

# Community Health Assessment

## *Current Perception of Health and Health Needs in Blaine County, Montana*



Photo Courtesy of Mark Weber

Blaine County Health Department

*Jana McPherson-Hauer, RN, BSN*

June 2017

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## Acknowledgements

The Blaine County Health Department facilitated this assessment activity with the help of multiple community agencies, professionals and residents. The intention was to give county-in its entirety- an opportunity to be a part of the process.

The residents of Blaine County were joined in this assessment effort by:

The Blaine County Health Department Co-Directors: Deb Anderson and Jana McPherson-Hauer, RN, BSN	The Montana Health Care Foundation	Montana Department of Health and Human Services
Amy Crowder-Klobofski, RN, MSN, DNP Candidate, Capella University	Erica McKeon-Hanson, MPH	Dr. Bruce Richardson, Blaine County Health Officer
Blaine County Commissioners	Sweet Medical Center	Harlem School District, Harlem, MT
Chinook Public Schools, Chinook, MT	Blaine County Disaster and Emergency Services	Blaine County Emergency Medical Services
17 <sup>th</sup> Judicial District Youth Court Services	Northern Montana Healthcare	Lacie Snider, Lacie Jae Photography and Crafts

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## Executive Summary

In recent history there has not been a health assessment completed by an agency within Blaine County. While there have been reviews and reports produced by facilities outside the county, these have been limited by low response rates and by lack of county partners. This is the first assessment that is to focus entirely on Blaine County and the residents thereof. This focus is a cornerstone and constant motivation for gathering meaningful data.

### Blaine County Health Department

Blaine County Health Department (BCHD) was the facilitating agency in this Community Health Assessment (CHA) process.

#### **Blaine County Health Department Mission:**

***Building healthy communities through education, outreach and intervention***

#### **Blaine County Health Department Vision:**

***Healthy families, Healthy communities, Healthy world***

#### **Blaine County Health Department Values:**

***Teamwork, Communication, Integrity, Ownership***

***Vitality, Respect, Leadership, Diversity***

### CHA Stakeholder Group

An inclusive group of county individuals were invited to participate in the process of planning for and completing this project. Those who participated are listed in the Acknowledgements on page 2.

Together the group identified the following guiding statements.

#### **CHA Stakeholder Mission:**

***We will contribute to foundational health knowledge in Blaine County by assessing needs through gathering, compiling and presenting primary and secondary data.***

#### **CHA Stakeholder Vision:**

***Accurate data to drive our practice and guide our programming***

#### **CHA Stakeholder Values:**

***Comprehensive, diverse, accurate, culturally aware and competent, objective, valuable, useful***



## Blaine County Description

### Geography and Demographics

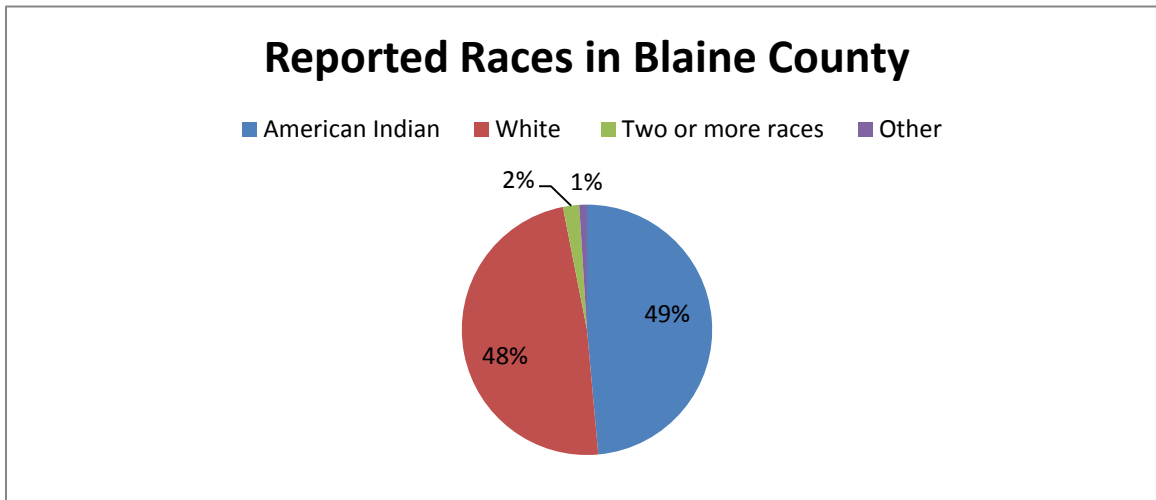
Blaine County is a county in northcentral Montana with about 2,730,880 acres or 4,267 square miles. The county is home to 6,601 residents. Of those residents 30.1% were under the age of 18, and 14.1% over the age of 65 years old.<sup>1</sup>

Blaine County is bordered by Saskatchewan, Canada to the north, Phillips County on the east, Fergus County on the south, and Hill County on the west.

In the southeastern area of Blaine County lies the Fort Belknap Indian Reservation, a sovereign nation encompassing an area of 675,147 acres, home to the Aaniiih (Gros Ventre) and Nakoda (Assiniboine) American Indian tribes.<sup>2</sup>

In Blaine County 48.8% of the population reports being American Indian and/or Alaska Native alone, 48.6% as White alone. The remaining Blaine County residents report to be two or more races (2.1%), African American or Black, Asian, or Native Hawaiian or Pacific Islander (<1% combined).<sup>1</sup>

**Graph 1. Description of races reported by individuals in Blaine County**



Source: <http://quickfacts.census.gov/>

### Social Contributors

According to the US Census data, across the state the percentage of the population living in poverty is 16.5%, while the figure for persons in poverty in Blaine County is 28.2%. Fifteen point nine percent of Blaine County residents who are 25 or over report holding a bachelor's degree or higher, compared to 28.7% of Montana residents who report the same education level.<sup>1</sup>

## Blaine County Health Description

### Chronic and communicable conditions

Our residents are unique in areas of health, as well. Of specific note, rates (per 100,000) for inpatient admissions for the conditions of cardiovascular disease and Diabetes (types 1 and 2) are markedly higher than the rates for other small counties in the state and the state of Montana as a whole (See Table 1).<sup>3</sup>

**Table 1. Inpatient admissions for specific chronic conditions (2011-2013)**

Health Indicator	Blaine County		Small County Data		Montana
	Number	Rate per 100, 000	Average Number per County	Rate per 100,000	Rate per 100, 000
<b>Cardiovascular Disease</b>	201	<b>910.4</b>	216	<b>696.5</b>	<b>746.7</b>
<b>Diabetes (types 1 &amp; 2)</b>	296	<b>1,479.6</b>	236.6	<b>795.7</b>	<b>822.5</b>

Source: Community Health Profile, Blaine County, PHSD, MT DPHHS, [www.dphhs.mt.gov](http://www.dphhs.mt.gov)

In addition to increased rates of chronic disease, Blaine County experiences increased rates of some communicable diseases. Chlamydial infections are reported at a rate twice as high in Blaine County as they are reported in Montana, and even more than twice the average for small counties (See Table 2).

**Table 2. Rate of reported chlamydia infections (2011-2013)**

Health Indicator	Blaine County	Small County Data	Montana
	Rate per 100, 000	Rate per 100,000	Rate per 100, 000
<b>Chlamydia Infection</b>	<b>746.72</b>	<b>291.02</b>	<b>366.24</b>

Source: Community Health Profile, Blaine County, PHSD, MT DPHHS, [www.dphhs.mt.gov](http://www.dphhs.mt.gov)

### Access to Care, Access to Opportunities to Improve Health

According to the Robert Wood Johnson Foundation's County Health Rankings, Blaine County residents experience inequalities regarding access to varied services and opportunities. For example the ratio of individuals to primary care physicians in Montana is 1,310:1, compared to a ratio of 2,210:1 in Blaine County. The ratios of mental health providers are similarly striking in Blaine County at 940:1, compared to 410:1 throughout the state.<sup>4</sup>

The percent of uninsured individuals in Blaine County is 27%, compared to 17% of Montanans as a whole.<sup>4</sup>

Further, only 4% of individuals in Blaine County report that they have access to exercise opportunities- this is in comparison to 67% of the state's populations reporting they have similar access.<sup>4</sup>



### Mental Health and Alcohol/Substance Abuse

Blaine County residents report the fourth highest number (4.4 days) of “poor mental health days”\* out of the last 30 days, when compared with every county in the state.<sup>4</sup> Additionally, 15% of Blaine County residents report frequent mental distress, compared to 11% of Montanans in general according to the County Health Rankings<sup>4</sup>.

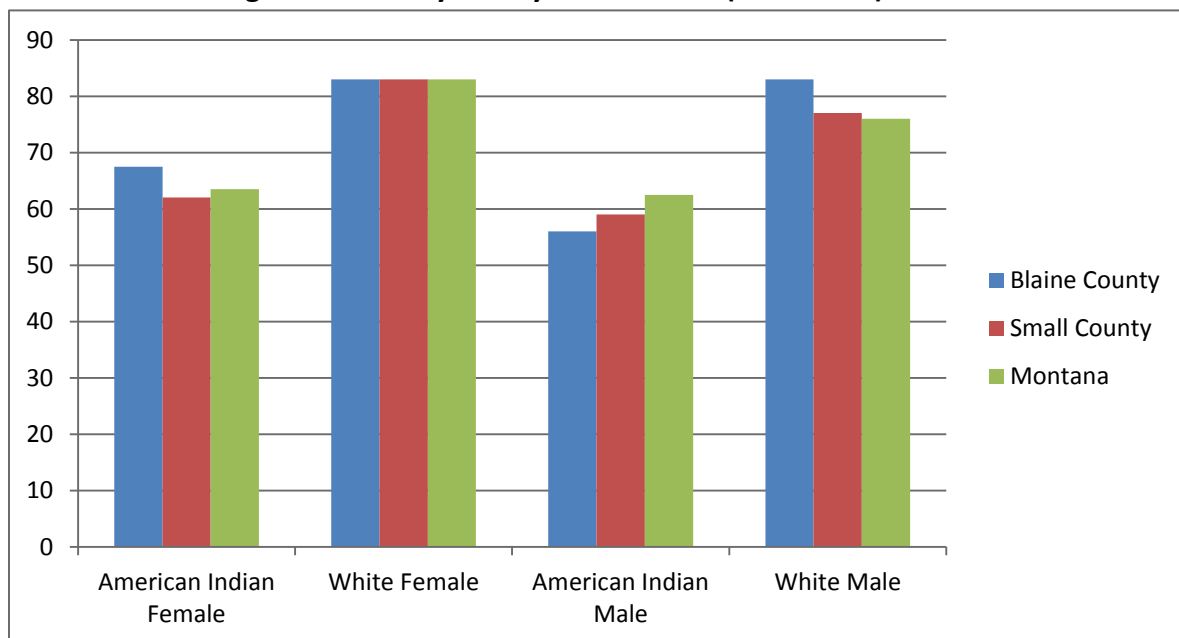
On average Montana driving deaths include alcohol impairment as a contributing factor 46% of the time. In Blaine County, that statistic rises to 80%.<sup>4</sup>

Within the last decade the drug-related mortality rate (per 100,000) was 15.3 in Blaine County, compared to 13.8 in Montana.<sup>5</sup>

### Health Inequities for Specific Populations

Racial health disparities are noted in many areas, but life expectancy figures reveal a staggering statistic. In Blaine County an American Indian male's median age at time of death is 56 years old compared to 83 years of age for a white male (See Chart 2).<sup>3</sup>

**Chart 2. Median age at death in years by race and sex (2011-2013)**



Source: Community Health Profile, Blaine County, PHSD, MT DPHHS, [www.dphhs.mt.gov](http://www.dphhs.mt.gov)

## Blaine County Health Description (continued)

### Health Inequities for Special Populations (continued)

The teen birth rate for female Blaine County residents between the ages of 15-19 years old is just shy of twice that of the state rate (See Table 3).<sup>3</sup>

**Table 3. Comparison of teen birth rate between Blaine County and Montana, 2011-2013**

	Blaine County	Montana
Health Indicator	Rate per 1,000	Rate per 1,000
<b>Teen birth rate</b>	<b>62.5</b>	<b>32.0</b>

Additionally, 33% of pregnant Blaine County women report smoking, compared with just 16.3% of pregnant Montanans as a whole.<sup>3</sup>

### What does this Health Description mean for the CHA?

This information, as well as other comprehensive data, was presented to the Stakeholder group, and studied extensively by the BCHD. This gave a foundation for multiple steps in the CHA process. First, it provided a basis for discussion by the stakeholders that led to the identification of priority health concerns in Blaine County. Second, we used this data and sources to develop questions for our survey. The intention was to “drill down” on some of the factors, and get more information about the overall health *and* the perception of health in Blaine County.

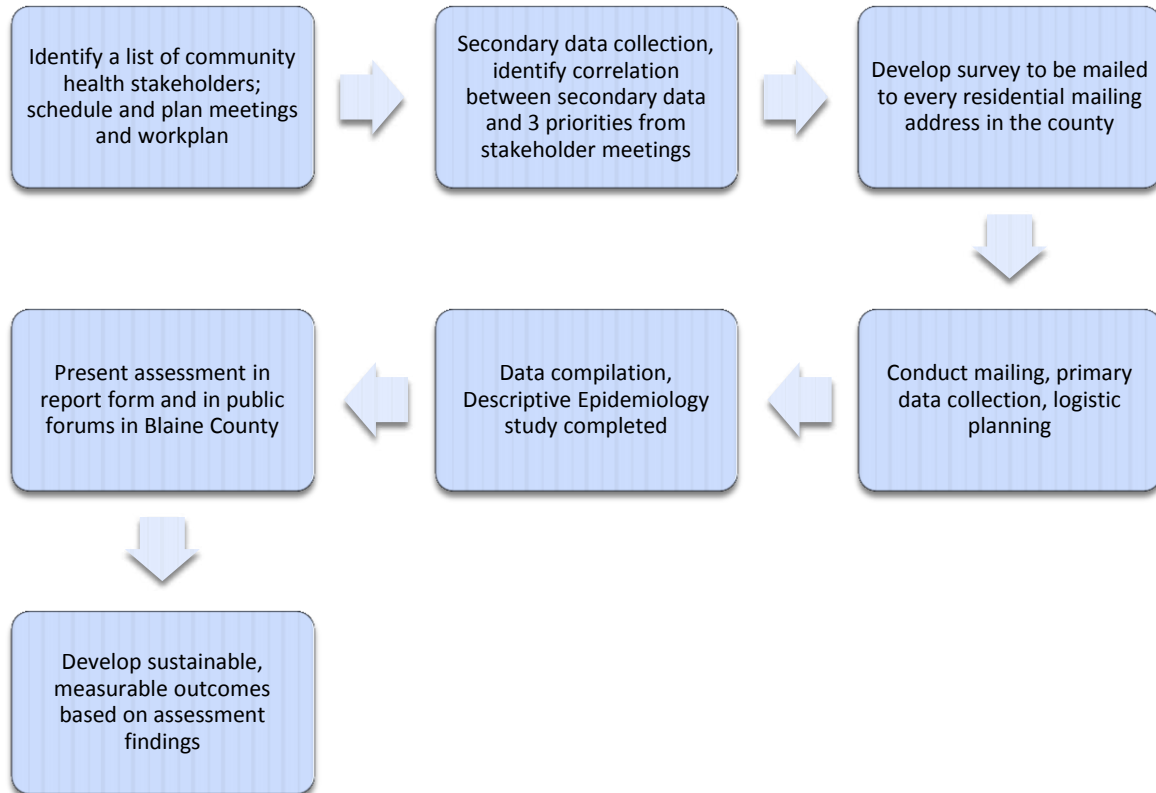




## CHA Methodology

The BCHD used a collection of resources to complete the Community Health Assessment which are described in this section. The general flow of the process was influenced by the Community Health Assessment Template (MT DPHHS, Office of Health System Improvement, 2015). The overview of the BCHD's experience is shown in Figure 1.

**Figure 1. General procedural flow of 2016-2017 CHA in Blaine County**



## University of Kansas Community Tool Box

The methodology used by Blaine County Health Department is the outline provided by the University of Kansas Community Tool Box. In Toolkit 2, the steps to guide assessing community needs and resources are;

1. Describe the makeup and history of the community to provide a context within which to collect data on its current concerns
2. Describe what matters to people in the community
3. Describe what matters to key stakeholders
4. Describe the evidence indicating whether the problem/goal should be a priority issue (for each problem/goal)
5. Describe the barriers and resources for addressing the identified issues
6. Select and state the priority issue/issues to be addressed by the group.<sup>6</sup>

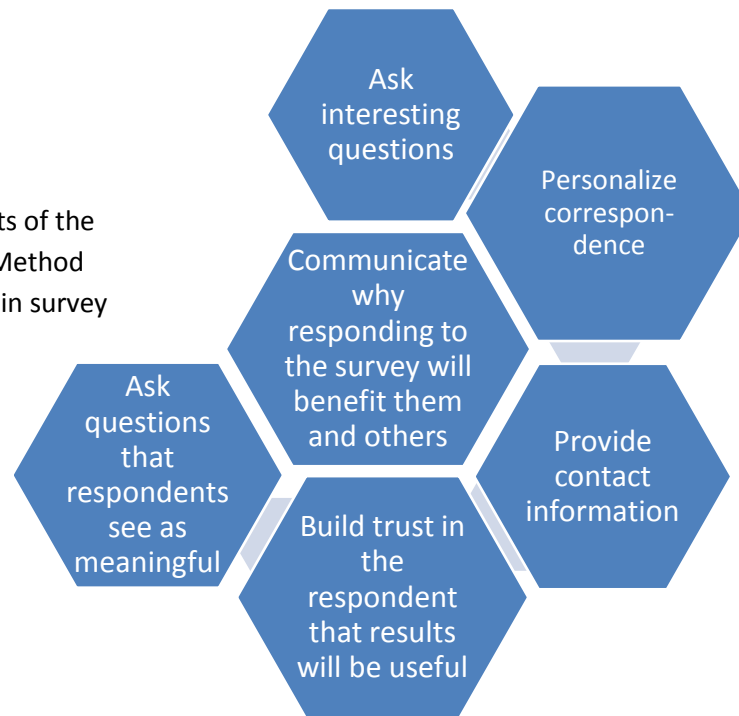


## CHA Methodology (continued)

### The Tailored Design Method

Throughout the process of developing the survey and outlining the data collection methods, we considered the Tailored Design Method. This is a concept derived as an extension of social exchange sociological theory, and includes strategies and concepts listed below.<sup>7</sup>

Figure 3. Elements of the Tailored Design Method utilized by BCHD in survey



### Survey Development and Distribution

The BCHD staff worked to develop questions that would provide insight into needs or gaps within each priority area (See Figure 4). The survey was organized into sections, and explicit directions were given after an introduction to the survey was presented. The introduction thanked the respondents for being the most important part of the process and encouraged completion of the survey as well as contact to the BCHD with any questions or concerns about the survey or results.

Surveys were printed and distributed by a direct mailing service. In addition to the questions, we built in a way to sort results and have another level of data by color coding the shade of paper the questionnaires were printed on by zip code. This was described in the letter to the respondent that accompanied the mailed survey.

Next, surveys were mailed to every residential mailing address in the county (2,773 addresses). We utilized business reply mail for the return option on the surveys.

Figure 4. Example of structure and questions in CHA survey

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**Section 3: Please help us by answering these questions dealing with access to health care. Some questions have 2 parts. Please answer the question first (by marking yes or no) and then indicate how important the issue is to you and how satisfied you are with the current state of the issue.**

1=not important/not satisfied, 2=kind of important/partially satisfied, 3=important/satisfied, 4=the most important/very satisfied

a. FOR EXAMPLE

Are you taking this survey?  Yes  No

How important is this to you? 1 2 3 **4**

How satisfied are you with the current state of this issue? 1 2 **3** 4

<p><b>A. Do you have any type of health insurance/health coverage (examples: Medicare, Medicaid, private insurance, Healthy Montana Kids, Indian Health Service coverage, etc.)?</b></p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p><b>B. Have you ever accessed health coverage through the "marketplace"?</b></p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p><b>C. Are you able to get the care you need near your home?</b></p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>How <b>IMPORTANT</b> is this to you? 1 2 3 4</p> <p>How <b>SATISFIED</b> are you with current ability to get care locally? 1 2 3 4</p>	<p><b>D. Are you aware of programs that help people pay for health care?</b></p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>How <b>IMPORTANT</b> is this to you? 1 2 3 4</p> <p>How <b>SATISFIED</b> are you with availability of such programs? 1 2 3 4</p>

(Section 3 is continued on the next page)



## Data Summary

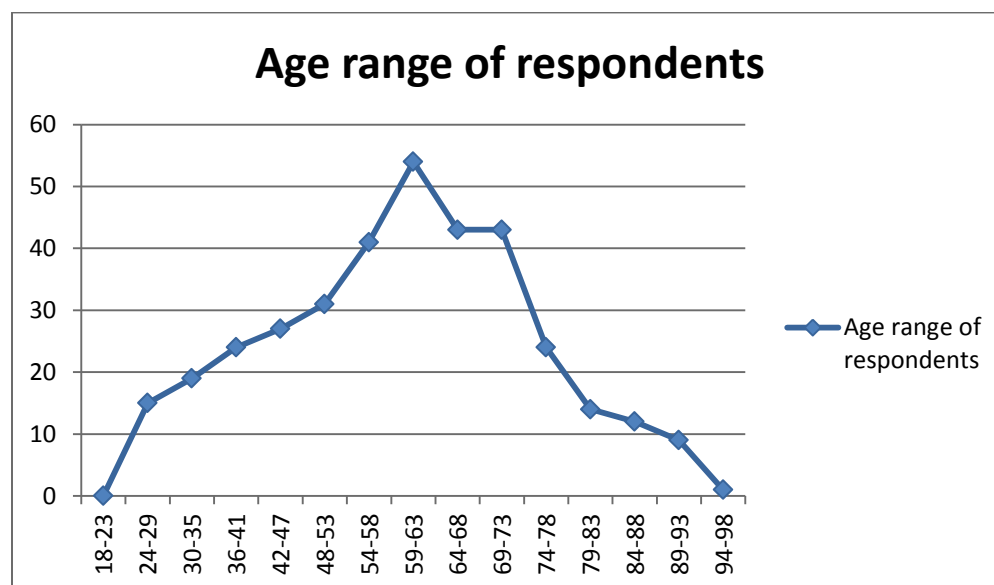
### Basics of the response

Of the 2,773 CHA surveys mailed out to residences throughout Blaine County 361 were returned to the BCHD. The response rate was 13%, which was lower than BCHD staff and Stakeholders hoped for, but does give an acceptable sample of the population from which to consider data.

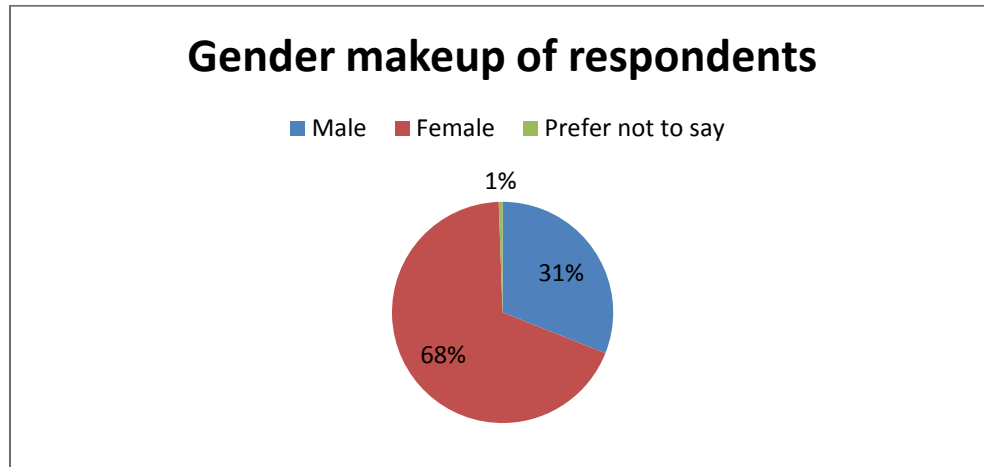
**Table 4. Response rate by community**

Community (where one receives mail)	Sent	Received	Response Rate (%)
Chinook	1,107	202	18.2%
Harlem	940	95	10.1%
Hays	383	15	3.9%
Hogeland	57	9	15.8%
Lloyd	32	6	18.8%
Turner	220	28	12.7%
Zurich	34	6	17.6%

**Chart 3. Frequency of age ranges reported**



Charts 3 and 4 illustrate a picture of the age and genders represented in our sample.

**Chart 4. Percentage of respondents' identified gender**

The following data summary is composite data, and represents rates and data from the responses to the survey as a whole. Each community (with a zip code) has an attached appendix highlighting results specific to the respondents from that area.

#### Overall Significance of Certain Health Issues

In *The State of the State's Health; A Report on the Health of Montanans* many health issues are noted. Our survey listed the 25 most commonly reported health issues<sup>8</sup> from this report and asked respondents to indicate if they believed said issue was "not a problem", "a slight problem", or "a significant problem".

Of the 25 issues, the top six most commonly indicated significant problems were tobacco use, diabetes, obesity, cancer, alcohol abuse, and illegal drug use. Of these issues, respondents most commonly reported that **alcohol abuse** and **cancer** were the most significant issues faced in Blaine County (See Chart 5 and Figure 5). In the case of both of these issues, 69% of those responding indicated that the issue was significant.

**Illegal Drug** use was reported as significant just slightly less, by 67% of respondents. Obesity was the next most commonly reported significant issue at 61%, followed by tobacco use at 46% and diabetes at 25%.

This data shows an alignment between the issues identified during survey planning and issues responding Blaine County residents perceive within the county.

Chart 5. Significant health issues in Blaine County

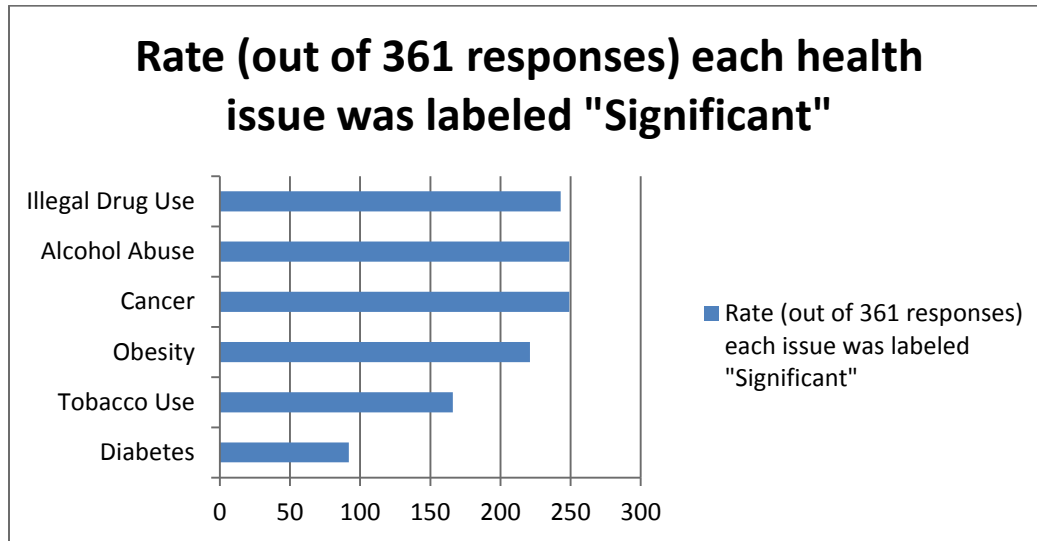


Figure 5. Top three most commonly reported "significant" health issues by CHA respondents

## Issue #1

**Cancer**

- 69% of respondents indicate it is one of their top three selections for most significant health issue.

## Issue #2

**Alcohol Abuse**

- 69% of respondents indicate it is one of their top three selections for most significant health issue.

## Issue #3

**Illegal Drug Use**

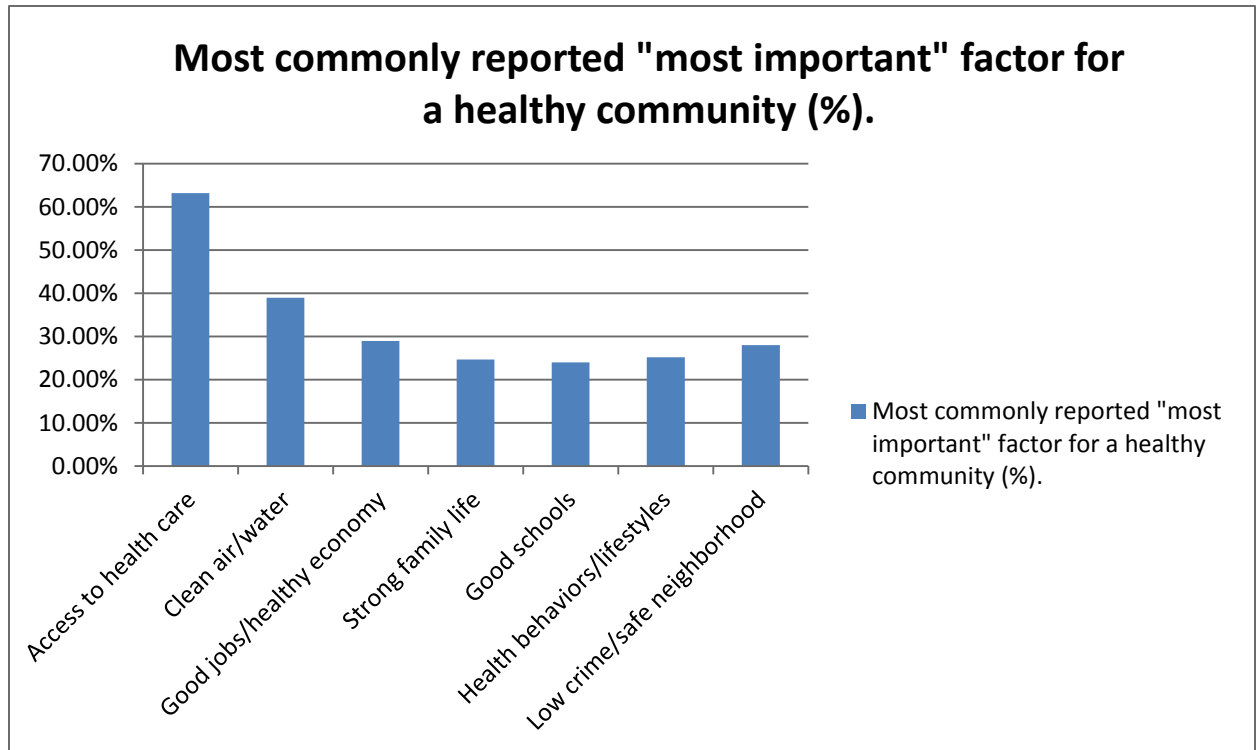
- 67% of respondents indicate it is one of their top three selections for most significant health issue.

**Most Important Factors for a Healthy Community**

There is an obvious difference among our communities when it comes to health outcomes. One dynamic driving the difference in outcomes is the presence of risk and protective factors. These are characteristics that a person or population and environment or experience possess that make problems (risk factor) and desired outcomes (protective factor) more likely.<sup>6</sup>

The CHA survey listed factors that have been shown to be protective health factors and asked respondents to select the three from the list that are the most important factors for a healthy community. The most commonly selected factors are shown in Chart 6. Access to health care was identified more frequently than any other factor as the most important for a healthy community. In addition to those factors reported in Chart 6, other factors were suggested on the survey, but none reached the percentage threshold selected for this CHA.

**Chart 6. Blaine County respondents' most commonly reported "most important" factors for a healthy community.**



### Education Offerings and Potential Programs

The CHA survey asked about the respondents' likelihood of participation in community programs and/or classes. Each respondent was asked to identify which 3 from a list of 28 options he/she would most likely participate in. The most frequently reported preferred classes/programs were in areas of **fitness, weight loss, and health and wellness** (See Table 5). There were noticeable discrepancies between communities, however, which can be seen in appendices A-G.



It was interesting that although there was the option of classes and programming related to the most commonly identified significant issues affecting health in Blaine County (Cancer, Alcohol/Substance Abuse- as identified in the survey results, see Chart 3), these selections were chosen much less frequently than others.



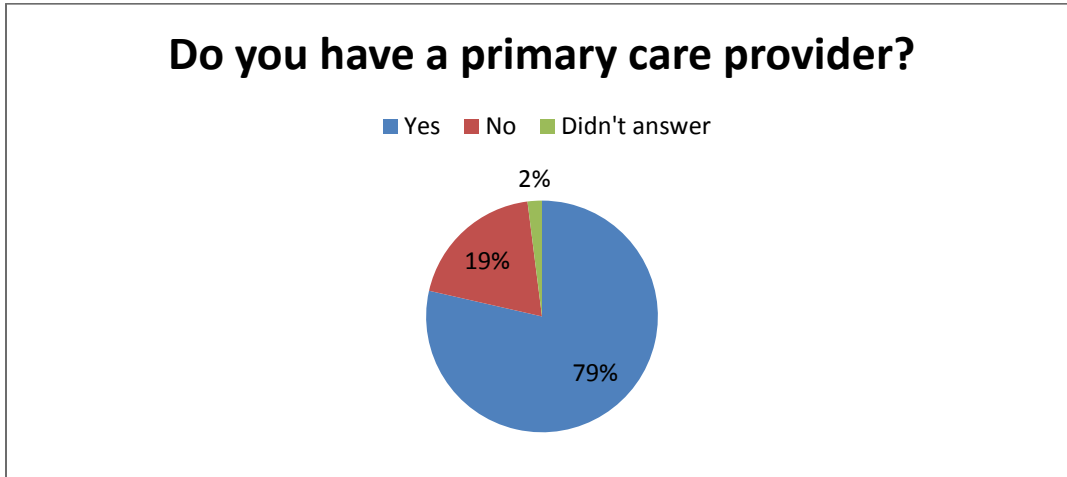
**Table 5. List of potential classes/programs with number of respondents who indicate they would likely participate.**

Potential Class/Program	Number of Respondents who indicate likely participation in class/program (respondents=361)
Fitness	103
Weight loss	82
Health and Wellness	79
Alzheimer's/ Dementia	66
Nutrition	63
Diabetes	55
First Aid/CPR	52
Health Insurance/ Affordable Care Act	50
Home care/Home Health care	50
Mental Health	49
Cancer	40
Accessing medical services	36
Elder care	35
Heart Disease	32
Suicide Prevention	30
Grief and Loss	29
Support groups	24
Alcohol/Substance Abuse	22
Immunizations	21
Parenting	16
Smoking Cessation	16
Early Childhood Development	15
Child Growth and Development	15
Breastfeeding	15
Pulmonary health	14
Health Literacy	10
Labor/Delivery/Infant Care	2

#### Coverage and Primary Care: Factors to Access

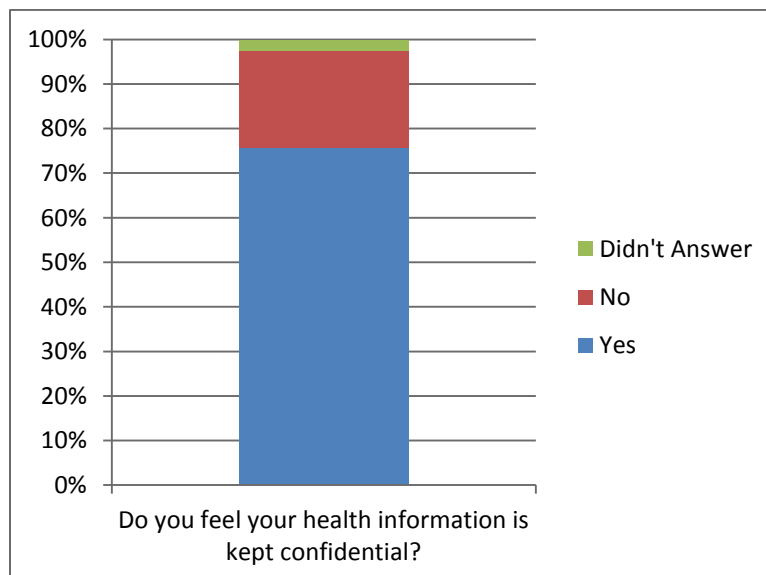
Of the individuals surveyed, 339 reported that they had some form of health insurance/health coverage (examples: Medicare, Medicaid, private insurance, Healthy Montana Kids, Indian Health Service coverage, etc.) Calculated, this is 93% of the respondents.

Primary care providers frequently serve as the point of access for advanced or specialized healthcare. Of the respondents to this CHA survey 79% reported that they have a primary care provider, whereas 19.4% indicated they did not (See chart 7).

**Chart 7. CHA responses to whether or not the individual has a primary care provider**

The survey asked respondents to identify which features (from a list and an option for a write in comment) would improve the community's access to health care. The most commonly selected element was **availability of a visiting specialist**. The percentage of people reporting this would be one of their top three solutions for improvement was 64%. The next two most commonly identified strategies were **availability of a walk-in clinic (52%)** and **more primary care providers (48%)**.

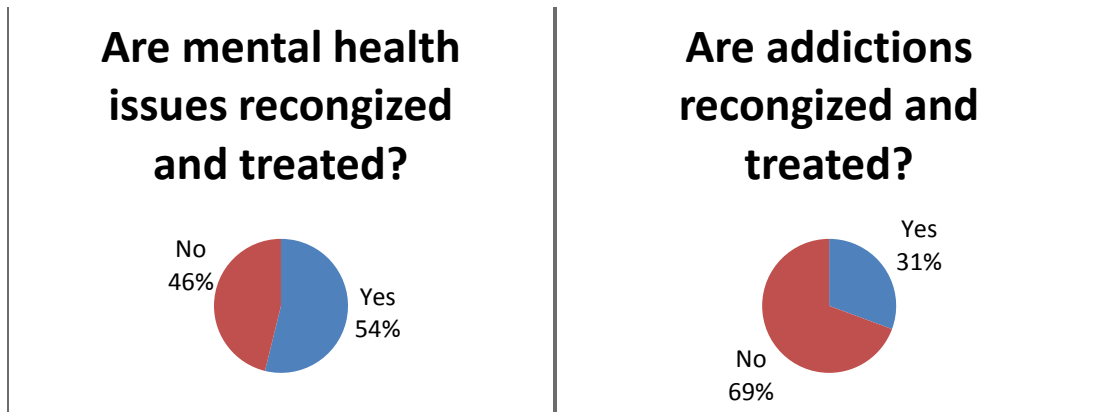
Confidentiality was assessed in the survey. Respondents were asked "Do you feel that your health information is kept confidential and protected when you receive health related services locally?" The responses are reflected in Chart 8.

**Chart 8. Perception of the maintenance of confidentiality of health information**

### Perception of state and needs related to mental health and substance/alcohol abuse.

Mental health and substance/alcohol abuse was another area on which the CHA survey attempted to collect data.

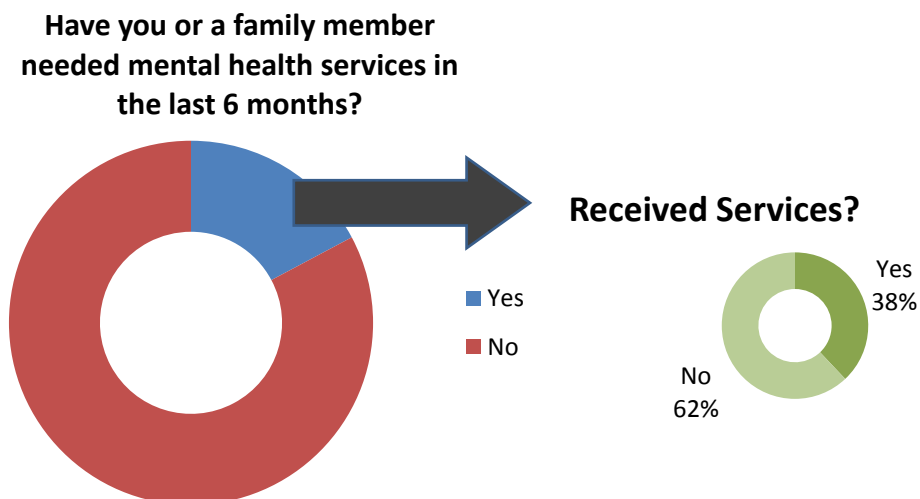
**Chart 9. Proportion of respondents' indications whether mental health problems and addictions are recognized and treated in their respective communities**



More than half of the survey respondents report that they do not know where a community member who needs mental health services could go to get them (54%).

The survey also asked county respondents to indicate whether or not they or a family member has needed mental health services in the last 6 months. The follow up question was if they had, did that person receive services. The results to that inquiry are described in Chart 11.

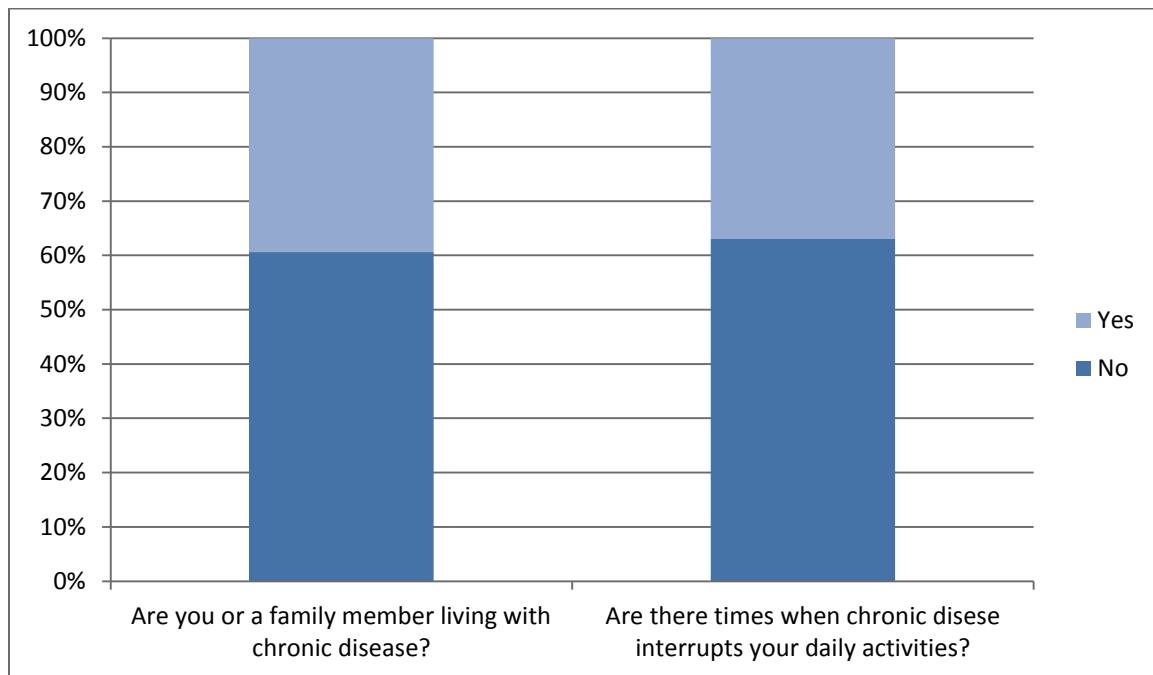
**Chart 11. Need and reception of mental health services**



### Chronic Disease Impact on Individuals in Blaine County

Of the survey respondents, 38% of the sample report that they or someone in their family is living with a chronic disease. Similarly, of respondents 37% of individuals in the sample indicate that there are times when chronic disease interrupts their daily activities.

**Chart 12. Presence of chronic disease and its effect on daily life of survey respondents**



### Data Limitations

While the overall response rate of the survey exceeded the goal of 10%, allowing the data to be considered useable sample, the rates among certain communities are significantly lower, and this affects the ability of the combined data report to be as useful. The appendices describing more detail for each community's responses aim to address this limitation.

The survey was a rather long questionnaire (8 pages, front and back). It was noted that questions at the beginning of the survey had a lower rate of non-response than those at the end of the survey. This suggests that as the survey went on, the respondent was less likely to answer each question.

The invitation to participate as a stakeholder did not produce volunteer participants from all of the agencies and entities the BCHD hoped. We believe we would have had a more desirable response rate with more comprehensive stakeholder membership.

## Conclusions

The goal of the Blaine County Community Health Assessment was to ***“contribute to foundational health knowledge in Blaine County by assessing needs through gathering, compiling and presenting primary and secondary data”*** (CHA Stakeholder mission statement). We accomplished this goal. The collection of data and information that we have can continue to be descriptively analyzed and presented to all of our stakeholders based on their individual needs. The zip code associated data will be saved as a data base for specific needs of community partners, as well as a baseline for continued assessments.

The significant health issues identified demonstrated alignment with the stakeholder’s prioritized elements. This alignment gave an added aspect of validity to the process for the author. Further, the most important factor for a healthy community was identified as another of the prioritized elements.

Each prioritized area contained questions that generated interesting data that could be utilized by county partners to strategize regarding how best to serve Blaine County residents. This data will be distributed to stakeholders and community members through meetings, media and outreach.

The lessons learned during this process were innumerable, with none being as significant as the fact that we can, as a community, achieve goals and produce results.



- This project was made possible in part by financial support through the Montana Health Care Foundation, and the facilitation of the project was supported greatly by the Montana Department of Public Health and Human Services, Office of System Improvement.

## Blaine County CHA Resources

<sup>1</sup>US Census, 2016 population estimate based on 2010 Census,  
<http://quickfacts.census.gov>

<sup>2</sup>Blaine County, Montana website, <http://blainecounty-mt.gov>

<sup>3</sup>Community Health Profile, Blaine County, PHSD, MT DPHHS, [www.dphhs.mt.gov](http://www.dphhs.mt.gov)

<sup>4</sup>County Health Rankings, 2017, Robert Wood Johnson Foundation,  
[www.countyhealthrankings.org](http://www.countyhealthrankings.org)

<sup>5</sup>Data for Community Health Assessments, Blaine, MT DPHHS, February 2011,  
<http://dphhs.mt.gov/Portals/85/publichealth/documents/Epidemiology/CHD/BlaineCommunityHealthAssessments.pdf>

<sup>6</sup>University of Kansas Community Tool Box, <http://ctb.ku.edu/en>

<sup>7</sup>*Internet, Mail, Phone and Mixed-mode Surveys, The Tailored Design Method*, Dillman, D., Fourth Edition, 2014

<sup>8</sup>State of the State's Health; A Report of the Health of Montanans, 2013, Montana Department of Health and Human Services,  
<http://dphhs.mt.gov/Portals/85/SHIP/StateOfTheStatesHealth.pdf>

\*"poor mental health days" are defined by the Center for Disease Control's (CDC's) Behavioral Risk Factor Surveillance System (BRFSS)) as a response in numbers of days indicated when a person answered the following 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?"