CASCADE COUNTY COMMUNITY HEALTH NEEDS ASSESSMENT REPORT



NORTH CENTRAL MONTANA HEALTHY COMMUNITIES "BUILDING HEALTHY COMMUNITIES"







TABLE OF CONTENTS

I.	INTF	RODUCTION	2
	1.1	The Community We Serve	2
	1.2	Cascade County Health Services	2
	1.3	Socioeconomic Characteristics	4
	1.4	North Central Montana Healthy Communities	5
II.	APP	ROACH AND METHODOLOGY	6
	2.1	Community Health Needs Assessment Background	6
	2.2	Community Health Survey	6
	2.3	Community Needs Index	6
	2.4	County, State and National Data Sources	7
III.	FIND	DINGS	8
	3.1	Cascade County Community Health Survey Results	8
	3.2	Health Risk Behaviors	10
	3.3	Mortality	11
	3.4	Disease Incidence and Prevalence	13
		3.4.1 Cancer	13
		3.4.2 Heart Disease and Stroke	14
		3.4.3 Diabetes	15
		3.4.4 Obesity	15
	3.5	Mental Health and Mental Disorders	16
	3.6	Dental Services	17
	3.7	Hospitalizations	17
	3.8	Public Health Issues: Communicable Diseases	19
	3.9	Access to Care	20
		3.9.1 Medical Manpower Needs	20
		3.9.2 Access to Health Care Survey Results	20
	3.10	Population-Based Health	21
		3.10.1 Child and Maternal Health	21
		3.10.2 Native Americans	23
IV.	NEX	T STEPS	24
V.	APP	ENDICES	25
	A.	North Central Montana Healthy Communities Collaborative	
	В.	Survey Questionnaire	
	C.	Community Needs Index Details	

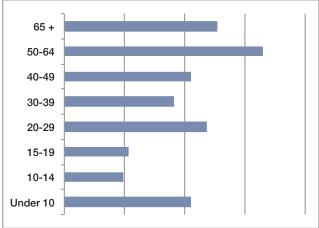
I. INTRODUCTION

1.1 The Community We Serve

Cascade County has an estimated population of 81,723 (2012 census estimate) and consists of about 2,712 square miles of land and water. Neighboring counties are Teton County to the northwest, Choteau County to the northeast, Judith Basin County to the east, Meagher County to the south and Lewis and Clark County to the west. Great Falls, with a population 58,893 (2012 census estimate), is the county seat. Other incorporated cities include Belt, Cascade and Neihart.

Based on 2010 census data, the largest age group in Cascade County is 50 to 64 year olds, who represent 20 percent of residents. The next three largest age groups are: 65 and over (16 percent); 20-29 (15 percent); and under 10 years of age (13 percent). The population age distribution is shown in the chart below.

Cascade County Population Age Distribution, 2010 (Total Population = 81,327)



Source: American FactFinder U.S. Census 2010

Cascade County residents include 89.2 percent Caucasians, 4.3 percent Native Americans, and the remaining 6.5 percent includes all other races.

1.2 Cascade County Health Services

Benefis Health System is a not-for-profit community health system serving 230,000 residents across 15 counties in North Central Montana. Benefis Health System includes:

- Benefis Hospitals on the East and West campuses.
- The Grandview at Benefis Senior Campus, offering skilled nursing, assisted living and memory care assisted living. There is also an extended care/skilled nursing center on the Benefis East Campus for a total of 146 senior care/extended care beds.
- The Benefis Sletten Cancer Institute, a freestanding 54,000-square-foot facility offering comprehensive cancer care.
- Benefis Spectrum Medical, which provides durable medical equipment, hospice care and other care services across the region and state.
- Benefis Peace Hospice of Montana, which provides home hospice care as well as residential hospice care at the 20-bed Benefis Peace Hospice of Montana facility Peace Hospice is operated by Benefis Spectrum Medical (referenced above).
- Benefis Medical Group, an employed provider group comprised of more than 100 physicians and advanced practice clinicians.
- The Orthopedic Center of Montana, a partnership with Great Falls Orthopedics Associates, offering comprehensive orthopedic care.
- The North Central Montana Healthcare Alliance (NMHA), established by Benefis in 2003 to provide support for the critically needed services and programs of frontier healthcare providers, including Critical Access Hospitals. Benefis also operates the REACH Montana Telehealth Network (RMTN), which provides telehealth services

across the region and state, such as retinopathy screening to protect the vision of premature babies and cardiology appointments for heart patients in small rural communities in the region.

- The Benefis Health System Foundation, which raises more than \$1.5 million each year to help improve and enhance healthcare services in northcentral Montana. The Benefis Foundation operates two Gift of Life Housing facilities, which provide free accommodations for rural patients undergoing cancer care and for rural families with babies in the Neonatal Intensive Care Unit.
- Benefis Native American Programs, established in 2006 to optimally serve Native American patients and their families in a culturally sensitive manner.
 The program includes a Native American Welcoming Center, Native American patient rounding and smudging. The Benefis Native American Board has representation from tribal leaders of the four Reservations in Northcentral Montana Blackfeet, Fort Belknap, Rocky Boy's and Fort Peck as well as the Little Shell Tribe, Indian Health Service hospitals and clinics and tribal colleges.

Examples of the comprehensive, tertiary services Benefis provides for its 15-county region include Mercy Flight transport, a Tier II emergency room, critical care, cardiovascular surgery, neurosurgery, women's and children's services, spine surgery, joint replacement, wound care, a bariatric program, pain management and many more.

Guided by a mission to "provide excellent care for all, healing body, mind, and spirit," Benefis Health System is recognized for clinical excellence by leading health ratings organizations. The ratings place Benefis among the top 2 percent of hospitals nationwide for overall clinical excellence. Benefis has 2,800 employees, a medical staff

of more than 200 physicians and over 500 volunteers who serve its patients. Benefis is the largest non-governmental employer in the region.

Great Falls Clinic is located in Great Falls and provides primary care, specialty outpatient care and some inpatient services to patients in Cascade County and the North Central Montana region. The Clinic has 30 physicians, ranging from primary care to specialties such as orthopedic surgery, cardiology, pediatrics, nephrology and urology. The Great Falls Clinic has a specialty clinic, an outpatient surgery center, an immediate care center and the Northwest Clinic. It also operates a 20-bed hospital, the Great Falls Clinic Medical Center. The Great Falls Clinic also provides outreach specialty clinics throughout the region.

Cascade City-County Health Department,

based in Great Falls, serves the entire county. The mission of the Health Department is "to prevent disease and illness, promote healthy choices and deliver quality health care." The Department's vision is "Healthy people in a healthy community." Services are provided in four program areas: (1) Environmental Health; (2) Preventative Services; (3) Family Services and (4) Administrative Services. Environmental Health focuses on providing a healthy environment for the residents of Cascade County by providing education, monitoring, and enforcement of state laws and regulations. Preventative Services includes immunizations: communicable disease surveillance; sexually transmitted disease surveillance, testing, treatment and education; HIV case management, counseling and testing; emergency preparedness; and cancer control focusing on tobacco, breast and cervical health and colorectal cancer education and screening. Family Services programs work to enhance the health and safety of families in Cascade County. Services and programs include: WICspecial supplemental nutrition program for women, infants, and children; maternal and

child health; public health home visits; Safe Kids Cascade County; fetal alcohol syndrome program; and no-cost infant hearing screening.

Medical services are provided by the Community Health Care Center, a separate division located within the City-County Health Department facility.

Community Health Care Center (CHCC),

is a not-for-profit Federally Qualified Health Center located in Great Falls, CHCC is a division of the Cascade City-County Health Department, but is a separate, independent entity. A community board provides oversight of the center. The CHCC provides comprehensive primary and preventative medical, dental and behavioral health care for all residents of Cascade County. The center focuses on serving patients who are low-income, uninsured, underinsured, or who otherwise cannot afford medical and dental care. The CHCC is partly funded through a grant from the U.S. Department of Health and Human Services, Bureau of Primary Health Care. The CHCC has two full-time physicians, four nurse practitioners, one dentist, one dental hygienist, and a licensed social worker.

Center for Mental Health is a private, notfor-profit organization providing a full range of community-based services to adults and children. Based in Great Falls, the Center provides services in 13 north central Montana counties. It serves over 2,400 people in Cascade County. Services include outpatient, day treatment, transitional living, crisis stabilization and group homes. The Center is staffed by more than 350 psychiatrists, psychologists, clinical social workers, professional counselors, addiction counselors, nurses, trained paraprofessionals and certified peer specialists. Among its services are community-based psychiatric rehabilitation and support, anger management, domestic violence intervention, substance abuse and addiction counseling, post traumatic stress disorder

treatment (in conjunction with the Veterans Administration), children's mental health services and emergency mental health support through a phone hotline and a walk-in clinic.

Planned Parenthood is a health center offering women's and men's health care, including birth control, pregnancy testing and care, abortion services, HIV testing and LGBT services. Located in downtown Great Falls, Planned Parenthood provides service three days a week by appointment, as well as some walk-in care.

Gateway Community Services is a nonprofit organization that serves as a "critical care access center" for alcohol and drug abuse. Its programs focus on treatment, prevention and education. Based in Great Falls, it also provides prevention services in Liberty, Toole, Pondera, Glacier and Teton Counties. Classes provide information on the physical and psychological effects of alcohol and drugs related to driving behavior and the development of chemical dependency. Gateway also offers a Minor in Possession program for teens.

1.3 Socioeconomic Characteristics

Socioeconomic characteristics have repeatedly been shown to have a significant impact on health. Those with lower socioeconomic status are more likely to engage in high-risk behaviors, such as tobacco and alcohol abuse. They are less likely to have adequate health care coverage and less likely to get preventative health care. Lower socioeconomic status groups are often targeted for public health interventions. Socioeconomic characteristics for Cascade County are noted below. Numbers in green indicate statistically significant areas in which Cascade County's rates are better than rates for Montana overall. Numbers in red indicate an area of statistically significant concern compared with Montana overall.

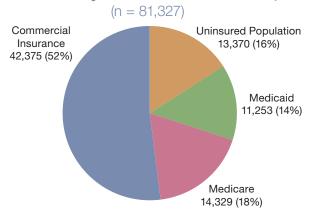
Socioeconomic Measure	Cascade County	Montana	National
Unemployment Rate (November 2013)	4.3%	5.2%	7.0%
Median Household Income	\$44,074	\$43,000	\$52,762
Percent High School Grad- uates or GED attainment of the population 25 years or older	90.2%	87%	85.4%
Percent of population below Federal Poverty Level • Children <18	21.0%	19.0%	20.0%
Adults 18-64	12.6%	13.0%	13.1%
• Adults 65+	7.9%	9.0%	9.4%
All Ages	13.8%	14.0%	14.3%
Food Stamp Recipients	9.1%	8.8%	10.2%
Marital Status (15+ years old) • Never Married	25.0%	28.0%	26.8%
Married	54.2%	55.0%	56.5%
Widowed	6.7%	5.0%	6.3%
Divorced	12.8%	12.0%	10.4%

Source: Montana Department of Public Health, Community Needs Assessment

Of note in these statistics is that Cascade County has a lower unemployment rate of 4.3 percent compared with Montana overall. The county has a higher percentage of high school graduates than Montana overall. All other indicators – median household income, percent of population below the Federal Poverty Level, food stamp recipients and marital status – are consistent with Montana overall.

Having medical health insurance promotes a healthy community. The health insurance profile for Cascade County is shown below.

Cascade County Health Insurance Profile, 2011



1.4 North Central Montana Healthy Communities

In February 2012, a number of not-forprofit entities in North Central Montana formed a coalition to conduct a Community Health Needs Assessment. The hospitals Community Health Needs Assessment helps meet new IRS requirements under the 2010 Affordable Care Act. Public health departments need the assessment to achieve public health accreditation. And Community Health Centers are required to conduct the assessment to maintain their status as Federally Qualified Health Centers. Thus, the North Central Montana Healthy Communities Coalition was established to develop a Community Health Needs Assessment, as well as a Community Health Improvement Plan that would meet each of the partners' needs.

The coalition members are summarized below and a detailed list is provided in Appendix A.

North Central Montana Healthy Communities Coalition



II. APPROACH AND METHODOLOGY

2.1 Community Health Needs Assessment Background

In 2010, Congress enacted the Patient Protection and Affordable Care Act (ACA), which established comprehensive health insurance reforms aimed at improving the quality of health care for all Americans. Under the ACA, not-for-profit hospitals are required to conduct a Community Health Needs Assessment and Community Health Improvement Plan every three years. Similarly, the Public Health Association has an accreditation process for local, state and tribal health departments which requires completion of a Community Health Needs Assessment and a Community Health Improvement Plan every three years. The federally funded community health clinics in North Central Montana also are required to complete a Community Health Needs Assessment. The aforementioned entities in North Central Montana have worked together to develop a region-wide Community Health Needs Assessment, as well as separate assessments for each of the 14 communities (counties and health districts) that meet the specific requirements for each of the institutions.

Based on the findings of the Community
Health Needs Assessments, a process
involving community members will be
implemented to develop a Community Health
Improvement Plan for each community.
The objectives of the improvement plan are
to (1) Identify and prioritize health needs in
the community as a whole and for diverse
populations within the community (e.g.,
Native Americans, women and children); (2)
Identify and foster interventions to improve
health status within the priority health areas
on an ongoing basis; (3) Identify measureable
health indicators that will track improvements
in priority health areas; and (4) Coordinate

and leverage resources to support the local community and the North Central Montana Healthy Communities Coalition.

2.2 Community Health Survey

A Community Health Survey was designed based on model community health surveys, identified health indicators and the specific interests of the North Central Montana Healthy Communities Coalition partners. The survey design and analysis leaders were:

- Alicia M. Thompson, Health Director, Cascade City-County Health Department
- Dr. Greg Madson, Academic Dean and Professor of Sociology at the University of Great Falls.

The four-page survey consisted of 31 multiple choice questions (see Appendix B). A sample size of households in each community was determined for statistical purposes and the survey was sent out in October 2012. An incentive drawing of survey respondents was conducted for each community. One household in each community was randomly selected and sent a \$100 gift card as an incentive for responding to the survey.

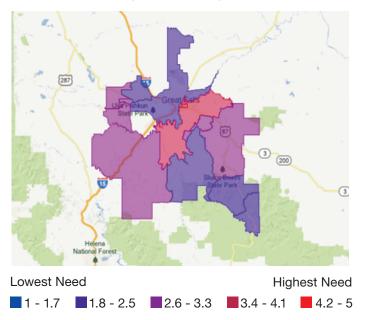
The Healthy Communities survey was mailed to 664 of the 33,966 households in Cascade County. A total of 122 households responded to the survey, representing an 18 percent response rate. The average age of the respondents was 60, with 76.2 percent females and 23.8 percent males responding. The results of the survey responses are provided in Section 3.1 of this report.

2.3 Community Needs Index

The Community Needs Index (CNI) identifies the severity of health disparities for every zip code in the United States. The Index demonstrates a correlation between community need, preventable hospitalizations and access to care. The Index was created by Catholic Healthcare West (now Dignity Health) and a nationally recognized consulting firm. The Index aggregates five socioeconomic indicators/barriers to health care access known to contribute to health disparities. The five indicators/barriers are: income, education, culture/language, insurance and housing. The Index identifies communities of high need.

The Community Needs Index for Cascade County is provided below. More detail about the Community Needs Index is included in Appendix C.

Cascade County Community Needs Index



Cascade County Community
Health Index by Zip Code

Zip Code	CNI Score	Population	City
59401	3.6	14913	Great Falls
59404	2.2	26661	Great Falls
59405	3.6	31454	Great Falls
59412	2.6	1574	Belt
59414	3.4	853	Black Eagle
59421	2.6	2829	Cascade
59443	2.6	721	Fort Shaw
59463	2.2	114	Monarch
59465	2.2	149	Neihart
59472	2.6	522	Sand Coulee
59480	2.0	426	Stockett
59483	2.6	841	Sun River
59487	2.4	1181	Vaughn

Source: Dignity Health

On a scale of 1 to 5, 5 being the highest need, Cascade County has a mean score of 3.0. Zip codes identified as having the highest need are 59401 (Great Falls), 59405 (Great Falls) and 59414 (Black Eagle). Five of the 13 zip codes in Cascade County are identified as having the lowest need.

2.4 County, State and National Data Sources

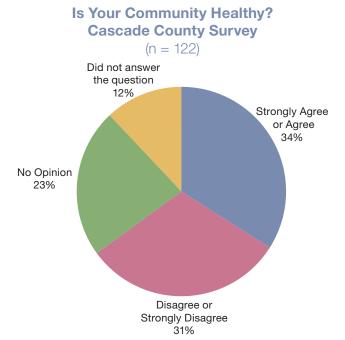
The most current available data was used to determine the health needs of the community. A particularly valuable data resource was the "Montana Department of Public Health and Human Services (DPHHS): Community Health Assessment." We were able to examine assessment data by county and also by Region 2, which consists of nine North Central Montana counties: Glacier, Toole, Liberty, Hill, Blaine, Pondera, Teton, Chouteau, and Cascade. For socioeconomic and demographic data, the report draws from the American FactFinder data base, which is based on the 2010 U.S. Census.

III. FINDINGS

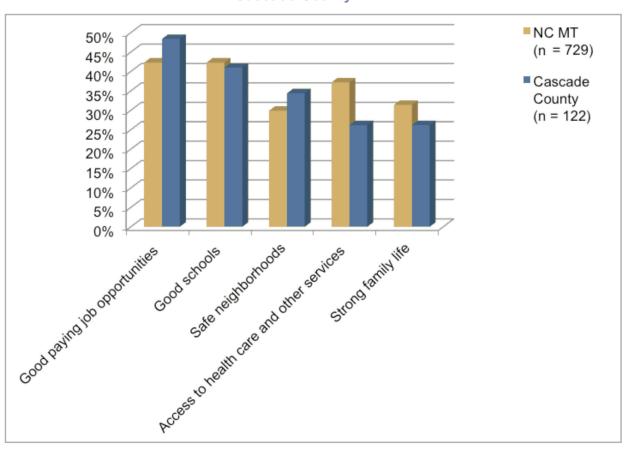
3.1 Cascade County Community Health Survey Results

Cascade County Community Health Survey respondents were asked if they think their county is healthy. Thirty-four percent of the respondents said they consider Cascade County to be healthy.

When asked "What are the most critical characteristics of a healthy community?" the respondents noted the importance of goodpaying job opportunities, good schools, safe neighborhoods, access to health care and other services, and strong family life.



Most Important Aspects for a Healthy Community Cascade County

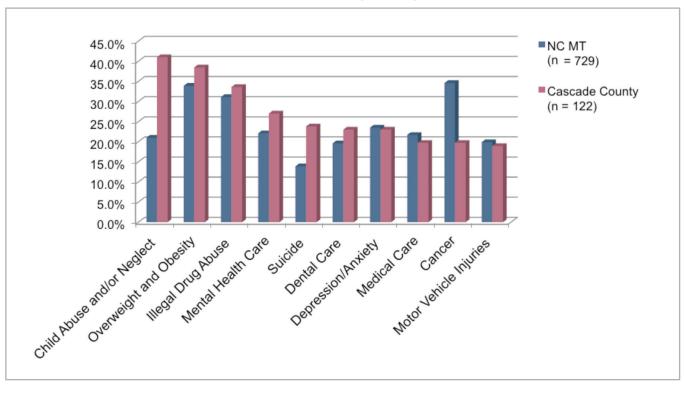


The Cascade County survey respondents also were asked to identify what they perceive as the 10 most serious health concerns for their community. The top four are:

- Child abuse and/or neglect
- Overweight and obesity
- Illegal drug abuse
- Mental health concerns

The Cascade County results differ from the North Central Montana survey, in which cancer, obesity and overweight, illegal drug use and depression and anxiety were the top four concerns. Of particular note, is the markedly larger percent of Cascade County survey respondents who felt child abuse and/or neglect was of concern compared with North Central Montana as a whole.

Respondents' Top Ten Health Concerns Cascade County Survey



3.2 Health Risk Behaviors

Some of the most important determinants to overall health are behavioral. The risk of developing many chronic or communicable diseases, as well as injuries, can be reduced by changing personal behavior. The indicators below correlate with information found in the Behavioral Risk Factor Surveillance System (BRFSS), a self-reported survey conducted by the federal Centers for Disease Control and Prevention. The chart below shows the behavioral risk factors for Cascade County. The numbers shaded in **green** indicate statistically significant areas in which Cascade County's rates are better than rates for Montana overall. There are no numbers shaded **red**, which would indicate an area of statistically significant concern compared with Montana overall.

Health Risk Behaviors in Cascade County and Montana Overall

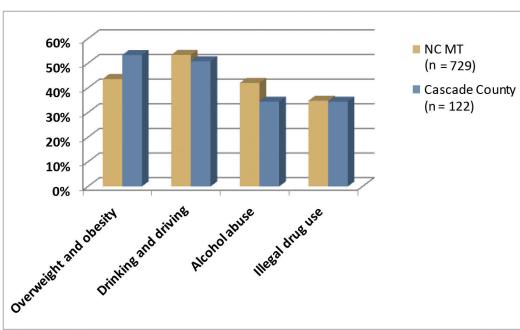
Behavioral Risk Factor	Current Smoking (95% CI)	Binge Drinking (95% CI)	Heavy Drinking (95% CI)	Always Wears Seatbelt (95% CI)	Condom Use as Contraception (95% CI)
County	23.9%	18.3%	5.6%	91.3%	18.0%
Adult 18-44	(19.7-28.7)	(14.3-23.1)	(3.5-8.7)	(85.9-94.7)	(11.4-27.4)
Montana	23.4%	24.5%	6.9%	86.4%	17.9%
Adult 18-44	(22.3-24.6)	(22.9-26.3)	(6.1-7.8)	(84.6-88.0)	(16.0-19.9)
County	19.8%	15.0%	5.8%	85.5%	See Region 2 Data*
Adult 45-64	(16.6-23.4)	(11.8-18.9)	(4.1-8.2)	(80.5-89.4)	
Montana	19.6%	14.1%	5.9%	89.6%	6.5%
Adult 45-64	(18.8-20.4)	(13.2-15.1)	(5.3-6.5)	(88.5-90.5)	(4.9-8.4)
County	7.7%	2.9%	2.5%	91.4%	Data Not Available
65+	(5.7-10.4)	(1.6-5.3)	(1.4-4.5)	(86.8-94.4)	
Montana	8.7%	4.0%	3.7%	90.8%	Data Not Available
65+	(8.0-9.4)	(3.5-4.7)	(3.1-4.3)	(89.6-91.9)	
Total County	19.0% (16.8-21.5)	13.3% (11.3-15.6)	4.9% (3.8-6.4)	89.1% (86.3-91.4)	14.7% (9.4-22.2)
Total Montana	19.3% (18.7-20.0)	16.9% (16.0-17.8)	5.9% (5.4-6.4)	88.4% (87.4-89.3)	15.2% (13.6-17.0)
Data Source/ Definition	Percent of all adults who reported having smoked at least 100 cigarettes in their entire lifetime and currently smoking either everyday or some days.2003-2008 data	Percent of all adults who reported at least one instance of having 5 or more alcoholic beverages on one occasion for men or 4 or more alcoholic beverages for women in the past 30 days. 2006-2008 data	Percent of all adults who reported having more than 2 drinks per day for men and more than 1 drink per day for women during the past 30 days. 2005-2008 data	Percent of all adults who reported "always" or "nearly always" using a seat belt when they drive or ride in a car. 2004, 2006 & 2008 data	Percent of all adults who reported using a condom as their current method of contraception. 2004, 2006 & 2008 data

Source: Montana Department of Public Health and Human Services

^{*}Region 2 data for Condom Use or Contraception for adult 45-64 is 7.1% (3.8-12.6).

Binge drinking is significantly lower in Cascade County compared with Montana overall. The use of seat belts is higher among 18-44 year olds in Cascade County and lower among 45-64 year olds, compared with Montana overall.

When asked: "What are the lifestyle choices in your community that concern you most?" Cascade County residents named overweight and obesity, drinking and driving, alcohol abuse and illegal drug use.



Lifestyle Choices in Your Community That Concern You

3.3 Mortality

Understanding the mortality rate and associated causes of death is an important aspect of a community health assessment. The following table provides reported information regarding mortality in Cascade County compared with Montana overall. Numbers shaded **green** indicate statistically significant areas in which rates for Cascade County are better than rates for Montana overall. The area shaded **red** indicates the Cascade County rate is significantly worse than the rate for Montana overall.

	Indicator	Cascade County	Montana	National	Data Source/ Definition
1.	Median age at death (All Races)	78	78	78.7	Vital Statistics: death certificates, Montana resident data from 2004-2008. Total includes both sexes and all races. 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.
	White	79	79	-	
	American Indian	64	59	-	
2.	All Cancers mortality rate per 100,000 population	204.1 (190.5-218.4)	200.9 (197.5-205.0)	176.4	Vital Statistics: death certificates, Montana resident data from 2004-2008.
3. rate	Unintentional injury death per 100,000 population	48.1 (41.7-55.3)	58.8 (56.7-60.9)	39.1	Vital Statistics: death certificates, Montana resident data from 2004-2008.
4.	Motor Vehicle death rate per 100,000 population	18.3 (14.5-22.9)	25.6 (24.2 -27.1)		Vital Statistics: death certificates, Montana resident data from 2004-2008.
5.	Percent of Motor Vehicle crashes involving alcohol	8.0%	10%		2003-2007 Montana Dept. of Transportation
6.	Cerebrovascular Disease (including stroke) mortality rate per 100,000 population	56 (49-63.7)	49.7 (47.8-51.7)	_	Vital Statistics: death certificates, Montana resident data from 2004-2008. Includes subarachnoid, intracerebral, and intracranial hemorrhage, cerebral infarction, other strokes and certain other forms of Cerebrovascular diseases and their sequelae.
7.	Chronic Liver Disease and Cirrhosis mortality rate per 100,000 population	15.6 (12.1-19.9)	12.7 (11.8-13.7)	-	Vital Statistics: death certificates, Montana resident data from 2004-2008.
8.	Diabetes Mellitus mortality rates	28.8 (23.9-34.5)	27.1 (25.7-28.6)		Vital Statistics: death certificate Montana resident data from 2004-2008.
9.	Pneumonia/ Influenza mortality	18.3 (14.5-22.9)	19.0 (17.8 -20.2)		Vital Statistics: death certificate Montana resident data from 2004-2008.
10.	Chronic Lower Respiratory Disease (CLRD) mortality rate per 100,000 population	72.6 (64.6-81.3)	63.9 (61.7- 66.2)		Vital Statistics: death certificates, Montana resident data from 2004-2008. 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.
11.	Drug-related mortality rate per 100,000 population	13.4 (10.2-17.4)	13.8 (12.9 -14.9)		Vital Statistics: death certificates, Montana resident data from 2004-2008. Death 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.
12.	Heart Disease mortality rate per 100,000 population	188.2 (175.2-201.9)	198.0 (194.6-202.0)		Vital Statistics: death certificates, Montana resident data from 2004-2008. Total includes both sexes and all races. 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.
13.	Work-related injury death rate per 100,000 population	4.2 (2.5-6.6)	3.7 (3.2-4.3)		Vital Statistics: death certificates, Montana resident data from 2004-2008.

Source: Montana Department of Public Health and Human Services

Median age at death for Native Americans is higher in Cascade County than for Montana overall, and is 15 years younger compared with Caucasians in Cascade County. Death rates from cancer, cerebrovascular disease and chronic lower respiratory disease are all higher in Cascade County than Montana overall. Unintentional injury, motor vehicle death rates, motor vehicle crashes involving alcohol, and heart disease are all significantly lower for Cascade County compared with Montana overall.

3.4 Disease Incidence and Prevalence

3.4.1 Cancer

Screening is critical for detecting certain cancers at an early stage, which increases the chances of successful treatment. The indicators below correlate with information found in the Behavioral Risk Factor Surveillance System (BRFSS), a self-reported survey. Numbers shaded **green** indicate statistically significant areas where rates for the county are better than rates for Montana overall. In this case, there are no numbers in **red**, which would indicate a statistically significant area of concern compared with Montana overall.

Cancer	Screening	Cascade County	Montana	Data Source/Definition
Cervical Cancer	Pap Test in past 3 years (95% CI)	87.0% (82.9-90.3)	83.0% (81.5-84.8)	Among women age 18 or older, percent of women reporting having a Pap Smear within the past 3 years. 2004, 2006 & 2008 data
Breast Cancer	Mammogram in past 2 years (95% CI)	79.4% (75.1-83.1)	71.9% (70.6-73.2)	Among women age 40 or older, percent who reported having a mammogram in the past 2 years. 2004, 2006 & 2008 data
Colon	Blood Stool Test In Past 2 years (95% CI)	20.8% (17.3-24.9)	25.3% (24.2-26.4)	Among adults age 50 or older, percent who reported having a blood stool test using a home kit in the past 2 years. 2004, 2006 & 2008 data
Cancer	Sigmoidoscopy or Colonoscopy (95% CI)	60.8% (56.2-65.2%)	54.3% (53.0-55.6)	Among adults age 50 or older, percent who reported ever having a sigmoidoscopy or colonoscopy. 2004, 2006 & 2008 data

Breast and sigmoidoscopy or colonoscopy colon cancer screening are significantly higher for Cascade County residents than for Montanans overall. Only blood stool tests for colon cancer are lower for Cascade County residents.

The Montana Cancer Registry lists the cancer incidence rates for all types of cancer — as well as the four most prevalent cancer rates — in "Region 2 - Northcentral Montana," which consists of Glacier, Toole, Liberty, Hill, Blaine, Pondera, Teton, Chouteau, and Cascade counties. The Region 2 rates shown on the next page are compared with Montana overall. Cascade County-specific cancer rates are not available.

Core Indicator	Region 2	Montana	National	Data		
All Sites—Cancer	461.9	455.5	463.0			
	(447-476.8)	(449.6-461.3)	403.0	Cancer incidence		
Prostate Cancer incidence	184.7	167.6	137.7	rates, 2003-2007.		
	(170.9-198.5)	(162.5-172.7)	137.7	Age-adjusted incidence rate per 100,000 population (95% confidence interval) Montana		
Breast Cancer incidence	112.5	119.5	123.1			
	(102.3-122.7)	(115.3-123.6)	123.1			
Colorectal Cancer incidence	49.3	44.2	42.5			
	(44.5-54.1)	(42.4-46.0)	42.5			
Lung Cancer incidence	71.0	64.7	64.3	Tumor Registry		
	(65.2-76.8)	(62.5-66.9)	04.3			

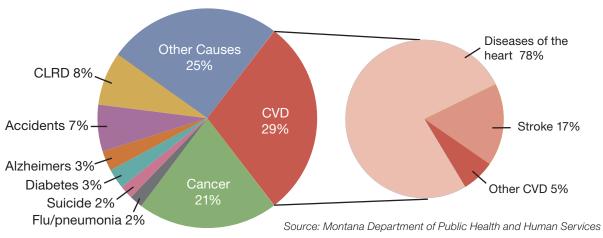
Source: Montana Department of Public Health and Human Services and Centers for Disease Control

The overall cancer incidence rate for Region 2 is higher than Montana overall. Prostate cancer, colorectal and lung cancer incidence rates are higher in Region 2, but breast cancer is lower than Montana overall. Results of the community health needs survey indicate that cancer is considered only the ninth-most-serious health concern by Cascade County survey respondents.

3.4.2 Heart Disease and Stroke

Cardiovascular disease remains the second-leading cause of death in Montana. The majority of these deaths, 29%, were due to heart disease and stroke (Montana Heart Disease and Stroke Prevention, State Plan 2010-2012). Risk factors for the development of heart disease include family history of premature coronary artery disease, cigarette smoking, high cholesterol, hypertension, and diabetes. Obesity, physical inactivity, and stress are all contributing factors.





The table below shows responses from the Behavioral Risk Factor Surveillance System (BRFSS), a self-reported survey. Both stroke and heart attack prevalence in Cascade County are similar to that of Montana overall.

Core Indicator	Cascade County	Montana	Data Source/Definition
Stroke prevalence	2.9% (2.1%-3.9%)	2.5% (2.3-2.8)	Ever diagnosed with a stroke BRFSS. 2003, 2005-2008 data
Acute Myocardial Infarction prevalence	4.0% (3.2%-5.0%)	4.1% (3.8-4.4)	Ever diagnosed with a heart attack. BRFSS 2003, 2005-2008 data

Source: Montana Department of Public Health and Human Services

3.4.3 Diabetes

The Cascade County survey respondents did not consider diabetes as one of the 10 most important health concerns. Diabetes is an extremely expensive disease because of its chronic complications, such as end-stage renal disease, diabetic blindness, lower extremity amputation, and heart disease. However, diabetes prevalence in Cascade County is significantly higher than Montana overall.

Core Indicator	Cascade County	Montana	Data Source/Definition
Diabetes prevalence	7.3% (6.1-8.8)	6.2% (5.9-6.5)	Ever told by a doctor they had diabetes. BRFSS

Source: Montana Department of Public Health and Human Services

3.4.4 Obesity

Over the past 20 years, obesity rates have increased in the United States, doubling for adults and tripling for children (U.S Department of Health and Human Services). Being overweight or obese was the second-most-important health concern of Cascade County survey respondents. Being overweight or obese puts an individual at higher risk for heart disease and diabetes. Based on Body Mass Index, 23.3 percent of Cascade County residents are obese, and 40.8 percent of residents are overweight, which is somewhat higher than for Montana overall.

Behavioral Risk Factor	Mor		National	Data Source/Definition
Obesity (95% CI)	23.3% (21.0-25.9)	21.6% (21.0-22.3)	27.8%	Based on a Body Mass Index of 30 or greater, calculated from self-reported weight and height. 2003-2008 data
Overweight (95% CI)	40.8% (37.8-43.9)	37.8% (36.9-38.6)	35.7%	Based on a Body Mass Index of 25 or greater but less than 30, calculated from self-reported weight and height. 2003-2008 data

Source: Montana Department of Public Health and Human Services

Body Mass Index Chart

Weight in Pounds 4'6" 4'8" 4'10" Height in Feet and Inches 5'0" 5'2" 5'4" 5'6" 5'8" 5'10" 6'0" 6'2" 6'4" 6'6" 6'8" Healthy Weight Overweight Obese

Behavioral risk factors have a significant impact on the incidence of overweight and obesity. Two of the most significant risk factors – lack of fruit and vegetable consumption and lack of physical activity – were higher in Cascade County than for Montana overall.

Behavioral Risk Factor	Cascade County	Montana	Data Source/Definition
Inadequate Fruit and vegetable consumption (95% CI)	78.9% (74.7-82.5)	75.8% (74.8-76.8)	Percent of all adults who reported usually eating less than 5 servings of fruits and vegetables per day. 2003, 2005 & 2007 data
No Leisure Time Physical Activity (95% CI)	22.0% (19.7-24.5)	20.7% (20.1-21.3)	Percent of all adults who reported NOT participating in any physical activity or exercise outside of their regular job. 2003-2008 data

Source: Montana Department of Public Health and Human Services, BRFSS survey

3.5 Mental Health and Mental Disorders

Social and mental health is as important to overall health as physical health is. Below are a number of important social and medical health indicators for Cascade County, compared with Montana overall. Numbers shaded **green** indicate areas in which rates for Cascade County are better than rates for Montana overall. Numbers shaded **red** indicate areas of concern compared with Montana overall.

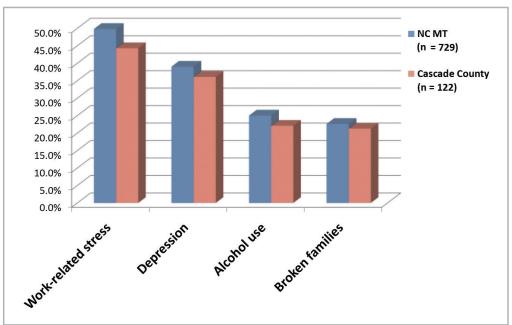
	Social/ Mental Health Indicator	Cascade County	Montana	National	Data Source/Definition
1.	General health status fair or poor (95% CI)	14.8% (13.0-16.9)	13.6% (13.1-14.2)		Percent all adults reporting their general health status as "fair" or "poor". BRFSS 2003-2008 data.
2.	14 or more days of "not good" mental health (95% CI)	8.6% (7.1-10.3)	8.8% (8.3-9.2)		Percent all adults reporting their mental health was "not good" for 14 or more of the past 30 days. BRFSS 2003-2008 data.
3.	3-yr Rate of Family Offenses: per 100,000 population (2007-2009)	62.6	76.5		Unlawful, nonviolent acts by a family member (or legal guardian), which threaten the physical, mental or economic wellbeing or morals of another family member, This offense includes Abandonment, Desertion, Neglect, Nonsupport, Nonviolent Abuse, Nonviolent Cruelty, and nonpayment of court-ordered alimony.
4.	Homicide rate: per 100,000 population	3.7	3.3	5.3	Aggregate Vital Statistics death certificate data from 1999- 2008. Crude rate includes both sexes and all races.
5.	Suicide rate: per 100,000 population	17.8	20.3	12.2	Aggregate Vital Statistics death certificate data from 1999- 2008. Crude rate includes both sexes and all races.
6.	3-yr Domestic Abuse Rate: per 100,000 population (2007-2009)	470.1	438.6		Where a person (a) knowingly or purposely causes bodily injury to a family member, household member or partner, or (b) purposely or knowingly causes reasonable apprehension of bodily injury to a family member, household member or partner.
7.	3-yr Rate of Sex Offenses: per 100,000 population (2007-2009)	70.0	82.2		Any sexual act directed against another person, forcibly and/or against that person's will; or where the victim is incapable of giving consent. Includes: statutory rape, forcible fondling and deviate sexual conduct, sexual abuse of children, incest and other non-forcible sex offenses.
8.	3-yr Rate of Rape: per 100,000 population (2007-2009)	16.8	34.7		The carnal knowledge of a person, forcibly and/or against that person's will; or where the victim is incapable of giving consent because of his/her temporary or permanent mental or physical incapacity. Includes rape with an object and forcible sodomy.

Source: Montana Department of Public Health and Human Services

Of note is the significantly higher rate of domestic abuse in Cascade County than in Montana overall. The rates of family offenses, suicide, sex offenses, and rape are lower for Cascade County than Montana overall.

Cascade County survey respondents were asked what they considered to be the most important mental health issues impacting themselves and their families. They identified work-related stress, depression, alcohol use, and broken families as the most important. See survey results below, which compare Cascade County responses with the North Central Montana Region.





3.6 Dental Services

Cascade County is designated a dental health professional shortage area by the U.S. Department of Health and Human Services, Health Resources and Services Administration. Sixty-three percent of Cascade County Community Health Assessment survey respondents said their household has no dental insurance. Dental care was identified as sixth among the top 10 most-serious health concerns by county survey respondents.

3.7 Hospitalizations

Hospital admission information is available through the Montana Hospital Discharge Database for most acute care hospitals. The data base does not include Indian Health Service or for-profit hospital admission data. In 2012, 8,649 residents of Cascade County were admitted to hospitals. Ninety-seven percent of the reported admissions were to Benefis Hospitals. Of note, residents admitted to the Great Falls Clinic Medical Center were not reported to the database and, thus, not included in the analysis below.

Cascade County Residents Hospital Discharges by Hospital (n = 8,649)

	Discharges	Percent
Cascade County Total	8,649	100.0%
Benefis Health System/Hospitals, Great Falls	8,389	97.0%
Health Center Northwest, Kalispell	45	0.5%
Billings Clinic, Billings	42	0.5%
St Vincent Healthcare, Billings	39	0.5%
St Peter's Hospital, Helena	32	0.4%
St Patrick Hospital, Missoula	28	0.3%
Kalispell Regional Medical Center, Kalispell	22	0.3%
Community Medical Center, Missoula	17	0.2%
All Other Hospitals	35	0.4%

Cascade County hospitalization rates were higher for stroke and asthma and lower for myocardial infarction rates compared with Montana overall. Numbers shaded **green** indicate statistically significant areas in which the county rates are better than rates for Montana overall. Numbers shaded **red** indicate an area of statistically significant concern compared with Montana overall.

Core Indicator (per 100,00 population)	Cascade County	Montana	National	Data Source/Definition
Stroke rate per	219.1 (206.1-232.8)	182.2 (178.6-185.9)	234.0	Hospitalizations: Age-adjusted rates calculated based on the primary diagnosis by the
Diabetes rate per	115.6 (105.5-126.5)	115.4 (112.4-118.5)		Montana Hospital Discharge Data System, based on data provided by the Montana
Myocardial Infarction	107 (97.9-116.8)	147.3 (144.1-150.6)	193.0	Hospital Association Population denominators: NCHS bridged race estimates of the resident
Asthma rate per	81.4 (72.9-90.6)	71.7 (69.3-74.2)	127.0	population of Montana for July 1, 2000-July 1, 2008 (Vintage 2008). 95% Confidence interval.

3.8 Public Health Issues: Communicable Diseases

Many diseases transmitted through person-to-person exposure can be prevented through high-level vaccination coverage or use of protective measures. Core Indicators of communicable diseases for Cascade County are shown below. Numbers shaded **green** indicate areas in which the county rates are better than rates for Montana overall. Numbers shaded **red** indicate an area of significant concern compared with Montana overall.

Core Indicator	Cascade County	Montana	National	Data Source/Definition
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 ACIP	77.5%	63.0%	73.9	Results are based on data reviewed during 2008 clinic reviews by the MT Immunization Program.
Adults aged 65+ ever immunized for pneumococcal Pneumonia	73.9% (69.2-78.1)	70.7% (69.5-71.9)	-	BRFSS 2003-2008 data. Percent of adults aged 65 or older who reported ever receiving a pneumonia shot also called a pneumococcal vaccine.
Adults aged 65+ immunized For Influenza in the past 12 months	76.2% (71.8-80.0)	71.6% (70.4-72.7)		BRFSS 2003-2008 data. Percent of adults aged 65 or older who reported receiving an influenza vaccine (either as an injection or sprayed in their nose) in the past 12 months.
Proportion of population ages + receiving the influenza vaccine	41.2% (38.3-44.2)	37.5% (36.8-38.3)	-	BRFSS 2003-2008 data. Received the flu shot in the past 12 months. BRFSS
 Proportion of adolescents aged 13-17 years who have received ≥ 1 doses Tdap vaccine. 	See State Data	44.2%		CDC National Immunization Survey- 2008 Teen, United States
Chlamydia rate per 100,000 population	413.3	321.4	457.6	2008. DPHHS Communicable Disease Epidemiology Program
Gonorrhea rate per 100,000 population	25.6	12.8	14.2	2008. DPHHS Communicable Disease Epidemiology Program
8. Syphilis rate per 100,000 population	0.0	0.3		2008. DPHHS Communicable Disease Epidemiology Program
Tuberculosis rate per 100,000 population	2.4	0.9	3.4	2008. DPHHS Communicable Disease Epidemiology Program
10. Persons living with HIV disease prevalence per 100,000 population	See State Data	52.9		2008. DPHHS Communicable Disease Epidemiology Program. Based on number of reported cases of adult or pediatric HIV/ AIDS cases known to be living in Montana at the end of the year.
11. Acute hepatitis C rate per 100,000 population	See State Data	0.4		2008. DPHHS Communicable Disease Epidemiology Program
12. Pertussis rate per 100,000 population	0.0	8.7		2008. DPHHS Communicable Disease Epidemiology Program
13. Salmonellosis rate per 100,000 population	0.0	13.5		2008. DPHHS Communicable Disease Epidemiology Program

Of concern are the higher rates of sexually transmitted diseases (chlamydia and gonorrhea) as well as tuberculosis in Cascade County compared with Montana overall. However, Cascade County

has significantly higher rates for children's vaccines, immunization for pneumonia and influenza for people over 65 years of age, and the proportion of people receiving influenza vaccines who are over 18 years of age compared with Montana overall. The official data on the rate of Pertussis (whooping cough) does not reflect the outbreak experienced in Cascade County that occurred in 2012-2013.

3.9 Access to Care

3.9.1 Medical Manpower Needs

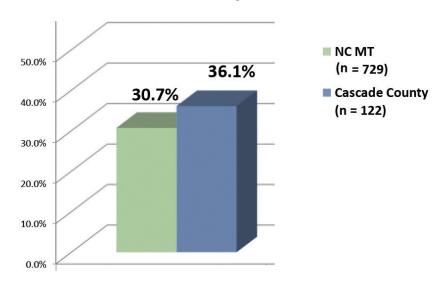
Benefis Health System has developed a Health Provider Manpower Projection Model to determine manpower needs for communities in the region. The projection model is based on patient visits per physician specialty (capacity) and patient visit utilization per 1,000 population in a rural setting. The manpower needs are then compared with the community's current physician availability. The physician needs are based on the assumption that physicians run efficient practices. This model was applied to the Cascade County population for 2013. There are currently 201 physicians in Cascade County. The projected need is for an additional 15 physicians. The most critical needs are in:

- Pediatricians (3.7)
- Psychiatrists (2.7)
- Gastroenterologists (1.3)
- ENTs (1.1)
- Other (6.2)

3.9.2 Access to Health Care Survey Results

Cascade County residents reported more difficulty accessing medical care when compared with a grouping of all residents across the North Central Montana region. Some 36 percent of Cascade County residents reported difficulty accessing care, compared with 30.7 percent region-wide. Survey respondents were asked if they were not able to get, or were delayed in getting, needed health care services in the past three years.

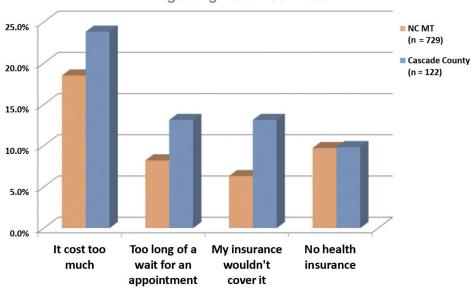
Did Not Get or Were Delayed in Getting Needed Health Services
Cascade County



Survey respondents who noted a delay were further asked: "What were the most important reasons for the delay or not getting needed health care services?" Cascade County respondents' top reasons for the delay were:

- "It cost too much."
- "Too long of a wait for an appointment."
- "My insurance wouldn't cover it."
- "No health insurance."





3.10 Population-Based Health

3.10.1 Child and Maternal Health

The health of women and children will determine the health of the next generation and can help predict future public health challenges for families, communities and the health care system (U.S. Department of Health and Human Services, 2010). Important criteria include low birth weight, infant deaths and teen mothers. Maternal and child health indicators reflect the effectiveness and availability of health services related to women and children. The following chart compares maternal and child health indicators for Cascade County with statewide data. Numbers shaded **green** indicate statistically significant areas in which rates for Cascade County are better than rates for Montana overall. There are no statistically significant areas in which Cascade County's rates are worse than those for Montana overall.

Maternal and Child Health	County	Montana	National	Data Source/Definition
Infant mortality (death within 1st year): rate per 1000 live births	5.3 (3.7-7.5)	6.1 (5.5-6.7)	6.2	Vital Statistics (OVS) death and live birth data, 2004-2008. The number of infant (birth through 364 days of age) deaths, divided by the total number of live births, multiplied by 1,000.
Entrance into prenatal care in 1st trimester: percent of live births	90.7% (89.9-91.5)	83.9% (83.6-84.2)		Vital Statistics (OVS) live birth data, 2003- 2007. 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.

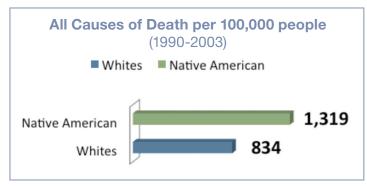
3.	Births to adolescents (15-17 years): rate per 1000 population	18.3 (15.6-21.2)	29.2 (27.9-30.5)	34.2	Vital Statistics (OVS) live birth data, 2004- 2008. The number of live births to mothers 15-17 years of age, divided by the estimated population of females 15-17 years of age.
4.	Low birth weight (<2500 grams): percent of live births	7.9% (7.2-8.6)	7.3% (7.1-7.5)		Vital Statistics (OVS) live birth data, 2004-2008. The number of live births with a birth weight less than 2500 grams, divided by the total number of live births, unknown BW infants excluded.
5.	Child mortality (1 through 14 years): rate per 100,000	21.8 (12.8-34.9)	18.4 (15.3-21.9)	6.2	Vital Statistics (OVS) death data, 2004-2008, and U.S. Census Population Estimates, May 2009 release. The number of deaths to children 1 through 14 years of age, divided by the estimated population of children 1 through 14 years of age, multiplied by 100,000.
6.	Neonatal (under 28 days of age) mortality: rate per 1000 live birth	2.6 (1.5-4.2)	3.3 (2.9-3.8)	4.1	Vital Statistics (OVS) death and live birth data, 2004-2008. The number of deaths to infants under 28 days of age, divided by the total number of live births, multiplied by 1000.
7.	Post neonatal (28 through 364 days of age) mortality: rate per 1000 live births	2.8 (1.6-4.4)	2.7 (2.4-3.1)	2.1	Vital Statistics (OVS) death and live birth data, 2004-2008. The number of deaths to infants 28 through 364 days of age, divided by the total number of live births, multiplied by 1000. The number of live births with gestational diabetes reported during pregnancy, divided by the total number of live births (records with unknown gestational diabetes excluded), times 100
8.	Gestational diabetes: percent of live births	1.8% (1.5-2.1)	2.5% (2.4-2.6)		Vital Statistics (OVS) live birth data, 2004-2008
9.	Smoking during pregnancy: percent of live births	19.6% (18.5-20.7)	18.3% (18.1-18.6)		Vital Statistics (OVS) live birth data, 2003-2007. The number of live births with smoking reported during pregnancy, divided by the total number of live births (records with unknown smoking during pregnancy excluded), times 100.
10.	Pre-term (<37 completed weeks gestation) birth: percent of live births	11.4% (10.6-12.3)	10.1% (9.8-10.4)		Vital Statistics (OVS) live birth data, 2004-2008. The number of live births at a gestational age of less than37 completed weeks, divided by the total number of live births (records with unknown gestational age excluded), times 100.

Source: Montana Department of Public Health and Human Services

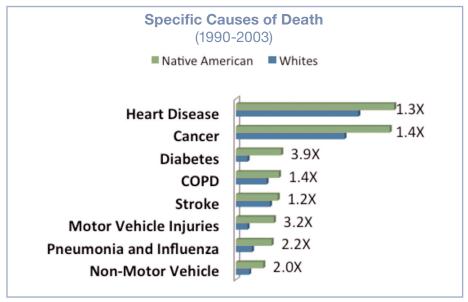
Infant mortality rate, entrance into prenatal care during the first trimester, and births to adolescents (shown on page 21) were all positive for Cascade County compared with Montana overall. However, the child mortality rate was higher than for Montana overall. Over the past five years, the City of Great Falls has experienced one child homicide per year as a result of child abuse and neglect.

3.10.2 Native Americans

Montana's 60,000 Native Americans, who comprise 6.2 percent of Montana's population, experience significant health disparities compared with non-Native Americans. For example, Montana Native Americans are 42 percent more likely to die of cancer and 291 percent more likely to die of diabetes than non-Native American Montanans as shown in the table below. This information is based on the most recent available data from the Montana Department of Public Health and Human Services.



Source: Montana Department of Public Health and Human Services



Source: Montana Department of Public Health and Human Services

Almost 70 percent (42,000) of Montana's Native American population resides in North Central Montana. The primary counties affected by the health disparities of Native Americans are Glacier and Pondera Counties (Blackfeet Reservation), Hill and Chouteau Counties (Rocky Boy's Reservation), Blaine and Phillips County (Fort Belknap Reservation), Roosevelt County (Fort Peck Reservation) and Cascade County (urban Native Americans). Meeting the critical needs of this population must be a priority. Cascade County has a large urban Native American population, however, there are no reliable health statistics for them as a group. The Great Falls Indian Community reports that there are about 6,000 Native Americans living in Great Falls.

IV. NEXT STEPS

The findings of the Community Health Needs Assessment were presented at a community meeting on May 17, 2013. The meeting was attended by more than 67 participants from a wide variety of community agencies. All identified health concerns were addressed at the meeting. A consensus was reached regarding the three health priorities for Cascade County:

- Healthy weight
- Substance abuse (particularly among youth)
- Access to health care

Following the community meeting, three steering committees were organized to work on the Community Health Improvement Plan's implementation of these priorties over the next three years. Metrics will be identified to gauge the impact of community actions on each of the three health priority areas.

The next three years will be an exciting time in Cascade County as work begins on implementing the identified health priorities. If you have questions, want additional information, or would like to get involved contact Alicia Thompson, Director of the Cascade City-County Health Department at athompson@cascadecountymt.gov or (406)791-9260.

V. APPENDICES

Appendix A North Central Montana Healthy Communities Collaborative Partners

Appendix B Survey Questionnaire

Appendix C Community Needs Index Details

NORTH CENTRAL MONTANA HEALTHY COMMUNITIES PARTNERS **APPENDIX A**

Partner Type	Agency	Name	Title	Phone	Address
Community Partner	AHEC – Office of Rural Health	Carolyn Pollari	Assistant Project Coordinator	994-6808	PO Box 170520, Bozeman 59717
Community Partner	Center for Mental Health	Sydney Blair	CEO	761-2100	915 1st Ave. S., Great Falls 59401
Community Partner	Gateway Community Services	Jennifer Ramburg	Prevention Specialist	727-2512	26 4th St. N., PO Box 3126, Great Falls 59401
Community Partner	Gateway Community Services	Maria Ruiz	Prevention Specialist	727-2512	26 4th St. N., PO Box 3126, Great Falls 59401
Community Partner	Great Falls Emergency Services	Justin Grohs	Operations Manager	453-5300	514 9th Ave. S., Great Falls 59405
Community Partner	Planned Parenthood of Montana	Kate Everhart		454-3431	211 9th St. S., Great Falls 59405
Community Partner	University of Great Falls	Greg Madson	Education, Arts & Social Sciences Division Chair	791-5359	1301 20th St. S., Great Falls 59405
FQHC	Bullhook Community Health Center	Cindy Smith	CEO	265-4541	110 13th Street, Havre 59501
FQHC	Central Montana Community Health Center	Leslie Lewis	СЕО	535-6545	406 1st Ave. S., Lewistown 59457
FQHC	Community Health Care Center, Inc	John Maher	CEO	791-9263	115 4th St. S., Great Falls 59401
FQHC	Glacier Community Health Center	John Maher	CEO	873-5670	519 East Main Street, Cut Bank 59427
FQHC	Montana Primary Care Association	Marge Levine		442-2750	1805 Euclind Ave, Helena 59601
FQHC	Sweet Medical Center	Jared Payne	Executive Director	357-2294	419 Pennsylvania, PO Box 309, Chinook 59523
Hospitals	Benefis Health System	Kathie Avis	Chief Administrative Officer, Strategic Development & Native Amer. Prog.	731-8201	1101 26th St. S., Great Falls 59405
Hospitals	Benefis Health System	Karen Ogden	Chief Communications Officer	455-5463	1101 26th St. S., Great Falls 59405

NORTH CENTRAL MONTANA HEALTHY COMMUNITIES PARTNERS **APPENDIX A**

Partner Type	Agency	Name	Title	Phone	Address
Hospitals	Benefis Health System Native American Programs	Lisa Whitford	Health Disparities Coordinator	731-8216	1101 26th St. S., Great Falls 59405
Hospitals	Northcentral Montana Healthcare Alliance & Benefis Health System	Jack King	Executive Director, NMHA	455-4285	1101 26th St. S., Great Falls 59405
Public Health	Liberty County	Karla Kulpas	Public Health Nurse	759-5181	315 West Madison Ave., Chester 59522
Public Health	Blaine County Health Department	Frances Hodgson	Director	357-2345	420A Ohio St., PO Box 516 Chinook 59523
Public Health	Cascade City-County Health Department	Alicia Thompson	Health Officer	791-9260	115 4th St. S., Great Falls 59401
Public Health	Central Montana Health District	Michele Foy	Director	535-3983	120 Wunderlin St., Ste. 1, Lewistown 59457
Public Health	Chouteau County Health Department	Angel Johnson	Public Health Nurse	622-3771	1020 13th St., Fort Benton 59442
Public Health	Hill County Health Department	Danielle Golie	Public Health Director	265-5481 x292	302 4th Ave., Havre 59501
Public Health	Meagher County Health Department	Kari Jo Kiff	Director	547-3234	16 W. Main, PO Box 309 White Sulphur Springs 59645
Public Health	Pondera County Health Department	Cynthia Grubb	Public Health Nurse	271-3247	311 South Virginia, Ste. 1, Conrad 59425
Public Health	Teton County Health Department	Lora Wier	Director	455-2562	905 4th St. NW, Choteau 59422
Public Health	Toole County Health Department	Kristi Aklestad	County Nurse	424-5169	402 1st St. S., Shelby 59474
Public Health	Glacier County Health Department	Carol McDivitt	Public Health Nurse	873-2924	1210 E. Main Street, Cut Bank 59427
Partner Type	Agency	Name	Title	Phone	Address
Hospitals	Northern Montana Healthcare	David Henry	CEO	265-2211	P.O. Box 1231, Havre 59501

NORTH CENTRAL MONTANA HEALTHY COMMUNITIES PARTNERS **APPENDIX A**

NORTHCENTRAL MONTANA HEALTHCARE ALLIANCE PARTNERS

Hospitals	Marias Medical Center	Mark Cross	CEO	434-3201	P.O. Box 915, Shelby 59474
Hospitals	Liberty Medical Center	Dustin Ahrens	CEO	759-5181	315 West Madison Ave., Chester 59522
Hospitals	Northern Rockies Medical Center	Cherie Taylor	CEO	873-2251	802 22nd Street SE, Cut Bank 59427
Hospitals	Phillips County Hospital	Ward VanWichen	CEO	654-1100	311 S. 8th Ave. E., Malta 59538
Hospitals	Big Sandy Medical Center	Harry Bold	CEO	378-2188	166 Montana Avenue E, Big Sandy 59520
Hospitals	Missouri River Medical Center	Jay Pottenger	CEO	622-3331	1501 Saint Charles, Fort Benton 59442
Hospitals	Mountainview Medical Center	Aaron Rogers	CEO	547-3321	16 West Main Street, White Sulphur Springs 59645
Hospitals	Central Montana Medical Center	Lee Rhodes	СЕО	535-7711	408 Wendell Avenue, Lewistown 59457
Hospitals	Teton Medical Center	Louie King	CEO	466-5763	915 Fourth Street NW, Choteau 59422
Hospitals	Pondera Medical Center	Wayne Ogburn	CEO	271-3211	805 Sunset Blvd., Conrad 59425
Hospitals	NMHA/Benefis Health System	Jack King	Executive Director	455-4285	1117 29th Street S., Great Falls 59405

APPENDIX B

2012 North Central Montana Healthy Communities Survey

Your Health, Your Community, Your Future!

You can also fill out the survey online if you would prefer by going to: https://surveymonkey.com/s/2012_NorthCentral_MT_HealthyCom_Survey

If you have any questions please call Voices of Hope at 1-800-273-8255.

Please complete and return this survey by December 15^{th} to be entered into the drawing for a \$100 Visa gift card.

Please tell us about the health of your community.

1. In the following list, what do you think	· ·
concerns in your community where you l	
Lack of Access to Care	Health Risk Behavior
□ Dental care	□ Alcohol abuse
☐ Medical care	☐ Child abuse and/or neglect
□ Mental health care	☐ Domestic violence
☐ Reproductive health care	□ Drug abuse (illegal)
Chronic Disease	☐ Drug abuse (prescription)
□ Asthma	☐ Overweight and obesity
□ Cancer	☐ Physical inactivity
□ Dental problems	□ Poor nutrition
□ Diabetes	□ Rape/sexual assault
☐ Heart disease	☐ Sexually transmitted diseases
☐ High blood pressure	☐ Teenage pregnancies
□ Stroke	☐ Tobacco use
Communicable Disease	Mental Health
□ HIV / AIDS	☐ Depression/Anxiety
☐ Low immunization rate	☐ Suicide
☐ Other infectious diseases	Unintentional Injury
☐ Sexually transmitted diseases	☐ Farm related injuries
Environmental Health	☐ Gun related injuries
☐ Foodborne illness	☐ Motor vehicle injuries
☐ Indoor air quality	☐ Recreation related crashes/injuries
☐ Outdoor air quality	☐ Work related accidents/injuries
☐ Water quality	Other
2. Would you agree that your community ☐ Strongly agree ☐ Agree ☐ No opin	is a "healthy community?" nion Disagree Strongly disagree

3. Please check up to THREE (3) lifestyle choices	in your community that concern you the
most.	
☐ Smoking	☐ Overweight and obesity
\square Drinking and driving	□ Alcohol abuse
☐ Lack of exercise	☐ Poor nutrition
☐ Dropping out of school	☐ Not getting vaccinations
□ Illegal drug abuse	□ Unsafe sex
☐ Prescription drug abuse	☐ Gambling
☐ Not using seat belts/child safety seats	•
☐ Other, please describe:	
4. Please select THREE (3) of the items below that	you believe are most important for a
"healthy community."	☐ Good schools
□ Safe neighborhoods□ Access to health care and other services	
	☐ Clean environment
☐ Parks and recreational opportunities	
☐ Religious or spiritual values	☐ Tolerance for diversity
☐ Life-long educational opportunities	☐ Affordable housing
☐ Support for good parenting☐ Support for healthy families	☐ Good paying job opportunities
☐ Low crime	☐ Healthy lifestyle choices☐ Strong family life
☐ Opportunities for community involvement	
☐ Other, please describe:	
Utilet, picase describe.	
5. Please check up to THREE (3) mental health is	ssues that impact YOU AND YOUR FAMILY
the most.	
□ Alcohol use	□ Depression
☐ Access to mental health services	□ Drug use
☐ Lack of family stability	☐ Lack of social support
☐ Broken families	☐ Work-related stress
☐ Other, please describe:	
6. Overall, how much impact do you think people l	ike you can have in making your
neighborhood or community a better place to live?	
\square Big impact \square Moderate impact \square Small i	impact \square No impact \square Not sure
7. In general, would you say your health is?	
□ Excellent □ Very good □ Good □ Fa	ir 🗆 Poor
□ Excenent □ very good □ Good □ Fa	II
8. Does everyone in your household have health ir	nsurance?
☐ Yes ☐ No ☐ Not sure	
9. Does everyone in your household have dental in	nsurance?
☐ Yes ☐ No ☐ Not sure	

10.	If you answered "No" to questions 8 or 9,wl	no in your household is uninsured?
	□ No one in the household is insured	☐ The children 18 and under
	$\hfill\Box$ The adults between 18 and 64	$\hfill\Box$ The adults who are 65 and older
11.	Do you have someone who you consider to	be "your" doctor or health care provider?
	\square Yes (skip to 13) \square No \square Not sure	
12.	If you marked "No" to question 11, then wh	
	☐ Community Health Care Center	□ Rural Health Clinic
	☐ Health Department	☐ Specialist (OB/GYN, Heart, etc.)
	☐ Emergency Room/Hospital	☐ Chiropractor
	□ Planned Parenthood	☐ Urgent Care/Walk-In Clinic
	□ Naturopath	□ Just don't go
	Other, please describe:	
	During the past three years, was there a tir	
hou		but did NOT get, or delayed getting service?
	☐ Yes ☐ No ☐ Not sure	
14.	If you answered "Yes" to question 13, what	were the THREE (3) most important
reas	sons why you or a family member did not re	eceive the care you needed?
	☐ Could not get an appointment	☐ It was too far to go
	☐ Too long of a wait for an appointment	☐ Could not get off work
	☐ Too nervous or afraid	☐ Didn't know where to go
	☐ My insurance wouldn't cover it	☐ Transportation problems
	□ Don't like doctors	□ No health insurance
	☐ Unsure if services were available	☐ Had no one to care for the children
	□ Not treated with respect	☐ Language barrier
	☐ It cost too much	☐ Office wasn't open when I could go
	□ Other, please describe:	
15.	How do you learn about health services in	your community?
	□ Friends/Family	☐ Presentations
	☐ Health care provider	☐ Public Health Department
	☐ Mailings/Newsletters	□ Radio
	□ Newspaper	□ Website/internet
	□ Other, please describe:	$_{-}$ \square Word of mouth/reputation
16.	What concerns you the most about health	care in your community?
	<u>.</u>	- J

Please tell us about you and your household.

17. Are you aware of assistance that might be available to help people quit smoking such as telephone quit lines and local health clinic services? \Box Yes \Box No
18. Do you smoke cigarettes? □ Yes, daily □ Yes, some days □ No, but I used to □ No, never
19. How many people 18 years and older live in your household (include yourself)?
20. How many people under 18 years live in your household?
21. Do you have a landline (home) telephone (not including a cell phone)? ☐ Yes ☐ No
22. Do you have access to a computer at your household? \Box Yes \Box No
23. Do you have access to the internet at your household? \Box Yes \Box No
24. What is your age?
25. What is your gender? □ Male □ Female
26. Are you Hispanic or Non-Hispanic? □ Hispanic □ Non-Hispanic
27. What do you consider your race? (check all that apply) ☐ American Indian/Alaskan Native ☐ Asian ☐ Black/African American ☐ Hispanic ☐ Native Hawaiian/Pacific Islander ☐ White/Caucasian ☐ Other
28. What is your marital status? □ Divorced □ Domestic Partnership □ Single, never married □ Married □ Widowed
29. What is the approximate monthly income for your household before taxes? □ Under \$1,000 □ \$1,001-1,500 □ \$1,501-\$2,000 □ \$2,001-\$2,500 □ \$2,501-\$3,000 □ \$3,001-\$3,500 □ \$3,501-\$4,000 □ \$4,001-\$4,500 □ \$4,501-\$5,000 □ \$5,001-\$5,500 □ \$5,501-\$6,000 □ Over \$6,000
30. What is the highest level of school that you completed? □ Less than 12 th grade □ Completed high school (or GED) □ Some college □ 2 year degree □ Technical/vocational school □ 4 year degree □ Postgraduate
31. What is your current employment status? (check all that apply) □ Employed Full-time □ Employed-temporary □ Student Full-time □ Employed Part-time □ Self Employed □ Student Part-time □ Retired □ Unemployed

Thank you! Please return your survey in the self-addressed stamped envelope.

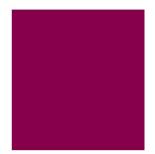
APPENDIX C EXCERPTS FROM THE COMMUNITY NEED INDEX REPORT











Improving Public Health & Preventing Chronic Disease

CHW's Community Need Index

The Nation's First Community Need Index

Catholic Healthcare West has developed the nation's first standardized Community Need Index (CNI) in partnership with Solucient, LLC. In developing this tool we applied the same level of scientific rigor we insist on in the practice of medicine to our public health programming. The CNI identifies the severity of health disparity for every zip code in the United States based on specific barriers to healthcare access. In doing so we have demonstrated the link between community need, access to care, and preventable hospitalization for conditions that, if effectively diagnosed and managed, should be treatable in an outpatient setting.

The ability to pinpoint neighborhoods with significant barriers to health care access is an important new advancement for public health advocates and care providers. And because the CNI considers multiple factors that are known to limit health care access, the tool may be more accurate and useful than existing assessment methods in identifying and addressing the disproportionate unmet health-related needs of neighborhoods.

A Breakthrough Approach

Rather than relying solely on public health data, the CNI accounts for the underlying social and economic barriers that affect overall health. Using a combination of research, literature, and experiential evidence, CHW identified five prominent socio-economic barriers that enable us to quantify health care access in communities across the nation:

Income Barriers — Percentage of elderly, children, and single parents living in poverty

Research shows that people living on limited incomes are more likely to forego visits to the doctor in order to meet their more pressing financial responsibilities. Low-income wage earners are also less likely to be covered by an employer's health insurance program, and if they are covered, they are often less able to pay their share of health expenses.¹

Cultural/Language Barriers — Percentage Caucasian/non-Caucasian and percentage of adults over the age of 25 with limited English proficiency

Access to culturally and linguistically competent care is a necessary component in improving health status. Language and culture barriers can contribute to an increased prevalence of disease and lower recruitment into government health programs.² Research has shown that patients whose primary language is not English may be compromised in their understanding of their medical situation, be confused about instructions following hospital discharge, and may not be able to read their prescription labels or understand self-care instruction for chronic conditions.³

Educational Barriers — Percentage without high school diploma

Lack of education has been cited as a major indicator of poor health in many studies. Educational barriers often turn into impediments to employment, further increasing the likelihood of poverty and lack of insurance. Lack of adequate health education also impacts a person's ability to understand medical information or recognize early symptoms of disease.

Insurance Barriers — Percentage uninsured and percentage unemployed

Lack of health insurance forces individuals to forgo primary care treatment options, leading to a markedly increased propensity to be hospitalized for chronic conditions. Employment status also has a substantial impact on the ability of individuals to obtain insurance. A person without health insurance who experiences an injury or a new chronic condition has greater difficulty accessing recommended medical care and takes longer to return to full health, if at all. And if health remains compromised, it could make it more difficult for an uninsured person to obtain health insurance in the future.

Housing Barriers — Percentage renting houses

Increased use of rental housing is associated with more transitory lifestyles, a less stable home and an environment that deters health prevention. For example, rental housing is more likely than owned housing to be sub-standard, in neighborhoods with higher crime rates, lower quality schools, limited healthy food choices and fewer recreational opportunities. This measure does not reflect whether there is a significant population of homeless individuals in an area, a factor that could influence demands on local health systems in addition to the inherent increase in overall health risk from lack of stable shelter.

¹ DeNavas-Walt C, Proctor BD, Mills RJ. Income, Poverty, and Health Insurance Coverage in the United States: 2003. U.S. Census Bureau, Current Population Reports, P60-226. U.S. Government Printing Office, Washington, DC, 2004.

² Reynolds D Improving care and interactions with racially and ethnically diverse populations in healthcare organizations. Journal of Healthcare Management. 2004 Jul-Aug;49(4):237-49.

³ Williams MV et al. Inadequate functional health literacy among patients at two public hospitals. JAMA. 1995 Dec 6;274(21):1677-82.

⁴ Fisher Wilson J. The Crucial Link between Literacy and Health. Annals Internal Medicine. 11/18/2003, Vol. 139 Issue 10, p875, 4p.

⁵ Holahan J, Arunabh G. The Economic Downturn and Changes in Health Insurance Coverage, 2000-2003. Henry J. Kaiser Family Foundation, Sept. 2004.

⁶ Hadley, Jack. Insurance Coverage, Medical Care Use, and Short-Term Health Changes Following an Unintentional Injury or the Onset of a Chronic Condition. The Journal of the American Medical Association 2007; 297: 1073-1084.

⁷ Diez Roux AV, Merkin SS, Amett D, et al. Neighborhood of residence and incidence of coronary heart disease. N Engl J Med. 2001; 345:99-106.

⁸ Macroeconomics and health investing in health for economic development: Report on the commission on Macroeconomics and health. World Health Organization, Geneva 2001.

Assigning CNI Scores

To determine the severity of barriers to health care access in a given community, the CNI gathers data about that community's socio-economy. For example, what percentage of the population is elderly and living in poverty; what percentage of the population is uninsured; what percentage of the population is unemployed, etc.

Using this data we assign a score to each barrier condition. A score of 1.0 indicates a zip code with the lowest socio-economic barriers (low need), while a score of 5.0 represents a zip code with the most socio-economic barriers (high need). The scores are then aggregated and averaged for a final CNI score (each barrier receives equal weight in the average). Figure 1, provides an example of CNI scores for a low need community and a high need community.

Figure 1 Comparison of CNI Scores for High-Need and Low Need Communities

		Green Valley, AZ 85614		Compton, CA 90220	
Barrier	Indicator	Indicator %	Barrier Score	Indicator %	Barrier Score
Income	Elderly Poverty Child Poverty Single Parent Poverty	3% 8% 32%	3	17% 27% 40%	4
Cultural	Non-Caucasian Limited English	8% 1%	2	97% 16%	5
Education	Without HS Diploma	9%	1	45%	5
Insurance	Unemployed Uninsured	4% 13%	2	15% 32%	5
Housing	Renting %	12%	1	38%	4
Final CNI Score			1.8 (Low Need)		4.6 (High Need)

What The Scores Mean

A comparison of CNI scores to hospital utilization shows a strong correlation between high need and high use. When we examine admission rates per 1,000 population (where available), we find a high correlation (95.5%) between hospitalization rates and CNI scores. In fact, admission rates for the most highly needy communities (CNI=5.0) are more than 60 percent higher than communities with the lowest need (CNI=1.0), as illustrated in Figure 2.

We have also examined admission rates for ambulatory sensitive conditions, or ASCs. These are conditions such as pneumonia, congestive heart failure and cellulitis where appropriate ambulatory care could prevent or reduce the need for hospital admission. Hospitalization for some conditions may be reduced if persons had access to effective and timely care in the community. Prior care could prevent the onset of certain illnesses, help control an acute episodic illness or condition, or manage a chronic disease or condition. With proper outpatient care these conditions do not generally require an acute care admission.

Annual Admission Rate per 1000 Population by Figure 2 CNI Score All Service Lines 140 Admission Rates in High Need Areas Are Twice Those of Low Need Areas 120 100 Admissions 80 20 10 0 2.0 3.0 CNI Score

For more information about the Community Need Index please contact Richard Roth (<u>richard.roth@chw.edu</u>).

To learn more about Catholic Healthcare West visit us at www.chwHEALTH.org

