellent condition. Mobile homes, which are often the most affordable option for lower income people, now comprise an approximate 9% of housing units, which is significantly down from the year 2000 when they comprised 14% of housing units. This is due in part to an increase in overall housing units that are primarily non-mobile homes. According to the 2005 housing condition report, 42% of mobile homes were in fair to unsound condition at the time of the report. This correlates with 2000 Census data that showed 49% of mobile homes had been constructed prior to 1976 when national safety standards for manufactured homes went into effect.

3.0 Housing for Senior Citizens

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 35% of the county population and occupy 63% 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.^{xxiv}

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 percent 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. (*Schafe*) The Harvard study also pointed to the need for housing to accommodate senior couples as men begin to live longer.

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III. REGIONAL CHARACTERISTICS

Madison County is comprised of three designated Census Tracts that are illustrated in Figure 5 above. Although population is distributed quite evenly across the Tracts, there are some characteristic differences. Census Tract One which includes the towns of Ennis and a portion of Big Sky has a significantly higher median household income and higher home values than the other two Tracts. Inflated figures in Tract One appear to be primarily influenced by the town of Big Sky where the median household income is much higher than in Ennis and where the proportion of households with incomes over \$75,000 is much higher than in other towns and in the county overall (*refer to Table 4.*) Census Tract One also appears to have a higher rate of educated people; the percentage of adults with bachelor's degree or higher is well above the other tracts. This is also heavily influenced by the town of Big Sky where over half of the adult population has a bachelor's degree or higher. The following tables provide detailed characteristics of the three Census Tracts and the primary towns in Madison County as well as county level data.

Table 3
County v. Census Tracts

Source: American Community Survey (2005-2009)

	Madison County	Tract One (Includes Ennis, Portion of Big Sky)	Tract Two (Includes Twin Bridges, Harrison)	Tract Three (Includes Sheridan, Virginia City)
Median Household Income	\$42,054	\$55,560	\$40,380	\$38,914
Median Value of Homes	\$229,600	\$308,800	\$217,000	\$155,200
Median Gross Rent	\$619.00	\$647.00	\$675.00	\$565.00
Median Mortgage Payment	\$1,165.00	\$1,204.00	\$1,169.00	\$1,103.00
% of Renters with Cost Burden	35%	30.22%	40.83%	34.35%
Poverty Rate	13.1%	12.00%	16.70%	9.90%
% of Households with incomes < \$25,000	27.51%	23.3%	33.5%	25.8%
% of Households with incomes > \$75,000	21.7%	26%	19%	19%
Educational Attainment Level				
High School Diploma or Equivalent	93.3%	95.80%	92.80%	91.40%
Bachelors Degree or Higher	27.5%	38.70%	24.80	19.50%
Median Age	47.3	47.7	42.7	51

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Table 4
Towns & Places

Source: American Community Survey (2005-2009)

	Ennis	Big Sky	Sheridan	Twin Bridges	Virginia City
Median Household Income	\$37,639	\$54,397	\$32,667	\$35,417	\$33,333
Median Value of Homes	\$200,000	\$456,000	\$105,000	\$91,700	\$96,400
Median Gross Rent	\$631.00	\$827	\$569	\$593	\$433
Median Mortgage Payment	\$1,066	\$1,719	\$883	\$950	\$825
% of Renters with Cost Burden	53.5%	28.92%	23.14%	50%	75%
Poverty Rate	6.00%	7.00%	11.5%	29.5%	29.3%
% of Households with incomes < \$25,000	28.61%	17.12%	26.54%	36.81%	9.57%
% of Households with incomes > \$75,000	20.00%	36.58%	12.04%	12.88%	17.02%
Educational Attainment Level					
High School Diploma or Equivalent	94.7%	100%	87.9%	88.2%	96.4%
Bachelors Degree or Higher	30.4%	51.8%	13.2%	35%	34.2%
Median Age	49.3	37.6	55.6	34.9	53.1

IV. SOCIAL AND BEHAVIORAL FACTORS

1.0 Crime

Madison county ranked 21st out of 50 reporting Montana counties for the 2009 overall crime rate; the rate factors in seven index crimes including homicide, rape, robbery, aggravated assault, burglary, larceny and motor vehicle theft. The Madison County rate was 1,372 per 100,000 population (104 crimes) compared to the Montana average of 1,795 crimes per 100,000 population.^{xxv} The number of juvenile offences increased by 43.4% between 2009 and 2010 in the county; total number of offenses in 2010 was 33 and the majority were crimes against property.^{xxvi} The rate of domestic abuse in Madison calculated for period 2007-2009 County is 225.4 per 100,000 population; this rate is considerably lower than the state rate of 438.6 per 100,000 people.^{xxvii}

2.0 Suicide

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." It is no surprise, then, that the state of Montana often ranks in the top five among states for its high suicide rate. Madison County's suicide rate is

currently higher than the state. Aggregate vital statistics that cover the period 1999 through 2008 show a county rate of 23.2 suicides per 100,000 people compared with the Montana rate of 20.3 per 100,000 people over the same time period.^{xxviii} In the shorter term calculation covering the period 2004-2008, the county rate is 19.4 suicides per 100,000 people and is lower than the state rate of 20.3 per 100,000 people.^{xxix} The suicide rate is based upon suicide related deaths in the county of residence.

3.0 Substance Abuse

Substance abuse is an undeniable contributing factor to poor health outcomes for adults and children and is an important consideration in public health planning. It is a factor, not only in physical health outcomes, but in child abuse, mental health and public safety. "Research has demonstrated that children of substance abusing parents are more likely to experience physical, sexual and/or emotional abuse."^{xxx} Although statistics vary, substance abuse contributes to at least one-third^{xxxi} and up to two-thirds of child welfare cases in the United States.^{xxxii} Research has also shown that there is a strong association between mental health disorders and substance abuse disorders. Adults and adolescents with major depressive episode (MDE) in the last year are more likely than those without MDE to have used alcohol heavily or to have used an illicit drug in the past year.^{xxxiii} Road safety is compromised when intoxicated people take to the roads.

As a state, Montana faces challenges in addressing substance abuse. In 2007-2008, the state had the highest rate of young adults (18 to 25), who were alcohol-dependent and was in the highest fifth for past year dependence on or abuse of alcohol or illicit drugs among persons aged 12 or older. It also ranked in the top fifth among states for the population 12 or older needing but not receiving treatment for alcohol problems.^{xxxiv} The challenge may be even greater in Madison County. The percentage of adults that engage in binge and heavy drinking is 21% compared with the overall Montana rate of 19%.^{xxxv} Additionally, in a state that has one of the highest alcohol-related fatality rates in the nation per vehicle mile travelled,^{xxxvi} Madison County has a rate of motor vehicle crashes involving alcohol that is higher than the state; the rate is 14% compared with the state rate of 10%.^{xxxvii}

A pattern of substance abuse often begins in youth, and particularly where there is a cultural acceptance of abuse in communities. There is some evidence that a culture of abuse may be present and impacting youth in Madison County. In a Prevention Needs Assessment Survey administered by the Montana Department of Health and Human Services in 2010, half of 10th grade students and 46.7% of 12th graders responded to questions in a way that indicated they were at high risk for anti social behaviors due to the presence of over 10 risk factors in their lives. These percentages were slightly lower than the state percentages, but higher

than a comparative multi-state percentage (includes 8 states). Categories where percentages were particularly high included positive parental attitudes toward anti-social behavior and drug use, academic failure, peer attitudes favorable toward antisocial behavior and drug use, sensation seeking and intention to use drugs.^{xxxviii} The same survey completed in Madison County in 2006 indicated that 35.4% of 10th grade students and 32.5% of 12th grade students had engaged in binge drinking within two weeks of completing the survey. This means they had consumed 5 or consecutive alcoholic drinks. In 2010, figures on binge drinking dropped to 17.6% of 10th graders and 15.6% of 12th graders. For purposes of determining whether there is a consistent pattern, it will be important for county officials to work with the Montana Department of Public Health and Human Services to ensure the survey is administered consistently and scientifically.

An aspect of the survey that sheds positive light on the behavioral environment in Madison County is the extent to which protective factors are at work for youth. While a significant percentage of students were in a high risk category for antisocial behavior, nearly 70% of 10th graders and nearly 80% of 12th graders had high protections in their lives, which means they had six or more protective factors at work to help produce good outcome. Protective factors in which percentages for Madison County kids were particularly high included opportunities and rewards for pro-social involvement both in the community and family environments, and interaction with pro-social peers.

V. ENVIRONMENTAL FACTORS

1.0 Air, Water and Soil Quality

The physical environment in Madison County appears to be a healthy one for citizens. There are no known soil or water quality problems. Air quality is very high with only four days per year in which the measure of fine particulate matter (PM 2.5) exceeds standards for good health.^{xxxix} The sparse population does not generate enough wood smoke to create significant air quality problems and there are no natural basins where wood smoke collects. There has been historic mining activity in the County, but does not pose significant environmental problems. Current garnet mining activity in the area between Alder and Virginia City does not involve the use of chemical agents and reclamation will be required once the mining operations end. Existing disturbances from historic dredge mining are unsightly, but do not constitute a health threat^{xl}

2.0 Availability of Healthy Food

Studies have linked the food environment to consumption of healthy food and overall health outcomes. In order to measure access to healthy foods, the U.S. Department of Health and Human Services' County Health Ranking project examined the number of zip codes within counties with healthy food outlets for citizens. Madison County received a score of 29% compared with 41% for Montana overall; both fell well below the national benchmark of 92%. The issue of access to healthy food has been raised in previous needs assessments in the county related to poverty. Specifically, concern was raised that many poor and low-income people and senior citizens had a difficult time accessing healthy, fresh food due to the need for reliable transportation to access outlets. As is true with healthcare and social services, the sparse and highly dispersed population adds a transportation layer in the discussion of access.

There are a number of efforts underway to address the access to healthy food issue. A number of community gardens have been started in Ennis and Sheridan and farmers' markets have been started in Ennis, Virginia City and Twin Bridges.

VI. HEALTH FACTORS AND OUTCOMES

Overall, Madison County is a relatively healthy county. In the most recent county health rankings that are released yearly through a collaborative project of the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute, Madison County ranked 6 out of 45 counties in Montana for its health outcomes with consideration given to one mortality and four morbidity factors as well as 10 health categories. The county ranked 9 among 45 counties for its health factors that include behaviors, clinical area, socioeconomic factors and the physical environment. Some of the following information was derived from that report released in March, 2011 which considered data over the period 2001 through 2007. The report also relies upon county level data produced by the Montana Department of Public Health and Human Services (DPHHS) specifically for community health assessments and the 2009 Madison County Health Profile also produced by the Montana Department of Health and Human Services. Oral health information came from DPHHS oral health screenings in schools and applies only to third grade students in the county. Where possible, state and national data was provided for the purposes of comparison. A median from the national 2008 Behavioral Risk Factor Surveillance System Survey was provided for some factors. That median was derived from data for 177 communities across the nation that were included in the 2008 survey. In addition, a national benchmark from the County Health Profiles program is presented.

MADISON COUNTY 2011 HEALTH NEEDS ASSESSMENT

The following table details health indicators for Madison County including behaviors, status and outcomes.

Findings of note include:

- Heart disease is the leading cause of death; the associated death rate is higher than the state rate
- The rate of excessive and binge drinking is higher than the state rate
- The percentage of adults who smoke every day is higher than the state and national median
- The suicide rate is higher than the state rate
- The unintentional death rate is significantly higher than the state rate
- The rate of death associated with motor vehicle crashes is significantly higher than the state and national benchmark
- The percentage of children aged 24-35 months with appropriate immunizations appears to be very low
- The percentage of people without health insurance is among the highest in the state (29%)
- The percent of 3rd grade students attending school who need urgent dental care is 20%

Refer to Table 5 below for detailed health outcomes.

MADISON COUNTY 2011 HEALTH NEEDS ASSESSMENT

Table 5
HEALTH FACTORS AND OUTCOMES

	NATIONAL BENCHMARK	MEDIAN (FROM BRFSS, 2008)	MADISON COUNTY	MONTANA
HEALTH BEHAVIORS				
Alcohol Consumption				
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)***	8%	4.2%	21%	19%
% of adults engaging in binge drinking alone***	NA	16.5%	19%	17%
Liquor store density (stores per 100,000 population)	NA	NA	13	8
Adult Obesity				
% Obese (BMI of 30 or greater)***	25%	26.3%	21%	23%
% of adults aged 20 and over reporting no leisure time physical activity***	NA	NA	24%	21%
Adult Smoking Prevalence				
% Adults who smoke every day or most days***	15%	18.4%	26.1%	19%
% Mothers who smoked during pregnancy*	18% (Montana)	NA	10.8%	18.3%
HEALTH STATUS				
	NATIONAL BENCHMARK	MEDIAN (FROM BRFSS, 2008)	MADISON COUNTY	MONTANA
Perceived Health				
Self-reported health status; % of adults reporting fair or poor health (age adjusted)	10%	3.7%	10%	13%
Average number of physically unhealthy days reported in last 30 days	2.6	NA	2.5	3.4
Average number of mentally unhealthy days reported in last 30 days	2.3	NA	2.3	3.1
Disability				
% Adults 21-64 years of age have a disability**	NA	NA	14%	17%
Sentinel Events				
Number of measles cases, 2008*	NA	NA	0	0
Number of invasive Haemophilus Influenza B cases in children under 5*	NA	NA	0	0

MADISON COUNTY 2011 HEALTH NEEDS ASSESSMENT

	NATIONAL BENCHMARK	MEDIAN (FROM BRFSS, 2008)	MADISON COUNTY	MONTANA
Number of tetanus cases*	NA	NA	0	0
Mortality (based on the period 2004-2008)				
Median age at death*	NA	NA	79.5	78
Heart disease mortality rate per 100,000 population*	NA	NA	235.5	198.0
Cancer mortality rate per 100,000 population*	NA	NA	213.4	200.9
Diabetes mellitus mortality rate per 100,000 population*	NA	NA	19.4	27.1
Chronic liver disease and cirrhosis mortality rate per 100,000 population*	NA	NA	11.1	12.7
Cerebrovascular disease (including stroke) mortality rate per 100,000 population*	NA	NA	47.1	49.7
Pneumonia/Influenza mortality rate per 100,000 population*	NA	NA	16.6	19.0
Chronic lower respiratory disease mortality rate per 100,000 population*	NA	NA	69.3	63.9
Suicide rate per 100,000 population (1999-2008)*	NA	NA	23.2	20.3
Drug-related mortality rate per 100,000 population*	NA	NA	11.1	13.8
Motor Vehicle Crash Death Rate per 100,000 population **	12	NA	52.7	25.5
Unintentional injury death rate per 100,000 population	NA	NA	77.6	55.8
Work-related injury death rate per 100,000 population*	NA	NA	5.5	3.7
Immunizations				
Proportion of children aged 24-35 months who have received all age-appropriate vaccines (based on clinic interviews by the Montana Immunization Program in 2008)*	NA	NA	28.6%	63%
Health Insurance				
Percent of population (under 65) without health insurance**	NA	NA	29%	19%
Maternal and Child Health				
Entrance into prenatal care in first trimester 2003-2007*	NA	NA	81.3%	83.9%
Low birth weight (less than 2500 grams) as a percent of live births*	NA	NA	4.2%	7.3%
Infant Mortality (deaths per 1,000 live births, 2004-2008)***	NA	NA	3.8	6.1

MADISON COUNTY 2011 HEALTH NEEDS ASSESSMENT

Percent of live births involving gestational diabetes 2004-2008*	NA	NA	5.8%	2.5%
Pre-term births (< 37 weeks) as a percent of live births 2004-2008*	NA	NA	8.9%	10.1%
HEALTH OUTCOMES				
	NATIONAL BENCHMARK	MEDIAN (FROM BRFSS, 2008)	MADISON COUNTY	MONTANA
Cancer (2003-2007)				
Cancer incidence rate (diagnosis per 100,000**)	NA	NA	343.7	455.5
Cardiovascular Disease (2004-2008)				
Heart disease death rate per 100,000 population*	NA	NA	235.8	198.3
Communicable Disease (2008 data)				
Chlamydia; reported cases per 100,000 population*	NA	NA	40	321.4
Gonorrhea: reported cases per 100,000 population*	NA	NA	0	12.8
Syphilis: reported cases per 100,000 population*	NA	NA	0	0.3
Tuberculosis; reported cases per 100,000 population*	NA	NA	0	0.9
Pertussis: reported cases per 100,000 population*	NA	NA	0	8.7
Salmonellosis: reported cases per 100,000 population*	NA	NA	0	13.5
Diabetes				
Diabetes rate per 100,000 population	NA	NA	192.6	182.2
Oral Health****				
<i>(based on 2005-2006, 2009-2010 school years)</i>				
% of 3 rd grade children with untreated cavities	NA	NA	17%	NA
% of 3 rd grade children who had caries experience	NA	NA	30%	NA
% of 3 rd grade children without dental sealants	NA	NA	42%	NA
% of 3 rd grade children attending school and needing urgent dental treatment	NA	NA	20%	NA
*Montana Department of Health and Human Services; Data compiled for Community Health Assessments; Madison County				
**Montanan Department of Health and Human Services; 2009 Madison County Health Profile				
***County Health Rankings; Collaboration between Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute				
****Montana Department of Health and Human Services; Oral Health School Screenings; Madison County; 2005-2006 and 2009-2010 School years				

CHAPTER TWO: SERVICES AND GAPS

MADISON COUNTY 2011 HEALTH NEEDS ASSESSMENT

INTRODUCTION

The gap analysis portion of the health assessment for Madison 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.

METHODOLOGY

During the period between February and May, 2011, representatives of service agencies and organizations were contacted by telephone to learn the nature and extent of existing services and programs. 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:

- Jill Steeley, Director, Madison County Health Department, February 2nd, 2011
- Marilyn Ross, Former County Commissioner, February 7th, 2011, 405-843-5457
- Ramona, Rocky Mountain Hospice – Butte Office, February 7th, 2011, 406-494-6114
- Sharon, Nursing Director, Rocky Mountain Hospice – Bozeman Office, February 7th, 2011, 406-556-0640
- Cheryl, Highlands Hospice – February 7th, 2011, 406-533-0020
- Lisa Morgan, Alder School February 8th, 2011 – 406-842-5285
- Doreen Young, Superintendent’s Secretary, Harrison School, February 8th, 2011 – 406-685-3428
- Jenny Burke, Sheridan School, February 8th, 2011 – 406-842-5302
- Jim Clavadetscher, Madison Valley Medical Center, February 8th, 2011 – 406-682-6862
- Chad Johnson, Superintendent/Sylvia, Secretary, Twin Bridges Schools, February 9th, 2011– 684-5656
- Deb Pingrey, Office of Public Assistance, Bozeman, February 9th, 2011 – 866-550-2809
- Judy Melin, Director of the Madison Valley Manor (Ennis) and Chairperson of the Montana Healthcare Association for SW Montana (including Madison and Butte-Silver Bow), February 9th, 2011 – 406-682-7271

MADISON COUNTY 2011 HEALTH NEEDS ASSESSMENT

- John Semingson, Ruby Valley Nursing Home, and Ruby Valley Hospital Director, February 11, 2011, 406-842-5454
- Steve DiGiovanna, Communications Coordinator, May 24, 2011 - 853-4211,
- Ralph Hamler, Madison County Sanitarian, May 24, 2011 - 843-4275, 596-0190 (cell).

KEY FINDINGS

- While the senior population is increasing, there are virtually no home health or other senior assistance programs (home maintenance, cleaning services, etc.) in Madison County. The lack of these services not only threatens the health of the senior population, but also inhibits the ability of seniors to age in place.
- Madison County lacks physicians in the areas of gynecology, urology and general medicine.
- Gallatin County Mental Health provides one social worker to Madison County, but there are no mental health professionals who are locally based.
- The sheer size of the county, at 3500 square miles, makes it difficult for first responders (police, fire ambulance) to reach remote areas to provide emergency assistance.
- Volunteer ambulance drivers are often called upon for medical transport to regional hospitals, resulting in a shortage of available personnel to respond to new emergencies.
- The Madison County Health Department does not undertake the following programs, and must instead rely on the Butte-Silver Bow Health Department to provide programs in these areas of concern:
 - Tobacco and Alcohol Prevention
 - Family Planning
 - Cardio-Vascular Health

I. PUBLIC HEALTH AND PREVENTION SERVICES

1.0 Immunizations

The Department provides immunizations to every age group and to all populations including those with special needs (persons with mental and physical disabilities).

2.0 Sexually Transmitted Diseases (STD) Program

The STD program has three components, including counseling, investigation and prevention. Investigation includes working with each confirmed case to learn of all contacts made, to reduce the spread of the infections. The Department mandates that those with confirmed cases be treated and sometimes pays for treatment.

3.0 School Nursing Services

The School Nursing Program provides or arranges for the following services:

- Lice Checks
- Educational Services Associated with Administering Drugs (e.g. for Diabetes)
- Immunization Clinics
- Healthy Relationship Training which helps students understand healthy interactions and when and why a relationship is abusive, inappropriate, etc.
- Sex Education
- Hearing Screenings
- Vision Screenings, which are administered by the Lions Club
- Dental Screenings, coordinated by the Department but administered by area dentists and dental hygienists

4.0 Madison County Emergency Preparedness' Planning

The Health Department is Responsible for emergency planning with respect to implementing the following activities in the case of an emergency:

- Mass Vaccination Clinics
- Dispensing Mass Pharmaceuticals
- Isolation and Quarantine
- Mass care site services – on site assistance for severe injuries, e.g., during earthquakes
- County Evacuation Plans

- Specimen Analysis for those cases where communicable diseases have been intentionally introduced into the population, through terrorist activities, e.g., anthrax, the Health Department is responsible to work with the County Sheriff to arrange for the transportation of specimens (blood, fluids, and/or other samples) to the State Laboratory in Helena and to maintain the “chain of control” of the specimen.

5.0 Communicable Disease

This program includes the control, investigation and prevention of reportable diseases including salmonella, E coli, Pertussis (whooping cough), and chicken pox; both air-born and food-born illnesses. Recently, for example the health department had to shut down a restaurant when its water supply was infected with a type of bacteria known as campylobacter. People diagnosed with these diseases are cautioned to stay away from work, day care facilities, schools, etc., and to contact everyone that may have been exposed to the disease. In some cases the Health Department will pay for treatment to help prevent the spread of the disease.

6.0 Diabetes Prevention

The Health Department provides Type 2 Diabetes prevention education.

7.0 Services Not Provided

- The Health Department does not provide birth control, but can refer clients to the Sheridan Community Health Center or to public health departments in Gallatin, Butte-Silver Bow and Beaverhead Counties.
- The Department does not have programs to prevent tobacco use and alcohol abuse or to promote cardio vascular health. Tobacco use prevention, if provided, would come through the Butte-Silver Bow Health Department.

II. HOSPITALS

1.0 Madison Valley Medical Center, Ennis

The MVMC is a critical access hospital providing treatment to area residents and visitors. The hospital does not serve patients who have significant trauma or who require surgery and does not offer obstetric services. Patients who are delivering babies must travel to Dillon, Butte or Bozeman. Patients requiring surgery or treatment for trauma travel to tertiary hospitals in other areas, either by ambulance or on their own. The hospital has ten beds and its annual average daily occupancy is just under three. On an annual basis, the MVMC treats more than 1,200 in its emergency room, averaging over 100 each month. Of these, approximately eight are admitted to the hospital each month.

- **Ruby Valley Hospital, Sheridan**

The Ruby Valley Hospital (RVH) is a 10-bed, critical access hospital in Sheridan. The 10 beds include some "swing beds" which serve those patients that require acute care with more services than a nursing home. Swing bed services are covered by Medicare. RVH has a laboratory, radiology department and an active therapeutic department for physical, speech and occupational therapy. It does not offer delivery/birth services or surgery. Approximately eight patients per month are stabilized and transported via ground ambulance to hospitals in Dillon or Butte. Those require air service are sent to St. Pat's in Missoula or beyond to Spokane and Seattle.

Approximately 50% of the private pay patients at RVH have difficulty paying their bills and many accounts receivable are at 120 days or longer. This is due largely to the lack of access to insurance; 29% of people in the County under 65 have no form of health insurance, which is among the highest rates in the state of Montana. This is further compounded by the lack of a Medicaid office/agent in Madison County. People have to travel to Butte, Bozeman or Dillon to apply for Medicaid.

III. CLINICS/HEALTH CENTERS

- The Madison Valley Medical Center operates a clinic in Ennis that is staffed by three physicians and two physician's assistants. Outside providers visit the Clinic regularly including a diabetic counselor, gynecologist, cardiologist, and audiologist.
- The Ruby Valley Hospital operates two clinics, one each in Sheridan and Twin Bridges where one physician (family doctor/gerontologist) and three physician's assistants serve patients. They are focused in general medicine, although one has an additional specialty in orthopedics.
- The Community Health Center in Sheridan provides primary medical care to people throughout the county and provides a sliding fee for people at or below 200% of the federal poverty line.

IV. NURSING HOMES AND ASSISTED LIVING FACILITIES

- The Madison Valley Manor in Ennis provides both convalescent (short term) and nursing home (long term) care. It has 40 beds and typically has an 80% occupancy rate.
- The Tobacco Root Mountains Care Center in Sheridan has 39 beds and typically the daily census is 35. Recently an assisted living center opened in Sheridan, which has 10 beds, of which two to three are occupied currently. This may change the dynamics of the population at the nursing home.

V. HOSPICE ORGANIZATIONS

- **Rocky Mountain Hospice:** The Butte office of Rocky Mountain Hospice is Medicare-certified and serves the Sheridan and Twin Bridges area of Madison County. The organization currently has five clients in Sheridan. The Bozeman office serves Ennis, and while no clients are currently being served in the Ennis area, three or four received services during the last year.
- **Madison County Volunteer Hospice:** This all volunteer, state-licensed hospice program is located in Ennis and provides social services, volunteer services spiritual services, bereavement services and facilitates nursing services for chronically ill people in Madison County who wish to stay at home.

The opportunity exists for the Ennis Volunteer Hospice program and Rocky Mountain Hospice to work together to deliver services in the Ennis area of the county. Although Rocky Mountain Hospice is Medicare certified, it is 50 miles away from Ennis. If the two groups were to work cooperatively, Rocky Mountain Hospice could provide the Medicare benefit to clients being served by the volunteers.

VI. SENIOR SERVICES

- **Senior Bus Programs:** Two buses are operated by the nursing homes in Ennis and Sheridan. In addition, a bus is operated by Hollow Top Senior Center in Pony. The Hollow Top bus travels twice each week, once to Bozeman and once to Butte. The route to Bozeman includes stops in Twin Bridges, Sheridan and Ennis, while the Butte route offers the same stops in reverse, beginning with Ennis and then traveling to Sheridan and Twin Bridges. Passengers travel on the Hollow Top Bus for a \$3.00 fee (round trip) and schedules are posted at the library.
- **Senior Centers:** There are three programs in the county, as follows:
 - In Sheridan, programs are offered in a former private residence and include congregant meals, five days a week and a Meals on Wheels program, as well as various meetings and activities.
 - In Pony, the Hollow Top Senior Center, which leases the ground floor of the Masonic Lodge, serves the Pony and Harrison areas. Programs include two congregant meals a week and a Meal on Wheels Programs, and other activities.
 - The Ennis Seniors use the Town Hall for congregant meals, which are offered two days a week, and a 'Meals on Wheels' program. However, there is no facility that offers on-going space for seniors to recreate or gather for companionship.

VII. Senior Health Needs

The Madison County Health Department would like to do more to address the needs of seniors through coordination with other agencies to provide the following services at home:

- Medical Evaluations and Dispensing Medicine (by registered nurses – RNs)
- Blood Pressure Checks and Assistance with the Activities of Daily Living (ADLs) (by certified nurse’s assistants – CNAs)
- Meal preparation, house cleaning and yard maintenance (by personal aids)

Currently there are few home health service providers in the County. An RN provides some home health services in Ennis and is at capacity. Three licenses have been issued for home health services in the County but it is not known if they are being used. While Medicare and Medicaid programs are experiencing cuts for nursing home care, there are no home health services to meet what will be an expected to be an increase in demand.

At one time the Ruby Valley Hospital offered a home health program, but changes in reimbursement and travel time resulted in the cessation of the program.

VIII. PHYSICIANS

▪ Ennis

- Dr. RD Marks, Family Medicine
- Dr. Curtis Blake, Family Medicine
- Dr. Patricia Moran, Family Medicine (but has a specialty in Obstetrics)
- Dr. Blair Erb, Cardiologist – travels from Bozeman once a month
- Drs. Brian Landsverk and Tim Johnson, gastroenterologists, travel from Bozeman twice monthly to perform endoscopies

▪ Sheridan and Twin Bridges

- Dr. Roman Hendrickson, Geriatric and Family Medicine
- Dr. Sarah Googe, Director of the Community Health Center in Sheridan

IX. OTHER HEALTH CARE PROFESSIONALS

▪ Physicians' Assistants

- Three in Ennis: Mary Hensel, Cary Wilson, Nancy Fitzpatrick
- Three in Sheridan and Twin Bridges: Family Medicine Services are provided at clinics in Twin Bridges and Sheridan

▪ Nurse Practitioners

- One nurse practitioner serves patients at the Community Health Center in Sheridan.

▪ Other Specialists

- Audiologists: Dr. Helton, comes from Bozeman monthly
- Optometrists: Advanced Eye Care, comes from Bozeman weekly
- Mental Health Professionals
 - Licensed Counselors are available to students through the various school districts in the County.
 - Gallatin County Mental Health provides one social worker to the county.
 - Gallatin County Mental Health has a contract with Madison County to provide crisis mental health services through hospital emergency rooms. The sheriff's office coordinates transportation to the State Mental Hospital or other facility.
 - The Madison Valley Manor (Ennis) currently has six patients from the State Mental Hospital who are receiving care in Ennis.

X. HEALTHCARE PROFESSIONAL NEEDS

▪ Areas of Need – Ennis

- Gynecology (not obstetrics)
- Urologists – could be served through an extended office of a practice elsewhere

▪ Areas of Need – Sheridan – Twin Bridges

- The Ruby Valley could benefit from an internist, but does not have the physical space and associated resources to conduct the laboratory tests in support of a practice. The Hospital has a lab, but no bench space to accommodate the additional testing requirements. Note: The RVH could not afford to offer an additional physician a guaranteed income, which makes recruitment difficult.

▪ Areas of Need – County Wide

- Mental Health Professionals – Gallatin County Mental Health provides one social worker to the county, but there are no mental health professionals who are based in Madison County.

XI. DENTISTS

There is one practicing, full-time dentist in Madison County (Dr. R. Tom Bartoletti in Sheridan). In addition, there are two dentists that travel to Ennis from Bozeman, once or twice a week (Drs. Peter Schmieding and Cory Sager).

XII. YOUTH ACTIVITIES AND SERVICES

- **Big Brothers and Sisters Program.** This program operates in Ennis, but its level of activity may be limited.
- **After-school Programs:** There are some after school programs operating including:

- **Alder School – K-6**

The Alder School offers music lessons for fifth and sixth graders after school and an independent provider provides after-school daycare and some limited activities on premises.

- **Ennis School – K-12**

The Ennis School has an after-school program through the Colt Club, which provides activities and tutoring.

- **Harrison School – K-12**

The Harrison School has received a Turner Grant to provide an after school program that provides a setting for students to do their homework while waiting for other activities and practices. Homework help, snacks and other limited activities are provided.

- **Sheridan School – K-12**

The Sheridan School offers athletics to middle and high school students; Future Farmers of America for ninth through twelfth grades; and Family, Career and Community Leaders of America for eighth through twelfth grades. In addition the school provides all students, K-12 with homework help, activities and field trips, five days a week (after school Monday-Thursday and all day Friday), through the PALZ club – Panther Adventure Learning Zone.

- **Twin Bridges School – K-12**

After school activities at the Twin Bridges schools are primarily focused in athletics, cheerleading and school clubs.

- **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 Madison County from Butte.

XIII. NUTRITION SERVICES

- **Women Infants and Children Program:** The WIC program is available in the county and is administered through the Anaconda-Deer Lodge County and Gallatin County Public Health Departments.
- **Food Banks:** There are two food banks in the county, in Sheridan and Ennis.
- **Senior Food Service:** The Madison Valley Manor (Ennis Nursing Home) and the Tobacco Root Mountains Care Center have a dietary managers on staff and consult with a registered dietician (as required by state law).

XIV. SOCIAL SERVICES

- **Self-help Groups:** AA and NA operate in most communities in the County.
- **Office of Public Assistance:** The County is served by the Office of Public Assistance in Bozeman, but specific numbers of clients served in Madison County are not available. Deb Pingrey at OPA notes that overall, she had 813 applications for food stamps in January of 2011, a four-fold increase since 2006. Of those approximately 10% are from Madison County.
- **Domestic Violence:** There are no shelters for victims of domestic violence and often victims are without the necessary transportation to get to a shelter in Butte or elsewhere.
- **Affordable Housing:** The only designated affordable housing units in Madison County are owned and managed by the District XII Human Resources Council. There are 12 units of family housing in Ennis, Montana (Valley Apartments) and 12 units of senior and disabled housing in Sheridan. Given the proportion of low income households and the percentage of households paying more than 30% of their income for housing, there is a need for more affordable housing units in the county.

XV. EMERGENCY SERVICES AND COMMUNICATIONS

- **Ambulance Services:** Madison County is served by two ambulance services, one operating in the Ruby Valley and the other in the Madison Valley. The volunteer staff is stretched thin and often called upon for medical transport in addition to its first responder responsibilities in the case of medical emergencies. The result is that many of the county's Emergency Medical Technicians are overtaxed.
- **Volunteer Fire Departments:** The County is served by six volunteer fire departments. Despite equipment that is undersized and antiquated, the volunteers do an excellent job of responding to and fighting fires. Efforts to improve equipment are ongoing.

- **Law Enforcement:** Madison County has 10 full-time law enforcement officers including the Sherriff and approximately five reserve officers. The County provides all law enforcement services in the County with the exception of Ennis, which has one police officer, who also serves as the town's chief of police. While the County has about 7,500 full-time residents, its population swells during the summer recreation season and during special event weekends, and can often double to nearly 15,000. Further, the county's size, at 3500 square miles, makes coverage difficult, even without additional population. A deputy, in responding to a call, is often alone until another officer is able to travel to the site, which can be as long as 30 to 60 minutes. This presents a potentially dangerous situation for law enforcement personnel. Additional deputies are needed, even in light of the fact that law enforcement is clearly the most expensive first responder service.
- **Communications:** The Madison County 911 dispatcher responds to calls for all agencies and entities, including the US Forest Service, the Montana Department of Fish, Wildlife and Parks, volunteer fire departments, county Sherriff's deputies and the Ennis police chief. Madison County faces difficult challenges, given its mountainous environment. Radio waves are unable to travel through the terrain, creating "dead spots" in communication. However, this situation is improving. During 2010, the State of Montana provided the County with two repeaters, which are helping to address this problem.

XVI. ENVIRONMENTAL HEALTH – WATER AND SEWER

As stated in Chapter one of this document, Madison County has no significant water or air quality issues. Old water and septic systems are replaced as needed and reports of contamination are addressed on a case by case basis. While there is no air quality monitoring program, a report from the U.S. Department of Health and Human Services shows only four days of poor air quality. Garnet mining activity in the area between Alder and Virginia City does not involve the use of chemical agents and reclamation will be required once the mining operations end.

MADISON COUNTY 2011 HEALTH NEEDS ASSESSMENT

END NOTES

- ⁱ Wood and Pool Economics, Inc.; 2006
- ⁱⁱ Baby Boom Migration and Its Impact on Rural America; John Cromartie and Peter Nelson, Economic Research Report No. (ERR-79) 36 pp, August 2009
- ⁱⁱⁱ U.S. Census Bureau; 2010 Decennial Census count; Montana Natural Resource Information System; Land area for Montana Counties
- ^{iv} 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.
- ^v Wood and Pool Economics, Inc.; 2006
- ^{vi} 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
- ^{vii} County Health Rankings, 2010; Robert Wood Johnson Foundation, University of Wisconsin Institute of Public Health
- ^{viii} Diane Rowland; The Gale Group Inc., Macmillan Reference USA.... Gale Encyclopedia of Public Health, 2002; <http://www.healthline.com/galecontent/poverty-and-health#ixzz1QggepcbQ>
- ^{ix} Medical News Today; Article Date: 04 Jan 2006
- ^x Medical News Today; Article Date: 04 Jan 2006
- ^{xi} 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.
- ^{xii} U.S. Census Bureau; American Community Survey; 2005-2009
- ^{xiii} Montana Department of Public Health and Human Services; County Health Profile; 2009
- ^{xiv} U.S. Census Bureau; American Community Survey; 2005-2009
- ^{xv} Montana Department of Labor and Industry; Madison County Profile; 2010
- ^{xvi} U.S. Census Bureau; American Community Survey; 2005-2009
- ^{xvii} Montana KIDS COUNT Data Center; Profile for Madison County; 2005-2010
- ^{xviii} Montana KIDS COUNT Data Center; Profile for Madison County; 2005-2010
- ^{xix} 29% of adults under the age of 65 have no health insurance; Montana Department of Public Health and Human Services; Madison County Health Profile; 2009
- ^{xx} Source: U.S. Census Bureau; Small Area Health Insurance Estimates for Montana Counties; 2007
- ^{xxi} Montana Department of Health and Human Services
- ^{xxii} The housing analysis was completed using data from the U.S. Census Bureau; American Community Survey; 2005-2009
- ^{xxiii} Montana Condition of Housing Report; prepared by Montana State University Billings for the Montana Department of Commerce; 2005
- ^{xxiv} Source for Tenure data was the U.S. Census Bureau; Census of Population and Housing, 1980, 1990, 2000
- ^{xxv} Montana Board of Crime Control Data; 2009
- ^{xxvi} Montana Board of Crime Control Data; 2009, 2010
- ^{xxvii} Montana Department of Public Health and Human Services; Data for Community Health Assessments; Madison County
- ^{xxviii} Montana Department of Public Health and Human Services; Data for Community Health Assessments; Madison County
- ^{xxix} Montana Department of Public Health and Human Services; County Health Profile; 2009
- ^{xxx} Child Welfare Information Gateway; Substance Abuse and Child Maltreatment Bulletin for Professionals, 2003
- ^{xxxi} SAMHSA Health Information Network; Substance Abuse Treatment for Persons with Child Abuse and Neglect Issues; <http://ncadi.samhsa.gov/govpubs/BKD343/36d.aspx>
- ^{xxxii} Child Welfare Information Gateway; Substance Abuse and Child Maltreatment Bulletin for Professionals, 2003
- ^{xxxiii} National Survey on Drug Use and Health; U.S. Substance Abuse and Mental Health Services Administration; Depression and Initiation of Alcohol and Other Drug Use Among Youths Aged 12 to 17, May 3, 2007
- ^{xxxiv} SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2007 and 2008.
- ^{xxxv} 2011 County Health Rankings; Mobilizing Action Toward Community Health; Collaboration of Robert Wood Johnson Foundation and the University of Washington Population Health Institute
- ^{xxxvi} Montana Department of Transportation
- ^{xxxvii} Montana Department of Public Health and Human Services; County Health Profile; 2009
- ^{xxxviii} Montana Department of Health and Human Services; 2010 Montana Prevention Needs Assessment Survey; Madison County
- ^{xxxix} U.S. Department of Health and Human Services; Community Health Status Report; Madison County, Montana, 2009
- ^{xl} Interview with Ralph Hamler, Madison County Sanitarian

APPENDIX A
GLOSSARY OF TERMS AND ACRONYMS

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. The source is Montana vital statistics: death certificates, Montana resident data from 2004-2008.

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. The source is Montana vital statistics: death certificates, Montana resident data from 2004-2008.

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. The source is Montana vital statistics: death certificates, Montana resident data from 2004-2008.

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. Data comes from Montana Vital Statistics; live birth data, 2003-2007.

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 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.

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.

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). Results are based on data reviewed during 2008 clinic reviews by the Montana Immunization Program.

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. The source is Montana vital statistics: death certificates, Montana resident data from 2004-2008.

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.

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 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.

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.

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.

APPENDIX B
COMMUNITY HEALTH IMPROVEMENT PLAN

The Madison County Community Health Improvement Plan or CHIP provides a framework for implementing projects and activities that will enhance public health services and delivery systems throughout Madison County. In doing so, we can help contribute to our overall quality of life as well as to the health and safety of our residents and visitors alike. More specifically, the CHIP addresses the critical health related needs identified in the Madison County Community Needs Assessment, prepared in 2010 and 2011.

The assessment of need and the development of a citizen-based action plan are important to the development of sound public policy related to public health. This planning effort has as its purpose the following:

- To inform the allocation of resources – providing a foundation for the strategic planning process for participating entities
- To foster a shared vision for community health – informing a shared understanding of the problems
- To foster linkages among stakeholders to create a continuum of care and service and collaborating on solutions
- To create a sustainable public health system through cooperation, which can make measureable improvements in the health status of our citizens

While the Madison County Public Health Department (MCPHD) was the facilitator of this effort, the implementation of the CHIP will rely on a cooperative effort among the agencies, organizations and health care providers in order to be successful. The following table summarizes the results of the Madison County Community Health Improvement Plan (CHIP) Stakeholder Meeting, held on March 7th, 2012 in Virginia City. At the meeting, goals and strategies were identified for each of five focus groups, including:

- The Aging Population
- Emergency Services
- Low Income and Poverty
- Behavioral Health
- General Health

The identification of “champions” for each strategy will occur over time. Therefore, the lead entity designations and time frames included here are suggestions only. Each participating agency, organization or provider, through its own organizational planning process, will determine the level of involvement in the implementation of the CHIP.

MADISON COUNTY COMMUNITY HEALTH IMPROVEMENT PLAN

Focus Area: The Aging Population

GOAL #1. EXPAND HOME HEALTH SERVICES IN MADISON COUNTY

STRATEGIES	POTENTIAL LEAD ENTITY OR ENTITIES	SUGGESTED TIME FRAME <i>Near Term (1-2 years)</i> <i>Long Term (3-5 years)</i>
Work with the hospitals and nursing homes to provide more home health services	MCPHD with Area Hospitals and Nursing Homes	Near Term
Explore how Hospice can help provide home health services	Hospice Organizations	Near and Long Term
Explore how private home health providers can expand services in Madison County	Council on Aging Hospitals, Clinics, Individual Providers	Near and Long Term
Encourage CNAs to seek home healthcare placements	CNA training programs, including universities and colleges of technology	Near Term
Develop a Regional (sub-county) service delivery system (Ruby, Madison, Big Sky) in collaboration with the Council on Aging	Council of Aging, with assistance of the MCPHD	Near Term
Work with AHEC (Area Health Education Center) and critical access hospitals to increase services in areas of need	Area Hospitals	Long Term

MADISON COUNTY COMMUNITY HEALTH IMPROVEMENT PLAN

GOAL #2. ENCOURAGE STUDENTS TO CONSIDER CAREERS IN HEALTHCARE, PARTICULARLY IN GERIATRIC SERVICES

STRATEGIES	POTENTIAL LEAD ENTITY OR ENTITIES	SUGGESTED TIME FRAME <i>Near Term(1-2 years)</i> <i>Long Term (3-5 years)</i>
Continue health fairs at local hospitals where students can learn about opportunities in the health care field	Area Hospitals and other partners already defined	Near Term

GOAL #3. PROVIDE EDUCATIONAL AND OUTREACH SERVICES TO THE ELDERLY POPULATION

STRATEGIES	POTENTIAL LEAD ENTITY OR ENTITIES	SUGGESTED TIME FRAME <i>Near Term(1-2 years)</i> <i>Long Term (3-5 years)</i>
Provide workshops and seminars to address a variety of topics including: <ul style="list-style-type: none"> • Available services to support the aging population • Advantages of aging in place v. advantages of assisted living options 	MCPHD in cooperation with the Council on Aging, Nursing Homes	Near Term
Work with Adult Education programs to support outreach programs that target the elderly population	Council on Aging in cooperation with area schools and Senior Centers	Long Term

MADISON COUNTY COMMUNITY HEALTH IMPROVEMENT PLAN

Focus Area: Emergency Services

GOAL: INCREASE VOLUNTEER RATE, ESPECIALLY AMONG 18-25 OLDS AND PARTICULARLY FOR THOSE WHO VOLUNTEER FOR AMBULANCE/EMERGENCY RESPONSE SERVICES (RECRUITMENT AND RETENTION)

STRATEGIES	POTENTIAL LEAD ENTITY OR ENTITIES	SUGGESTED TIME FRAME <i>Near Term(1-2 years)</i> <i>Long Term (3-5 years)</i>
Give credit for high school EMT classes	High School Districts in cooperation with First Responders	Near Term
Research policies related to elective transport; have Butte/Bozeman provide transport rather than Madison County – so that less time is spent driving very long distances	Madison County, Incorporated Towns and First Responders	Near Term
Research how other counties compensate first responders, including such things as per diem expenses, retirement benefits, health insurance, and paid positions through hospital emergency departments	First responders with assistance from Area Hospitals and MCPHD	Near Term
Offer EMT class tuition in exchange for a set time of service as an emergency responder	EMT training providers, First Responders	Near Term
Include recruitment activities for emergency responders at health fairs	First Responders, Area Hospitals	Near Term
Decrease number of emergency calls through the provision of home health services	Home Health Providers, Area Hospitals	Long Term

MADISON COUNTY COMMUNITY HEALTH IMPROVEMENT PLAN

Focus Area: Low Income and Poverty

GOAL #1. INCREASE NUMBER OF AFFORDABLE RENTAL UNITS AND HOME-OWNERSHIP OPPORTUNITIES, TO FOSTER MORE HEALTHY LIVING CONDITIONS

STRATEGIES	POTENTIAL LEAD ENTITY OR ENTITIES	SUGGESTED TIME FRAME <i>Near Term(1-2 years)</i> <i>Long Term (3-5 years)</i>
Create a vehicle for affordable workforce housing; create a CHDO through Headwaters RC&D or Human Resources Council (HRC) District XII	Madison County, HRC Headwaters RC&D	Near and Long Term
Promote weatherization and improved environmental health through associated improvements	HRC and MCPHD	Near Term
Update Housing Plan	Madison County	Near Term

GOAL #2. ASSURE ACCESS TO SAFETY NET PROGRAMS FOR LOW-INCOME PROGRAMS

STRATEGIES	POTENTIAL LEAD ENTITY OR ENTITIES	SUGGESTED TIME FRAME <i>Near Term(1-2 years)</i> <i>Long Term (3-5 years)</i>
Provide educational programs to raise awareness about the availability of services <ul style="list-style-type: none"> • Madison Valley Hospital provides services to people who are at or below 200% of poverty • Madison County Health Department assists people in filling out forms 	MCPHD, Montana DPHHS, HRC, Area Hospitals	Near Term
Work collaboratively with religious institutions to provide programs and services	Area Religious Centers	Near and Long Term
Establish a county continuum of care	MCPHD, HRC	Long Term

MADISON COUNTY COMMUNITY HEALTH IMPROVEMENT PLAN

GOAL #3. WORK TO ASSURE THAT ALL LOW INCOME CHILDREN ARE HEALTHY AND WELL NOURISHED

STRATEGIES	POTENTIAL LEAD ENTITY OR ENTITIES	SUGGESTED TIME FRAME <i>Near Term(1-2 years)</i> <i>Long Term (3-5 years)</i>
Make sure that all children are signed up for free lunch and health insurance programs	Public Schools and MCPHD, Montana DPHHS	Near Term
Advertise and promote available services – Send packets out at the beginning of the school year to all children	Public Schools and MCPHD, Montana DPHHS	Near Term

Focus Group: Behavioral Health

GOAL #1. WORK TOWARDS AN OVERALL CULTURAL SHIFT TO DECREASE THE STIGMA ASSOCIATED WITH ACCESSING MENTAL HEALTH SERVICES

STRATEGIES	POTENTIAL LEAD ENTITY OR ENTITIES	SUGGESTED TIME FRAME <i>Near Term(1-2 years)</i> <i>Long Term (3-5 years)</i>
Bring speakers to public venues to address mental health topics	Western Montana Mental Health Center, Community Health Centers	Long Term
Hold round table community conversations about the symptoms of depression and the definitions of counseling	Western Montana Mental Health Center, Community Health Center, MCPHD	Near Term
Create more comfortable settings for counseling services	Western Montana Mental Health Center, Community Health Center, MCPHD	Near and Long Term

MADISON COUNTY COMMUNITY HEALTH IMPROVEMENT PLAN

GOAL #2. INCREASE THE NUMBER OF PROVIDERS OF MENTAL HEALTH SERVICES

STRATEGIES	POTENTIAL LEAD ENTITY OR ENTITIES	SUGGESTED TIME FRAME <i>Near Term(1-2 years)</i> <i>Long Term (3-5 years)</i>
Determine an appropriate number of providers based on population (per capita evaluation)	MCPHD	Near Term
Use Madison Valley Hospital as a model for programs that are provided through the Health Resources and Services Administration (HRSA), the primary Federal agency for improving access to health care services for people who are uninsured, isolated, or medically vulnerable.	MCPHD with Madison Valley Hospital	Ongoing – near and long term
Explore opportunities to recruit mental health professionals through HRSA student loan repayment programs for critical shortage areas	Area Hospitals and Community Health Center	Near Term
Support the Madison Valley/ Ennis Hospital effort to bring in a psychologist and social/mental health specialist, through an HRSA grant, by fall, 2012	MCPHD, Madison County, Public Schools, Council on Aging	Very Near Term

GOAL #3. SUPPORT ROLE OF PRIMARY CARE PROVIDERS IN PRESCRIBING FOR MENTAL HEALTH PATIENTS

STRATEGIES	POTENTIAL LEAD ENTITY OR ENTITIES	SUGGESTED TIME FRAME <i>Near Term(1-2 years)</i> <i>Long Term (3-5 years)</i>
Promote more “grand rounds” when primary care physicians are joined by specialists who can guide the diagnosis and prescription process	Area Hospitals, Area Health Providers	Near and Long Term
Encourage collaborations among physicians	Area Hospitals, Area Health Providers	Ongoing – near and long term

MADISON COUNTY COMMUNITY HEALTH IMPROVEMENT PLAN

Focus Area: General Health

GOAL #1. PROVIDE WELLNESS PROGRAMS

STRATEGIES	POTENTIAL LEAD ENTITY OR ENTITIES	SUGGESTED TIME FRAME <i>Near Term(1-2 years)</i> <i>Long Term (3-5 years)</i>
Hold more blood pressure clinics	Area Hospitals and Healthcare Providers with assistance from MCPHD	Near Term
Offer a lunch or evening series on the benefit of healthy eating and exercise	MCPHD and Public Schools	Long Term
Develop diabetes prevention programs such as the "Healthy Hearts Restaurant" competition that was held in Ennis	MCPHD and local Business groups	Long Term
Work with hospitals, community health centers, dieticians, schools, gym and fitness centers, the Safe Routes to School Programs and individual clinics to establish a wellness collaboration	MCPHD and all stakeholders	Long Term

GOAL #2. INCREASE ACCESS TO MAMMOGRAPHY

STRATEGIES	POTENTIAL LEAD ENTITY OR ENTITIES	SUGGESTED TIME FRAME <i>Near Term(1-2 years)</i> <i>Long Term (3-5 years)</i>
Partner with Bozeman Deaconess and Barrett Hospital in Dillon to sponsor a "Madison County Mammography Day"	Area Hospitals and Healthcare Providers, coordinated by MCPHD	Near Term

MADISON COUNTY COMMUNITY HEALTH IMPROVEMENT PLAN

GOAL #3. PROVIDE HOME HEALTH SERVICES TO PEOPLE REQUIRING INFUSIONS, TO SHORTEN HOSPITAL STAYS

STRATEGIES	POTENTIAL LEAD ENTITY OR ENTITIES	SUGGESTED TIME FRAME <i>Near Term(1-2 years)</i> <i>Long Term (3-5 years)</i>
Investigate and address Medicare/Medicaid home care licensing issues	MCPHD, Nursing Homes, Healthcare providers and Area Hospitals	Near Term
Collaborate with providers – nursing homes, assisted living facilities, doctors and hospitals to provide home infusion programs	MCPHD, Nursing Homes, Healthcare providers and Area Hospitals	Near Term