

Community Health Assessment

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



Photo Courtesy of Mark Weber

Blaine County Health Department

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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
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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

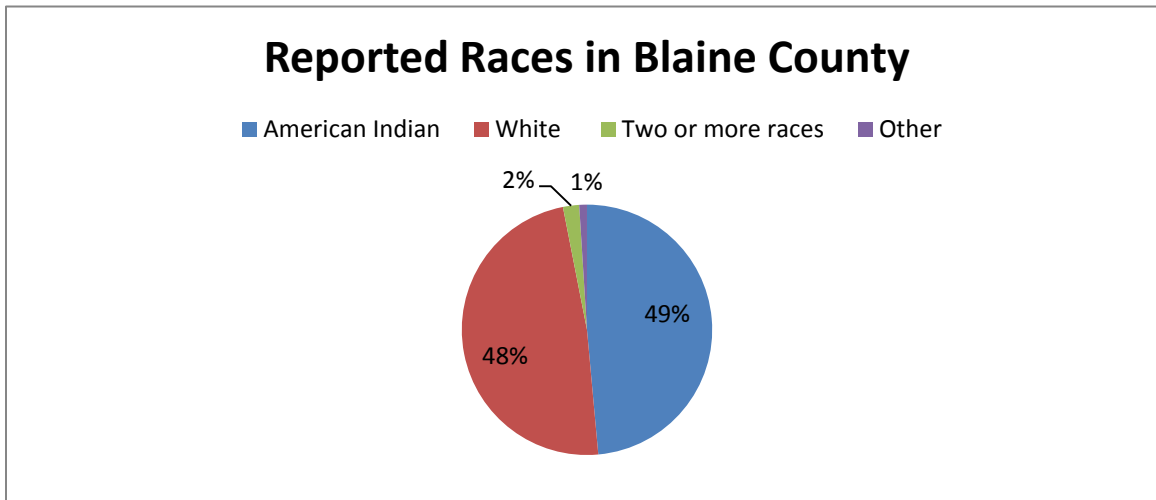
Blaine County is a county in northcentral Montana with about 2,730,880 acres or 4,267 square miles. The county is home to 6,601 residents. Of those residents 30.1% were under the age of 18, and 14.1% over the age of 65 years old.¹

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.²

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).¹

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.¹

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).³

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
Cardiovascular Disease	201	910.4	216	696.5	746.7
Diabetes (types 1 & 2)	296	1,479.6	236.6	795.7	822.5

Source: Community Health Profile, Blaine County, PHSD, MT DPHHS, 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
Chlamydia Infection	746.72	291.02	366.24

Source: Community Health Profile, Blaine County, PHSD, MT DPHHS, 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.⁴

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

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.⁴



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.⁴ Additionally, 15% of Blaine County residents report frequent mental distress, compared to 11% of Montanans in general according to the County Health Rankings⁴.

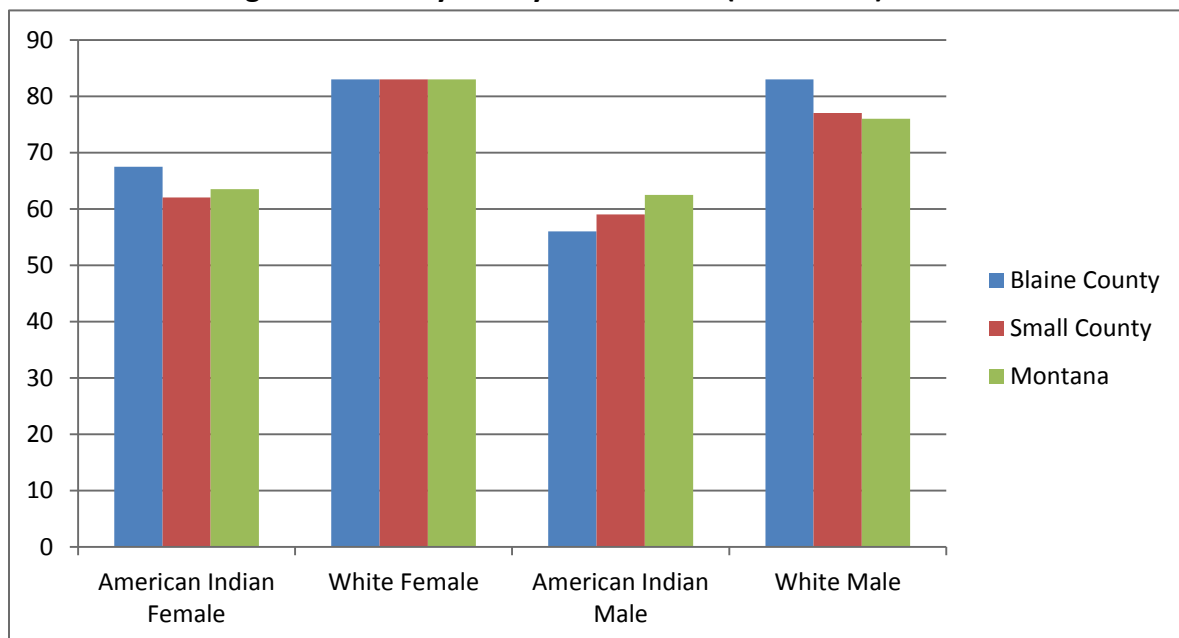
On average Montana driving deaths include alcohol impairment as a contributing factor 46% of the time. In Blaine County, that statistic rises to 80%.⁴

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

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).³

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

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).³

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
Teen birth rate	62.5	32.0

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

What does this Health Description mean for the CHA?

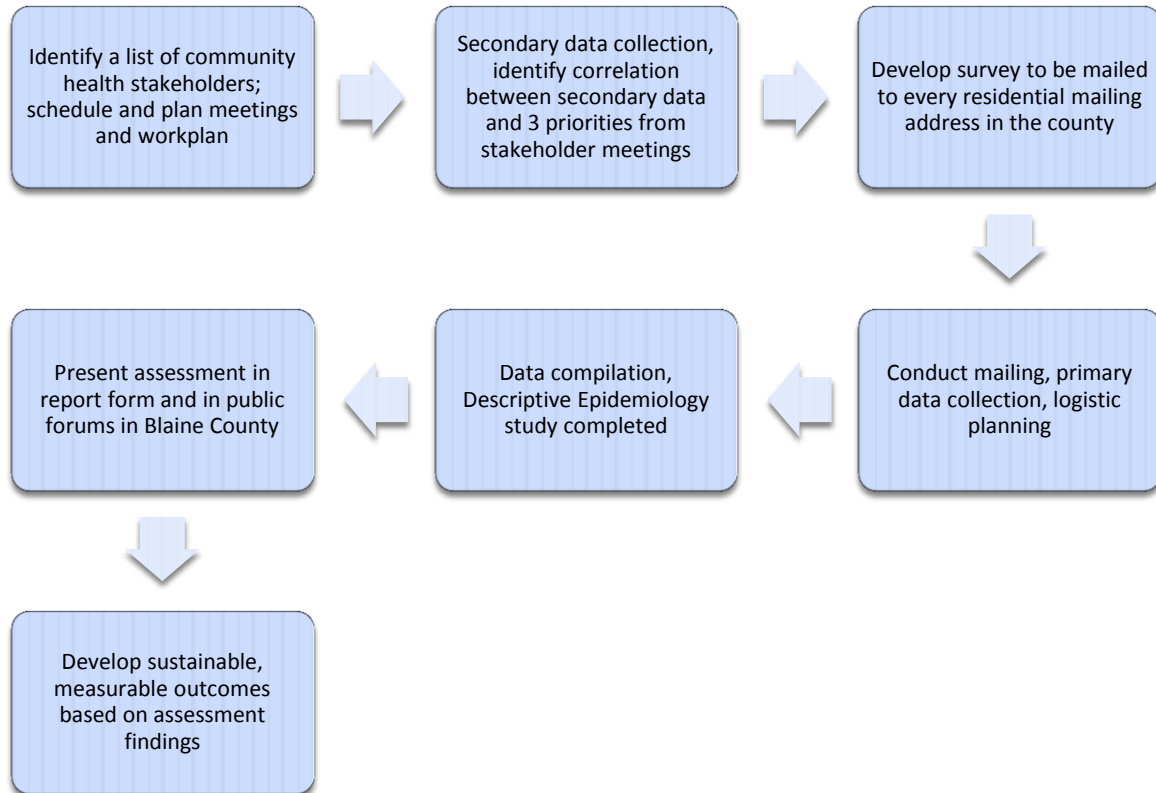
This information, as well as other comprehensive data, was presented to the Stakeholder group, and studied extensively by the BCHD. This gave a foundation for multiple steps in the CHA process. First, it provided a basis for discussion by the stakeholders that led to the identification of priority health 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;

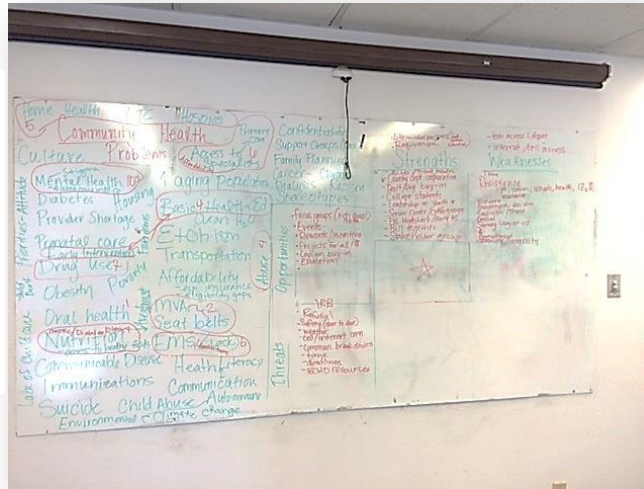
1. Describe the makeup and history of the community to provide a context within which to collect data on its current concerns
2. Describe what matters to people in the community
3. Describe what matters to key stakeholders
4. Describe the evidence indicating whether the problem/goal should be a priority 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.⁶

CHA Methodology (continued)

University of Kansas Community Tool Box (continued)

The Community Took Box was selected as the resource to guide our project because it is flexible and has a collection of tools that are evidence based, and are easily communicated with stakeholders and respondents.

Figure 2. Identified community health problems and SWOT analysis during stakeholder meeting, 2016



Selection of Three Priority Health Concerns

The CHA Stakeholder group, through frequent discussions and a systematic process, was able to identify the three areas that were of priority concern to the group. The priorities are presented in Figure 3, and were used as a guide for survey development.

Figure 3. Top 3 Priority Health Concerns identified by CHA Stakeholder group

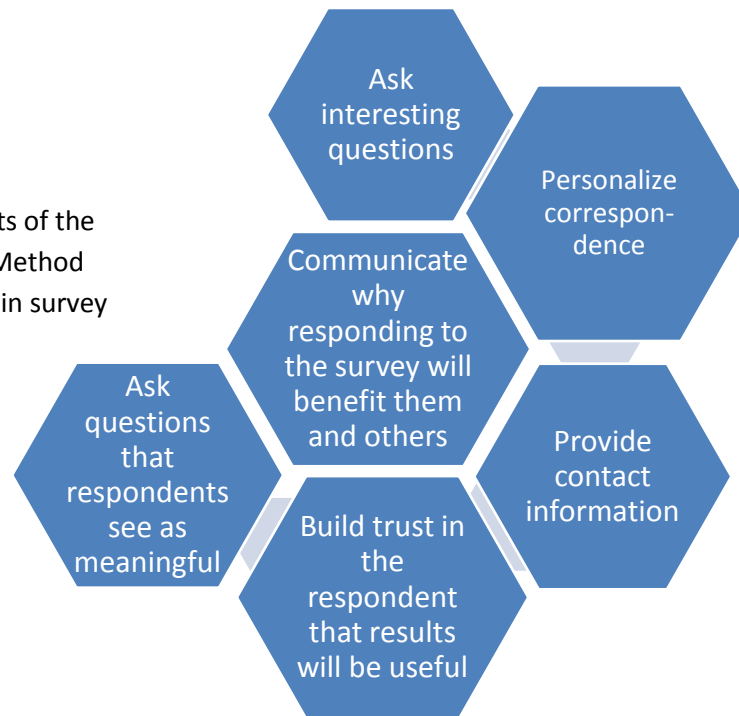


CHA Methodology (continued)

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.⁷

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

(Section 3 is continued on the next page)



Data Summary

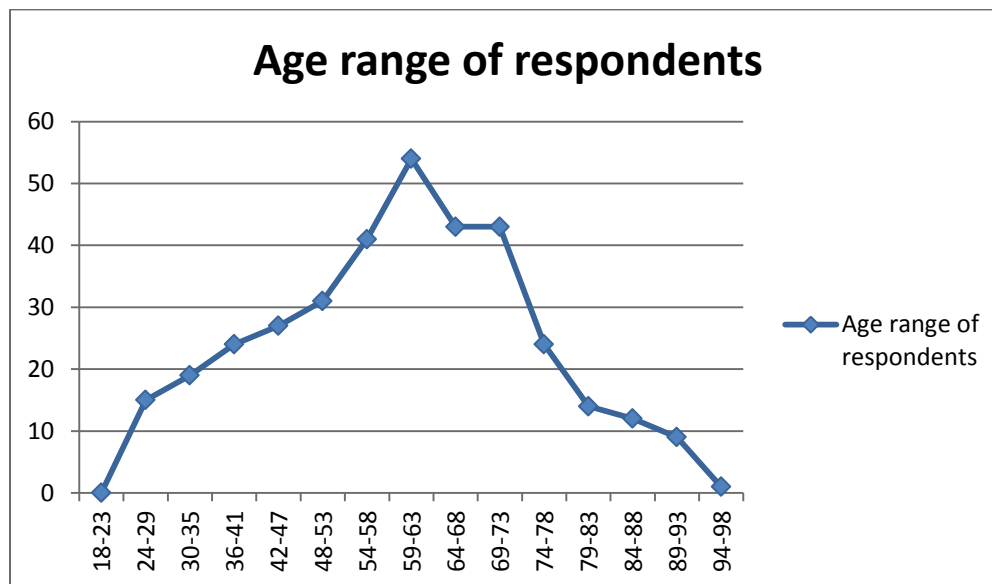
Basics of the response

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.

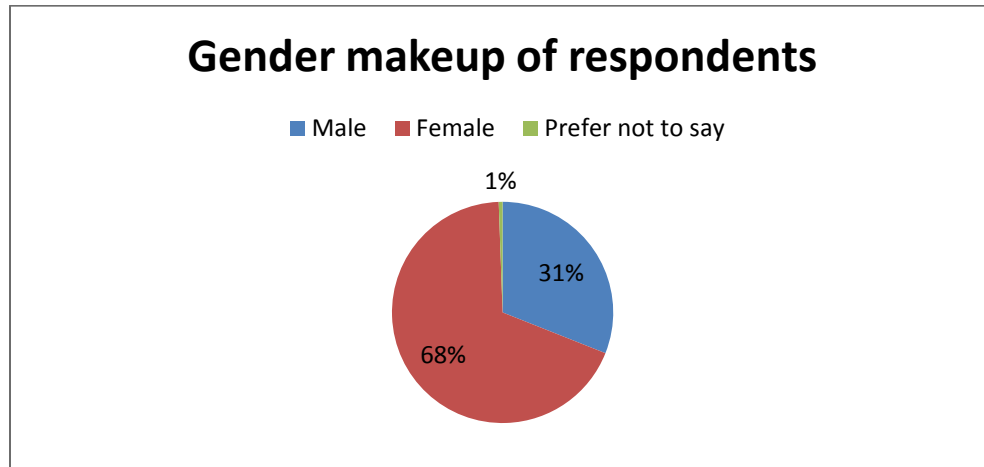
Table 4. Response rate by community

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 issues⁸ 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

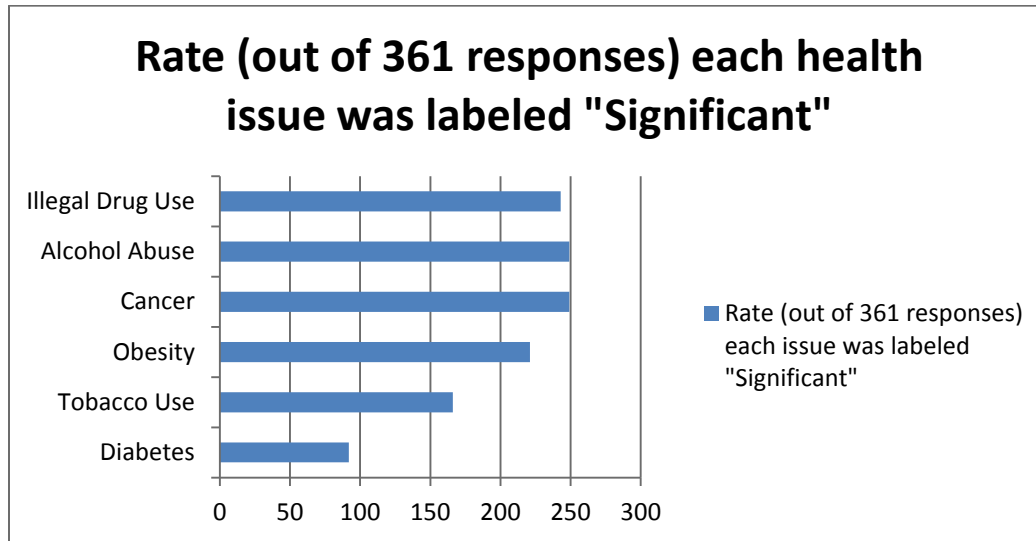


Figure 5. Top three most commonly reported "significant" health issues by CHA respondents

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

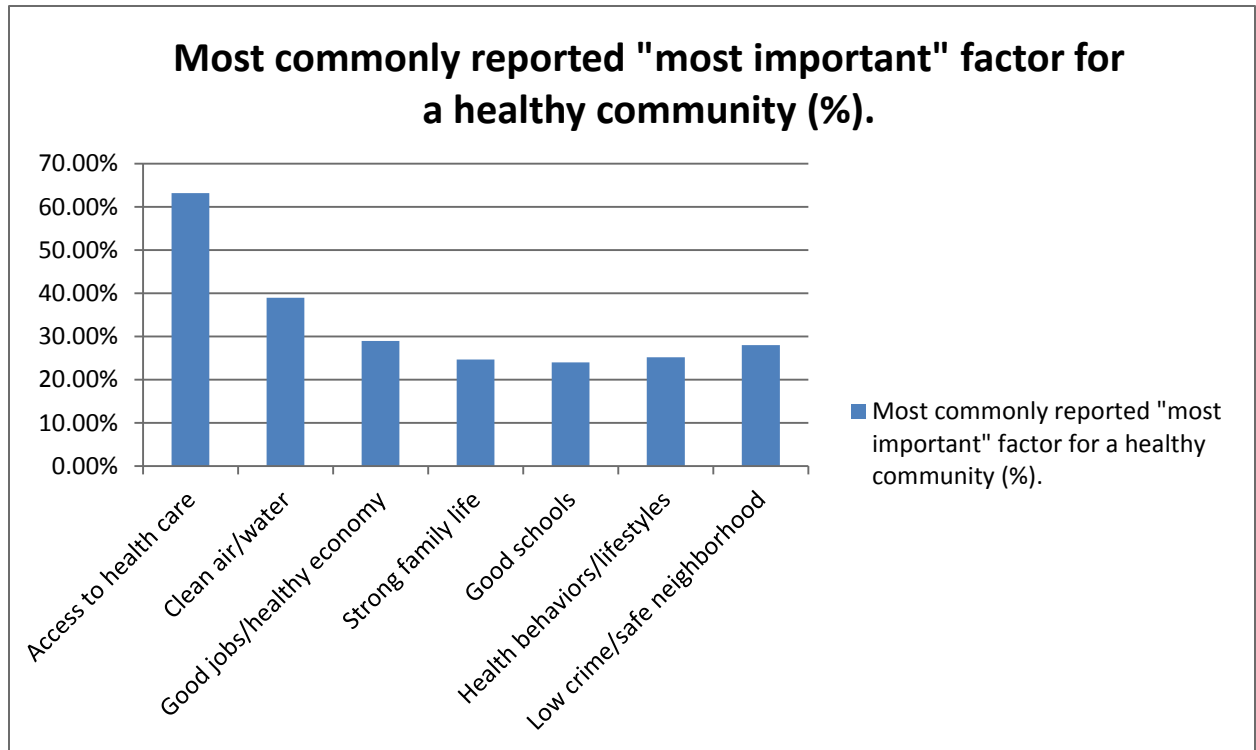
- 67% of respondents indicate it is one of their top three selections for most significant health issue.

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.⁶

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.

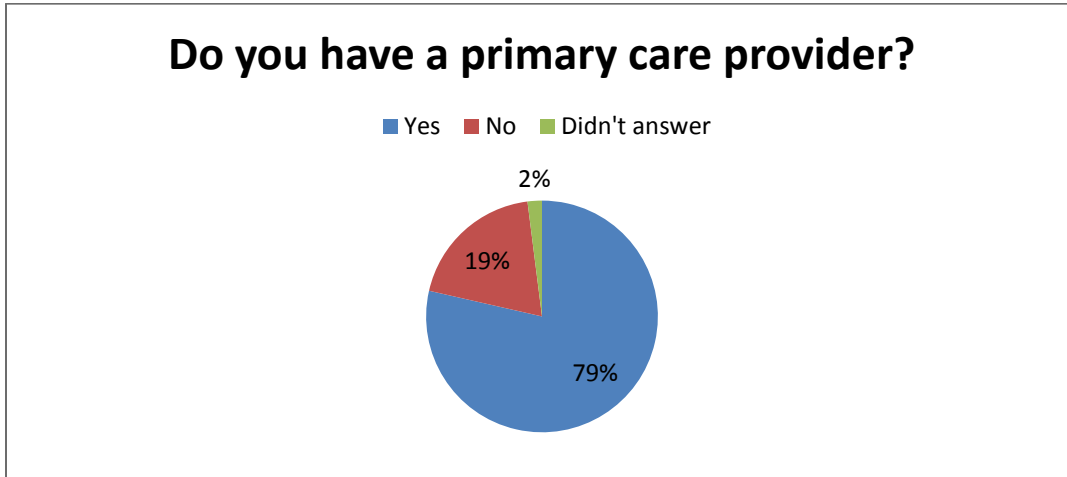
Table 5. List of potential classes/programs with number of respondents who indicate they would likely participate.

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

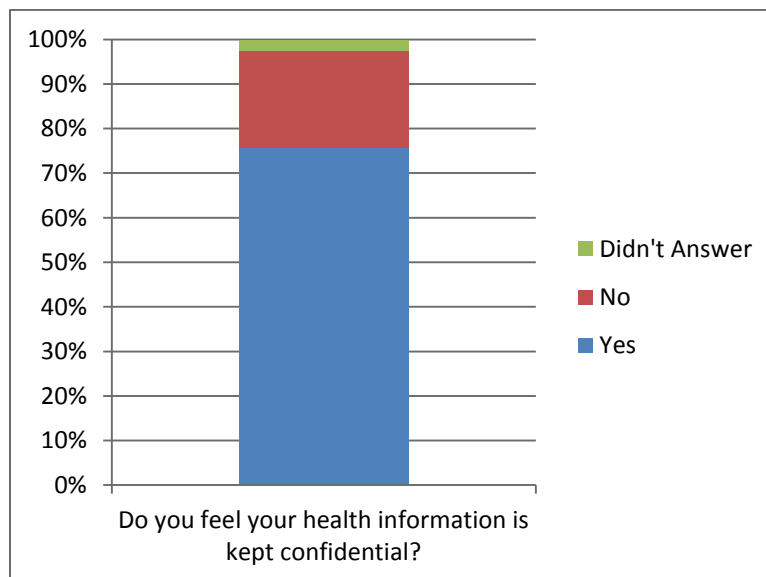
Of the individuals surveyed, 339 reported that they had some form of health insurance/health coverage (examples: Medicare, Medicaid, private insurance, Healthy Montana Kids, Indian Health Service coverage, etc.) Calculated, this is 93% of the respondents.

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%)**.

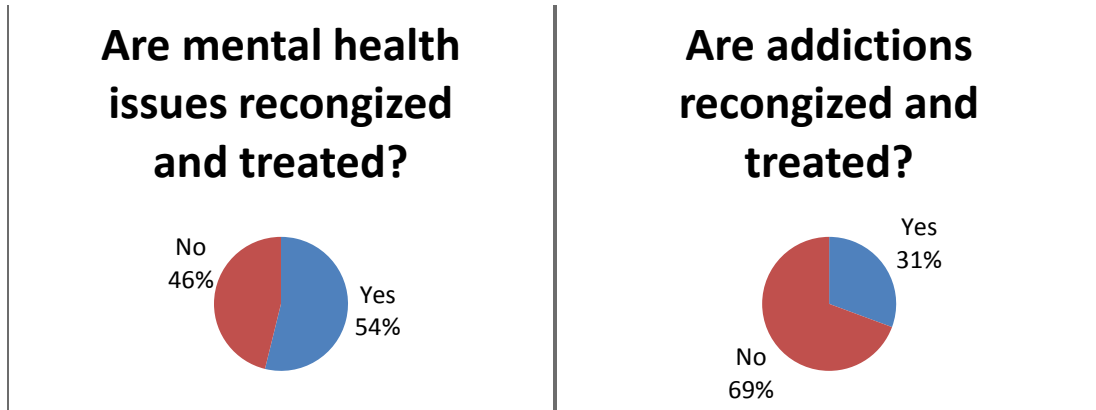
Confidentiality was assessed in the survey. Respondents were asked "Do you feel that your health information is kept confidential and protected when you receive health related services locally?" The responses are reflected in Chart 8.

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.

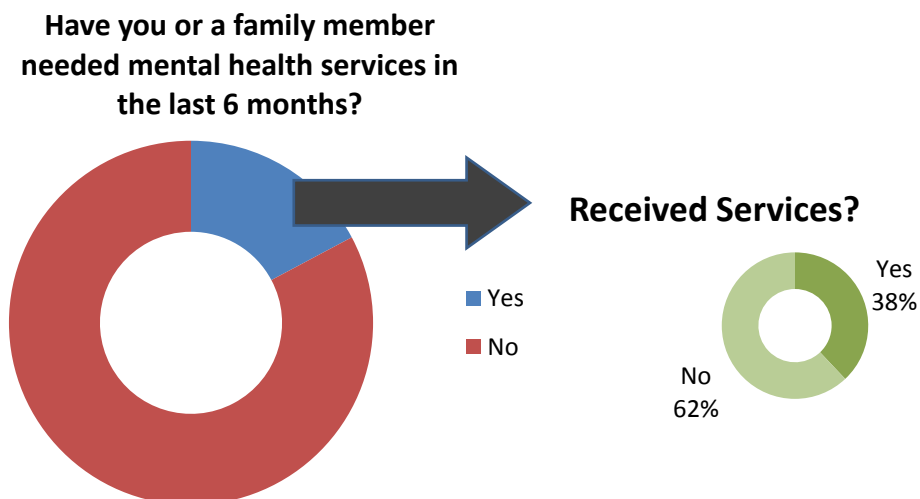
Chart 9. Proportion of respondents' indications whether mental health problems and addictions are recognized and treated in their respective communities



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.

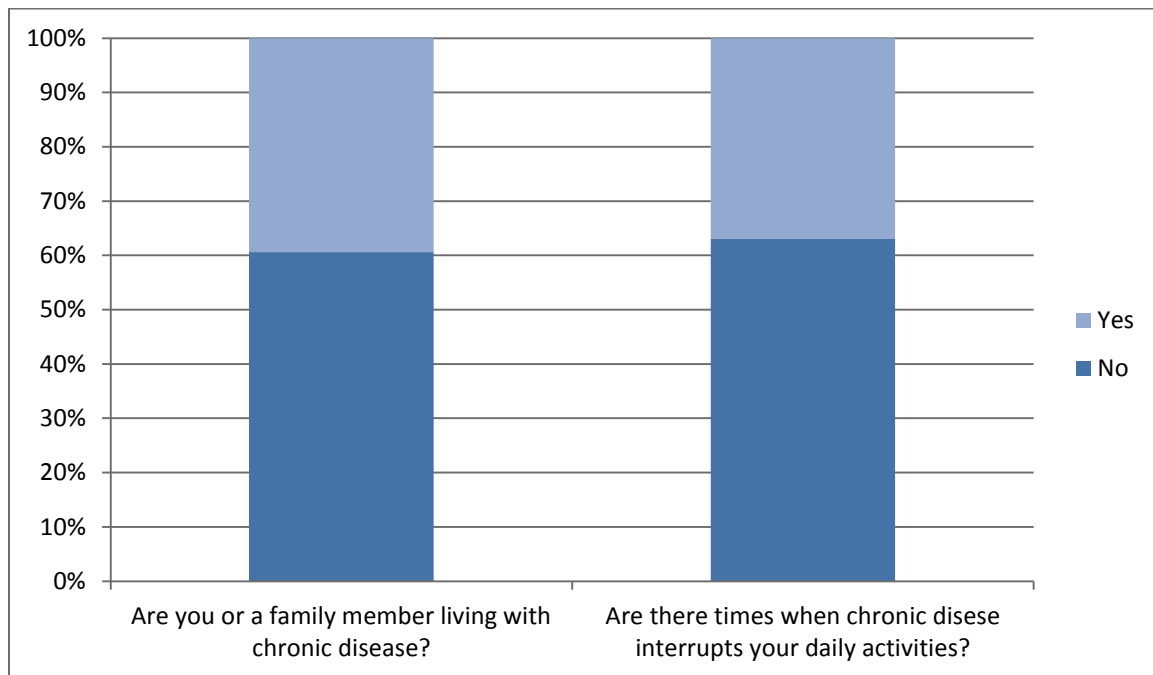
Chart 11. Need and reception of mental health services



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

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

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

³Community Health Profile, Blaine County, PHSD, MT DPHHS, www.dphhs.mt.gov

⁴County Health Rankings, 2017, Robert Wood Johnson Foundation,
www.countyhealthrankings.org

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

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

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

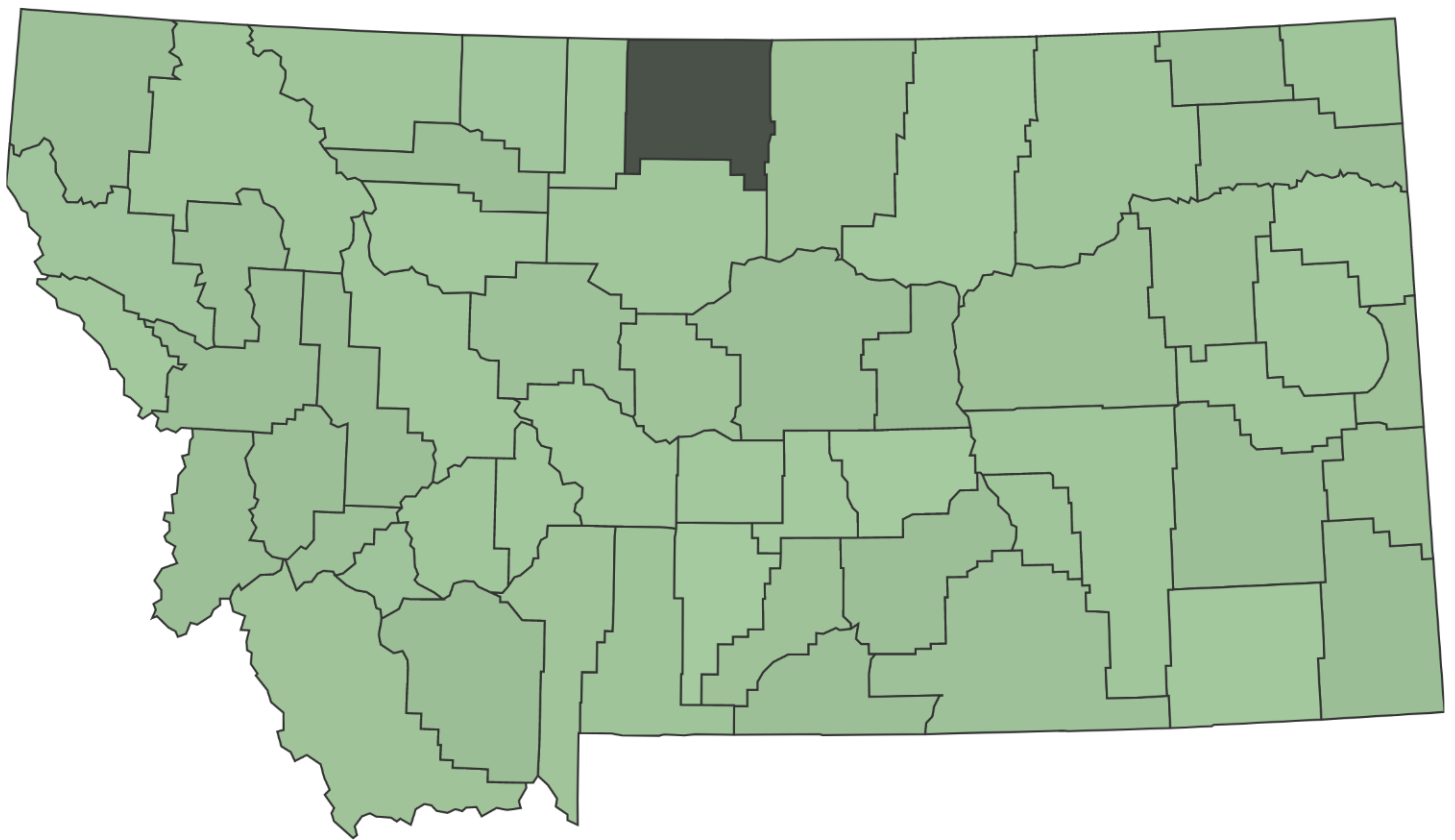
⁸State of the State's Health; A Report of the Health of Montanans, 2013, Montana Department of Health and Human Services,
<http://dphhs.mt.gov/Portals/85/SHIP/StateOfTheStatesHealth.pdf>

*"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?"

HILL COUNTY, MONTANA

COMMUNITY HEALTH NEEDS ASSESSMENT

2020



PREPARED BY THE HILL COUNTY HEALTH CONSORTIUM
DECEMBER 2020

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We acknowledge the many partners, stakeholders, and community members whose time, effort, and resources contribute to the work of the Hill County Health Consortium and the preparation of this assessment, including the following:

Bullhook Community Health Center
Havre Daily News
Havre Public Schools
HELP Committee and Boys & Girls Club of the Hi-Line
Hill County Board of Health
Hill County Commissioner
Hill County Extension Office
Hill County Health Department
Human Resource Development Council (HRDC District 4)
Local Emergency Preparedness Committee
Montana Department of Public Health and Human Services
Montana Healthcare Foundation
Montana State University-Northern
New Media Broadcasters, Inc.
Northern Montana Hospital
Office of Public Assistance
Rocky Boy Health Department
Salvation Army
Sanitarian/Planner
United Way
Youth Dynamics

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INTRODUCTION

EXECUTIVE SUMMARY

The 2020 Hill County Community Health Needs Assessment (CHNA) follows similar studies conducted in 2012, 2014, and 2017. A CHNA is a systematic, data-driven effort used to assess a community's health status and needs, determine factors that shape health outcomes, and identify community-based resources able to address the recognized needs. Non-profit hospitals, federally funded Community Health Centers, and accredited county health departments are required to complete a CHNA. In addition to meeting IRS, federal funding, and accreditation requirements, the goal of a CHNA is to provide information that communities use to collaboratively identify issues of greatest need and to feasibly commit resources to those areas, making the greatest possible impact through coordination and prioritization.

This assessment was led by the Hill County Health Consortium (HCHC), whose principal partners are the Hill County Health Department, Northern Montana Health Care, Bullhook Community Health Center, District 4 Human Resources Development Council, and HELP Committee and Boys & Girls Club of the Hi-Line. This assessment incorporates data from primary and secondary sources. Data was collected from Hill County residents through a survey instrument in June 2020, and employees of the Montana Department of Public Health and Human Services analyzed the results. Alongside key findings of these community survey results, a review of secondary county data and input from community stakeholders, health professionals, and human service organizations led to the prioritization of the following areas to be addressed in a subsequent Community Health Improvement Plan (CHIP): behavioral health, access to dental care, and obesity. Both this CHNA and the forthcoming CHIP are intended to be living documents, used and updated as is most strategic for the ongoing work in Hill County of ensuring healthy people in healthy communities.

CHNA METHODOLOGY

A Community Health Assessment Survey is conducted in Hill County every 3 years to evaluate the health status in the community and to help identify priority areas. The COVID-19 global pandemic disrupted all of life this year, including the HCHC's plans to implement the community survey using the Community Assessment for Public Health Emergency Response (CASPER) model that was successfully used in the previous planning cycle. Because the preventative measures in place at the time to stop the spread of COVID-19 made the in-person, house-to-house CASPER method impossible, the planning team shifted to administering the prepared community survey questionnaire (see Appendix A) online via SurveyMonkey.com. The consortium advertised the survey through traditional and social media and electronic mailing lists. Despite the mitigating circumstances, the 2020 community survey saw a 46% increase in the number of community participants from the 2017 CHNA survey.

Employees of the Montana Department of Public Health and Human Services analyzed the data collected from Hill County residents during the survey process that occurred in 2020. A total of 183 surveys were completed, and 6 were excluded from analysis as they were not Hill County residents. A total of 177 surveys, all completed by Hill County residents, were analyzed, and key findings from these results are presented elsewhere in this document.

There were several limitations to this survey that demonstrate the need for secondary data sources, which are in the data profiles presented in this document. Some limitations to the survey's applicability to the general population is that the respondents were disproportionately female, which means that males are underrepresented in this survey. 86.55% of respondents in this survey were female, however only 49.5% of Hill County Residents are female per U.S. Census Bureau 2019 American Community Survey 5-Year Estimates Data Profiles. In another example of disproportionate demographics, the race demographics of the survey do not reflect the reality of the county. 92.90% of survey respondents were White/not of Hispanic descent, and 5.92% of survey respondents were American Indian/Alaskan Native. In reality, 70.2% of Hill County residents are White/not of Hispanic descent, and 23.7% of Hill County residents are American Indian/Alaskan Native.

UNDERSTANDING SOCIAL DETERMINANTS OF HEALTH

Social determinants of health (SDOH) are the conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks. Conditions (e.g., social, economic, and physical) in these various environments and settings (e.g., school, church, workplace, and neighborhood) have been referred to as "place." In addition to the more material attributes of "place," the patterns of social engagement and sense of security and well-being are also affected by where people live. Resources that enhance quality of life can have a significant influence on population health outcomes. Examples of these resources include safe and affordable housing, access to education, public safety, availability of healthy foods, local emergency/health services, and environments free of life-threatening toxins. Understanding the relationship between how population groups experience "place" and the impact of "place" on health is fundamental to SDOH.

SDOH also contribute to wide health disparities and inequities. For example, people who don't have access to grocery stores with healthy foods are less likely to have good nutrition. That raises their risk of health conditions like heart disease, diabetes, and obesity — and even lowers life expectancy relative to people who do have access to healthy foods.

Just promoting healthy choices won't eliminate these and other health disparities. Instead, public health organizations and their partners in sectors like education, transportation, and housing need to take action to improve the conditions in people's environments.

Social Determinants of Health

Examples of SDOH include:

- Availability of resources to meet daily needs (e.g., safe housing, local food markets)
- Access to educational, economic, and job opportunities
- Access to quality health care services
- Access to quality education and job training
- Availability of community-based resources in support of community living
- Opportunities for recreational and leisure-time activities
- Public transportation options
- Public safety
- Social support
- Social norms and attitudes (e.g., discrimination, racism, distrust of government)
- Exposure to crime, violence, and social disorder (e.g., presence of trash, lack of cooperation in a community)
- Socioeconomic conditions (e.g., concentrated poverty and the stressful conditions that accompany it)
- Residential segregation
- Language/literacy
- Access to mass media and emerging technologies (e.g., cell phones, internet)
- Opportunities for cultural expression

5 Domains of SDOH



Sources: *Healthy People 2030*, U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Retrieved November 2020 from <https://health.gov/healthypeople/objectives-and-data/social-determinants-health>.

Healthy People 2020, U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Retrieved November 2020 from <https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health>

By working to establish policies that positively influence social and economic conditions and those that support changes in individual behavior, we can improve health for large numbers of people in ways that can be sustained over time. Improving the conditions in which we live, learn, work, and play and the quality of our relationships will create a healthier population, society, and workforce.

This CHNA shares the hope of one of the five overarching goals of Healthy People 2030: “To create social, physical, and economic environments that promote attaining the full potential for health and well-being for all.”¹

¹ Language and information in this section taken from: “Social Determinants of Health,” Healthy People 2020, U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion, retrieved Nov. 2020 from <https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health>; and “Social Determinants of Health,” Healthy People 2030, U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion, retrieved Nov. 2020 from <https://health.gov/healthypeople/objectives-and-data/social-determinants-health>.

ABOUT HILL COUNTY

Hill County is located in north-central Montana on the “Hi-Line,” a region south of the U.S.-Canada border whose foundational infrastructure is the main line of the BNSF Railway and U.S. Highway 2. The county covers about 2,898.6 square miles of land and water (2019 U.S. Census Bureau), with major features including Beaver Creek Park, the nation’s largest county park, and sections of the Milk River Project, including the Fresno Dam and Reservoir. Hill County borders Canada, with the provinces of Alberta and Saskatchewan to the north. Adjacent counties are Blaine County to the east, Chouteau County to the south, and Liberty County to the west. Part of Hill County is within Rocky Boy’s Reservation, which also extends into Chouteau County.

Hill County has a population of 16,436 (2019 U.S. Census Bureau estimate). The county seat and most populous city is Havre, with an estimated population of 9,791 (2019 U.S. Census Bureau estimate). Other communities in the county include Box Elder, Gildford, Hingham, Kremlin, Inverness, Rocky Boy, Rudyard, and the East End, Gildford, and Hilldale Hutterite Colonies.

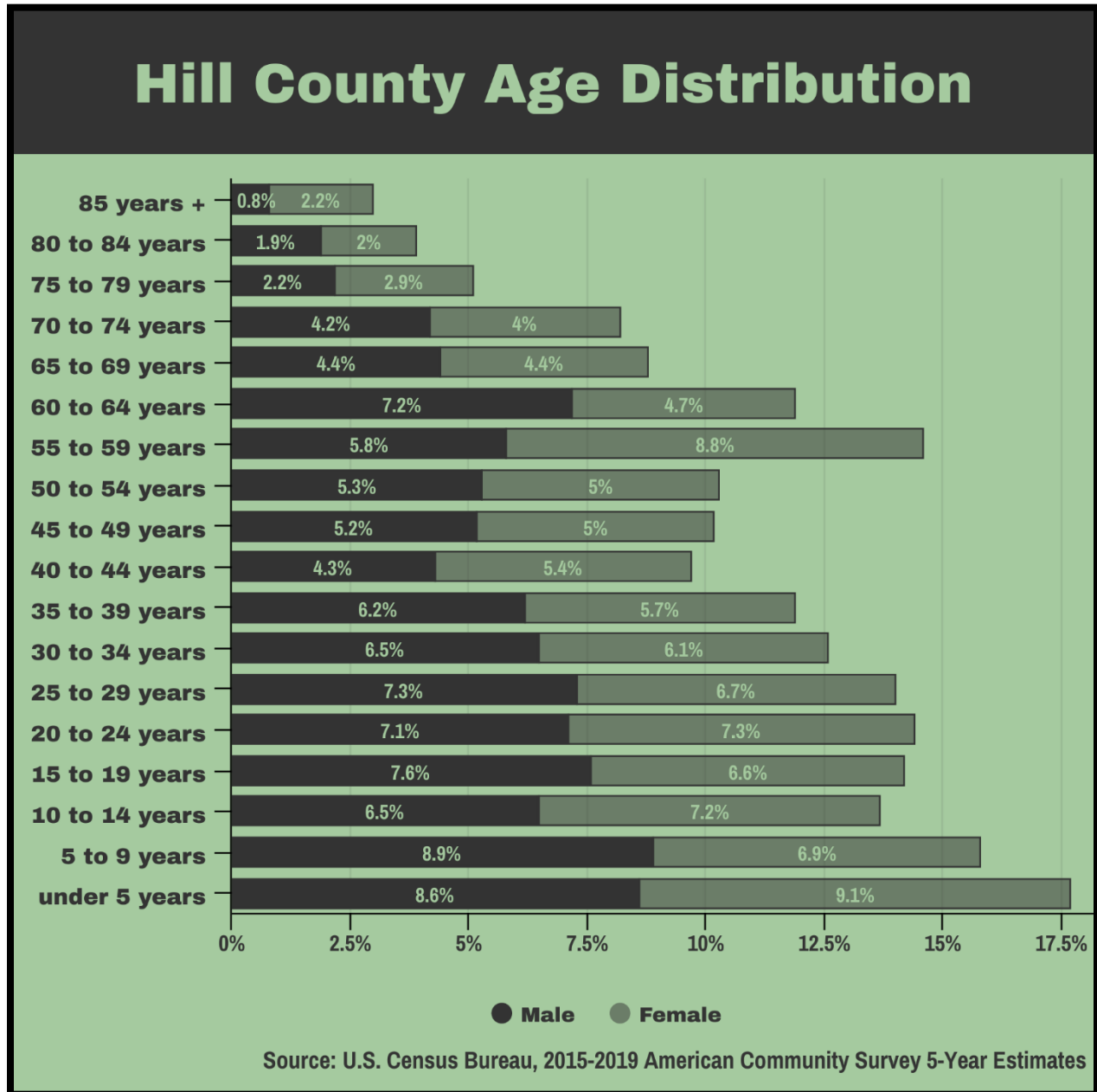
According to the U.S. Department of Health and Human Services Health Resources and Services Administration, Hill County is designated as a Health Professional Shortage Area (HPSA) for Primary Care, Dental Care, and Mental Health Care.

DATA PROFILE OF HILL COUNTY

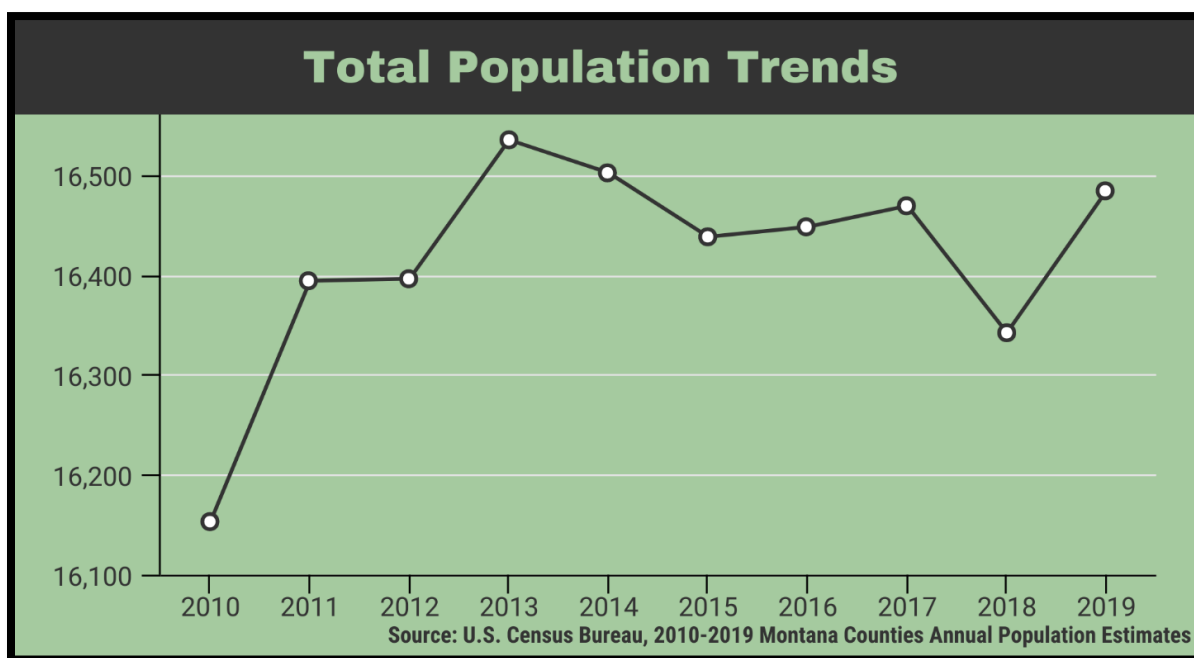
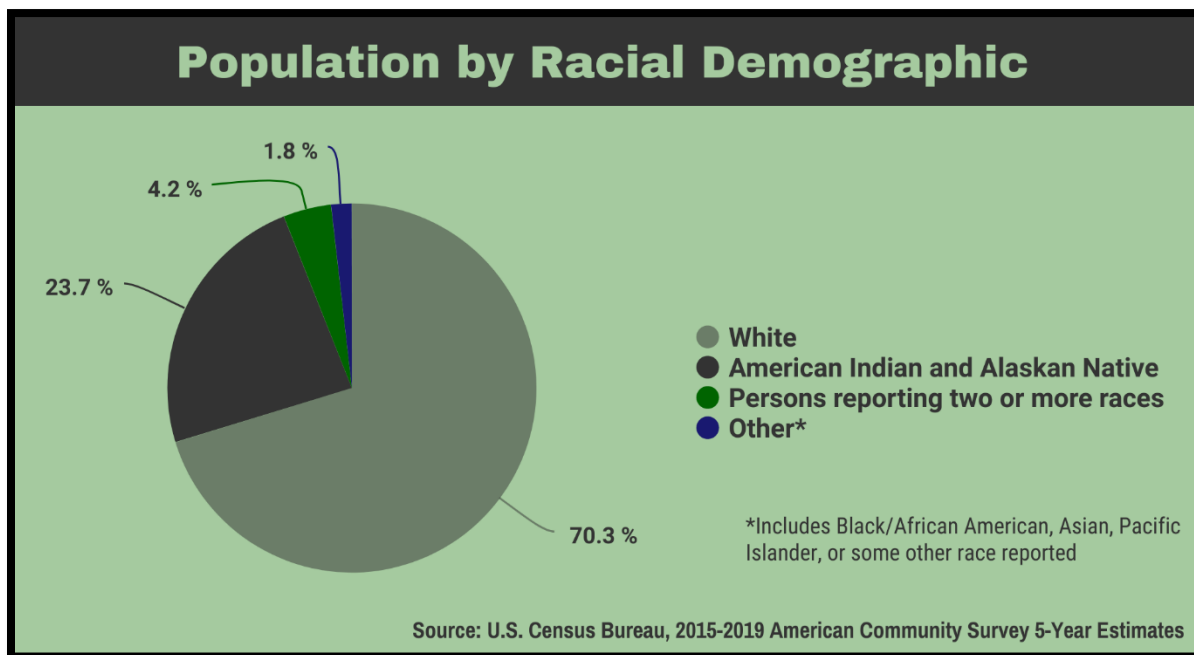
The tables and related descriptions in this section provide a profile of Hill County based on available secondary data. Except where otherwise noted, all data and descriptions are from the U.S. Census Bureau’s 2015-2019 American Community Survey 5-Year Estimates dataset and community profile narratives.

POPULATION PROFILE

Hill County has a total population of 16,436, with 8,129 (49.5%) females and 8,307 (50.5%) males. The median age is 34.3 years. An estimated 27.7% of the population is under 18 years, 34.4% is 18 to 44 years, 23.4% is 45 to 64 years, and 14.5% is 65 years and older.

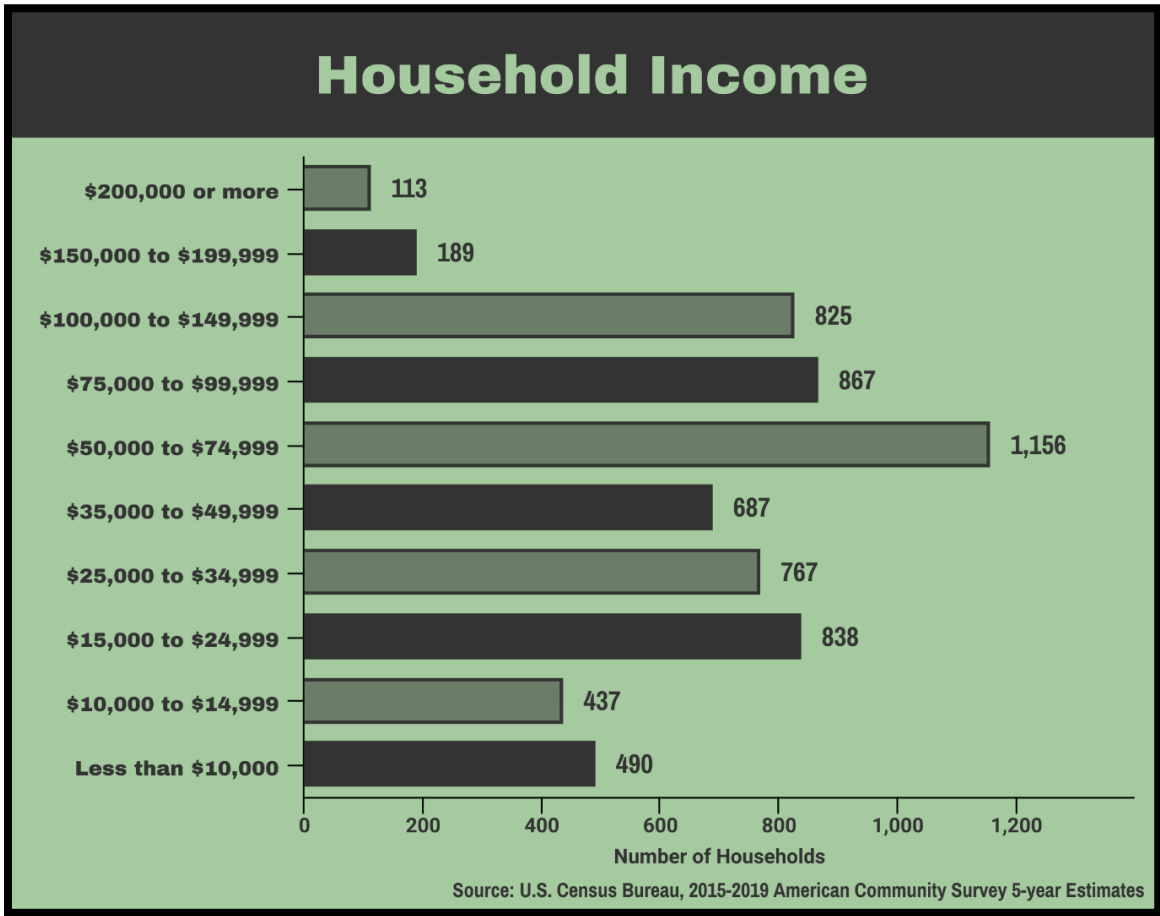
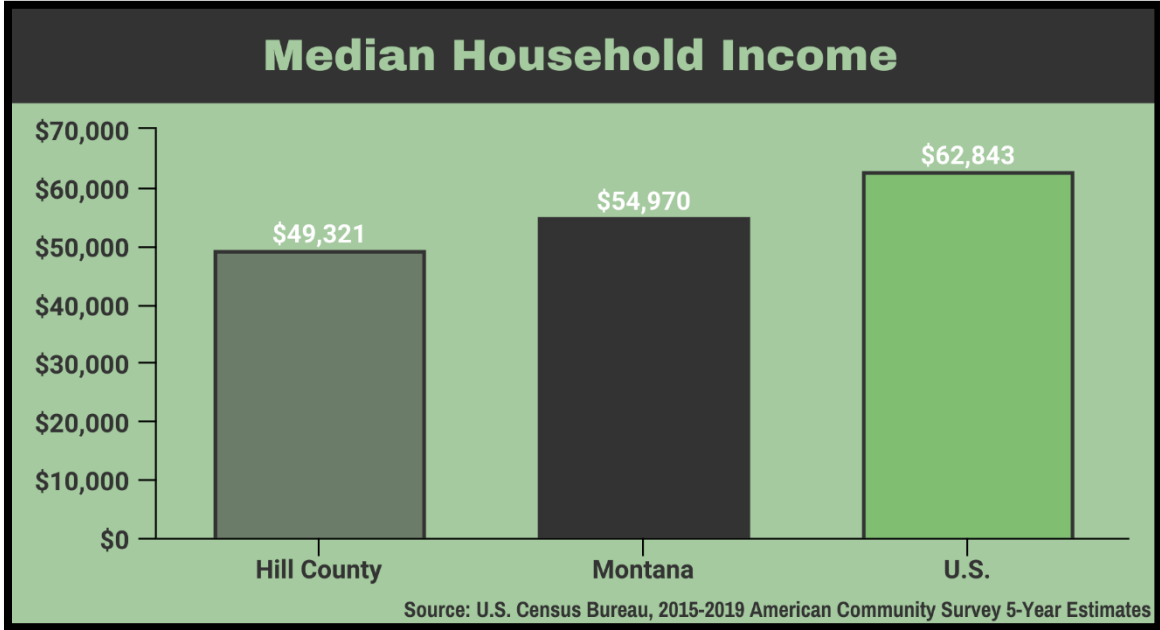


For people reporting one race alone, 70.2% are White; 0.4% are Black or African American; 23.7% are American Indian and Alaska Native; 0.4% are Asian; 0.0% are Native Hawaiian and Other Pacific Islander, and 1.0% are some other race. An estimated 4.2% reported two or more races. An estimated 3.8% of the people in Hill County are Hispanic (people of Hispanic origin may be of any race). An estimated 69.2% of the people are White non-Hispanic.

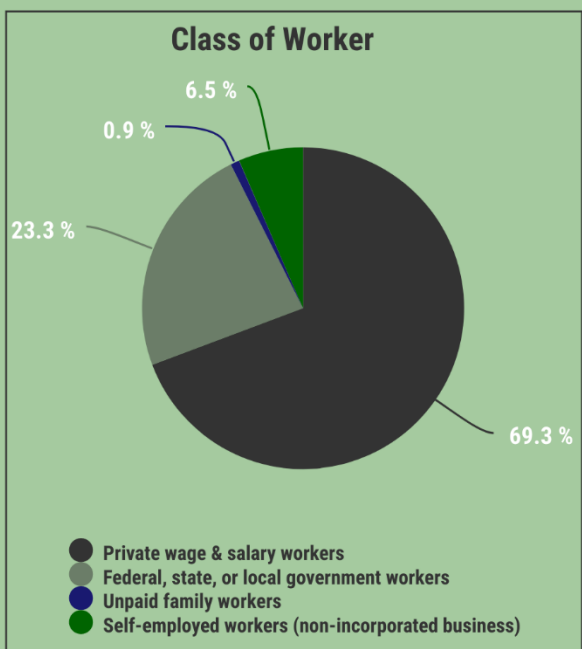
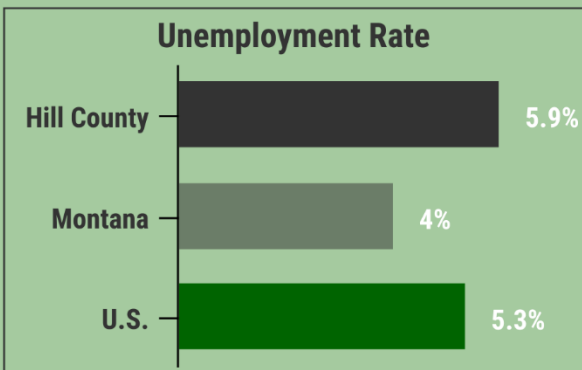


SOCIOECONOMIC PROFILE

Median household income for Hill County is \$49,321. Median earnings for full-time year-round workers is \$41,704. Male full-time year-round workers have median earnings of \$47,341, whereas female full-time year-round workers have median earnings of \$35,828.



Employment in Hill County



Industry	Workforce
Agriculture, forestry, fishing and hunting, and mining	7.1%
Construction	6.3%
Manufacturing	1.7%
Wholesale trade	1.5%
Retail trade	11.8%
Transportation and warehousing, and utilities	8.4%
Information	1.4%
Finance and insurance, and real estate and rental and leasing	4.6%
Professional, scientific, & management, and administrative & waste management services	6.7%
Educational services, and health care and social assistance	27.5%
Arts, entertainment, and recreation, and accommodation, and food services	9.7%
Other Services, except public administration	6.9%
Public administration	6.5%



78.7% of workers drive alone to work
 11.2% of workers carpool
 Average commute to work: 12.3 minutes



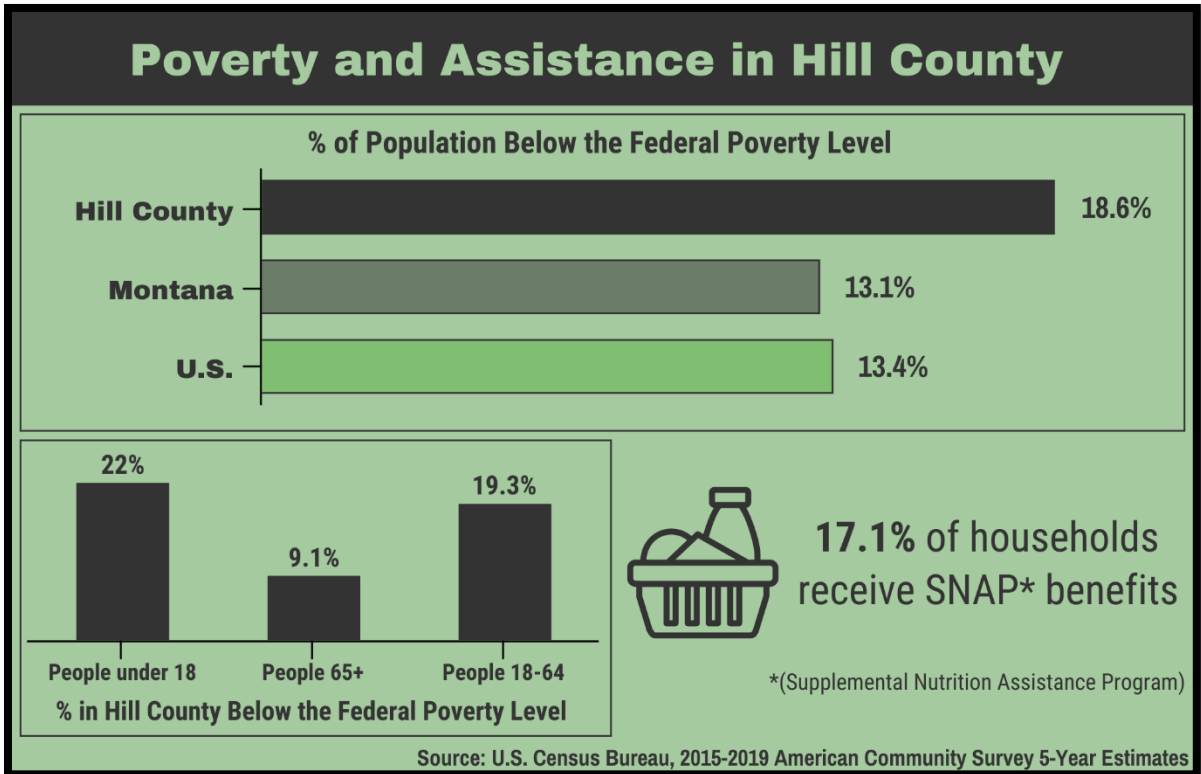
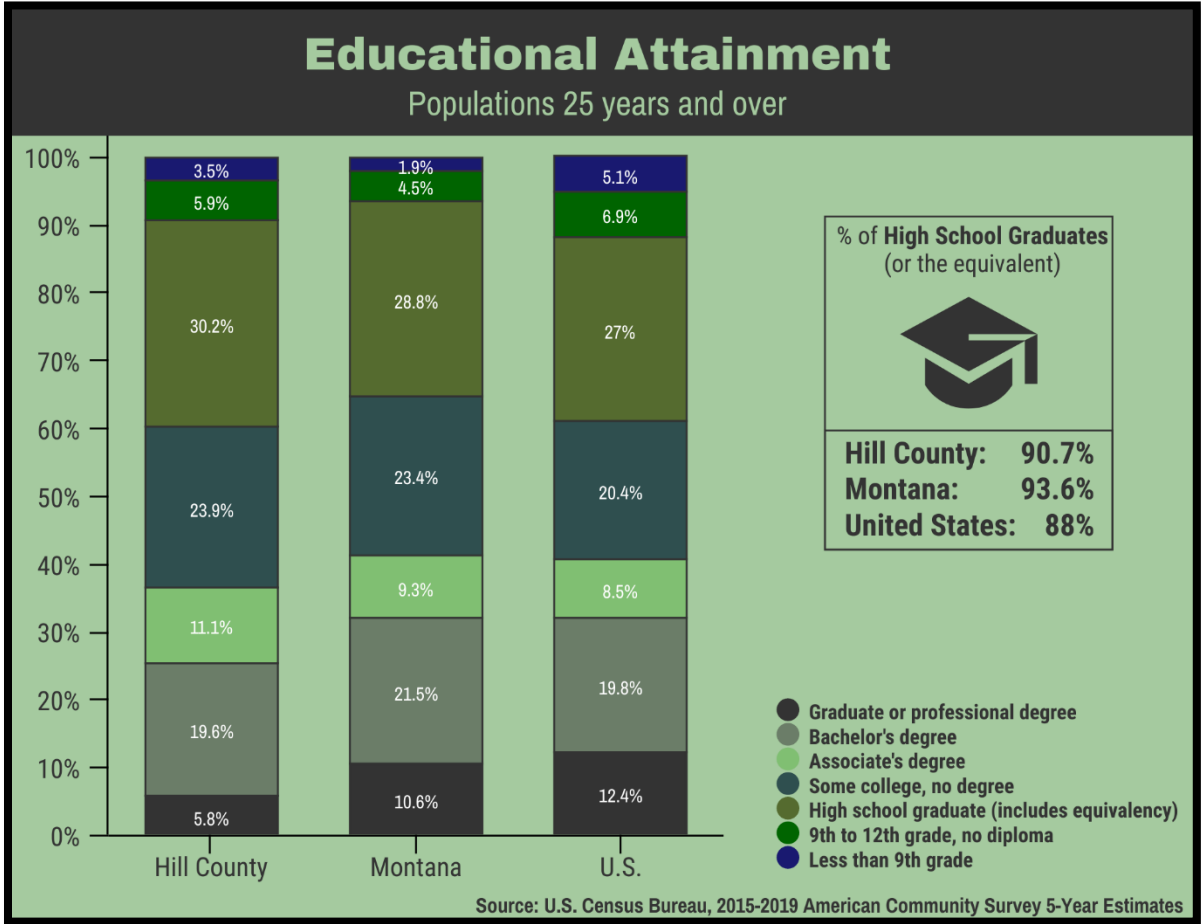
5.5% walk to work

3.7% work at home

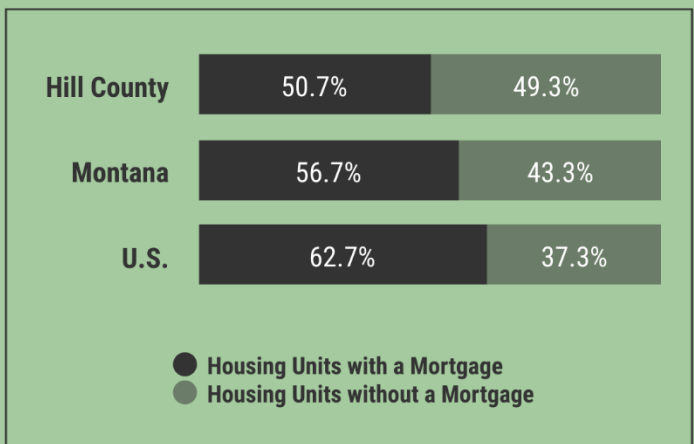
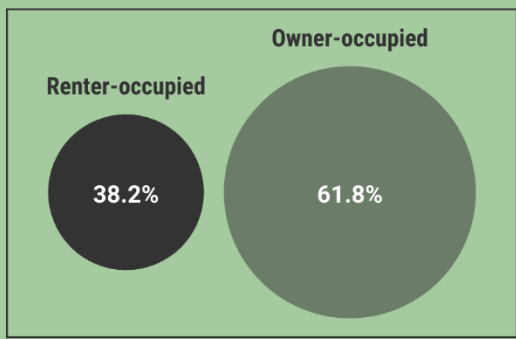
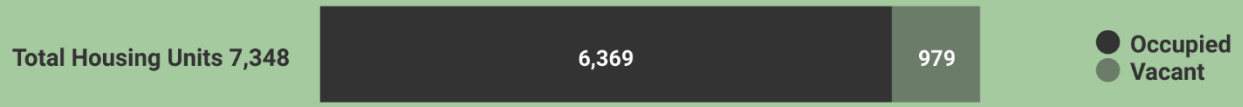


Civilian employed population 16 years and over	Number	Percent
Management, business, sciences, and arts occupations	2,637	37.0
Service occupations	1,240	17.4
Sales and office occupations	1,304	18.3
Natural resources, construction, and maintenance occupations	896	12.6
Production, transportation, and material moving occupations	1,042	14.6

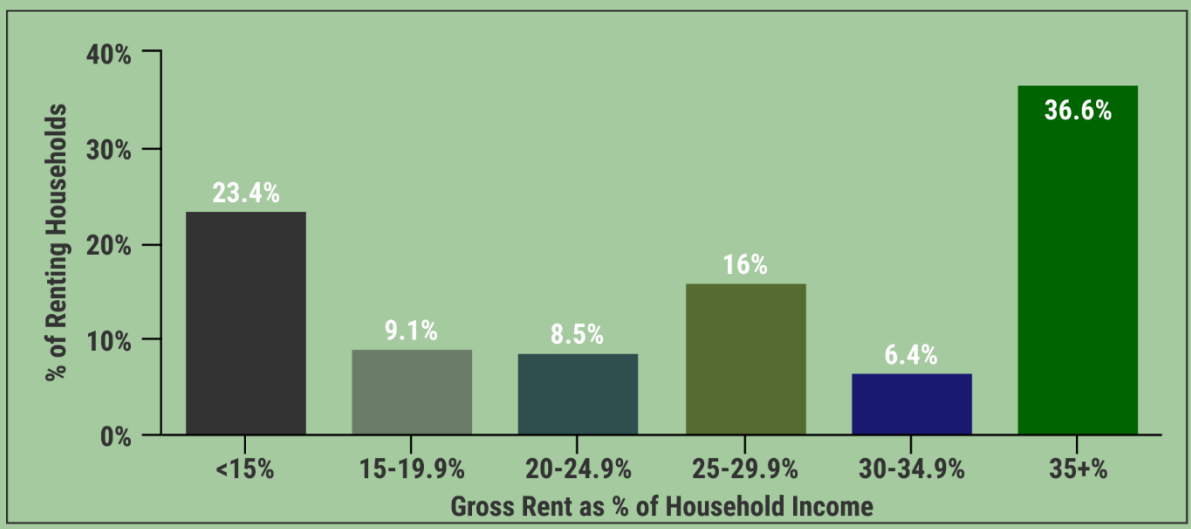
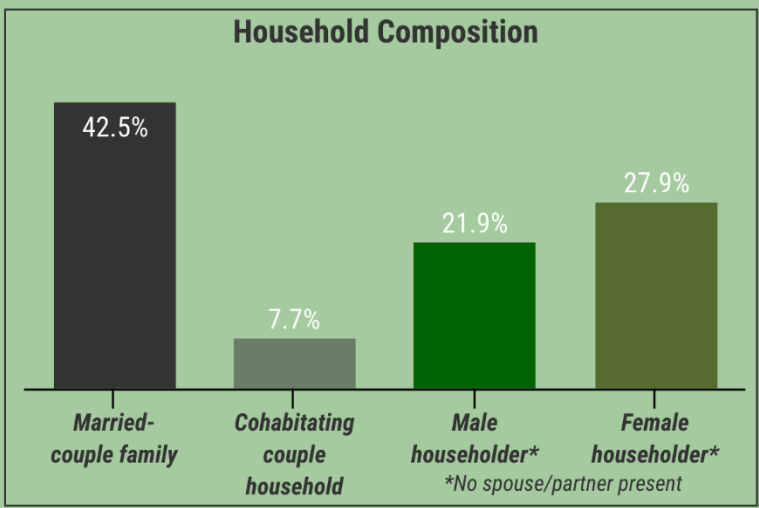
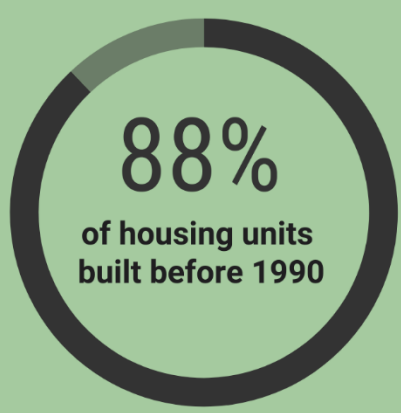
Source: U.S. Census Bureau, 2015-2019 American Community Survey 5-Year Estimates



Housing in Hill County



Median owned home value: \$143,600
 Median monthly rent: \$615
 Average household size: 2.51

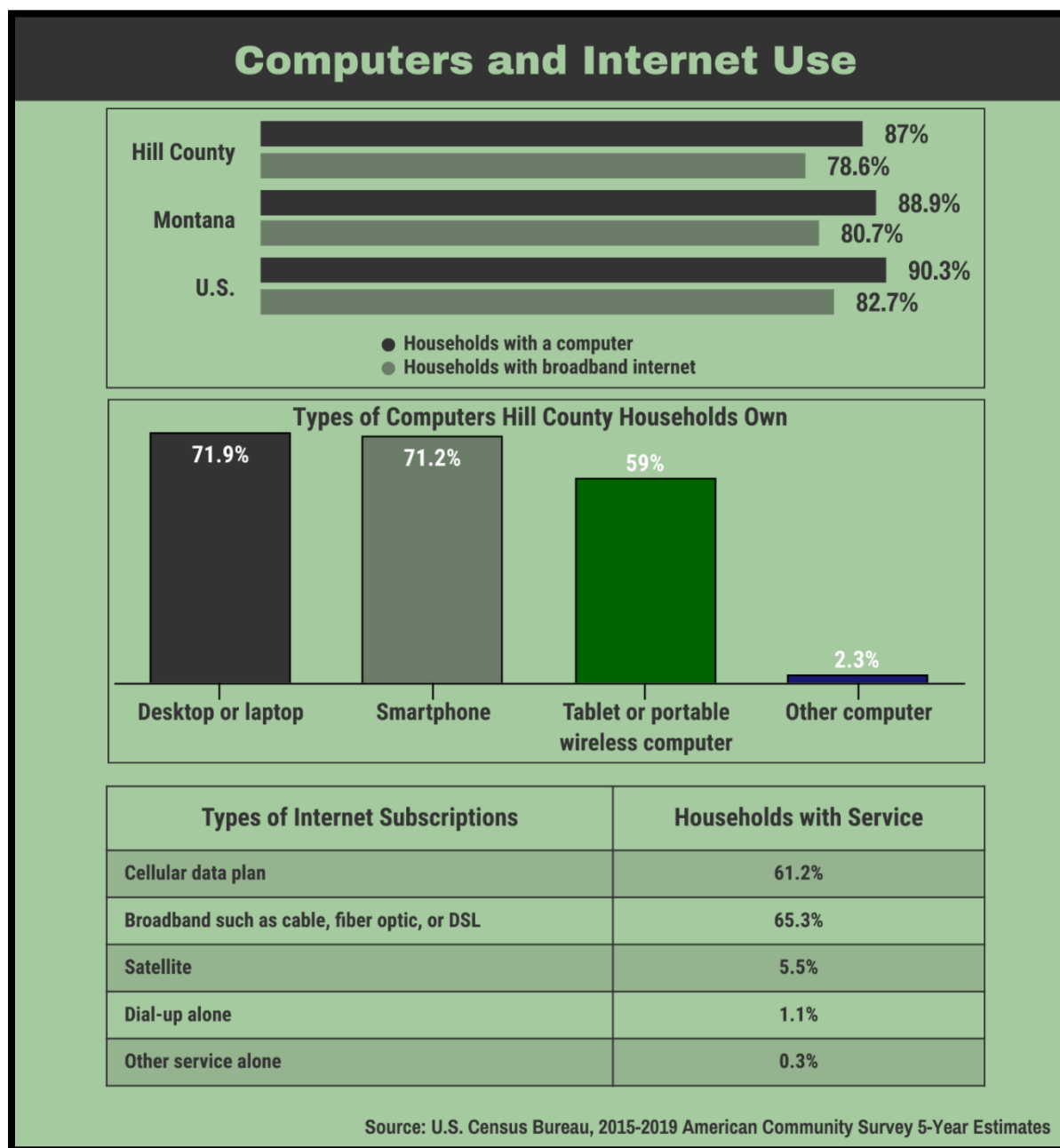


Source: U.S. Census Bureau, 2015-2019 American Community Survey 5-Year Estimates

Of owner-occupied households, 50.7% have a mortgage. 49.3% own their houses “free and clear,” that is, without a mortgage or loan on the house. The median monthly housing costs for owners with a mortgage was \$1,228, and for owners without a mortgage it was \$390.

For renter-occupied houses, the median gross rent for Hill County is \$615. Gross rent includes the monthly contract rent and any monthly payments made for electricity, gas, water and sewer, and any other fuels to heat the house.

Households that pay 30% or more of their income on housing costs are considered cost-burdened. In 2015-2019, cost-burdened households in Hill County, Montana accounted for 25.3% of owners with a mortgage, 9.0% of owners without a mortgage, and 43.0% of renters.



BEHAVIORAL AND HEALTH PROFILE

STI Incidence Rates (per 100,000)

	Chlamydia	Gonorrhea	Syphilis
Hill County	1032.6	267.3	6.1
Montana	468.1	112.4	4.3
U.S.	539.9	179.1	10.8

Source: U.S. Centers for Disease Control and Prevention, 2018 NCHHSTP AtlasPlus

Violence and Injury Rates

Violent Crime Rate*
per 100,000

Hill County 467
Montana 346
U.S. 386

*The FBI Uniform Crime Reporting Index considers violent crime to be composed of: murder and nonnegligent manslaughter, rape, robbery, and aggravated assault. Violent crimes are defined as those offenses that involve force or the threat of force.

Source: 2020 County Health Rankings

Age-Adjusted Mortality Rates per 100,000	Hill County	Montana	U.S.
Injury-related Deaths	84.0	85.5	63.1
Unintentional Injury Deaths	61.2	53.9	42.7
Firearm-related Deaths	9.8	17.7	10.9
Motor Vehicle Deaths	21.8	20.1	11.7
Suicide	16.8	24.4	13.1

Source: CDC, Web-based Injury Statistics Query and Reporting System (WISQARS), 2010-2018 Annual Averages

Heart Disease (per 100,000)

	Hill County	Montana	U.S.
Mortality Rate*	407.3	305.5	320

*2016-2018 age-adjusted rates

Risk Factors: For adults in Hill County ages 20+, **38.3%** are obese and **26.7%** report they are physically inactive in their leisure time

Source: U.S. Centers for Disease Control and Prevention, Interactive Atlas of Heart Disease and Stroke

Cancer Rates (per 100,000)

	Hill County	Montana	U.S.
Incidence Rate*	415.2	459.7	449
Mortality Rate*	172.4	154.2	158

*2013-2017 age-adjusted rates, all cancers

Source: U.S. Cancer Statistics Working Group, CDC and National Cancer Institute, 2020

Diabetes

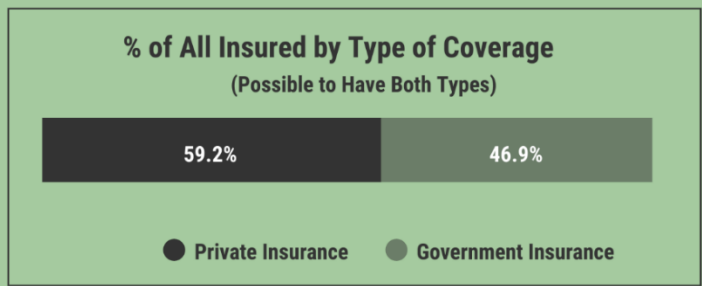
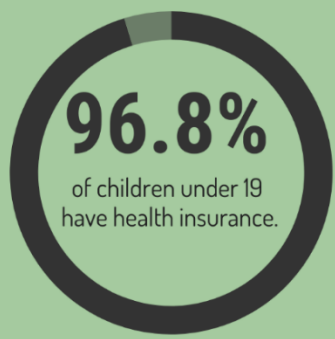
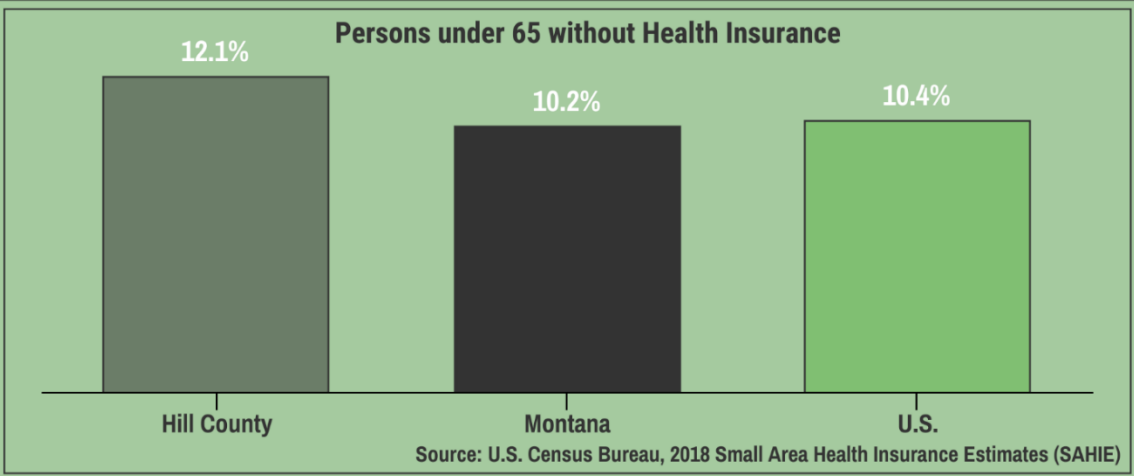
	Hill County	Montana	U.S.
Adults with Diabetes	10.1%	6.9%	8.5%

2017 age-adjusted rates (Hill, U.S.);
2016 age-adjusted rate (Montana)

Risk Factors: For adults in Hill County ages 20+, **38.3%** are obese and **26.7%** report they are physically inactive in their leisure time

Source: U.S. Centers for Disease Control and Prevention, Interactive U.S. Diabetes Surveillance System Data

Health Insurance in Hill County



Source: U.S. Census Bureau, 2015-2019 American Community Survey 5-Year Estimates

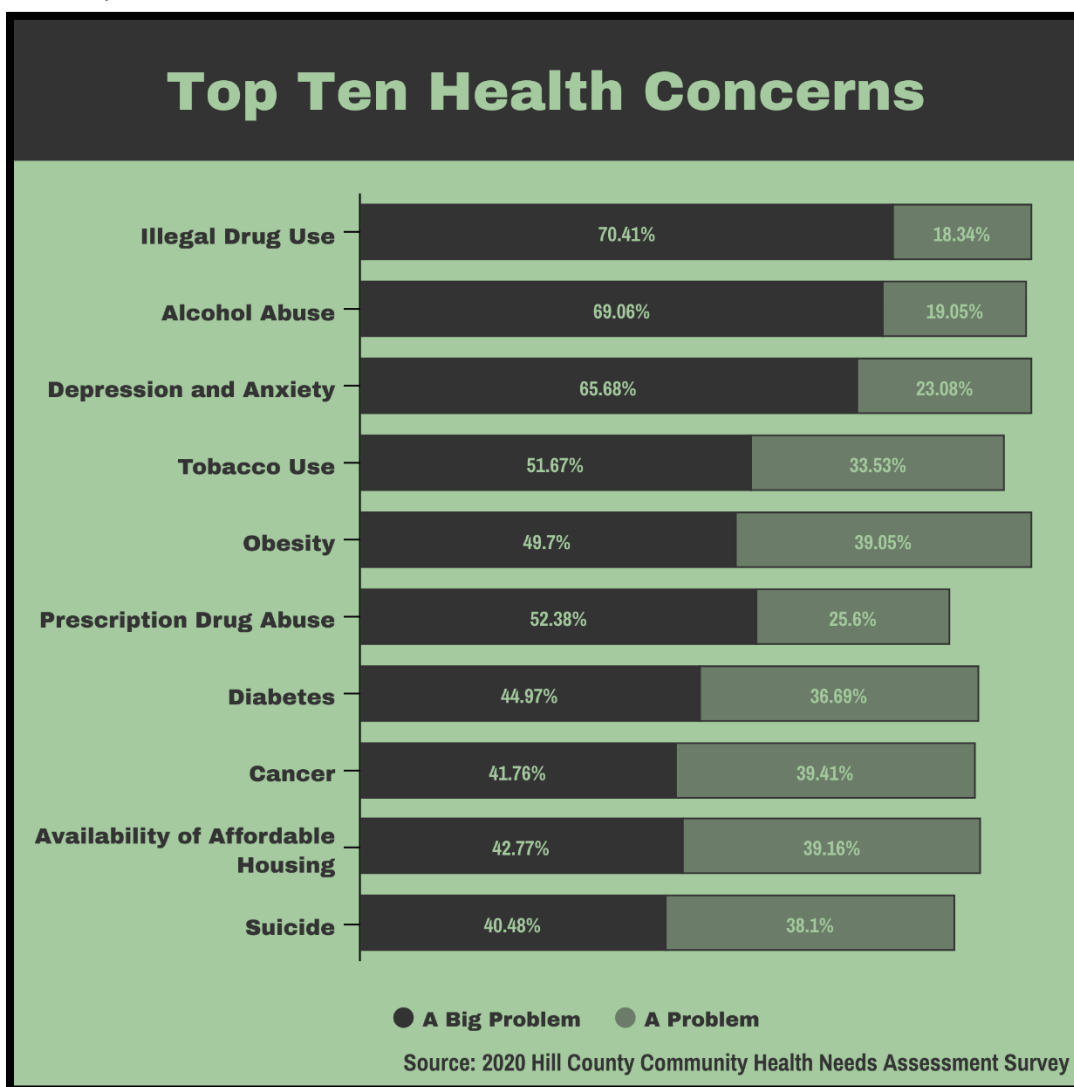
KEY FINDINGS AND AREAS OF OPPORTUNITY

KEY FINDINGS

The following top ten health issues were drawn from the survey, asking the community, “Using the following list, for each potential problem, please tell us if this is not a problem, a problem, a big problem, or don’t know.” Weighting these responses, “a big problem” carried a weight of 2, “a problem” carried a weight of 1, and “not a problem” and “don’t know” carried a weight of 0.

The community sees the following as the top ten health concerns in Hill County based on the perception of “a problem” and “a big problem”:

1. Illegal Drug Use
2. Alcohol Abuse
3. Depression and anxiety
4. Tobacco Use
5. Obesity
6. Prescription Drug Abuse
7. Diabetes
8. Cancer
9. Availability of Affordable Housing
10. Suicide



Illegal Drug Use (meth, heroin, marijuana, etc.)

- 88.75% of survey respondents identified illegal drug use as “a problem” or “a big problem”
 - 18.34% identified illegal drug use as “a problem”
 - 70.41% identified illegal drug use as “a big problem”
- In 2019, drug abuse violations comprised 11% of all adult arrests. 63% of these arrests were male and 37% were female. (Hill County Sheriff’s Office NIBRS)
- In 2019, the crude rate for emergency department encounters in Hill County for drug overdoses (defined as ICD-10 codes T36-T50 “Poisoning by drugs, medicaments and biological substances” and F10-F19 “Mental and behavioral disorders due to psychoactive substance use”) was 3,882.55 per 100,000 (MT IBIS)

Alcohol Abuse

- 88.1% of survey respondents identified alcohol abuse as “a problem” or “a big problem”
 - 19.05% identified alcohol abuse as “a problem”
 - 69.06% identified alcohol abuse as “a big problem”
- Excessive drinking rate is 23% (percentage of adults reporting binge or heaving drinking) (County Health Rankings 2020); Montana’s excessive drinking rate is 21%
- Alcohol-impaired driving death rate is 43% (percent of driving deaths with alcohol involvement) (County Health Rankings 2020)

Depression and Anxiety

- 88.76% of survey respondents identified Depression and Anxiety as “a problem” or “a big problem”
 - 23.08 % identified depression and anxiety as “a problem”
 - 65.68 % identified depression and anxiety as “a big problem”
- 25.98% of those surveyed reported a “fair” or “poor” overall mental health
- Residents reported an age-adjusted average of 4.1 poor mental health days (mentally unhealthy days) in the past 30 days (County Health Rankings 2020)

Tobacco Use

- 85.29% of survey respondents identified tobacco use as “a problem” or “a big problem”
 - 33.53% identified tobacco use as “a problem”
 - 51.67% identified alcohol abuse as “a big problem”
- 14.7% of survey respondents reported smoking “some days” or “every day”
- 23% of Hill County residents report smoking (County Health Rankings 2020)

Obesity

- 88.75% of survey respondents identified obesity as “a problem” or “a big problem”
 - 39.05% identified obesity as “a problem”
 - 49.70% identified obesity as “a big problem”
- Adult obesity (percentage of the adult population age 20 and older that reports a body mass index (BMI) greater than or equal to 30kg/m²) is 38% (County Health Rankings 2020)

Prescription Drug Use

- 77.98 % of survey respondents identified prescription drug use as “a problem” or “a big problem”
 - 25.60% identified prescription drug use as “a problem”
 - 52.38% identified prescription drug use as “a big problem”
- In 2018, the opioid dispensing rate in Hill County was 42 per 100 people (CDC 2018)

Diabetes

- 81.66% of survey respondents identified diabetes as “a problem” or “a big problem”
 - 36.69% identified diabetes as “a problem”
 - 44.97% identified diabetes as “a big problem”
- Diabetes prevalence among adults was 10.1% in 2017 (Interactive U.S. Diabetes Surveillance System)

Cancer

- 81.17 % of survey respondents identified cancer as “a problem” or “a big problem”
 - 39.41 % identified cancer as “a problem”
 - 41.76% identified cancer as “a big problem”
- Cancer incidence rate for all cancers from 2013-2017 was 415.2 (annual average, age-adjusted rate of cases per 100,000 people) (U.S. Cancer Statistics Working Group)
- Cancer mortality rates for all cancers from 2013-2017 was 172.4 (annual average, age-adjusted rate of cases per 100,000 people) (U.S. Cancer Statistics Working Group)

Availability of Affordable Housing

- 81.93% of survey respondents identified availability of affordable housing as “a problem” or “a big problem”
 - 39.16% identified availability of affordable housing as “a problem”
 - 42.77% identified availability of affordable housing as “a big problem”

- 13% of homes reported severe housing problems (households with at least 1 of 4 housing problems: overcrowding, high housing costs, lack of kitchen facilities, or lack of plumbing facilities) (County Health Rankings 2020)

Suicide

- 78.58% of survey respondents identified suicide as “a problem” or “a big problem”
 - 38.10 % identified suicide as “a problem”
 - 40.48 % identified suicide as “a big problem”
- Suicide rate from 1999-2018 per 100,000 people: 17.5 for Hill County and 22.3 for MT (CDC Wonder)
- Intentional self-harm injury emergency department visit rate from 2016-2017 was 298.9 per 100,000 population (age-adjusted rate) (MT IBIS)

AREAS OF OPPORTUNITY

In addition to the top ten health issues identified by survey respondents and discussed above, several other areas of opportunity emerged from the questionnaire.

When the survey prompted for the “Top 3 for a Healthy Community”, “Access to health care and other services” ranked first, followed by “safe neighborhoods” and “good paying job opportunities”. When asked what could improve the community’s access to health, improving the availability of walk-in clinics/urgent care clinics was the highest-ranking choice, with 81% of survey respondents identifying it as a top way to improve access. When prompted with “How do you learn about health-related services available in our community? Check all that apply”, the top three ways that people found out about health care services were friends/family, social media, and word of mouth/reputation. When asked “During the past three years, was there a time when you or a member of your household felt that you needed health care services but did NOT get, or delayed getting services?”, 50% of respondents said “Yes.”

When asked “What do you think needs to be available, or improved upon to make Hill County a better place to raise children? Pick top 3”, the top results were more activities for teens, more things for children to do with free time, and more parental resources for help raising children.

Finally, a majority of survey respondents also identified dental problems as an issue. 33% of people in the community identified “dental problems” as “a problem”, and 39% identified it as “a big problem”. Survey results also showed that only 68% of respondents have dental insurance. 2020 County Health Rankings indicate Hill County’s ratio of population to dentist is 1,090:1, which is behind Montana’s overall ratio of 1,390:1.

AWARENESS AND ACCESS TO HEALTH SERVICES AND COMMUNITY RESOURCES

Many things contribute to a community's access to health services and resources that contribute to health and wellbeing. According to the U.S. Department of Health and Human Services Health Resources and Services Administration, Hill County is designated as a Health Professional Shortage Area (HPSA) for Primary Care, Dental Care, and Mental Health Care. However, the survey responses indicate that Hill County residents might not be fully aware of the many resources in their community that are available to them or how these resources could be mobilized to address identified needs. The HCHC will continue its collaborative efforts both to build the available resources in Hill County and to raise awareness of and increase access to said resources for its constituents. This section highlights some of the key health resources currently available.

Northern Montana Hospital is located in Havre and is the only hospital in Hill County. The hospital has 49 beds. The Northern Montana Hospital campus includes several medical clinics and a vision center. Services provided by this system include an emergency department, birth center, dialysis, hospice, a sleep center, day surgery, and cardio-pulmonary rehabilitation. The campus also includes Northern Montana Sletten Cancer Center, the Northern Montana Care Center (a 136-bed skilled and intermediate care facility), and Northern Montana Assisted Living.

Bullhook Community Health Center is also located in Havre, and it provides overall health care from birth to end of life. Bullhook Community Health Center provides preventive care, education, behavioral health, case management, urgent and primary care, and dental services to its patients regardless of their ability to pay. It is a Federally Qualified Health Center funded in part by the U.S. Department of Health and Human Services to serve county residents without insurance or those who are underinsured.

The **Hill County Health Department** is also located in Havre. The Health Department provides many services to Hill County, including Public Health Emergency Preparedness, Disaster and Emergency Services, immunizations, WIC, family planning, HIV education and testing, a home visiting program, and various other programs aimed at promoting physical and emotional health, preventing disease, injury, and disability, and protecting the environment and population.

Rocky Boy Health Center, located in Box Elder on Rocky Boy's Reservation, offers a comprehensive range of services, including but not limited to primary care, emergency medical services, community health nursing, optometry, physical therapy, Public Health Emergency Preparedness, immunizations, preventive care, diabetes education, chemical dependency services, HIV education and testing, prenatal and newborn services, dental services, women's health care, behavioral health services, and a wellness program.

The **Merril Lundman Department of Veterans Affairs Outpatient Clinic**, located in Havre, provides various services to veterans and their families.

Dental services in Hill County are offered by those facilities indicated above and also by the **Havre Dental Group, Harada Family Dental Care, Dr. Lee Laeupple, and Dr. Robert Marshall.**

Vision/optometry services in addition to those already mentioned include **Evans Optical and Havre Optometric Clinic.**

In addition to the behavioral and mental health services offered by the major healthcare facilities previously mentioned, there are a number of other behavioral and mental health providers in Hill County.

Havre has a local office of the **Center for Mental Health**, which partners with people and communities to produce integrated mental health and substance abuse services. Their teams provide quality mental healthcare, diversified programming, and a full range of community-based services to both adults and children.

Havre also has a local office for **Youth Dynamics**, a children's mental agency serving youth and families. Their services include therapy, case management, family education and support, foster and respite care, mentoring, therapeutic youth home care, equine-assisted therapy, substance abuse treatment, and independent living skills.

Havre is also home to a **National Alliance on Mental Illness (NAMI) Chapter**. NAMI provides advocacy, education, support and public awareness so that all individuals and families affected by mental illness can build better lives. NAMI is the nation's largest grassroots mental health organization dedicated to building better lives for the millions of Americans affected by mental illness.

Additionally, the **Havre/Hill County Mental Health Local Advisory Council** and the **Hill County Suicide Awareness Coalition** are local advocacy groups working towards meeting the mental health needs of Hill County.

Although located in Havre, the **District IV Human Resources Development Council (HRDC)** serves Hill, Blaine, and Liberty counties, including Rocky Boy's and Ft. Belknap Reservations. As a Community Action Program (CAP) agency, the Council's goals are to serve, advise, educate, and aid society in projects aimed at breaking the cycle of poverty. Various services offered by HRDC District IV include child care, Head Start/ Early Head Start, housing and rental assistance, employment and training, energy assistance, victim services, and a food bank.

As noted above, with increasing health care costs and given the rural and frontier nature of Hill County, access to care can be limited and constraining for many. A possible way to increase awareness and access to health services is to increase the local and regional utilization of

connectmontana.org. **CONNECT** is a secure, web-based system for sending and accepting referrals, and it is HIPAA, FERPA, 42CFR and IDEA compliant. **CONNECT** is free-to-use and supported by the state of Montana.

Another resource provided by the state of Montana that would address a need identified by survey participants is **ParentingMontana.org**, which hosts an expansive collection of age-specific, situation-specific, evidenced-based resources for those in parenting roles to use with children of all ages, from infancy to teenage years.

NEXT STEPS

The information in this CHNA will continue to be used by the Hill County Health Consortium (HCHC) and community members to identify and prioritize health needs that can be strategically addressed over the next three years. The data from this CHNA will be presented publicly, and input from the community and the HCHC will be incorporated into future editions of this document. An initial review of the key findings from primary and secondary data by community stakeholders, health professionals, and human service organizations led to the prioritization of the following areas to be addressed in a subsequent Community Health Improvement Plan (CHIP): behavioral health, access to dental care, and obesity. Both this CHNA and the forthcoming CHIP continue the ongoing, collaborative work in Hill County of ensuring healthy people in healthy communities.

REFERENCES

- Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2018 on CDC WONDER Online Database released in 2020. Data are from the Multiple Cause of Death Files, 1999-2018, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Accessed at <http://wonder.cdc.gov/ucd-icd10.html>.
- Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. Web-based Injury Statistics Query and Reporting System (WISQARS). Accessed December 2020. Available from URL: www.cdc.gov/injury/wisqars
- Centers for Disease Control and Prevention. NCHHSTP AtlasPlus. Updated 2019. <https://www.cdc.gov/nchhstp/atlas/index.htm>. Accessed December 2020.
- CONNECT Referral System. Retrieved December 20, 2020 from <https://connectmontana.org/>.
- Office of Vital Statistics, Montana Department of Public Health and Human Services. Retrieved on December 20, 2020 from Montana Department of Public Health and Human Services, Indicator-Based Public Health Information System website: <http://ibis.mt.gov/>.
- “Social Determinants of Health,” Healthy People 2020, U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Retrieved November 2020 from <https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health>.
- “Social Determinants of Health,” Healthy People 2030, U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Retrieved November 2020 from <https://health.gov/healthypeople/objectives-and-data/social-determinants-health>.
- United States Department of Justice, Federal Bureau of Investigation. Crime in the United States, 2019. Retrieved December 18, 2020 from <https://crimedataexplorer.app.cloud.gov/explorer/agency/MT0210000/arrest>.
- University of Wisconsin Population Health Institute. County Health Rankings & Roadmaps 2020. www.countyhealthrankings.org.
- U.S. Cancer Statistics Working Group. U.S. Cancer Statistics Data Visualizations Tool, based on 2019 submission data (1999-2017): U.S. Department of Health and Human Services, Centers for Disease Control and Prevention and National Cancer Institute. www.cdc.gov/cancer/dataviz. Released in June 2020. Accessed December 2020.
- U.S. County Opioid Dispensing Rates, 2018. (December 07, 2020). Retrieved December 22, 2020 from <https://www.cdc.gov/drugoverdose/maps/rxcounty2018.html>.