# 2019 Community Health Needs Assessment Summary Report

**Park County, Montana** 

Sponsored by: Livingston Healthcare Park County Health Department In collaboration with: Bozeman Health

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# Introduction

# **About This Assessment**

This Community Health Needs Assessment, a follow-up to similar studies conducted in 2011, 2014, and 2017, is a systematic, data-driven approach to determining the health status, behaviors and needs of residents in Park County, Montana. Subsequently, this information may be used to inform decisions and guide efforts to improve community health and wellness.

A Community Health Needs Assessment provides information so that communities may identify issues of greatest concern and decide to commit resources to those areas, thereby making the greatest possible impact on community health status.

This assessment was conducted by Professional Research Consultants, Inc. (PRC) on behalf of Livingston HealthCare and the Park County Health Department; it is part of a larger collaborative project with Bozeman Health. PRC is a nationally-recognized healthcare consulting firm with extensive experience conducting Community Health Needs Assessments in hundreds of communities across the United States since 1994.

# Methodology

This assessment incorporates data from both quantitative and qualitative sources. Quantitative data input includes primary research (the PRC Community Health Survey) and secondary research (vital statistics and other existing health-related data); these quantitative components allow for comparison to benchmark data at the state and national levels. Qualitative data input includes primary research gathered through an Online Key Informant Survey of various community stakeholders.

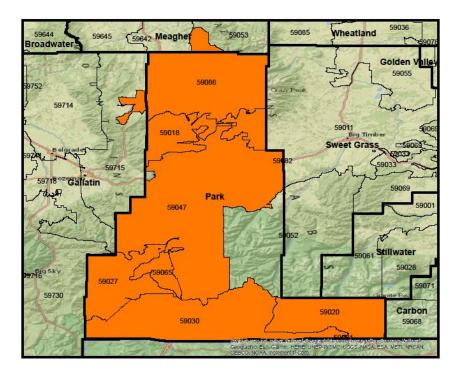
# **PRC Community Health Survey**

#### **Survey Instrument**

The survey instrument used for this study is based largely on the Centers for Disease Control and Prevention (CDC) Behavioral Risk Factor Surveillance System (BRFSS), as well as various other public health surveys and customized questions addressing gaps in indicator data relative to health promotion and disease prevention objectives and other recognized health issues. The final survey instrument was developed by Bozeman Health, Park County Health Department, Livingston HealthCare, and PRC.

#### **Community Defined for This Assessment**

The study area for the survey effort includes the ZIP Codes primarily associated with Park County, Montana (see the map that follows). For Livingston HealthCare, this community definition includes the ZIP Codes from which most of its recent patients originate.



#### Sample Approach & Design

A precise and carefully executed methodology is critical in asserting the validity of the results gathered in the PRC Community Health Survey. Thus, to ensure the best representation of the population surveyed, a telephone interview methodology — one that incorporates both landline and cell phone interviews — was employed. The primary advantages of telephone interviewing are timeliness, efficiency, and random-selection capabilities.

The sample design used for this effort consisted of a random sample of 200 individuals age 18 and older in Park County. All administration of the surveys, data collection and data analysis was conducted by PRC.

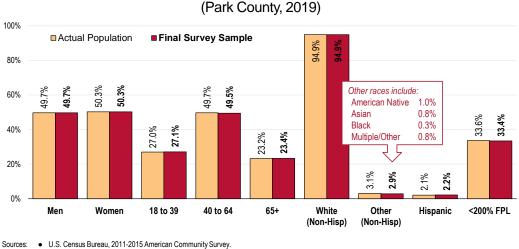
For statistical purposes, the maximum rate of error associated with a sample size of 200 respondents is  $\pm 6.9\%$  at the 95 percent confidence level.

#### **Sample Characteristics**

To accurately represent the population studied, PRC strives to minimize bias through application of a proven telephone methodology and random-selection techniques. While this random sampling of the population produces a highly representative sample, it is a common and preferred practice to "weight" the raw data to improve this representativeness even further. This is accomplished by adjusting the results of a random sample to match the geographic distribution and demographic characteristics of the population surveyed (poststratification), so as to eliminate any naturally occurring bias.

The following chart outlines the characteristics of the Park County sample for key demographic variables, compared to actual population characteristics revealed in census data. [Note that the sample consisted solely of area residents age 18 and older; data on

children were given by proxy by the person most responsible for that child's healthcare needs, and these children are not represented demographically in this chart.]



# **Population & Survey Sample Characteristics**

2019 PRC Community Health Survey, PRC, Inc.

Notes: • FPL is federal poverty level, based on guidelines established by the US Department of Health & Human Services.

Further note that the poverty descriptions and segmentation used in this report are based on administrative poverty thresholds determined by the US Department of Health & Human Services. These guidelines define poverty status by household income level and number of persons in the household (*e.g., the 2019 guidelines place the poverty threshold for a family of four at \$25,750 annual household income or lower*). In sample segmentation: "**Iow income**" refers to community members living in a household with defined poverty status <u>or</u> living just above the poverty level and earning up to twice (<200% of) the poverty threshold; "**mid/high income**" refers to those households living on incomes which are twice or more (≥200% of) the federal poverty level.

The sample design and the quality control procedures used in the data collection ensure that the sample is representative. Thus, the findings may be generalized to the total population of community members in the defined area with a high degree of confidence.

# **Online Key Informant Survey**

To solicit input from key informants, those individuals who have a broad interest in the health of the community, an Online Key Informant Survey also was implemented as part of this process. A list of recommended participants was provided by Park County Health Department and Livingston HealthCare; this list included names and contact information for physicians, public health representatives, other health professionals, social service providers, and a variety of other community leaders. Potential participants were chosen because of their ability to identify primary concerns of the populations with whom they work, as well as of the community overall. Key informants were contacted by email, introducing the purpose of the survey and providing a link to take the survey online; reminder emails were sent as needed to increase participation. In all, 53 community stakeholders took part in the Online Key Informant Survey, as outlined below:

Online Key Informant Survey Participation						
Key Informant Type	Number Participating					
Physicians	6					
Public Health Representatives	4					
Other Health Providers	12					
Social Services Providers	15					
Other Community Leaders	16					

Final participation included representatives of the organizations outlined below.

- 6<sup>th</sup> Judicial District Court
- Adult Protective Services
- ASPEN (Abuse Support & Prevention Education Network)
- CHP Learning Partners Social Services
   Provider
- Community Health Partners
- County Superintendent of Schools
- Human Resources Development Council
- L'esprit Mental Health Center
- LINKS for Learning
- Living Hope Church
- Livingston Fire and Rescue
- Livingston Food Resource Center
- Livingston HealthCare

- Livingston Police Department
- Livingston Public Schools
- Mammoth Clinic at Yellowstone
- Park County
- Park County Government
- Park County Health Department
- Park County Office of Emergency Management
- Park County Senior Citizens Corporation
- PrintingForLess
- Shields Valley School District
- Southwest Chemical Dependency Center
- Youth Court Services/Probation

Through this process, input was gathered from several individuals whose organizations work with low-income, minority, or other medically underserved populations.

In the online survey, key informants were asked to rate the degree to which various health issues are a problem in their own community. Follow-up questions asked them to describe why they identify problem areas as such and how these might better be addressed. Results of their ratings, as well as their verbatim comments, are included throughout this report as they relate to the various other data presented.

NOTE: These findings represent qualitative rather than quantitative data. The Online Key Informant Survey was designed to gather input regarding participants' opinions and perceptions of the health needs of the residents in the area.

# Public Health, Vital Statistics & Other Data

A variety of existing (secondary) data sources was consulted to complement the research quality of this Community Health Needs Assessment. Data for Park County were obtained from the following sources (specific citations are included with the graphs throughout this report):

- Center for Applied Research and Engagement Systems (CARES) Engagement Network, University of Missouri Extension
- Centers for Disease Control & Prevention, Office of Infectious Disease, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention
- Centers for Disease Control & Prevention, Office of Public Health Science Services, Center for Surveillance, Epidemiology and Laboratory Services, Division of Health Informatics and Surveillance (DHIS)
- Centers for Disease Control & Prevention, Office of Public Health Science Services, National Center for Health Statistics
- ESRI ArcGIS Map Gallery
- Montana Department of Public Health
- National Cancer Institute, State Cancer Profiles
- OpenStreetMap (OSM)
- US Census Bureau, American Community Survey
- US Census Bureau, County Business Patterns
- US Census Bureau, Decennial Census
- US Department of Agriculture, Economic Research Service
- US Department of Health & Human Services
- US Department of Health & Human Services, Health Resources and Services Administration (HRSA)
- US Department of Justice, Federal Bureau of Investigation
- US Department of Labor, Bureau of Labor Statistics

#### **Benchmark Data**

#### Trending

Similar surveys were administered in Park County in 2011, 2015, and 2017 by PRC. Trending data, as revealed by comparison to prior survey results, are provided throughout this report whenever available. Historical data for secondary data indicators are also included for the purposes of trending.

#### Montana Risk Factor Data

Statewide risk factor data are provided where available as an additional benchmark against which to compare local survey findings; these data represent the most recent *BRFSS (Behavioral Risk Factor Surveillance System) Prevalence and Trends Data* published online by the Centers for Disease Control and Prevention. State-level vital statistics are also provided for comparison of secondary data indicators.

#### Nationwide Risk Factor Data

Nationwide risk factor data, which are also provided in comparison charts, are taken from the 2017 PRC National Health Survey; the methodological approach for the national study is similar to that employed in this assessment, and these data may be generalized to the US population with a high degree of confidence. National-level vital statistics are also provided for comparison of secondary data indicators.

#### Healthy People 2020

Healthy People provides science-based, 10-year national objectives for improving the health of all Americans. For three decades, Healthy People has established benchmarks and monitored progress over time in order to:



- Encourage collaborations across communities and sectors.
- Empower individuals toward making informed health decisions.
- Measure the impact of prevention activities.

Healthy People 2020 is the product of an extensive stakeholder feedback process that is unparalleled in government and health. It integrates input from public health and prevention experts, a wide range of federal, state and local government officials, a consortium of more than 2,000 organizations, and perhaps most importantly, the public. More than 8,000 comments were considered in drafting a comprehensive set of Healthy People 2020 objectives.

# **Determining Significance**

Differences noted in this report represent those determined to be significant. For surveyderived indicators (which are subject to sampling error), statistical significance is determined based on confidence intervals (at the 95 percent confidence level), using question-specific samples and response rates. For the purpose of this report, "significance" of secondary data indicators (which do not carry sampling error but might be subject to reporting error) is determined by a 15% variation from the comparative measure.

## Information Gaps

While this assessment is quite comprehensive, it cannot measure all possible aspects of health in the community, nor can it adequately represent all possible populations of interest. It must be recognized that these information gaps might in some ways limit the ability to assess

all of the community's health needs.

For example, certain population groups — such as the homeless, institutionalized persons, or those who only speak a language other than English or Spanish — are not represented in the survey data. Other population groups — for example, pregnant women, lesbian/gay/bisexual/ transgender residents, undocumented residents, and members of certain racial/ethnic or immigrant groups — might not be identifiable or might not be represented in numbers sufficient for independent analyses.

In terms of content, this assessment was designed to provide a comprehensive and broad picture of the health of the overall community. However, there are certainly medical conditions that are not specifically addressed.

#### **Public Comment**

Livingston HealthCare made its prior Community Health Needs Assessment (CHNA) report publicly available through its website; through that mechanism, the hospital requested from the public written comments and feedback regarding the CHNA and implementation strategy. At the time of this writing, Livingston HealthCare had not received any written comments. However, through population surveys and key informant feedback for this assessment, input from the broader community was considered and taken into account when identifying and prioritizing the significant health needs of the community. Livingston HealthCare will continue to use its website as a tool to solicit public comments and ensure that these comments are considered in the development of future CHNAs.

# **IRS Form 990, Schedule H Compliance**

For non-profit hospitals, a Community Health Needs Assessment (CHNA) also serves to satisfy certain requirements of tax reporting, pursuant to provisions of the Patient Protection & Affordable Care Act of 2010. To understand which elements of this report relate to those requested as part of hospitals' reporting on IRS Schedule H (Form 990), the following table cross-references related sections.

IRS Form 990, Schedule H (2018)	See Report Page
<b>Part V Section B Line 3a</b> A definition of the community served by the hospital facility	5
Part V Section B Line 3b Demographics of the community	21
<b>Part V Section B Line 3c</b> Existing health care facilities and resources within the community that are available to respond to the health needs of the community	125
Part V Section B Line 3d How data was obtained	5
Part V Section B Line 3e The significant health needs of the community	13
<b>Part V Section B Line 3f</b> <i>Primary and chronic disease needs and other health issues of uninsured persons, low-income persons, and minority groups</i>	Addressed Throughout
<b>Part V Section B Line 3g</b> The process for identifying and prioritizing community health needs and services to meet the community health needs	14
Part V Section B Line 3h The process for consulting with persons representing the community's interests	5
<b>Part V Section B Line 3i</b> The impact of any actions taken to address the significant health needs identified in the hospital facility's prior CHNA(s)	135

# **Summary of Findings**

# Significant Health Needs of the Community

The following "Areas of Opportunity" represent the significant health needs of the community, based on the information gathered through this Community Health Needs Assessment. From these data, opportunities for health improvement exist in the area with regard to the following health issues (see also the summary tables presented in the following section).

The Areas of Opportunity were determined after consideration of various criteria, including: standing in comparison with benchmark data (particularly national data); identified trends; the preponderance of significant findings within topic areas; the magnitude of the issue in terms of the number of persons affected; and the potential health impact of a given issue. These also take into account those issues of greatest concern to the community stakeholders (key informants) giving input to this process.

Areas of Opportunity Identified Through This Assessment				
Access to Healthcare Services	<ul><li> Routine Medical Care (Adults)</li><li> Emergency Room Utilization</li></ul>			
Cancer	<ul> <li>Leading Cause of Death</li> <li>Cervical Cancer Screening [Age 21-65]</li> <li>Colorectal Cancer Screening [Age 50-75]</li> </ul>			
Heart Disease & Stroke	<ul> <li>Leading Cause of Death</li> <li>High Blood Pressure Prevalence</li> <li>Overall Cardiovascular Risk</li> </ul>			
Infant Health & Family Planning	Infant Deaths			
Injury & Violence	<ul> <li>Unintentional Injury Deaths <ul> <li>Including Motor Vehicle Crash Deaths</li> </ul> </li> <li>Firearm-Related Deaths</li> <li>Firearm Storage/Safety</li> <li>Domestic Violence Experience</li> </ul>			
Mental Health	<ul> <li>"Fair/Poor" Mental Health</li> <li>Suicide Deaths</li> <li>Key Informants: Mental health ranked as a top concern.</li> </ul>			
Nutrition, Physical Activity & Weight	<ul> <li>Fruit/Vegetable Consumption</li> <li>Low Food Access</li> <li>Overweight &amp; Obesity [Adults]</li> <li>Meeting Physical Activity Guidelines</li> <li>Key Informants: Nutrition, physical activity, and weight ranked as a top concern.</li> </ul>			
Oral Health	Dental Insurance Coverage			
	— continued next page —			

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Areas of Opportunity (continued)						
Respiratory Diseases	• Flu Vaccination [Age 65+]					
Substance Abuse	<ul> <li>Excessive Drinking</li> <li>Illicit Drug Use</li> <li>Personally Impacted by Substance Abuse (Self or Other's)</li> <li>Key Informants: Substance abuse ranked as a top concern.</li> </ul>					

#### **Community Feedback on Prioritization of Health Needs**

Prioritization of the health needs identified in this assessment (see "Areas of Opportunity" above) was determined based on a prioritization exercise conducted among community stakeholders (representing a cross-section of community-based agencies and organizations) in conjunction with the administration of the Online Key Informant Survey.

In this process, these key informants were asked to rate the severity of a variety of health issues in the community. Insofar as these health issues were identified through the data above and/or were identified as top concerns among key informants, their ranking of these issues informed the following priorities:

- 1. Behavioral Health (Mental Health & Substance Abuse)
- 2. Nutrition, Physical Activity, and Weight
- 3. Oral Health
- 4. Dementia/Alzheimer's Disease
- 5. Injury and Violence
- 6. Heart Disease and Stroke
- 7. Respiratory Diseases
- 8. Cancer
- 9. Access to Health Services
- 10. Infant Health & Family Planning

#### **Hospital Implementation Strategy**

Livingston HealthCare will use the information from this Community Health Needs Assessment to develop an Implementation Strategy to address the significant health needs in the community. While the hospital will likely not implement strategies for all of the health issues listed above, the results of this prioritization exercise will be used to inform the development of the hospital's action plan to guide community health improvement efforts in the coming years.

Note: An evaluation of the hospital's past activities to address the needs identified in prior CHNAs can be found as an appendix to this report.

# Summary Tables: Comparisons With Benchmark Data

The following tables provide an overview of indicators in Park County, grouped by health topic.

Reading the Summary Tables

In the following tables, Park County results are shown in the larger, blue column. *Tip:* Indicator labels beginning with a "%" symbol are taken from the PRC Community Health Survey; the remaining indicators are taken from secondary data sources.

■ The columns to the right of the Park County column provide trending, as well as comparisons between local data and any available state and national findings, and Healthy People 2020 objectives. The symbols indicate whether Park County compares favorably (\$), unfavorably (\$), or comparably (\$) to these external data.

Note that blank table cells signify that data are not available or are not reliable for that area and/or for that indicator.

**TREND SUMMARY** (Current vs. Baseline Data)

Survey Data Indicators: Trends for survey-derived indicators represent significant changes since 2011. Note that survey data reflect the ZIP Code-defined Park County.

Other (Secondary) Data Indicators: Trends for other indicators (e.g., public health data) represent point-to-point changes between the most current reporting period and the earliest presented in this report (typically representing the span of roughly a decade).

Note that secondary data reflect county-level data.

		Park County vs. Benchmarks				
Social Determinants	Park County	vs. MT	vs. US	vs. HP2020	TREND	
Linguistically Isolated Population (Percent)	0.3	6.3	<b>*</b> 4.4			
Population in Poverty (Percent)	13.4	<u>ب</u> 14.4	<i>公</i> 14.6			
Children in Poverty (Percent)	12.1	<b>**</b> 17.6	<b>2</b> 0.3			
No High School Diploma (Age 25+, Percent)	4.3	<b>※</b> 7.0	<b>**</b> 12.7			
Unemployment Rate (Age 16+, Percent)	2.8	<u>ح</u> 3.2	<b>※</b> 3.9			
% Worried About Running Out of Food in Past Year	13.7		<b>)</b> 25.3			
% Worry/Stress Over Rent/Mortgage in Past Year	24.9		<u>ح</u> ے 30.8		23.2	
% Homeless in Past Two Years	1.1					
		🂢 better	🖄 similar	worse		

	_	Park County vs. Benchmarks			
Overall Health	Park County	vs. MT	vs. US	vs. HP2020	TREND
% "Fair/Poor" Overall Health	13.7	Ŕ	Ŕ		D3
		15.6	18.1		16.3
		<b>*</b>	Ŕ		
		better	similar	worse	

		Park Cou	Park County vs. Benchmarks			
Access to Health Services	Park County	vs. MT	vs. US	vs. HP2020	TREND	
% [Age 18-64] Lack Health Insurance	15.7	2 12.4	公 13.7	0.0	20.8	
% Difficulty Accessing Healthcare in Past Year (Composite)	28.8	12.1		0.0	É	
% Difficulty Finding PCP in Past Year	7.5				26.6	
% Difficulty Getting Appointment in Past Year	11.9				6.8	
% Cost Prevented PCP Visit in Past Year	8.6				8.0	
% Transportation Hindered PCP Visit in Past Year	3.9				9.2 2	
% Inconvenient Hrs Prevented PCP Visit in Past Year	6.7				2.5 2.5	
% Language/Culture Prevented Care in Past Year	0.4				10.0	
% Cost Prevented Getting Prescription in Past Year	6.9		<b>X</b> 14.9		0.0	
Primary Care Doctors per 100,000	113.4	<b>%</b> 81.9	87.8		14.5	
% Have a Specific Source of Ongoing Care	70.5	01.0	74.1	<b>9</b> 5.0	<u>ح</u> 76.9	
% Have Had Routine Checkup in Past Year	60.2	65.6	68.3	00.0	-70.3 	
% Two or More ER Visits in Past Year	22.4	00.0	9.3		2.9	
		<b>*</b>	9.3 2		2.9	
		better	similar	worse		

	Deala	Park County vs. Benchmarks			
Cancer	Park County	vs. MT	vs. US	vs. HP2020	TREND
Cancer (Age-Adjusted Death Rate)	147.9	<u>ب</u> 153.0	公 158.1	۲ <u>۲</u> 161.4	<b>**</b> 177.4
Lung Cancer (Age-Adjusted Death Rate)	29.7	<b>※</b> 39.6	<b>**</b> 43.4	<b>**</b> 45.5	
Prostate Cancer (Age-Adjusted Death Rate)	21.7	22.8	20.1	21.8	
Female Breast Cancer (Age-Adjusted Death Rate)	17.1	<b>**</b> 19.9	<b>21.1</b>	<b>※</b> 20.7	
Colorectal Cancer (Age-Adjusted Death Rate)	13.8	2 13.9	<u>6</u> 14.9	2 14.5	
Cancer Incidence Rate (All Sites)	443.7	<i>€</i>	<i>€</i> 2 483.8		
Female Breast Cancer Incidence Rate	139.5	2 123.2	谷 124.7		
Prostate Cancer Incidence Rate	109.8	合 111.1	公 109.0		
Lung Cancer Incidence Rate	44.1	55.7	<b>(</b> 60.2		
Colorectal Cancer Incidence Rate	30.4	<b>**</b> 38.2	<b>3</b> 9.2		
% Cancer (Other Than Skin)	8.0	2 8.7	<del>公</del> 7.1		<u>ح</u> ے 8.0
% Skin Cancer	7.5	6.4	<ul><li>名.5</li></ul>		6.1
% [Women 50-74] Mammogram in Past 2 Years	63.6	73.9	77.0	<b>81.1</b>	49.0
% [Women 21-65] Pap Smear in Past 3 Years	62.0	80.5	<i>6</i> 73.5	93.0	88.6
% [Age 50-75] Colorectal Cancer Screening	61.8	62.1	<b>76.4</b>	۲0.5	<u>ح</u> ے 56.7

	Park Cou	nty vs. Be	nchmarks		
Cancer (continued)	Park County	vs. MT	vs. US	vs. HP2020	TREND
% Home Ever Tested for Radon	31.2				
		پ better	<u>ج</u> similar	worse	

	Park County vs. Benchmarks				
Diabetes	Park County	vs. MT	vs. US	vs. HP2020	TREND
Diabetes (Age-Adjusted Death Rate)	18.4	<b>21.7</b>	<b>21.2</b>	<u>ح</u> 20.5	<b>)</b> 25.8
% Diabetes/High Blood Sugar	8.7	✓ 7.9	<b>)</b> 13.3		<u>ک</u> 10.9
% Borderline/Pre-Diabetes	5.6	1.4	<b>%</b> 9.5		2.8
% [Non-Diabetes] Blood Sugar Tested in Past 3 Years	55.2		<u>ح</u> 50.0		<u>ح</u> 48.6
		💢 better	similar	worse	

		Park County vs. Benchmarks				
Heart Disease & Stroke	Park County	vs. MT	vs. US	vs. HP2020	TREND	
Diseases of the Heart (Age-Adjusted Death Rate)	118.5	<b>)</b> 153.5	<b>()</b> 167.1	<b>)</b> 156.9	<b>)</b> 153.6	
Stroke (Age-Adjusted Death Rate)	35.0	35.1	公 37.1	۲ <u>۲</u> 34.8	<u>ح</u> 37.5	
% Heart Disease (Heart Attack, Angina, Coronary Disease)	5.0		会 8.0		<u>ح</u> 4.5	
% Stroke	2.2	2.5	<b>X</b> 4.7		<u>ح</u> 2.5	
% Told Have High Blood Pressure (Ever)	37.1	29.1	< 37.0	26.9	22.7	

		Park Cou	nty vs. Be	nchmarks	
Heart Disease & Stroke (continued)	ease & Stroke (continued)	vs. MT	vs. US	vs. HP2020	TREND
% Told Have High Cholesterol (Ever)	28.9		<b>**</b> 36.2	13.5	ے∠ 32.1
% 1+ Cardiovascular Risk Factor	87.9		50.2 42	10.0	52.1
			87.2		71.3
		۵			
		better	similar	worse	

Infant Health & Family Planning		Park Cou	nty vs. Be	nchmarks	
	Park County	vs. MT	vs. US	vs. HP2020	TREND
Infant Death Rate	8.6	5.9	<b>6</b> .1	6.0	
Births to Adolescents Age 15 to 19 (Rate per 1,000)	23.8	<b>X</b> 34.8	<b>※</b> 36.6		
		💢 better	similar	worse	

Injury & Violence		Park Cou	nty vs. Be	nchmarks	
	Park County	vs. MT	vs. US	vs. HP2020	TREND
Unintentional Injury (Age-Adjusted Death Rate)	56.6	<u>ح</u> 54.2	44.0	<b>36.4</b>	<u>ح</u> ے 59.8
Motor Vehicle Crashes (Age-Adjusted Death Rate)	17.2	2 19.3	<b>11.0</b>	<b>12.4</b>	<b>※</b> 31.9
% [Age 45+] Fell in the Past Year	30.7		<u>ح</u> 31.6		ےً 34.6
% Texted/Emailed While Driving in Past	39.8				
% "Always" Wear Seat Belt When Driving	78.9				
Firearm-Related Deaths (Age-Adjusted Death Rate)	27.4	18.7	<b>***</b> 11.1	<b>9</b> .3	22.2

Injury & Violence (continued)		Park County vs. Benchmarks				
	Park County	vs. MT	vs. US	vs. HP2020	TREND	
% Homes With Unlocked & Loaded Firearms	42.7		26.9			
Violent Crime Rate	169.8	<b>)</b> 306.1	<b>)</b> 384.8			
% Victim of Domestic Violence (Ever)	21.6		<b>14.2</b>		<u>ب</u> 15.3	
		💢 better	🖄 similar	worse		

		Park County vs. Benchmarks					
Mental Health	Park County	vs. MT	vs. US	vs. HP2020	TREND		
% "Fair/Poor" Mental Health	16.0		Ŕ				
			13.0		6.5		
% Diagnosed Depression	24.8	Ŕ	Ŕ		D3		
		21.2	21.6		23.9		
% Symptoms of Chronic Depression (2+ Years)	32.4		Ŕ				
			31.4		24.6		
% Typical Day Is "Extremely/Very" Stressful	11.9		Ŕ				
			13.4		14.2		
% Average <7 Hours of Sleep per Night	36.2		Ŕ				
			36.7		36.9		
Suicide (Age-Adjusted Death Rate)	39.9						
		25.6	13.3	10.2	25.2		
Mental Health Providers per 100,000	238.5	-					
		285.5	202.8				
% Taking Rx/Receiving Mental Health Trtmt	19.5		Ŕ				
			13.9		12.9		
% Have Ever Sought Help for Mental Health	44.6		Ø		<b>\$</b>		
			30.8		25.2		

	Park	Park County vs. Benchmarks				
Mental Health (continued)	County	vs. MT	vs. US	vs. HP2020	TREND	
% [Those With Diagnosed Depression] Seeking Help	93.9		Ŕ			
			87.1			
% Unable to Get Mental Health Svcs in Past Yr	3.1				Ŕ	
			6.8		1.9	
			É	-		
		better	similar	worse		
	Park	Park Cou	nty vs. Be	nchmarks		
Nutrition, Physical Activity & Weight	County	vs. MT	vs. US	vs. HP2020	TREND	
% 5+ Servings of Fruits/Vegetables per Day	35.4		Ŕ			
			33.5		49.5	
% 7+ Sugar-Sweetened Drinks in Past Week	22.3		Ø		Ŕ	
		<u> </u>	29.0		26.2	
Population With Low Food Access (Percent)	33.9					
		24.3	22.4			
% No Leisure-Time Physical Activity	19.6	Ŕ		Ø	Ŕ	
		19.9	26.2	32.6	16.1	
% Meeting Physical Activity Guidelines	24.4	Ŕ				
		24.5	22.8	20.1	54.2	
Recreation/Fitness Facilities per 100,000	12.8	<b>1</b>	Ŕ			
		15.8	11.0			
% Healthy Weight (BMI 18.5-24.9)	27.8	<b>1</b>	Ŕ			
		35.3	30.3	33.9	51.8	
% Overweight (BMI 25+)	69.1	É	É			
		62.7	67.8	2	46.8	
% Obese (BMI 30+)	24.9	Ŕ				
		25.5	32.8	30.5	12.1	
% Medical Advice on Weight in Past Year	19.9				Ŕ	
			24.2		19.5	
% [Overweights] Counseled About Weight in Past Year	22.8		Ŕ		É	
			29.0		29.6	
			É			
		better	similar	worse		

		Park Cou	inty vs. Be	nchmarks	
Oral Health	Park County	vs. MT	vs. US	vs. HP2020	TREND
% Have Dental Insurance	51.2				D3
			59.9		43.2
% [Age 18+] Dental Visit in Past Year	68.5	Ŕ			
		65.5	59.7	49.0	64.7
		۲	Ŕ		
		better	similar	worse	

Potentially Disabling Conditions		Park County vs. Benchmarks			
	Park County	vs. MT	vs. US	vs. HP2020	TREND
% Activity Limitations	26.2	È	Ŕ		
		23.9	25.0		23.8
% Sciatica/Chronic Back Pain	19.7		Ŕ		
			22.9		24.3
% 3+ Chronic Conditions	29.9				
			41.4		
Alzheimer's Disease (Age-Adjusted Death Rate)	28.9		Ŕ		<b>\$</b>
		20.8	28.0		37.6
		۵	Ŕ	1	
		better	similar	worse	

		Park Cou	nty vs. Be	nchmarks	
Respiratory Diseases	Park County	vs. MT	vs. US	vs. HP2020	TREND
CLRD (Age-Adjusted Death Rate)	39.4	<b>\</b>			
		51.3	41.1		38.0
Pneumonia/Influenza (Age-Adjusted Death Rate)	11.7				
		13.6	15.3		21.3
% [Adult] Currently Has Asthma	10.9	É	Ê		
		9.1	11.8		13.8

Respiratory Diseases (continued)	Derk	Park County vs. Benchmarks			
	Park County	vs. MT	vs. US	vs. HP2020	TREND
% Adults Asthma (Ever Diagnosed)	18.6	Ŕ	Ŕ		É
		14.0	19.4		17.3
% COPD (Lung Disease)	4.5	Ŕ			<b>X</b>
		6.2	8.6		11.0
% [Age 65+] Flu Vaccine in Past Year	39.7				
		57.3	76.8	70.0	55.5
% [Age 65+] Pneumonia Vaccine Ever	74.2	É	Ê		É
		73.3	82.7	90.0	61.3
			Ŕ		
		better	similar	worse	

Sexual Health		Park County vs. Benchmarks				
	Park County	vs. MT	vs. US	vs. HP2020	TREND	
Chlamydia Incidence Rate	187.8	<b>**</b> 427.5	<b>**</b> 497.3			
Gonorrhea Incidence Rate	18.8	<b>**</b> 83.9	<b>**</b> 145.8			
HIV Prevalence Rate	36.1	<b>()</b> 66.1	<b>)</b> 362.3			
% [Age 18-44] HIV Test in the Past Year	7.1		<b>***</b> 24.7			
% Received HPV Info in Past Three Years	25.1					
% Completed HPV Vaccination Series	4.0					
% [Age 18-49] Tested for STDs (Other Than HIV) in Past 3 Years	32.8					
% [Age 18-49] Unable to Get Reproductive Healthcare in Past Year	1.2					
		پ better	ے۔ similar	worse		

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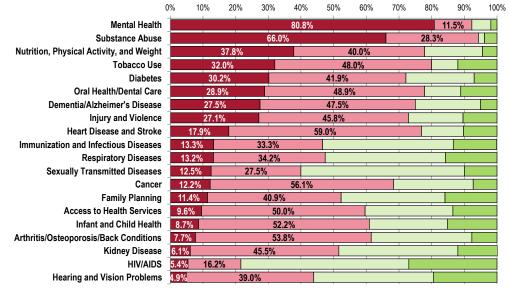
	Park County	Park County vs. Benchmarks			
Substance Abuse		vs. MT	vs. US	vs. HP2020	TREND
Cirrhosis/Liver Disease (Age-Adjusted Death Rate)	11.2	<b>**</b> 14.1	公 11.1	8.2	
% Current Drinker	74.4	58.8	<b>55.0</b>		<b>6</b> 4.4
% Binge Drinker (Single Occasion - 5+ Drinks Men, 4+ Women)	21.6	2 19.5	公 20.0	24.4	۲ <u>۲</u> 14.4
% Excessive Drinker	27.2		<u>ب</u> 22.5	<u>ح</u> 25.4	16.8
% Drinking & Driving in Past Month	4.0	<i>4</i> .7	<del>62</del> 5.2		云 3.4
% Rode With Drinking Driver in Past Month	2.8				
% Illicit Drug Use in Past Month	3.1		2.5	<b>※</b> 7.1	0.3
% Ever Sought Help for Alcohol or Drug Problem	4.0		<u>ح</u> ے 3.4		۲ 3.3
% Personally Impacted by Substance Abuse	57.5		<b>37.3</b>		
		🔅 better	순 similar	worse	

		Park County vs. Benchmarks			
Tobacco Use	Park County		vs. US	vs. HP2020	TREND
% Current Smoker	18.1	Ŕ	Ŕ		Ŕ
		18.5	16.3	12.0	11.6
% Someone Smokes at Home	7.5		Ŕ		É
			10.7		7.1
% [Nonsmokers] Someone Smokes in the Home	2.6		Ŕ		É
			4.0		2.9

		Park Cou	nty vs. Be	nchmarks	
Tobacco Use (continued)	Park County	vs. MT	vs. US	vs. HP2020	TREND
% [Household With Children] Someone Smokes in the Home	1.2		<b>※</b> 7.2		
% Currently Use Vaping Products	7.5	<u>ح</u> 4.1	<u>ح</u> ے 3.8		
% Use Smokeless Tobacco	6.0		<u>بالم</u> 4.4	0.2	
		🔅 better	∠ے similar	worse	

# **Summary of Key Informant Perceptions**

In the Online Key Informant Survey, community stakeholders were asked to rate the degree to which each of 20 health issues is a problem in their own community, using a scale of "major problem," "moderate problem," "minor problem," or "no problem at all." The following chart summarizes their responses; these findings also are outlined throughout this report, along with the qualitative input describing reasons for their concerns. (Note that these ratings alone do not establish priorities for this assessment; rather, they are one of several data inputs considered for the prioritization process described earlier.)



# Key Informants: Relative Position of Health Topics as Problems in the Community

Major Problem Moderate Problem Minor Problem No Problem At All

# Data Charts & Key Informant Input

The following sections present data from multiple sources, including the random-sample PRC Community Health Survey, public health and other existing data sets (secondary data), as well as qualitative input from the Online Key Informant Survey.

Data indicators from these sources are intermingled and organized by health topic. To better understand the source data for specific indicators, please refer to the footnotes accompanying each chart.



# **Community Characteristics**

# **Population Characteristics**

#### Land Area, Population Size & Density

Data from the US Census Bureau reveal the following statistics for our community relative to size, population, and density.

	Total Population	<b>Total Land Area</b> (Square Miles)	Population Density (Per Square Mile)	
Park County	16,001	2,802.48	5.71	
Montana	1,029,862	145,545.42	7.08	
United States	321,004,407	3,532,315.66	90.88	

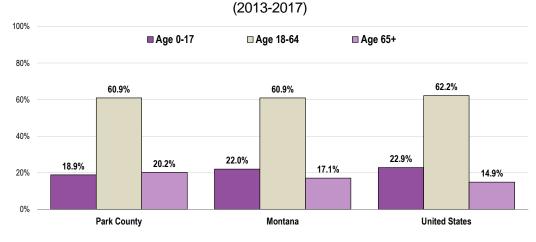
# **Total Population** (Estimated Population, 2013-2017)

Sources: • US Census Bureau American Community Survey 5-year estimates.

Retrieved August 2019 from CARES Engagement Network at https://engagementnetwork.org.

#### Age

It is important to understand the age distribution of the population, as different age groups have unique health needs that should be considered separately from others along the age spectrum.



# Total Population by Age Groups, Percent

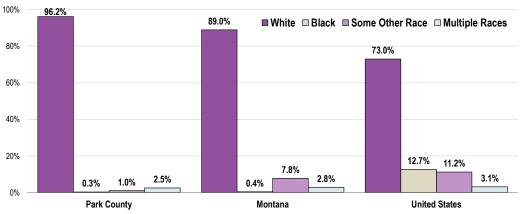
Sources: • US Census Bureau American Community Survey 5-year estimates.

Retrieved August 2019 from CARES Engagement Network at https://engagementnetwork.org.

# **Race & Ethnicity**

The following charts illustrate the racial and ethnic makeup of our community. Note that ethnicity (Hispanic or Latino) can be of any race.

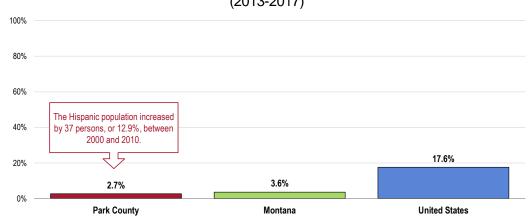
# Total Population by Race Alone, Percent



(2013-2017)

Sources: US Census Bureau American Community Survey 5-year estimates. Retrieved August 2019 from CARES Engagement Network at https://engagementnetwork.org.

# Hispanic Population (2013-2017)



Sources: • US Census Bureau American Community Survey 5-year estimates.

Retrieved August 2019 from CARES Engagement Network at https://engagementnetwork.org.

Notes: Origin can be viewed as the heritage, nationality group, lineage, or country of birth of the person or the person's parents or ancestors before their arrival in the United States. People who identify their origin as Hispanic, Latino, or Spanish may be of any race.

# Social Determinants of Health

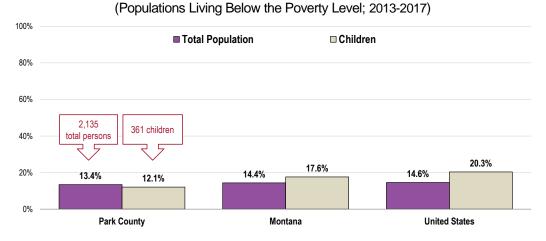
#### **About Social Determinants**

Health starts in our homes, schools, workplaces, neighborhoods, and communities. We know that taking care of ourselves by eating well and staying active, not smoking, getting the recommended immunizations and screening tests, and seeing a doctor when we are sick all influence our health. Our health is also determined in part by access to social and economic opportunities; the resources and supports available in our homes, neighborhoods, and communities; the quality of our schooling; the safety of our workplaces; the cleanliness of our water, food, and air; and the nature of our social interactions and relationships. The conditions in which we live explain in part why some Americans are healthier than others and why Americans more generally are not as healthy as they could be.

Healthy People 2020 (www.healthypeople.gov)

#### **Poverty**

The following chart outlines the proportion of our population below the federal poverty threshold, as well as below 200% of the federal poverty level, in comparison to state and national proportions.



#### **Population in Poverty**

Sources: .

US Census Bureau American Community Survey 5-year estimates. Retrieved August 2019 from CARES Engagement Network at https://engagementnetwork.org. Poverty is considered a key driver of health status. This indicator is relevant because poverty creates barriers to access including health services, healthy food, and Notes other necessities that contribute to poor health status.

# **Education**

Education levels are reflected in the proportion of our population without a high school diploma:

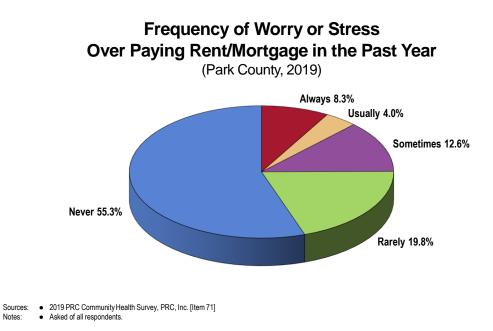
#### (Population Age 25+ Without a High School Diploma or Equivalent, 2013-2017) 100% 80% 60% 40% 517 individuals 5 20% 12.7% 7.0% 4.3% 0% Park County Montana **United States** US Census Bureau American Community Survey 5-year estimates. Sources: ٠ Retrieved August 2019 from CARES Engagement Network at https://engagementnetwork.org.

Notes: This indicator is relevant because educational attainment is linked to positive health outcomes

### Housing

#### Housing Insecurity

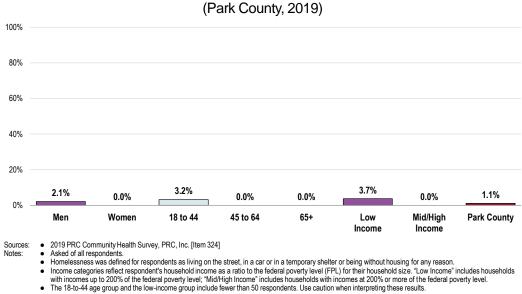
"In the past 12 months, how often were you worried or stressed about having enough money to pay your rent or mortgage? Would you say you were worried or stressed: always, usually, sometimes, rarely, or never?"



# **Population With No High School Diploma**

#### Homelessness

"Has there been any time in the past two years when you were living on the street, in a car, in a temporary shelter, or without housing for any reason?"

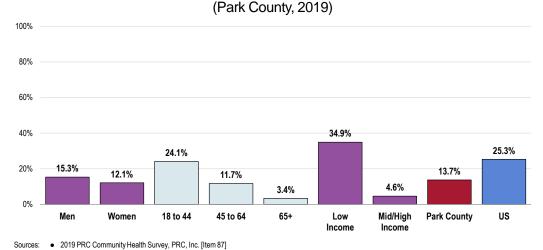


# Experienced Period of Homelessness Within Past Two Years

#### **Food Insecurity**

"Now I am going to read a statement that people have made about their food situation. Please tell me whether this statement was 'often true,' 'sometimes true,' or 'never true' for you in the past 12 months."

• 'I worried about whether our food would run out before we got money to buy more.'



# Worried About Running Out of Food Before Having Money to Buy More in the Past Year

Notes: • Asked of all respondents.

- Includes respondents who say this was "Often True" or "Sometimes True" for them in the past year.
- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households
  with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.
- The 18-to-44 age group and the low-income group include fewer than 50 respondents. Use caution when interpreting these results.

# **Adverse Childhood Experiences (ACEs)**

#### **About ACEs**

Adverse Childhood Experiences (ACEs) are stressful or traumatic events, including abuse and neglect. They are a significant risk factor for substance abuse disorders and can impact prevention efforts. ACEs include:

- Physical abuse
- Sexual Abuse
- Emotional abuse
- Physical neglect
- Emotional neglect
- Intimate partner violence
- Mother treated violently
- Household substance misuse
- Household mental illness
- Parental separation/divorce
- Incarcerated household member

A series of 11 survey questions were used to identify adults' experiences of adverse childhood events prior to the age of 18 years. These 11 questions align with 8 ACEs categories, as outlined in the following table.

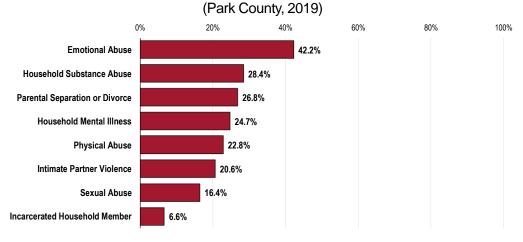
Category	Question
Household Mental Illness	Before you were 18 years of age, did you live with anyone who was depressed, mentally ill, or suicidal?
	Before you were 18 years of age, did you live with anyone who was a problem drinker or alcoholic?
Household Substance Abuse	Before you were 18 years of age, did you live with anyone who used illegal street drugs or who abused prescription medications?
Incarcerated Household Member	Before you were 18 years of age, did you live with anyone who served time or was sentenced to serve time in a prison, jail, or other correctional facility?
Parental Separation or Divorce	Before you were 18 years of age, were your parents separated or divorced?
Intimate Partner Violence	Before age 18, how often did your parents or adults in your home slap, hit, kick, punch or beat each other up?
Physical Abuse	Before age 18, how often did a parent or adult in your home hit, beat, kick, or physically hurt you in any way? Do not include spanking.
Emotional Abuse	Before age 18, how often did a parent or adult in your home swear at you, insult you, or put you down?
	Before you were 18 years of age, how often did an adult or anyone at least 5 years older than you touch you sexually?
Sexual Abuse	Before you were 18 years of age, how often did an adult or anyone at least 5 years older than you try to make you touch them sexually?
	Before you were 18 years of age, how often did an adult or anyone at least 5 years older than you force you to have sex?

# Adverse Childhood Experiences (ACEs)

Sources: • PRC Community Health Survey, Professional Research Consultants, Inc. [Items 339-349]

Notes: • Reflects the total sample of respondents.

The prevalence of ACEs in the community is outlined below.



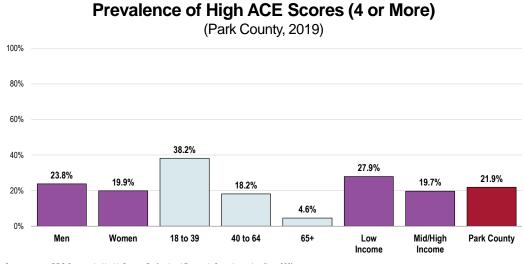
# Adverse Childhood Experiences (ACEs)

Sources: • PRC Community Health Survey, Professional Research Consultants, Inc. [Items 357-364]

Notes: • Reflects the total sample of respondents.

ACEs are stressful or traumatic events, including abuse and neglect. They are a significant risk factor for substance abuse disorders and can impact
prevention efforts.

In scoring the series of 11 ACE questions, survey respondents receive one "point" for each affirmative response. A score of 4 or higher is determined to be a "high" ACE score.



PRC Community Health Survey, Professional Research Consultants, Inc. [Item 366] Asked of all respondents. Sources: ٠ Notes:

٠

Adults who report four or more ACEs are categorized as having a high ACE score

Adults wito teport tour or more Access are dategorized as naming a might Acc source. Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level. •

- The 18-to-44 age group and the low-income group include fewer than 50 respondents. Use caution when interpreting these results.

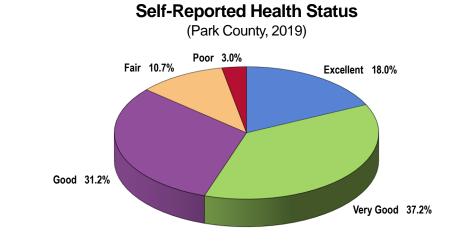
# **General Health Status**

# **Overall Health Status**

#### **Self-Reported Health Status**

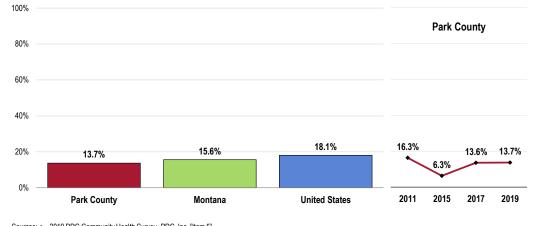
The initial inquiry of the PRC Community Health Survey asked respondents the following:

"Would you say that, in general, your health is: excellent, very good, good, fair, or poor?"



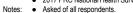
Sources: • 2019 PRC Community Health Survey, PRC, Inc. [Item 5] Notes: • Asked of all respondents.

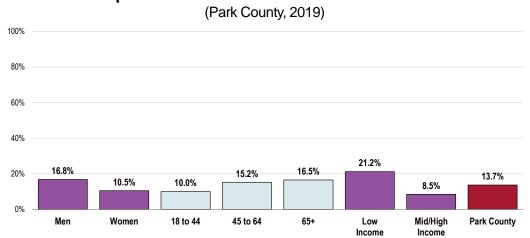
The following charts further detail "fair/poor" overall health responses in Park County in comparison to benchmark data, as well as by basic demographic characteristics (namely by sex, age groupings, and income [based on poverty status]).



# Experience "Fair" or "Poor" Overall Health

Sources: • 2019 PRC Community Health Survey, PRC, Inc. [Item 5]
Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2016 Montana data.
2017 PRC National Health Survey, PRC, Inc.





# Experience "Fair" or "Poor" Overall Health

Sources: • 2019 PRC Community Health Survey, PRC, Inc. [Item 5]

Notes: • Asked of all respondents.

Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households
with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

The 18-to-44 age group and the low-income group include fewer than 50 respondents. Use caution when interpreting these results.

## **Mental Health**

#### About Mental Health & Mental Disorders

Mental health is a state of successful performance of mental function, resulting in productive activities, fulfilling relationships with other people, and the ability to adapt to change and to cope with challenges. Mental health is essential to personal well-being, family and interpersonal relationships, and the ability to contribute to community or society. Mental disorders are health conditions that are characterized by alterations in thinking, mood, and/or behavior that are associated with distress and/or impaired functioning. Mental disorders contribute to a host of problems that may include disability, pain, or death. Mental illness is the term that refers collectively to all diagnosable mental disorders. Mental disorders are among the most common causes of disability. The resulting disease burden of mental illness is among the highest of all diseases.

Mental health and physical health are closely connected. Mental health plays a major role in people's ability to maintain good physical health. Mental illnesses, such as depression and anxiety, affect people's ability to participate in health-promoting behaviors. In turn, problems with physical health, such as chronic diseases, can have a serious impact on mental health and decrease a person's ability to participate in treatment and recovery.

The existing model for understanding mental health and mental disorders emphasizes the interaction of social, environmental, and genetic factors throughout the lifespan. In behavioral health, researchers identify: **risk factors**, which predispose individuals to mental illness; and **protective factors**, which protect them from developing mental disorders. Researchers now know that the prevention of mental, emotional, and behavioral (MEB) disorders is inherently interdisciplinary and draws on a variety of different strategies. Over the past 20 years, research on the prevention of mental disorders has progressed. The major areas of progress include evidence that:

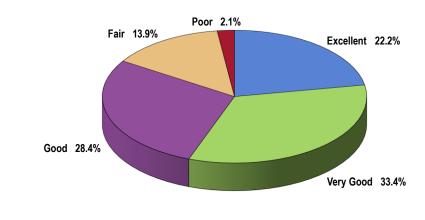
- MEB disorders are common and begin early in life.
- The greatest opportunity for prevention is among young people.
- There are multiyear effects of multiple preventive interventions on reducing substance abuse, conduct disorder, antisocial behavior, aggression, and child maltreatment.
- The incidence of depression among pregnant women and adolescents can be reduced.
- School-based violence prevention can reduce the base rate of aggressive problems in an average school by 25 to 33%.
- There are potential indicated preventive interventions for schizophrenia.
- Improving family functioning and positive parenting can have positive outcomes on mental health and can reduce poverty-related risk.
- School-based preventive interventions aimed at improving social and emotional outcomes can also improve academic outcomes.
- Interventions targeting families dealing with adversities, such as parental depression or divorce, can be effective in reducing risk for depression in children and increasing effective parenting.
- Some preventive interventions have benefits that exceed costs, with the available evidence strongest for early childhood interventions.
- Implementation is complex, and it is important that interventions be relevant to the target audiences.
- In addition to advancements in the prevention of mental disorders, there continues to be steady
  progress in treating mental disorders as new drugs and stronger evidence-based outcomes
  become available.
  - Healthy People 2020 (www.healthypeople.gov)

#### Self-Reported Mental Health Status

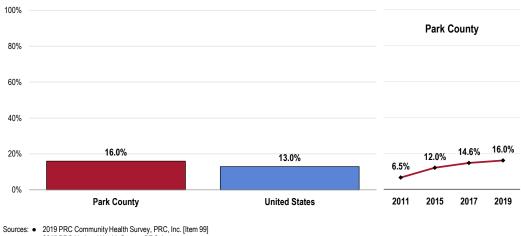
"Now thinking about your mental health, which includes stress, depression and problems with emotions, would you say that, in general, your mental health is: excellent, very good, good, fair, or poor?"

# **Self-Reported Mental Health Status**

(Park County, 2019)



Sources: • 2019 PRC Community Health Survey, PRC, Inc. [Item 99] Notes: • Asked of all respondents.



# **Experience "Fair" or "Poor" Mental Health**

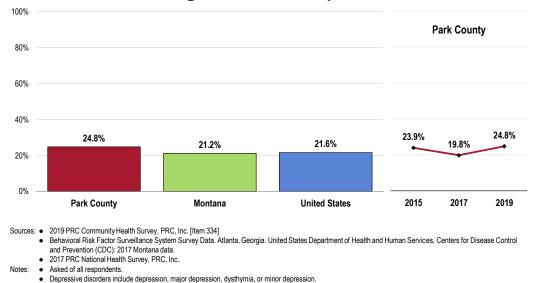
 Sources:
 2019 PRC Community Health Survey, PRC, Inc. [Item 99]

 2017 PRC National Health Survey, PRC, Inc.

 Notes:
 Asked of all respondents.

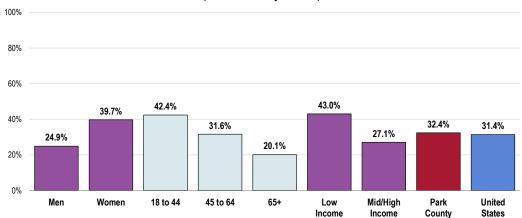
## **Depression**

Diagnosed Depression: "Has a doctor or other healthcare provider ever told you that you have a depressive disorder, including depression, major depression, dysthymia, or minor depression?"



# Have Been Diagnosed With a Depressive Disorder

Symptoms of Chronic Depression: "Have you had two years or more in your life when you felt depressed or sad most days, even if you felt okay sometimes?"



# Have Experienced Symptoms of Chronic Depression (Park County, 2019)

Sources: . 2019 PRC Community Health Survey, PRC, Inc. [Item 100] Notes:

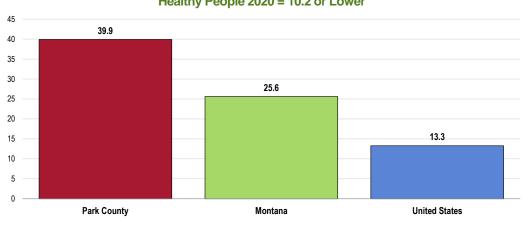
Asked of all respondents.

Chronic depression includes periods of two or more years during which the respondent felt depressed or sad on most days, even if (s)he felt okay sometimes. Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

The 18-to-44 age group and the low-income group include fewer than 50 respondents. Use caution when interpreting these results.

# Suicide

The following chart outlines the most current age-adjusted mortality rates attributed to suicide in our population. (Refer to "Leading Causes of Death" for an explanation of the use of age-adjusting for these rates.)



# Suicide: Age-Adjusted Mortality

(2013-2017 Annual Average Deaths per 100,000 Population) Healthy People 2020 = 10.2 or Lower

 
 Sources:
 CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted August 2019.

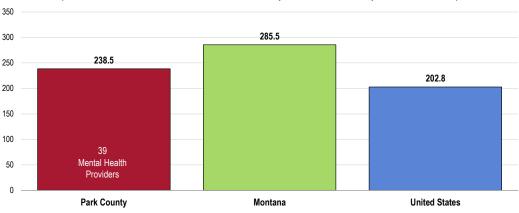
 US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective MHMD-1]

 Notes:
 Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).

Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

#### **Mental Health Treatment**

The following chart outlines access to mental health providers, expressed as the number of providers (psychiatrists, psychologists, clinical social workers, and counsellors who specialize in mental health care) per 100,000 residents.



## Access to Mental Health Providers

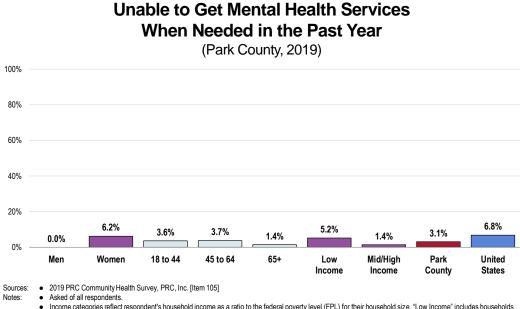
(Number of Mental Health Providers per 100,000 Population, 2017)

Sources: • University of Wisconsin Population Health Institute, County Health Rankings.

Retrieved August 2019 from CARES Engagement Network at https://engagementnetwork.org.

Notes: • This indicator reports the rate of the county population to the number of mental health providers including psychiatrists, psychologists, clinical social workers, and counsellors that specialize in mental health care.

"Was there a time in the past 12 months when you needed mental health services but were not able to get them?"



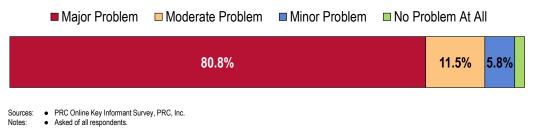
Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.
 The 18-to-44 age group and the low-income group include fewer than 50 respondents. Use caution when interpreting these results.

#### **Key Informant Input: Mental Health**

The following chart outlines key informants' perceptions of the severity of *Mental Health* as a problem in the community:

# Perceptions of Mental Health as a Problem in the Community

(Key Informants, 2019)



Among those rating this issue as a "major problem," the following represent what key informants see as the main challenges for persons with mental illness:

#### Access to Care/Services

Lack of access to quality behavioral health services – particularly for severe mental health disorders. Difficulty with early recognition and treatment of depression and suicidality, particularly in school-aged kids. Stigma associated with being diagnosed and treating mental health issues. - Physician

Availability of services. Discreet access to services and funding. - Community Leader

Lack of services and access. - Community Leader

We have no state-funded mental health clinic. Since the 1990s, mental health services to kids and adults have been slashed by our legislature. Our services are minimal. - Other Health Provider

Since the local MHC office closed, there have been some attempts to address this issue. I am not sure that these attempts have come close to meeting this need in our community. Therefore, there are only limited resources available to serve the mentally ill folks in our county. To see an actual psychiatrist, someone can go to Livingston HealthCare to see one of their two providers, but their schedules are full for quite a while from today's date. As for the psychiatric needs for children/youth, someone would have to go to Bozeman, Billings, or some other larger community to get that type of help. Then we come to inpatient psychiatric treatment, this would require going to Billings, Helena, Great Falls, Missoula, or Kalispell. When a person is in a mental health crisis, it is difficult to have to seek these services so far away from our home and support systems. Again, transportation is a major barrier. - Other Health Provider

Difficult to access existing resources. Insurance obstacles to paying for resources. Many people feel judged and unable to ask for help without consequences. - Other Health Provider

Not enough available services, not enough case managers, not enough outreach to contact those without Medicaid or Social Security and assistance to obtain these benefits. Not enough housing for MI and others, with criminal, sexual addiction and backgrounds. - Social Services Provider

Lack of availability of pediatric and adolescent mental health services. Inadequate coordination of services. Lack of substance abuse treatment. Increase in demand for mental health services. No inpatient facility for patients. Often those with mental health issues enter criminal justice/legal system rather than treatment. - Public Health Representative

Timely, appropriate and comprehensive care. - Public Health Representative

We do not have a state-sponsored mental health facility for our chronic mental health patients. It is difficult to track them when they are off their medication. Often see a revolving door of patients in and out of Warm Springs. No case management of home-based services for adult mental health. - Social Services Provider

No community resources, stigma, we are basically abandoning those with mental health issues and how to best treat and provide for those who suffer and their families. - Social Services Provider

Access to appropriate care in a timely manner. Lack of mental health providers in area. Lack of specialty mental health providers. - Other Health Provider

There are no resources or providers in Park County to address mental health issues. - Social Services Provider

#### **Contributing Factors**

Continuity of care, access to substances of abuse and poverty. - Physician

Limited resources for treatment of serious mental illness. Lack of affordable counseling options. Lack of seamless system of crisis care. Lack of comprehensive community well-being strategy. - Physician

Even in Livingston, where a fairly large menu of services exists, inordinate numbers of individuals seem to face mental health struggles correlated with substance abuse and trauma. Access to services can be limited by ability to pay – some who do not qualify for Medicaid cannot pay for services and do not access them. High suicide rates, frequent and severe disruptive and physically aggressive behavior among school-aged children, and widespread self-medication is among the indicators of the mental health crisis in Livingston. - Community Leader

Consistent care, housing and nutrition. - Social Services Provider

The problem is multivariate. Poverty, relationship skills, employability skills, drugs, alcohol and incarceration. - Community Leader

Poverty, stress, lack of resources, education or support. Overmedication and lack of individualization. -Physician

#### Lack of direct sunlight, vitamin D. - Public Health Representative

We have a high percentage of people with mental health issues. Socioeconomic challenges contribute to these issues, as do substance abuse issues. We have one of this highest suicide rates in the nation. - Other Health Provider

#### Prevalence/Incidence

Mental health issues are rampant in our youth, which is the population I am involved with. There is a lot of anxiety and depression in youth in this county, and access to care can be limited to the very rich or very poor. - Other Health Provider

Customers and clients disclosing diagnosed and undiagnosed mental health conditions. - Social Services Provider

Consistently identified as one of the biggest health problems in our community coupled with inadequate treatment resources. Often comorbidity with substance confounds the situation. - Community Leader

There is an increased number of youth and adults presenting for depression, anxiety, and suicidal ideation. This of course means there are also many who are not accessing care for one reason or another with the same issues. Financial stress, adverse childhood experiences, drug and alcohol use, and hopelessness are definitely a good part of the problem. Recent suicides in our community and in social media have made that seem like a viable option. - Other Health Provider

#### Lack of Providers

Not enough mental health providers available for the county, specifically the rural communities and services for children. Schools are desperate for mental health counselors on site. Many community partners are looking for solutions for rural communities and the schools but have not found an easy answer (or any answer yet). - Community Leader

We essentially have no mental health providers like psychiatry, psychiatric NPs, etc. In other words, there exists nothing for people with severe mental disorders. - Other Health Provider

Only one available psychiatrist within 60 miles. - Physician

As a subset of mental health, care for the caregiver is a major concern needing attention. The burnout rate for school staff, health care providers, and mental health providers needs to be addressed. - Community Leader

#### Denial/Stigma

Stigma. Lacking resources, process for community mental health intervention. There is a need for community/group debriefing, defusing similarly to CISM for first responders. - Community Leader Stigma of seeking mental health care and the availability or lack thereof of providers. - Community Leader

The stigma of getting mental health services. Access to mental health services. Lack of both depth and breadth of mental health services. - Social Services Provider

#### Disease Management

Therapy and medicinal assistance. - Community Leader

I feel that one of the biggest challenges for people with mental health issues in our community is the ability to seek out care. Typically, they shut down and don't communicate with others instead of reaching out, and then it is too late. I also feel that we could use more advocates and supports for people who require mental health care in our community. The schools are doing a great job of providing resources and supports, but there are simply too many students who require these types of supports and not enough funding. - Public Health Representative

Counseling, medications and crisis intervention. - Community Leader

#### Affordable Care/Services

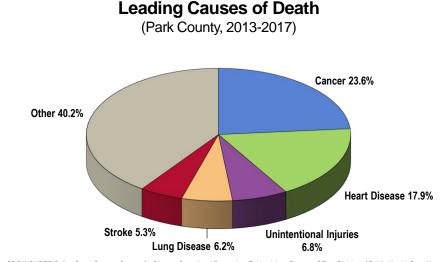
Affordable counseling services. Suicide prevention. Not just our community but technology has created a vastly different way to communicate. People are not sharing emotions face to face. Education on the effect of technology and mental health should be an area of focus. - Community Leader

# **Death, Disease & Chronic Conditions**

## Leading Causes of Death

#### **Distribution of Deaths by Cause**

Cancers and cardiovascular disease (heart disease and stroke) are leading causes of death in the community.



 CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Sources: Informatics. Data extracted August 2019. Notes:

Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).

Lung disease is CLRD, or chronic lower respiratory disease

## Age-Adjusted Death Rates for Selected Causes

#### **About Age-Adjusted Death Rates**

In order to compare mortality in the region with other localities (in this case, Montana and the United States), it is necessary to look at rates of death — these are figures which represent the number of deaths in relation to the population size (such as deaths per 100,000 population, as is used here).

Furthermore, in order to compare localities without undue bias toward younger or older populations, the common convention is to adjust the data to some common baseline age distribution. Use of these "age-adjusted" rates provides the most valuable means of gauging mortality against benchmark data, as well as Healthy People 2020 objectives.

The following chart outlines annual average age-adjusted death rates per 100,000 population for selected causes of death in the area. (For infant mortality data, see also Birth Outcomes & Risks in the Births section of this report.)

# Age-Adjusted Death Rates for Selected Causes

	Park County	Montana	US	HP2020
Malignant Neoplasms (Cancers)	147.9	153.0	158.1	161.4
Diseases of the Heart	118.5	153.5	167.1	156.9*
Unintentional Injuries	56.6	54.2	44.0	36.4
Intentional Self-Harm (Suicide)	39.9	25.6	13.3	10.2
Chronic Lower Respiratory Disease (CLRD)	39.4	51.3	41.1	n/a
Cerebrovascular Disease (Stroke)	35.0	35.1	37.1	34.8
Alzheimer's Disease	28.9	20.8	28.0	n/a
Firearm-Related	27.4	18.7	11.1	9.3
Diabetes	18.4	21.7	21.2	20.5*
Motor Vehicle Deaths	17.2	19.3	11.0	12.4
Pneumonia/Influenza	11.7	13.6	15.3	n/a
Cirrhosis/Liver Disease	11.2	14.1	11.1	8.2

(2013-2017 Deaths per 100,000 Population)

 CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted August 2019.
 US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov.
 Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population and coded using ICD-10 codes.
 "The Healthy People 2020 Heart Disease target is adjusted to account for all diseases of the heart; the Diabetes target is adjusted to reflect only diabetes mellitus-coded deaths. Sources:

Data for pneumonia/influenza, motor vehicle deaths and cirrhosis/liver disease are from 2008-2017.

Note:

## **Cardiovascular Disease**

#### About Heart Disease & Stroke

Heart disease is the leading cause of death in the United States, with stroke following as the third leading cause. Together, heart disease and stroke are among the most widespread and costly health problems facing the nation today, accounting for more than \$500 billion in healthcare expenditures and related expenses in 2010 alone. Fortunately, they are also among the most preventable.

The leading modifiable (controllable) risk factors for heart disease and stroke are:

- High blood pressure
- High cholesterol
- Cigarette smoking
- Diabetes
- · Poor diet and physical inactivity
- Overweight and obesity

The risk of Americans developing and dying from cardiovascular disease would be substantially reduced if major improvements were made across the US population in diet and physical activity, control of high blood pressure and cholesterol, smoking cessation, and appropriate aspirin use.

The burden of cardiovascular disease is disproportionately distributed across the population. There are significant disparities in the following based on gender, age, race/ethnicity, geographic area, and socioeconomic status:

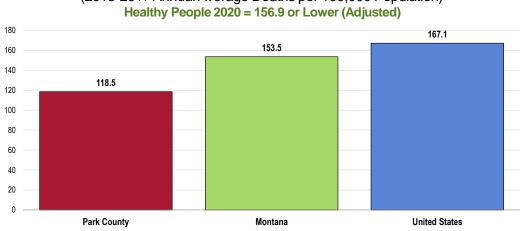
- Prevalence of risk factors
- · Access to treatment
- Appropriate and timely treatment
- Treatment outcomes
- Mortality

Disease does not occur in isolation, and cardiovascular disease is no exception. Cardiovascular health is significantly influenced by the physical, social, and political environment, including: maternal and child health; access to educational opportunities; availability of healthy foods, physical education, and extracurricular activities in schools; opportunities for physical activity, including access to safe and walkable communities; access to healthy foods; quality of working conditions and worksite health; availability of community support and resources; and access to affordable, quality healthcare.

Healthy People 2020 (www.healthypeople.gov)

#### Age-Adjusted Heart Disease & Stroke Deaths

The greatest share of cardiovascular deaths is attributed to heart disease. The following charts outline age-adjusted mortality rates for heart disease and for stroke in our community.



# Heart Disease: Age-Adjusted Mortality

(2013-2017 Annual Average Deaths per 100,000 Population)

Sources: CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted August 2019.

US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective HDS-2]

Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10) .

Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population. •

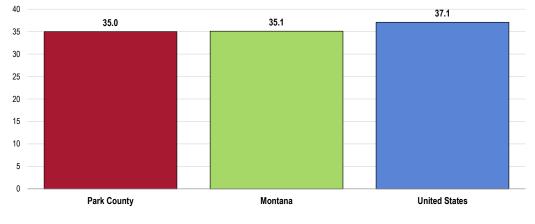
Notes:

Notes

The Healthy People 2020 Heart Disease target is adjusted to account for all diseases of the heart.

# Stroke: Age-Adjusted Mortality (2013-2017 Annual Average Deaths per 100,000 Population)

Healthy People 2020 = 34.8 or Lower



CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Sources: . Informatics. Data extracted August 2019.

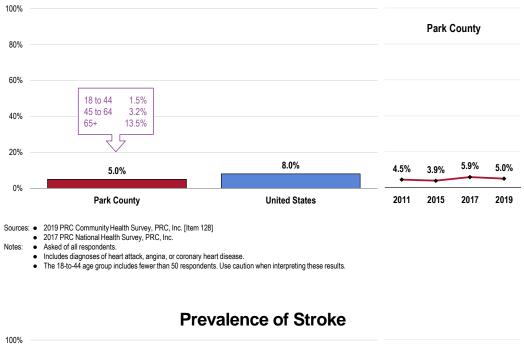
US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective HDS-3]

. Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10) Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

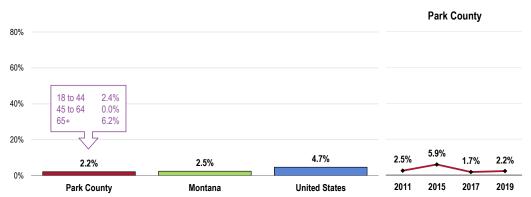
#### Prevalence of Heart Disease & Stroke

"Has a doctor, nurse, or other health professional ever told you that you had: a heart attack, also called a myocardial infarction; or angina or coronary heart disease?" (Heart disease prevalence here is a calculated prevalence that includes those responding affirmatively to either.)

"Has a doctor, nurse, or other health professional ever told you that you had a stroke?"



**Prevalence of Heart Disease** 



Sources: • 2019 PRC Community Health Survey, PRC, Inc. [Item 33]

Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control
and Prevention (CDC): 2017 Montana data.

2017 PRC National Health Survey, PRC, Inc.
Notes: Asked of all respondents.

• The 18-to-44 age group includes fewer than 50 respondents. Use caution when interpreting these results.

## **Cardiovascular Risk Factors**

#### **About Cardiovascular Risk**

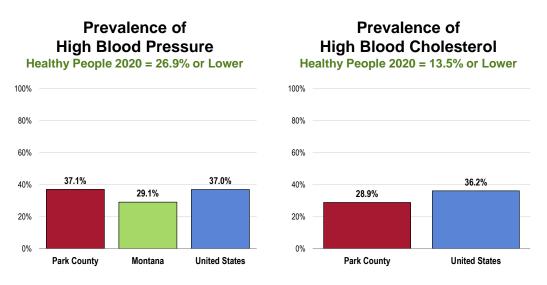
Controlling risk factors for heart disease and stroke remains a challenge. High blood pressure and cholesterol are still major contributors to the national epidemic of cardiovascular disease. High blood pressure affects approximately 1 in 3 adults in the United States, and more than half of Americans with high blood pressure do not have it under control. High sodium intake is a known risk factor for high blood pressure and heart disease, yet about 90% of American adults exceed their recommendation for sodium intake.

- Healthy People 2020 (www.healthypeople.gov)

#### High Blood Pressure & Cholesterol Prevalence

"Have you ever been told by a doctor, nurse, or other health care professional that you had high blood pressure?"

"Blood cholesterol is a fatty substance found in the blood. Have you ever been told by a doctor, nurse, or other health care professional that your blood cholesterol is high?"



Sources: • 2019 PRC Community Health Survey, PRC, Inc. [Items 39, 43]

Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control
and Prevention (CDC): 2015 Montana data.

• 2017 PRC National Health Survey, PRC, Inc.

US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objectives HDS-5.1, HDS-7]

Notes: 
 Asked of all respondents.

#### **About Cardiovascular Risk**

Individual level risk factors which put people at increased risk for cardiovascular diseases include:

- High Blood Pressure
- High Blood Cholesterol
- Tobacco Use
- Physical Inactivity
- Poor Nutrition
- Overweight/Obesity
- Diabetes
  - National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention

Three health-related behaviors contribute markedly to cardiovascular disease:

**Poor nutrition**. People who are overweight have a higher risk for cardiovascular disease. Almost 60% of adults are overweight or obese. To maintain a proper body weight, experts recommend a well-balanced diet which is low in fat and high in fiber, accompanied by regular exercise.

Lack of physical activity. People who are not physically active have twice the risk for heart disease of those who are active. More than half of adults do not achieve recommended levels of physical activity.

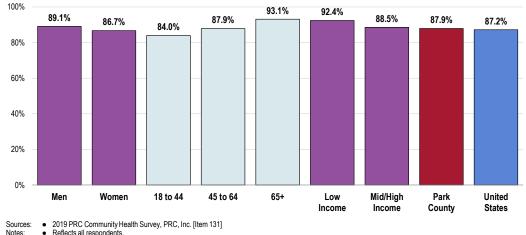
**Tobacco use**. Smokers have twice the risk for heart attack of nonsmokers. Nearly one-fifth of all deaths from cardiovascular disease, or about 190,000 deaths a year nationally, are smoking-related. Every day, more than 3,000 young people become daily smokers in the US.

Modifying these behaviors is critical both for preventing and for controlling cardiovascular disease. Other steps that adults who have cardiovascular disease should take to reduce their risk of death and disability include adhering to treatment for high blood pressure and cholesterol, using aspirin as appropriate, and learning the symptoms of heart attack and stroke.

- National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention

#### Total Cardiovascular Risk

The following chart reflects the percentage of adults in Park County who report one or more of the following: being overweight; smoking cigarettes; being physically inactive; or having high blood pressure or cholesterol. See also *Nutrition, Physical Activity, Weight Status,* and *Tobacco Use* in the **Modifiable Health Risks** section of this report.



## Present One or More Cardiovascular Risks or Behaviors (Park County, 2019)

Reflects all respondents

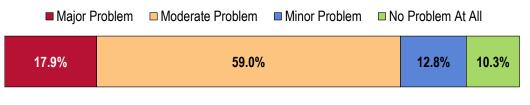
- Cardiovascular risk is defined as exhibiting one or more of the following: 1) no leisure-time physical activity; 2) regular/occasional cigarette smoking; 3) high blood • pressure; 4) high blood cholesterol; and/or 5) being overweight/obese. Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households
- with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level
- The 18-to-44 age group and the low-income group include fewer than 50 respondents. Use caution when interpreting these results.

#### Key Informant Input: Heart Disease & Stroke

The following chart outlines key informants' perceptions of the severity of Heart Disease & Stroke as a problem in the community:

# Perceptions of Heart Disease and Stroke as a Problem in the Community

(Key Informants, 2019)



 PRC Online Key Informant Survey, PRC, Inc. Sources: Notes: Asked of all respondents.

Among those rating this issue as a "major problem," reasons related to the following:

Prevalence/Incidence

I see a lot of people with heart disease and stroke. - Social Services Provider

Leading causes of death and disability in our state and community. - Public Health Representative High prevalence in Park County, and there isn't a cardiologist in Park County full time. LHC has a visiting cardiologist and is trying to recruit a full-time cardiologist, but the position has not been filled. -Community Leader

#### Awareness/Education

They are for any community, lack of education. - Public Health Representative

Lack of education around multiple cardiovascular risk factors, having the focus be on only cholesterol. - Physician

Aging Population

Age of population. - Community Leader

**Contributing Factors** 

Smoking, poor nutrition, obesity, and lifestyle. - Social Services Provider

# Cancer

#### About Cancer

Continued advances in cancer research, detection, and treatment have resulted in a decline in both incidence and death rates for all cancers. Among people who develop cancer, more than half will be alive in five years. Yet, cancer remains a leading cause of death in the United States, second only to heart disease.

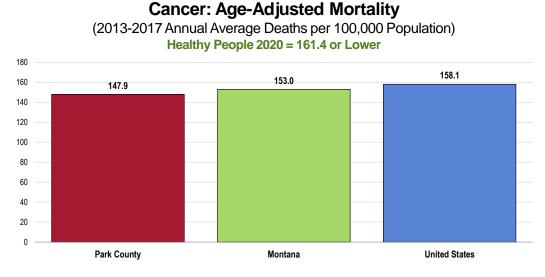
Many cancers are preventable by reducing risk factors such as: use of tobacco products; physical inactivity and poor nutrition; obesity; and ultraviolet light exposure. Other cancers can be prevented by getting vaccinated against human papillomavirus and hepatitis B virus. In the past decade, overweight and obesity have emerged as new risk factors for developing certain cancers, including colorectal, breast, uterine corpus (endometrial), and kidney cancers. The impact of the current weight trends on cancer incidence will not be fully known for several decades. Continued focus on preventing weight gain will lead to lower rates of cancer and many chronic diseases.

Screening is effective in identifying some types of cancers (see US Preventive Services Task Force [USPSTF] recommendations), including:

- Breast cancer (using mammography)
- Cervical cancer (using Pap tests)
- · Colorectal cancer (using fecal occult blood testing, sigmoidoscopy, or colonoscopy)
  - Healthy People 2020 (www.healthypeople.gov)

#### Age-Adjusted Cancer Deaths

The following chart illustrates age-adjusted cancer mortality (all types) in Park County.



Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted August 2019.

- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective C-1]
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
   Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

PRC

Notes:

Lung cancer is the leading cause of cancer deaths in the area. Other leading sites include prostate cancer among men, breast cancer among women, and colorectal cancer (both sexes).

## Age-Adjusted Cancer Death Rates by Site (2008-2017 Annual Average Deaths per 100,000 Population)

	Park County	Montana	US	HP2020
ALL CANCERS	147.9	153.0	158.1	161.4
Lung Cancer	29.7	39.6	43.4	45.5
Prostate Cancer	21.7	22.8	20.1	21.8
Female Breast Cancer	17.1	19.9	21.1	20.7
Colorectal Cancer	13.8	13.9	14.9	14.5

CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Sources: ٠ Informatics. Data extracted August 2019.

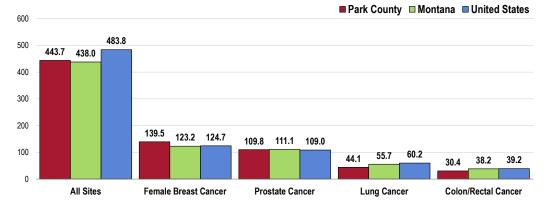
US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov

#### **Cancer Incidence**

Incidence rates (or case rates) reflect the number of newly diagnosed cases in a given population in a given year, regardless of outcome. They usually are expressed as cases per 100,000 population per year. These rates are also age-adjusted.

## Cancer Incidence Rates by Site

(Annual Average Age-Adjusted Incidence per 100,000 Population, 2011-2015)



State Cancer Profiles Sources: ٠

Notes

Retrieved August 2019 from CARES Engagement Network at https://engagementnetwork.org. This indicator reports the age adjusted incidence rate (cases per 100,000 population per year) of cancers, adjusted to 2000 US standard population age groups (under age 1, 1-4, 5-9, ..., 80-84, 85 and older). This indicator is relevant because cancer is a leading cause of death and it is important to identify cance separately to better target interventions.

#### **About Cancer Risk**

Reducing the nation's cancer burden requires reducing the prevalence of behavioral and environmental factors that increase cancer risk.

- All cancers caused by cigarette smoking could be prevented. At least one-third of cancer deaths that occur in the United States are due to cigarette smoking.
- According to the American Cancer Society, about one-third of cancer deaths that occur in the United States each year are due to nutrition and physical activity factors, including obesity.
  - National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention

#### **Cancer Screenings**

The American Cancer Society recommends that both men and women get a cancer-related checkup during a regular doctor's checkup. It should include examination for cancers of the thyroid, testicles, ovaries, lymph nodes, oral cavity, and skin, as well as health counseling about tobacco, sun exposure, diet and nutrition, risk factors, sexual practices, and environmental and occupational exposures.

Screening levels in the community were measured in the PRC Community Health Survey relative to three cancer sites: female breast cancer (mammography); cervical cancer (Pap smear testing); and colorectal cancer (sigmoidoscopy and fecal occult blood testing).

#### Female Breast Cancer

The US Preventive Services Task Force (USPSTF) recommends biennial screening mammography for women aged 50 to 74 years.

#### **Cervical Cancer**

The US Preventive Services Task Force (USPSTF) strongly recommends screening for cervical cancer every 3 years with cervical cytology alone in women aged 21 to 29 years.

#### **Colorectal Cancer**

The US Preventive Services Task Force (USPSTF) recommends screening for colorectal cancer starting at age 50 years and continuing until age 75 years.

- US Preventive Services Task Force, Agency for Healthcare Research and Quality, US Department of Health & Human Services

Note that other organizations (e.g., American Cancer Society, American Academy of Family Physicians, American College of Physicians, National Cancer Institute) may have slightly different screening guidelines.

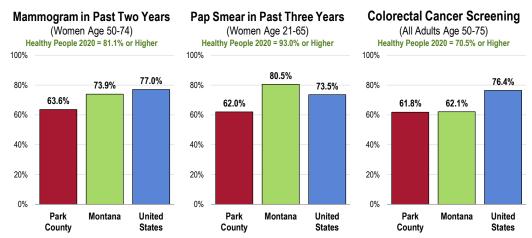
Breast Cancer Screening: "A mammogram is an x-ray of each breast to look for cancer. How long has it been since you had your last mammogram?" (Calculated here among women age 50 to 74 who indicate screening within the past 2 years.)

Cervical Cancer Screening: "A Pap test is a test for cancer of the cervix. How long has it been since you had your last Pap test?" (Calculated here among women age 21 to 65 who indicate screening within the past 3 years.)

Colorectal Cancer Screening: "Sigmoidoscopy and colonoscopy are exams in which a tube is inserted in the rectum to view the colon for signs of cancer or other health problems. How long has it been since your last sigmoidoscopy or colonoscopy?" and

"A blood stool test is a test that may use a special kit at home to determine whether the stool contains blood. How long has it been since you had your last blood stool test?"

(Calculated here among both sexes age 50 to 75 who indicated fecal occult blood testing within the past year and/or sigmoidoscopy/colonoscopy [lower endoscopy] within the past 10 years.)



# **Cancer Screenings**

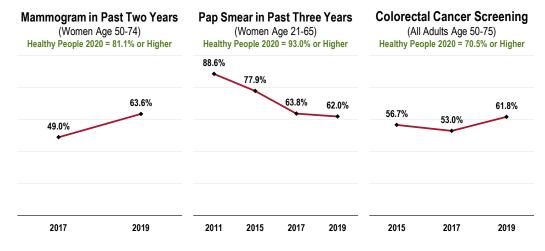
Sources: • 2019 PRC Community Health Survey, PRC, Inc. [Items 133, 134, 137]

Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control • and Prevention (CDC): 2016 Montana data.

2017 PRC National Health Survey, PRC, Inc.

 US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objectives C-15, C-16, C-17] Notes:

· Each indicator is shown among the gender and/or age group specified.



# **Cancer Screenings: Park County Trends**

Sources: 2019 PRC Community Health Survey, PRC, Inc. [Items 133, 134, 137] US Department of Health and Human Services. Healthy People 2020. December

US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objectives C-15, C-16, C-17]

Notes: 
 Each indicator is shown among the gender and/or age group specified.

#### **Key Informant Input: Cancer**

The following chart outlines key informants' perceptions of the severity of *Cancer* as a problem in the community:

# Perceptions of Cancer as a Problem in the Community

(Key Informants, 2019)

■ Major Problem ■ Moderate Problem ■ Minor Problem ■ No Problem At All

12.2%
-------

Sources: • PRC Online Key Informant Survey, PRC, Inc.

Notes: • Asked of all respondents.

Among those rating this issue as a "major problem," reasons related to the following:

#### Access to Care/Services

There is not a resource available to serve folks with this condition. Someone would have to go to Bozeman Health, the Cancer Center, or go to Billings or some other larger community to get help and support for cancer. For a lot of our residents, transportation is a huge barrier. - Other Health Provider

#### Aging Population

Age of population. - Community Leader

#### Prevalence/Incidence

It is the second-leading cause of mortality in our communities. Community members are not receiving preventive care or are delaying care for their symptoms. - Public Health Representative

#### **Environmental Contributors**

Lots of people in the community are diagnosed with cancer. I believe a lot has to do with the contamination of soil and water from years ago when chemicals were discharged without proper handling. We are paying for mistakes made years ago; along with that is all the chemicals in food, poor diets, excess hormones in meat, milk, etc. - Social Services Provider

# **Respiratory Disease**

#### About Asthma & COPD

Asthma and chronic obstructive pulmonary disease (COPD) are significant public health burdens. Specific methods of detection, intervention, and treatment exist that may reduce this burden and promote health.

Asthma is a chronic inflammatory disorder of the airways characterized by episodes of reversible breathing problems due to airway narrowing and obstruction. These episodes can range in severity from mild to life threatening. Symptoms of asthma include wheezing, coughing, chest tightness, and shortness of breath. Daily preventive treatment can prevent symptoms and attacks and enable individuals who have asthma to lead active lives.

COPD is a preventable and treatable disease characterized by airflow limitation that is not fully reversible. The airflow limitation is usually progressive and associated with an abnormal inflammatory response of the lung to noxious particles or gases (typically from exposure to cigarette smoke). Treatment can lessen symptoms and improve quality of life for those with COPD.

The burden of respiratory diseases affects individuals and their families, schools, workplaces, neighborhoods, cities, and states. Because of the cost to the healthcare system, the burden of respiratory diseases also falls on society; it is paid for with higher health insurance rates, lost productivity, and tax dollars. Annual healthcare expenditures for asthma alone are estimated at \$20.7 billion.

**Asthma**. The prevalence of asthma has increased since 1980. However, deaths from asthma have decreased since the mid-1990s. The causes of asthma are an active area of research and involve both genetic and environmental factors.

Risk factors for asthma currently being investigated include:

- · Having a parent with asthma
- · Sensitization to irritants and allergens
- Respiratory infections in childhood
- Overweight

Asthma affects people of every race, sex, and age. However, significant disparities in asthma morbidity and mortality exist, in particular for low-income and minority populations. Populations with higher rates of asthma include: children; women (among adults) and boys (among children); African Americans; Puerto Ricans; people living in the Northeast United States; people living below the Federal poverty level; and employees with certain exposures in the workplace.

While there is not a cure for asthma yet, there are diagnoses and treatment guidelines that are aimed at ensuring that all people with asthma live full and active lives.

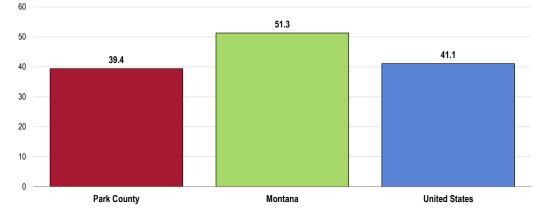
Healthy People 2020 (www.healthypeople.gov)

[NOTE: COPD was changed to chronic lower respiratory disease (CLRD) with the introduction of ICD-10 codes. CLRD is used in vital statistics reporting, but COPD is still widely used and commonly found in surveillance reports.]

#### Age-Adjusted Respiratory Disease Deaths

Chronic lower respiratory diseases (CLRD) are diseases affecting the lungs; the most deadly of these is chronic obstructive pulmonary disease (COPD), which includes emphysema and chronic bronchitis. Mortality for CLRD is illustrated in the charts that follow.

Pneumonia and influenza mortality is also illustrated.



# CLRD: Age-Adjusted Mortality

(2013-2017 Annual Average Deaths per 100,000 Population)

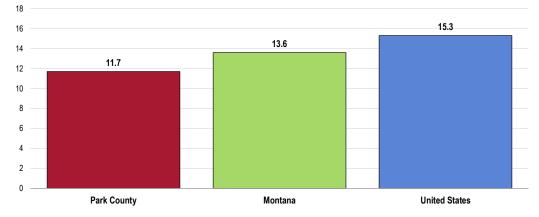
CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Sources: ٠ Informatics. Data extracted August 2019. Notes:

• Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).

Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population. •

CLRD is chronic lower respiratory disease.

# Pneumonia/Influenza: Age-Adjusted Mortality



(2008-2017 Annual Average Deaths per 100,000 Population)

 CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted August 2019.

Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10). Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

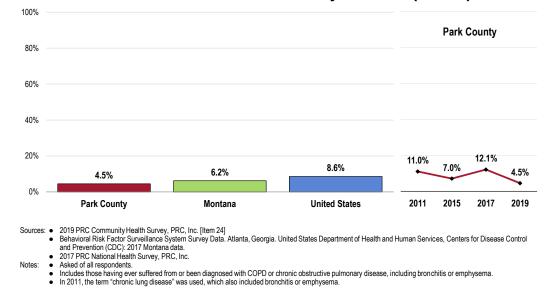
# **Prevalence of Respiratory Diseases**

#### COPD

Sources:

Notes

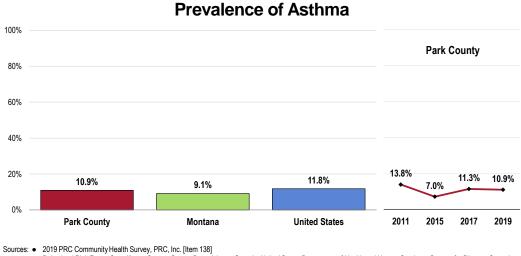
"Would you please tell me if you have ever suffered from or been diagnosed with COPD or chronic obstructive pulmonary disease, including bronchitis or emphysema?"



# Prevalence of Chronic Obstructive Pulmonary Disease (COPD)

#### Asthma

Adults: "Have you ever been told by a doctor, nurse, or other health professional that you had asthma?" and "Do you still have asthma?" (Calculated here as a prevalence of all adults who have ever been diagnosed with asthma and who still have asthma.)



Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control
and Prevention (CDC): 2017 Montana data.

Includes those who have ever been diagnosed with asthma and report that they still have asthma.

<sup>2017</sup> PRC National Health Survey, PRC, Inc.
Notes: Asked of all respondents.

## Key Informant Input: Respiratory Disease

The following chart outlines key informants' perceptions of the severity of *Respiratory Disease* as a problem in the community:

# Perceptions of Respiratory Diseases as a Problem in the Community

(Key Informants, 2019)

<b>13.2% 34.2% 36.8%</b>	15.8%
--------------------------	-------

Sources: • PRC Online Key Informant Survey, PRC, Inc.

Notes: • Asked of all respondents.

Among those rating this issue as a "major problem," reasons related to the following:

#### **Environmental Contributors**

Wildfire smoke and allergy seasons. - Public Health Representative

#### Prevalence/Incidence

A lot of asthma, COPD, respiratory illness in the community. A lot of community-acquired pneumonia. -Social Services Provider

#### **Contributing Factors**

Smoking, air quality, and lifestyle choices. - Social Services Provider

# **Injury & Violence**

#### **About Injury & Violence**

Injuries and violence are widespread in society. Both unintentional injuries and those caused by acts of violence are among the top 15 killers for Americans of all ages. Many people accept them as "accidents," "acts of fate," or as "part of life." However, most events resulting in injury, disability, or death are predictable and preventable.

Injuries are the leading cause of death for Americans ages 1 to 44, and a leading cause of disability for all ages, regardless of sex, race/ethnicity, or socioeconomic status. More than 180,000 people die from injuries each year, and approximately 1 in 10 sustains a nonfatal injury serious enough to be treated in a hospital emergency department.

Beyond their immediate health consequences, injuries and violence have a significant impact on the well-being of Americans by contributing to:

- Premature death
- Disability
- · Poor mental health
- · High medical costs
- Lost productivity

The effects of injuries and violence extend beyond the injured person or victim of violence to family members, friends, coworkers, employers, and communities.

Numerous factors can affect the risk of unintentional injury and violence, including individual behaviors, physical environment, access to health services (ranging from pre-hospital and acute care to rehabilitation), and social environment (from parental monitoring and supervision of youth to peer group associations, neighborhoods, and communities).

Interventions addressing these social and physical factors have the potential to prevent unintentional injuries and violence. Efforts to prevent unintentional injury may focus on:

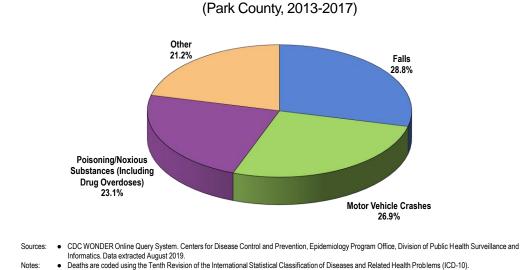
- Modifications of the environment
- · Improvements in product safety
- Legislation and enforcement
- Education and behavior change
- Technology and engineering

Efforts to prevent violence may focus on:

- Changing social norms about the acceptability of violence
- Improving problem-solving skills (for example, parenting, conflict resolution, coping)
- Changing policies to address the social and economic conditions that often give rise to violence
  - Healthy People 2020 (www.healthypeople.gov)

## Leading Causes of Accidental Death

Leading causes of accidental death in the area include the following:

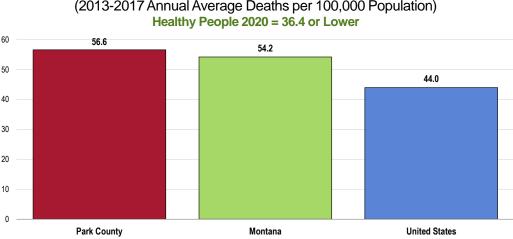


Leading Causes of Unintentional Injury Deaths

# **Unintentional Injury**

Age-Adjusted Unintentional Injury Deaths

The following chart outlines age-adjusted mortality rates for unintentional injury in the area.



# Unintentional Injuries: Age-Adjusted Mortality

(2013-2017 Annual Average Deaths per 100,000 Population)

CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Sources: . Informatics. Data extracted August 2019.

US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective IVP-11] Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10). Notes:

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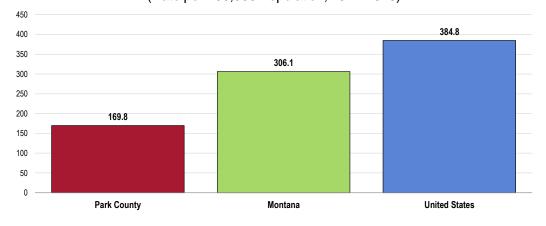
Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

## Intentional Injury (Violence)

#### Violent Crime

Notes

Violent crime is composed of four offenses (FBI Index offenses): murder and non-negligent manslaughter; forcible rape; robbery; and aggravated assault. Note that the quality of crime data can vary widely from location to location, depending on the consistency and completeness of reporting among various jurisdictions.



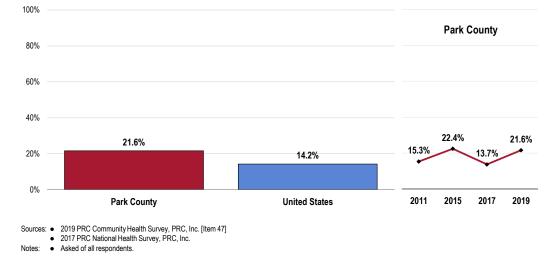
**Violent Crime** (Rate per 100,000 Population, 2014-2016)

Federal Bureau of Investigation, FBI Uniform Crime Reports. Sources: ٠

Retrieved August 2019 from CARES Engagement Network at https://engagementnetwork.org. This indicator reports the rate of violent crime offenses reported by the sheriff's office or county police department per 100,000 residents. Violent crime includes

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Intimate Partner Violence: "The next questions are about different types of violence in relationships with an intimate partner. By an intimate partner, I mean any current or former spouse, boyfriend, or girlfriend. Someone you were dating, or romantically or sexually intimate with, would also be considered an intimate partner. Has an intimate partner ever hit, slapped, pushed, kicked, or hurt you in any way?"



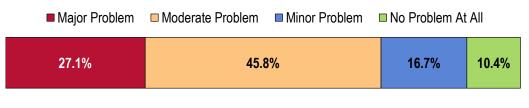
Have Ever Been Hit, Slapped, Pushed, Kicked, or Hurt in Any Way by an Intimate Partner

#### Key Informant Input: Injury & Violence

The following chart outlines key informants' perceptions of the severity of *Injury* & *Violence* as a problem in the community:

# Perceptions of Injury and Violence as a Problem in the Community

(Key Informants, 2019)



Sources: • PRC Online Key Informant Survey, PRC, Inc.

Notes: • Asked of all respondents.

Among those rating this issue as a "major problem," reasons related to the following:

#### Drugs/Alcohol

Drinking and driving, as well as domestic violence and bullying in schools, are problems in this community. - Social Services Provider

Drinking and driving, other car accidents, suicide, addiction, domestic abuse, child abuse, too many guns, mental illness and frontier mentality. - Social Services Provider

Goes along with substance use and abuse. Results are driving-related injuries, domestic violence and suicide. - Community Leader

#### **Domestic/Family Violence**

From experience, I know violence, and especially intimate partner violence, is a problem. I only know of ASPEN as a resource. - Social Services Provider

Intimate partner violence and access to support services is a very real issue in our community. There is also a significant amount of child neglect and abuse in our community and inadequate local resources to manage the problem and support our families. We also see violence and injury related directly to substance use and abuse. - Physician

#### Suicide

I was referencing the high rate of suicide in our county when answering this question. It was possibly a mistaken answer and should have been addressed in the "anxiety" question. - Other Health Provider Our incidence rate for suicide ideation and completion are at an alarming rate in our community. - Community Leader

#### Access to Care/Services

There are few services for kids in home situations where violence is a factor. Our DPHHS services have been cut to the bare minimum, and even kids in dangerous situations seem to get few services because their parents are in charge of the opportunity to do so. - Other Health Provider

#### Prevalence/Incidence

Injury, our recreation economy comes with real risk. Violence, there is always too much. - Community Leader

Number of accidental deaths in the community. - Social Services Provider

#### **Co-Occurrences**

Mental health, social determinants of health, access to firearms, substance abuse, especially alcohol. -Physician

#### **Gun Violence**

We have a lot of people who have multiple semiautomatic weapons and military-style weapons. This is a huge risk factor for violence in our community. - Other Health Provider

## Diabetes

#### **About Diabetes**

Diabetes mellitus occurs when the body cannot produce or respond appropriately to insulin. Insulin is a hormone that the body needs to absorb and use glucose (sugar) as fuel for the body's cells. Without a properly functioning insulin signaling system, blood glucose levels become elevated and other metabolic abnormalities occur, leading to the development of serious, disabling complications. Many forms of diabetes exist; the three common types are Type 1, Type 2, and gestational diabetes. Effective therapy can prevent or delay diabetic complications.

Diabetes mellitus:

- Lowers life expectancy by up to 15 years.
- Increases the risk of heart disease by 2 to 4 times.
- Is the leading cause of kidney failure, lower limb amputations, and adult-onset blindness.

The rate of diabetes mellitus continues to increase both in the United States and throughout the world. Due to the steady rise in the number of persons with diabetes mellitus, and possibly earlier onset of type 2 diabetes mellitus, there is growing concern about the possibility that the increase in the number of persons with diabetes mellitus and the complexity of their care might overwhelm existing healthcare systems.

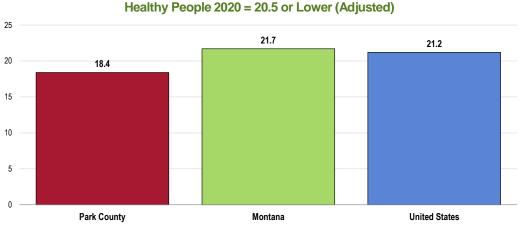
People from minority populations are more frequently affected by type 2 diabetes. Minority groups constitute 25% of all adult patients with diabetes in the US and represent the majority of children and adolescents with type 2 diabetes.

Lifestyle change has been proven effective in preventing or delaying the onset of type 2 diabetes in high-risk individuals.

Healthy People 2020 (www.healthypeople.gov)

#### Age-Adjusted Diabetes Deaths

Age-adjusted diabetes mortality for the area is shown in the following chart.



Diabetes: Age-Adjusted Mortality (2013-2017 Annual Average Deaths per 100,000 Population)

Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted August 2019.

• US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective D-3]

Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
 Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

The Healthy People 2020 target for Diabetes is adjusted to account for only diabetes mellitus coded deaths.

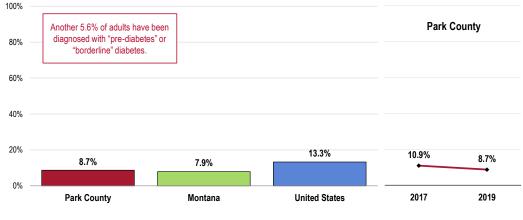
#### **Prevalence of Diabetes**

Notes:

"Have you ever been told by a doctor, nurse, or other health professional that you have diabetes? (If female, add: not counting diabetes only occurring during pregnancy?)"

"Have you ever been told by a doctor, nurse, or other health professional that you have pre-diabetes or borderline diabetes? (If female, add: other than during pregnancy?)"

Adults who do not have diabetes: "Have you had a test for high blood sugar or diabetes within the past three years?"



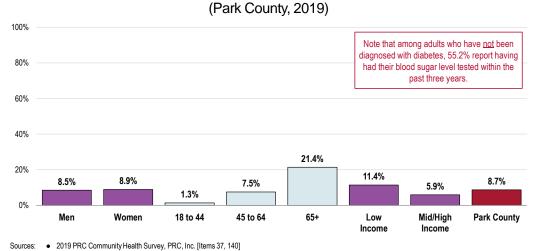
# **Prevalence of Diabetes**

Sources: • 2019 PRC Community Health Survey, PRC, Inc. [Item 140]

 Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2017 Montana data.

2017 PRC National Health Survey, PRC, Inc.

Notes: • Asked of all respondents.



# Prevalence of Diabetes

2019 PRC community realth Survey, PRC, Inc. [items 37, 14
 Asked of all respondents.

- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households
  with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.
   Excludes recetational distance (or provide prevadence) are prevadence).
- Excludes gestational diabetes (occurring only during pregnancy).
   The 18-to-44 age group and the low-income group include fewer than 50 respondents. Use caution when interpreting these results.

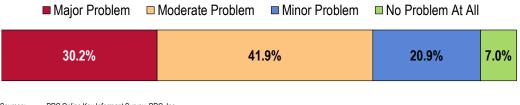
#### **Key Informant Input: Diabetes**

Notes:

The following chart outlines key informants' perceptions of the severity of *Diabetes* as a problem in the community:

# Perceptions of Diabetes as a Problem in the Community

(Key Informants, 2019)



Sources: • PRC Online Key Informant Survey, PRC, Inc. Notes: • Asked of all respondents.

Among those rating this issue as a "major problem," the biggest challenges for people with diabetes are seen as:

Access to Medications/Supplies

Medication affordability and health insurance. - Social Services Provider The cost of prescription medication. - Social Services Provider Cost of insulin. - Community Leader

#### Awareness/Education

Nutritional education and support once diabetes is diagnosed. Pre-diabetic conditions such as low blood sugar are seldom discussed. - Social Services Provider

Lack of education of the disease. - Public Health Representative

Awareness of disease prevalence and access to care that is supportive of the struggles of diabetes and other comorbid conditions. - Community Leader

#### **Contributing Factors**

Poor community opportunities for fitness, weight loss, and active living. - Physician

Good nutrition, behavior management, and cost to treat. - Social Services Provider

Nutrition support, lifestyle support, and alternative approaches. - Physician

Access to medications. Access to adequate nutritional counseling. Access to adequate food supplies due to lack of money. - Other Health Provider

#### Access to Healthy Food

Difficulty understanding and obtaining healthy food choices. - Physician

Affordability of healthy food. Friend groups to recreate/exercise with. - Community Leader

#### Access to Care/Services

No support community that would include exercise, diet, and medication resources and activities within their community addressing their challenges. - Public Health Representative

# **Kidney Disease**

#### About Kidney Disease

Chronic kidney disease and end-stage renal disease are significant public health problems in the United States and a major source of suffering and poor quality of life for those afflicted. They are responsible for premature death and exact a high economic price from both the private and public sectors. Nearly 25% of the Medicare budget is used to treat people with chronic kidney disease and end-stage renal disease.

Genetic determinants have a large influence on the development and progression of chronic kidney disease. It is not possible to alter a person's biology and genetic determinants; however, environmental influences and individual behaviors also have a significant influence on the development and progression of chronic kidney disease. As a result, some populations are disproportionately affected. Successful behavior modification is expected to have a positive influence on the disease.

Diabetes is the most common cause of kidney failure. The results of the Diabetes Prevention Program (DPP) funded by the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) show that moderate exercise, a healthier diet, and weight reduction can prevent development of type 2 diabetes in persons at risk.

Healthy People 2020 (www.healthypeople.gov)

#### Key Informant Input: Kidney Disease

The following chart outlines key informants' perceptions of the severity of *Kidney Disease* as a problem in the community:

# Perceptions of Kidney Disease as a Problem in the Community (Key Informants, 2019)

Major Problem 
Moderate Problem 
Minor Problem 
No Problem At All

6.1% 45.5% 12.1%

Sources: PRC Online Key Informant Survey, PRC, Inc. Notes: Asked of all respondents.

Among those rating this issue as a "major problem," reasons related to the following:

#### Access to Care/Services

Do not have dialysis in our local community. Becomes a major problem to get chronic kidney or diabetes patients over the hill for treatment. - Social Services Provider

There are no dialysis resources available to serve folks with these conditions in Livingston. Someone would have to go to Bozeman or some other larger community to get help with their treatment by a doctor and to receive dialysis. A lot of our residents do not leave Livingston and/or do not have dependable transportation, plus they would need someone to take them because I believe driving after being dialyzed is not always a safe choice. - Other Health Provider

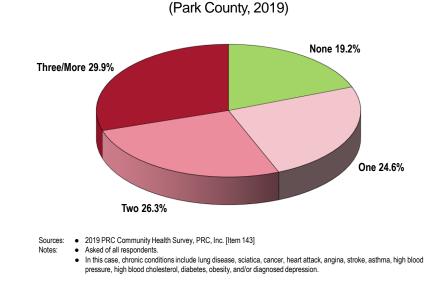
# **Potentially Disabling Conditions**

### **Multiple Chronic Conditions**

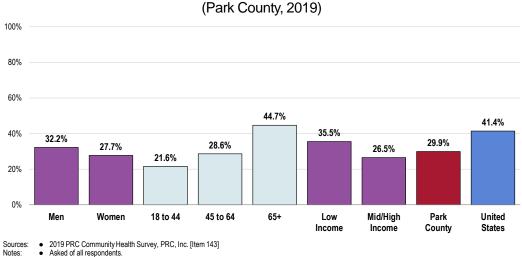
The following charts outline the prevalence of multiple chronic conditions among surveyed adults, taking into account all of the various conditions measured in the survey.

In this case, chronic conditions include lung disease, sciatica, cancer, heart attack, angina, stroke, asthma, high blood pressure, high blood cholesterol, diabetes, obesity, and/or diagnosed depression.

**Number of Current Chronic Conditions** 



**Currently Have Three or More Chronic Conditions** 



٠ Asked of all respondents.

Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

- In this case, chronic conditions include lung disease, sciatica, cancer, heart attack, angina, stroke, asthma, high blood pressure, high blood cholesterol, diabetes, obesity, and/or diagnosed depression.
- The 18-to-44 age group and the low-income group include fewer than 50 respondents. Use caution when interpreting these results.

#### **Activity Limitations**

#### **About Disability & Health**

An individual can get a disabling impairment or chronic condition at any point in life. Compared with people without disabilities, people with disabilities are more likely to:

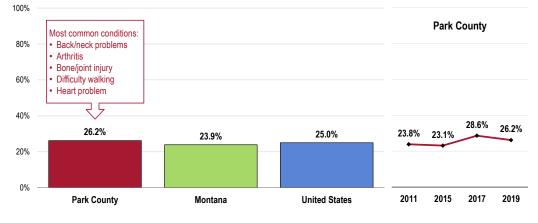
- Experience difficulties or delays in getting the health care they need.
- Not have had an annual dental visit.
- Not have had a mammogram in past 2 years.
- Not have had a Pap test within the past 3 years.
- Not engage in fitness activities.Use tobacco.
- Be overweight or obese.
- Have high blood pressure.
- Experience symptoms of psychological distress.
- Receive less social-emotional support.
- Have lower employment rates.

There are many social and physical factors that influence the health of people with disabilities. The following three areas for public health action have been identified, using the International Classification of Functioning, Disability, and Health (ICF) and the three World Health Organization (WHO) principles of action for addressing health determinants.

- Improve the conditions of daily life by: encouraging communities to be accessible so all can live in, move through, and interact with their environment; encouraging community living; and removing barriers in the environment using both physical universal design concepts and operational policy shifts.
- Address the inequitable distribution of resources among people with disabilities and those without disabilities by increasing: appropriate health care for people with disabilities; education and work opportunities; social participation; and access to needed technologies and assistive supports.
- Expand the knowledge base and raise awareness about determinants of health for people with disabilities by increasing: the inclusion of people with disabilities in public health data collection efforts across the lifespan; the inclusion of people with disabilities in health promotion activities; and the expansion of disability and health training opportunities for public health and health care professionals.
  - Healthy People 2020 (www.healthypeople.gov)

"Are you limited in any way in any activities because of physical, mental, or emotional problems?"

Adults with activity limitations: "What is the major impairment or health problem that limits you?"



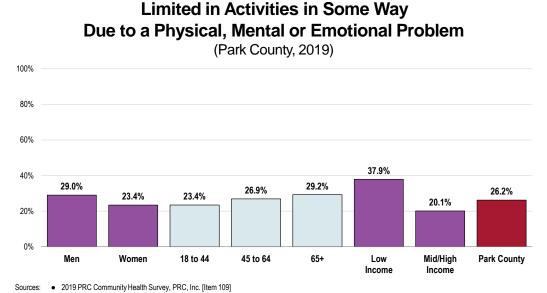
# Limited in Activities in Some Way Due to a Physical, Mental or Emotional Problem

Sources: • 2019 PRC Community Health Survey, PRC, Inc. [Items 109-110] Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control

and Prevention (CDC): 2015 Montana data.

• 2017 PRC National Health Survey, PRC, Inc.

Notes: Asked of all respondents.



Notes:

Asked of all respondents.

Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level. The 18-to-44 age group and the low-income group include fewer than 50 respondents. Use caution when interpreting these results.

### Arthritis, Osteoporosis & Chronic Back Conditions

#### About Arthritis, Osteoporosis & Chronic Back Conditions

There are more than 100 types of arthritis. Arthritis commonly occurs with other chronic conditions, such as diabetes, heart disease, and obesity. Interventions to treat the pain and reduce the functional limitations from arthritis are important, and may also enable people with these other chronic conditions to be more physically active. Arthritis affects 1 in 5 adults and continues to be the most common cause of disability. It costs more than \$128 billion per year. All of the human and economic costs are projected to increase over time as the population ages. There are interventions that can reduce arthritis pain and functional limitations, but they remain underused. These include: increased physical activity; self-management education; and weight loss among overweight/obese adults.

Osteoporosis is a disease marked by reduced bone strength leading to an increased risk of fractures (broken bones). In the United States, an estimated 5.3 million people age 50 years and older have osteoporosis. Most of these people are women, but about 0.8 million are men. Just over 34 million more people, including 12 million men, have low bone mass, which puts them at increased risk for developing osteoporosis. Half of all women and as many as 1 in 4 men age 50 years and older will have an osteoporosis-related fracture in their lifetime.

Chronic back pain is common, costly, and potentially disabling. About 80% of Americans experience low back pain in their lifetime. It is estimated that each year:

- 15%-20% of the population develop protracted back pain.
- 2-8% have chronic back pain (pain that lasts more than 3 months).
- 3-4% of the population is temporarily disabled due to back pain.
- 1% of the working-age population is disabled completely and permanently as a result of low back pain.

Americans spend at least \$50 billion each year on low back pain. Low back pain is the:

- 2<sup>nd</sup> leading cause of lost work time (after the common cold).
- 3<sup>rd</sup> most common reason to undergo a surgical procedure.
- 5<sup>th</sup> most frequent cause of hospitalization.

Arthritis, osteoporosis, and chronic back conditions all have major effects on quality of life, the ability to work, and basic activities of daily living.

Healthy People 2020 (www.healthypeople.gov)

Key Informant Input: Arthritis, Osteoporosis & Chronic Back Conditions

The following chart outlines key informants' perceptions of the severity of *Arthritis*, *Osteoporosis & Chronic Back Conditions* as a problem in the community:

# Perceptions of Arthritis/Osteoporosis/Back Conditions as a Problem in the Community

(Key Informants, 2019)

	Major Problem Moderate Prob		Minor Problem	No Problem At All	
7.7%		53.8%		30.8%	7.7%

Sources: • PRC Online Key Informant Survey, PRC, Inc. Notes:

Asked of all respondents.

Among those rating this issue as a "major problem," reasons related to the following:

#### Access to Care/Services

There are no resources available to serve folks with these conditions. Someone would have to go to Bozeman, Billings, or some other larger community to get help, and a lot of our residents do not leave Livingston and/or do not have dependable transportation. - Other Health Provider

#### **Contributing Factors**

Aging population and a blue-collar economy. Lots of folks who do physical work. - Social Services Provider

#### Prevalence/Incidence

We have a huge number of patients who have chronic pain due to arthritis and back pain. This is one of the most common issues seen, and we have limited resources for helping these issues. - Other Health Provider

#### Vision & Hearing Impairment

#### **About Vision**

Vision is an essential part of everyday life, influencing how Americans of all ages learn, communicate, work, play, and interact with the world. Yet millions of Americans live with visual impairment, and many more remain at risk for eye disease and preventable eye injury.

The eyes are an important, but often overlooked, part of overall health. Despite the preventable nature of some vision impairments, many people do not receive recommended screenings and exams. A visit to an eye care professional for a comprehensive dilated eye exam can help to detect common vision problems and eye diseases, including diabetic retinopathy, glaucoma, cataract, and age-related macular degeneration.

These common vision problems often have no early warning signs. If a problem is detected, an eye care professional can prescribe corrective eyewear, medicine, or surgery to minimize vision loss and help a person see his or her best.

Healthy vision can help to ensure a healthy and active lifestyle well into a person's later years. Educating and engaging families, communities, and the nation is critical to ensuring that people have the information, resources, and tools needed for good eye health.

Healthy People 2020 (www.healthypeople.gov)

#### **About Hearing & Other Sensory or Communication Disorders**

An impaired ability to communicate with others or maintain good balance can lead many people to feel socially isolated, have unmet health needs, have limited success in school or on the job. Communication and other sensory processes contribute to our overall health and well-being. Protecting these processes is critical, particularly for people whose age, race, ethnicity, gender, occupation, genetic background, or health status places them at increased risk.

Many factors influence the numbers of Americans who are diagnosed and treated for hearing and other sensory or communication disorders, such as social determinants (social and economic standings, age of diagnosis, cost and stigma of wearing a hearing aid, and unhealthy lifestyle choices). In addition, biological causes of hearing loss and other sensory or communication disorders include: genetics; viral or bacterial infections; sensitivity to certain drugs or medications; injury; and aging.

As the nation's population ages and survival rates for medically fragile infants and for people with severe injuries and acquired diseases improve, the prevalence of sensory and communication disorders is expected to rise.

Healthy People 2020 (www.healthypeople.gov)

#### Key Informant Input: Vision & Hearing

The following chart outlines key informants' perceptions of the severity of Vision & Hearing as a problem in the community:

# Perceptions of Vision and Hearing as a Problem in the Community

(Key Informants, 2019)

4.9% <u>39.0</u> %	36.6%	19.5%
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Sources: • PRC Online Key Informant Survey, PRC, Inc. Notes:

Asked of all respondents.

Among those rating this issue as a "major problem," reasons related to the following:

#### Access to Care/Services

There is not audiology available in Livingston, as far as I know. There is audiology in Bozeman, and most people who need hearing aids cannot afford them. There is virtually no visual care for those without some kind of insurance. We have lots of diabetics that need inexpensive eye exams. - Other Health Provider

#### Affordable Care/Services

Seniors requesting financial assistance or putting off hearing and vision care. - Social Services Provider

#### **Vision Correction**

Glasses. - Social Services Provider

### **Alzheimer's Disease**

#### **About Dementia**

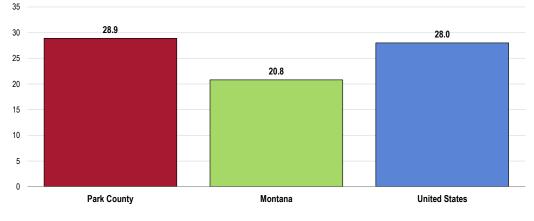
Dementia is the loss of cognitive functioning—thinking, remembering, and reasoning—to such an extent that it interferes with a person's daily life. Dementia is not a disease itself, but rather a set of symptoms. Memory loss is a common symptom of dementia, although memory loss by itself does not mean a person has dementia. Alzheimer's disease is the most common cause of dementia, accounting for the majority of all diagnosed cases.

Alzheimer's disease is the 6th leading cause of death among adults age 18 years and older. Estimates vary, but experts suggest that up to 5.1 million Americans age 65 years and older have Alzheimer's disease. These numbers are predicted to more than double by 2050 unless more effective ways to treat and prevent Alzheimer's disease are found.

Healthy People 2020 (www.healthypeople.gov)

#### Age-Adjusted Alzheimer's Disease Deaths

Age-adjusted Alzheimer's disease mortality is outlined in the following chart.



# Alzheimer's Disease: Age-Adjusted Mortality

(2013-2017 Annual Average Deaths per 100,000 Population)

Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted August 2019. Notes: • Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).

Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
 Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

Key Informant Input: Dementias, Including Alzheimer's Disease

The following chart outlines key informants' perceptions of the severity of *Dementias, Including Alzheimer's Disease* as a problem in the community:

# Perceptions of Dementia/Alzheimer's Disease as a Problem in the Community

(Key Informants, 2019)

Major Problem	Moderate Problem	Minor Problem		No Problem At All	
27.5%	47.5%		20.0%		

Sources: • PRC Online Key Informant Survey, PRC, Inc. Notes: • Asked of all respondents.

#### Among those rating this issue as a "major problem," reasons related to the following:

#### Access to Care/Services

I do not believe there are local resources or respite care in Livingston, at least not at a level needed. Seniors will be more than 33% of Park County's population by 2025, and this will need to be addressed. - Social Services Provider

Minimal resources and no care for these individuals. - Other Health Provider

There are no specific medical resources available to serve folks with these types of conditions other than "the memory unit at the Frontier." I do not think this is a good resource for someone that has this type of condition. The person would have to go to Bozeman, Billings, or some other larger community to get the help they need. Again, transportation is a barrier for some folks. - Other Health Provider

Our community lacks a good memory care unit. We have Frontier Assisted Living, which has a locked memory care unit, but they are frequently understaffed and have an incredible amount of turnover. We also lack a support group for caregivers of dementia/Alzheimer's patients. - Other Health Provider

#### Aging Population

Park County's aging population is estimated to be 30% 65 and older and growing. I see people every day who are either in some stage of dementia or are caring for someone who is. The sheer numbers of those who are dealing with this is one thing, but the community is not prepared or equipped to deal with it in an appropriate way, and this will only get worse without serious attention. - Social Services Provider

Elderly often remain pretty isolated in their homes, increasing progression of symptoms and risks. -Public Health Representative

Growing population of older residents living longer. Growing number of individuals with dementia. Also, too few medical professionals trained in treating mental deterioration in the aged. - Community Leader

#### Affordable Care/Services

Access to good affordable care. - Social Services Provider

#### Diagnosis/Treatment

Screening is insufficient. More brain scans needed to identify and prevent onset. - Social Services Provider

#### **Contributing Factor**

Personal experience. - Community Leader

# Infectious Disease

#### **About Immunization & Infectious Diseases**

The increase in life expectancy during the 20th century is largely due to improvements in child survival; this increase is associated with reductions in infectious disease mortality, due largely to immunization. However, infectious diseases remain a major cause of illness, disability, and death. Immunization recommendations in the United States currently target 17 vaccine-preventable diseases across the lifespan.

People in the US continue to get diseases that are vaccine-preventable. Viral hepatitis, influenza, and tuberculosis (TB) remain among the leading causes of illness and death across the nation and account for substantial spending on the related consequences of infection.

The infectious disease public health infrastructure, which carries out disease surveillance at the national, state, and local levels, is an essential tool in the fight against newly emerging and reemerging infectious diseases. Other important defenses against infectious diseases include:

- · Proper use of vaccines
- Antibiotics
- Screening and testing guidelines
- · Scientific improvements in the diagnosis of infectious disease-related health concerns

Vaccines are among the most cost-effective clinical preventive services and are a core component of any preventive services package. Childhood immunization programs provide a very high return on investment. For example, for each birth cohort vaccinated with the routine immunization schedule, society:

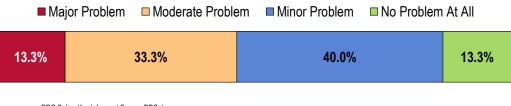
- Saves 33,000 lives.
- Prevents 14 million cases of disease.
- Reduces direct healthcare costs by \$9.9 billion.
- Saves \$33.4 billion in indirect costs.
  - Healthy People 2020 (www.healthypeople.gov)

#### Key Informant Input: Immunization & Infectious Diseases

The following chart outlines key informants' perceptions of the severity of Immunization & Infectious Diseases as a problem in the community:

# Perceptions of Immunization and Infectious Diseases as a Problem in the Community

(Key Informants, 2019)



 PRC Online Key Informant Survey, PRC, Inc. Sources: Notes:

Asked of all respondents.

#### Among those rating this issue as a "major problem," reasons related to the following:

#### Early Diagnosis/Prevention

Population is underimmunized. Overuse of antibiotics don't treat viral infections with ABX; they don't work. Promotes ABX resistance. - Social Services Provider

Pertussis outbreak, high numbers of anti-vaccinators and extremely high numbers of tourists. - Public Health Representative

In the rural communities, if immunizations aren't required, less likelihood of adults or children will receive them. Infectious disease, delay in getting care or knowledge of disease prevalence in the community. - Public Health Representative

#### Cultural/Personal Beliefs

There is a small population of anti-vax in this community, and herd immunity is proven science. For those that are immune, compromised immunization is vital. We do not have the infrastructure in place for a mass outbreak of even an aggressive flu strain. - Community Leader

Childhood and adolescent immunization rates are below the HP2020 goals, especially adolescent HPV vaccines. I think we have a number of families who opt not to vaccinate, we have several families that home school their children, and I think adolescent HPV vaccinations get missed since it requires more than one shot. - Community Leader

#### **Contributing Factors**

Because it only takes one. - Community Leader

# **Births**

#### About Infant & Child Health

Improving the well-being of mothers, infants, and children is an important public health goal for the US. Their well-being determines the health of the next generation and can help predict future public health challenges for families, communities, and the healthcare system. The risk of maternal and infant mortality and pregnancy-related complications can be reduced by increasing access to quality preconception (before pregnancy) and inter-conception (between pregnancies) care. Moreover, healthy birth outcomes and early identification and treatment of health conditions among infants can prevent death or disability and enable children to reach their full potential. Many factors can affect pregnancy and childbirth, including pre-conception health status, age, access to appropriate healthcare, and poverty.

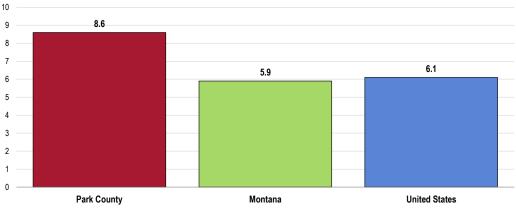
Infant and child health are similarly influenced by socio-demographic factors, such as family income, but are also linked to the physical and mental health of parents and caregivers. There are racial and ethnic disparities in mortality and morbidity for mothers and children, particularly for African Americans. These differences are likely the result of many factors, including social determinants (such as racial and ethnic disparities in infant mortality; family income; educational attainment among household members; and health insurance coverage) and physical determinants (i.e., the health, nutrition, and behaviors of the mother during pregnancy and early childhood).

— Healthy People 2020 (www.healthypeople.gov)

# **Birth Outcomes & Risks**

### **Infant Mortality**

Infant mortality rates reflect deaths of children less than one year old per 1,000 live births. These rates are outlined in the following chart.



### Infant Mortality Rate

US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective MICH-1.3]
 Infant deaths include deaths of children under 1 year old.

This indicator is relevant because high rates of infant mortality indicate the existence of broader issues pertaining to access to care and maternal and child health.

Notes:

<sup>(</sup>Annual Average Infant Deaths per 1,000 Live Births, 2008-2017) Healthy People 2020 = 6.0 or Lower

# Key Informant Input: Infant & Child Health

The following chart outlines key informants' perceptions of the severity of *Infant & Child Health* as a problem in the community:

# Perceptions of Infant and Child Health as a Problem in the Community

(Key Informants, 2019)

	Major Problem	Moderate Problem	Minor	Problem   No Proble	m At All
8.7%		52.2%		23.9%	15.2%
				1	

Sources: • PRC Online Key Informant Survey, PRC, Inc. Notes: • Asked of all respondents.

Among those rating this issue as a "major problem," reasons related to the following:

#### Diagnosis/Treatment

There is a number of children born in Livingston lost to follow-up. These infants may come from another county, and once they are born, they go back to the county they live in and do not follow up. Substance abuse and mental health in pregnant women in Park County is being addressed through a perinatal behavioral health grant to provide pre- and postnatal care for moms and babies. Access for rural communities is very limited. Gardiner, Emigrant, Pray, Wilsall, Clyde Park, and Cooke City have to make the journey to Livingston for care. - Community Leader

#### **Contributing Factors**

Personal experience. - Community Leader

Too many young parents are not mentally, educationally or financially equipped to adequately care for their children. - Community Leader

# **Family Planning**

### **Births to Adolescent Mothers**

#### **About Adolescent Births**

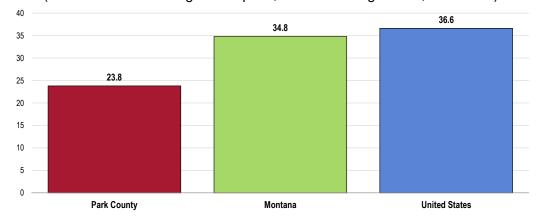
The negative outcomes associated with unintended pregnancies are compounded for adolescents. Teen mothers:

- Are less likely to graduate from high school or attain a GED by the time they reach age 30.
  Earn an average of approximately \$3,500 less per year, when compared with those who delay
  - childbearing.
- · Receive nearly twice as much Federal aid for nearly twice as long.

Similarly, early fatherhood is associated with lower educational attainment and lower income. Children of teen parents are more likely to have lower cognitive attainment and exhibit more behavior problems. Sons of teen mothers are more likely to be incarcerated, and daughters are more likely to become adolescent mothers.

Healthy People 2020 (www.healthypeople.gov)

The following chart describes births to adolescent mothers age 15 to 19 years old.



# Teen Birth Rate

(Births to Adolescents Age 15-19 per 1,000 Females Age 15-19, 2006-2012)

Centers for Disease Control and Prevention, National Vital Statistics System.

Sources:

Notes

Retrieved August 2019 from CARES Engagement Network at https://engagementnetwork.org.

This indicator reports the rate of total births to women under the age of 15–19 per 1,000 female population age 15–19. This indicator is relevant because in many
cases, teen parents have unique social, economic, and health support services. Additionally, high rates of teen pregnancy may indicate the prevalence of unsafe
sex practices.

### Key Informant Input: Family Planning

The following chart outlines key informants' perceptions of the severity of *Family Planning* as a problem in the community:

# Perceptions of Family Planning as a Problem in the Community

(Key Informants, 2019)

Major Problem		Moderate Problem	Minor Problem	No Problem At All	
11.4%	6 40.9%		31.8%	D	15.9%

Sources: • PRC Online Key Informant Survey, PRC, Inc.

Notes: • Asked of all respondents.

Among those rating this issue as a "major problem," reasons related to the following:

#### Awareness/Education

In rural Park County, there continues to be a reluctance to discuss and acknowledge the importance of all reproductive health issues. - Public Health Representative

Effective family planning is foundational to building strong families, communities, counties, states, countries and a strong human family on the planet. - Community Leader

#### Affordable Care/Services

There are not very many affordable OB/GYN doctors in Park County, and there are zero abortion services in the county. Sex education is limited, and access to accurate, science-based information is also limited. - Social Services Provider

#### Access to Care/Services

Far more support is needed for young mothers/parents. - Community Leader

#### **Unplanned Pregnancies**

Unplanned pregnancies. - Social Services Provider

# **Modifiable Health Risks**

# **Nutrition, Physical Activity & Weight**

#### **Nutrition**

#### About Healthful Diet & Healthy Weight

Strong science exists supporting the health benefits of eating a healthful diet and maintaining a healthy body weight. Efforts to change diet and weight should address individual behaviors, as well as the policies and environments that support these behaviors in settings such as schools, worksites, healthcare organizations, and communities.

The goal of promoting healthful diets and healthy weight encompasses increasing household food security and eliminating hunger.

Americans with a healthful diet:

- Consume a variety of nutrient-dense foods within and across the food groups, especially whole grains, fruits, vegetables, low-fat or fat-free milk or milk products, and lean meats and other protein sources.
- Limit the intake of saturated and trans fats, cholesterol, added sugars, sodium (salt), and alcohol.
- Limit caloric intake to meet caloric needs.

Diet and body weight are related to health status. Good nutrition is important to the growth and development of children. A healthful diet also helps Americans reduce their risks for many health conditions, including: overweight and obesity; malnutrition; iron-deficiency anemia; heart disease; high blood pressure; dyslipidemia (poor lipid profiles); type 2 diabetes; osteoporosis; oral disease; constipation; diverticular disease; and some cancers.

Diet reflects the variety of foods and beverages consumed over time and in settings such as worksites, schools, restaurants, and the home. Interventions to support a healthier diet can help ensure that:

- Individuals have the knowledge and skills to make healthier choices.
- · Healthier options are available and affordable.

Social Determinants of Diet. Demographic characteristics of those with a more healthful diet vary with the nutrient or food studied. However, most Americans need to improve some aspect of their diet.

Social factors thought to influence diet include: knowledge and attitudes; skills; social support; societal and cultural norms; food and agricultural policies; food assistance programs; and economic price systems.

**Physical Determinants of Diet.** Access to and availability of healthier foods can help people follow healthful diets. For example, better access to retail venues that sell healthier options may have a positive impact on a person's diet; these venues may be less available in low-income or rural neighborhoods.

The places where people eat appear to influence their diet. For example, foods eaten away from home often have more calories and are of lower nutritional quality than foods prepared at home.

Marketing also influences people's-particularly children's-food choices.

Healthy People 2020 (www.healthypeople.gov)

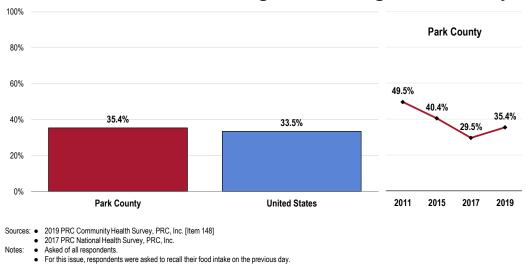
#### Daily Recommendation of Fruits/Vegetables

To measure fruit and vegetable consumption, survey respondents were asked multiple questions, specifically about the foods and drinks they consumed on the day prior to the interview.

"Now I would like you to think about the foods you ate or drank yesterday. Include all the foods you ate, both at home and away from home. How many servings of fruit or fruit juices did you have yesterday?"

#### "How many servings of vegetables did you have yesterday?"

The questions above are used to calculate daily fruit/vegetable consumption for respondents. The proportion reporting having 5 or more servings per day is shown here.

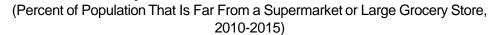


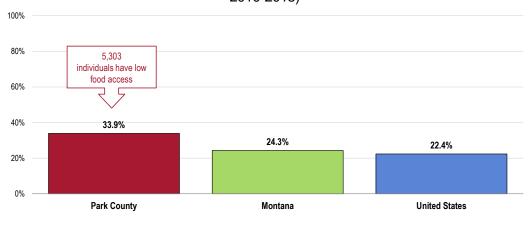
# **Consume Five or More Servings of Fruits/Vegetables Per Day**

#### **Food Access**

Low food access is defined as living more than ½ mile from the nearest supermarket, supercenter, or large grocery store. This related chart is based on US Department of Agriculture data.

# **Population With Low Food Access**





• US Department of Agriculture, Economic Research Service, USDA - Food Access Research Atlas (FARA). Sources:

Retrieved August 2019 from CARES Engagement Network at https://engagementnetwork.org. Notes:

This indicator reports the promotion of the population with low food access. Low food access is defined as living more than ½ mile from the nearest supermarket, supercenter, or large grocery store. This indicator is relevant because it highlights populations and geographies facing food insecurity. •

#### **Physical Activity**

#### About Physical Activity

Regular physical activity can improve the health and quality of life of Americans of all ages, regardless of the presence of a chronic disease or disability. Among adults, physical activity can lower the risk of: early death; coronary heart disease; stroke; high blood pressure; type 2 diabetes; breast and colon cancer; falls; and depression. Among children and adolescents, physical activity can: improve bone health; improve cardiorespiratory and muscular fitness; decrease levels of body fat; and reduce symptoms of depression. For people who are inactive, even small increases in physical activity are associated with health benefits.

Personal, social, economic, and environmental factors all play a role in physical activity levels among youth, adults, and older adults. Understanding the barriers to and facilitators of physical activity is important to ensure the effectiveness of interventions and other actions to improve levels of physical activity.

Factors **positively** associated with adult physical activity include: postsecondary education; higher income; enjoyment of exercise; expectation of benefits; belief in ability to exercise (self-efficacy); history of activity in adulthood; social support from peers, family, or spouse; access to and satisfaction with facilities; enjoyable scenery; and safe neighborhoods.

Factors **negatively** associated with adult physical activity include: advancing age; low income; lack of time; low motivation; rural residency; perception of great effort needed for exercise; overweight or obesity; perception of poor health; and being disabled. Older adults may have additional factors that keep them from being physically active, including lack of social support, lack of transportation to facilities, fear of injury, and cost of programs.

Among children ages 4 to 12, the following factors have a positive association with physical activity: gender (boys); belief in ability to be active (self-efficacy); and parental support.

Among adolescents ages 13 to 18, the following factors have a positive association with physical activity: parental education; gender (boys); personal goals; physical education/school sports; belief in ability to be active (self-efficacy); and support of friends and family.

Environmental influences positively associated with physical activity among children and adolescents include:

- Presence of sidewalks
- Having a destination/walking to a particular place
- Access to public transportation
- Low traffic density
- · Access to neighborhood or school play area and/or recreational equipment

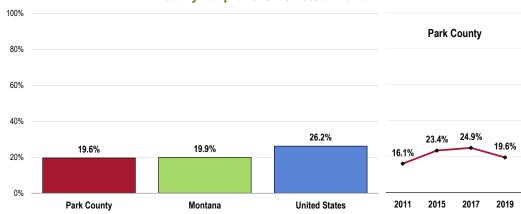
People with disabilities may be less likely to participate in physical activity due to physical, emotional, and psychological barriers. Barriers may include the inaccessibility of facilities and the lack of staff trained in working with people with disabilities.

Healthy People 2020 (www.healthypeople.gov)

#### Leisure-Time Physical Activity

Leisure-time physical activity includes any physical activities or exercises (such as running, calisthenics, golf, gardening, walking, etc.) which take place outside of one's line of work.

"During the past month, other than your regular job, did you participate in any physical activities or exercises, such as running, calisthenics, golf, gardening, or walking for exercise?"



### No Leisure-Time Physical Activity in the Past Month Healthy People 2020 = 32.6% or Lower

Sources: • 2019 PRC Community Health Survey, PRC, Inc. [Item 89]

Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control
and Prevention (CDC): 2016 Montana data.

2017 PRC National Health Survey, PRC, Inc.

• US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective PA-1]

Notes: 
 Asked of all respondents.

#### **Recommended Levels of Physical Activity**

Adults should do 2 hours and 30 minutes a week of moderate-intensity (such as walking), or 1 hour and 15 minutes (75 minutes) a week of vigorous-intensity aerobic physical activity (such as jogging), or an equivalent combination of moderate- and vigorous-intensity aerobic physical activity. The guidelines also recommend that adults do muscle-strengthening activities, such as push-ups, sit-ups, or activities using resistance bands or weights. These activities should involve all major muscle groups and be done on two or more days per week.

The report finds that nationwide nearly 50 percent of adults are getting the recommended amounts of aerobic activity and about 30 percent are engaging in the recommended muscle-strengthening activity.

2013 Physical Activity Guidelines for Americans, US Department of Health and Human Services. www.cdc.gov/physicalactivity

#### Meeting Physical Activity Recommendations

To measure physical activity frequency, duration and intensity, respondents were asked:

"During the past month, what type of physical activity or exercise did you spend the most time doing?"

"And during the past month, how many times per week or per month did you take part in this activity?"

# "And when you took part in this activity, for how many minutes or hours did you usually keep at it?"

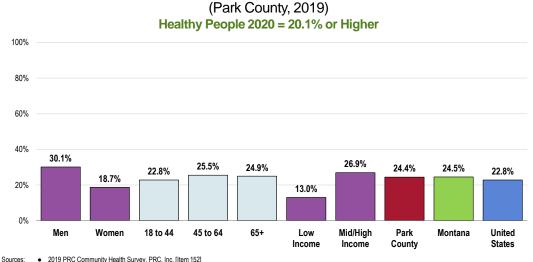
Respondents could answer the above series for up to two types of physical activity. The specific activities identified (e.g., jogging, basketball, treadmill, etc.) determined the intensity values assigned to that respondent when calculating total aerobic physical activity hours/minutes.

Respondents were also asked about strengthening exercises:

"During the past month, how many times per week or per month did you do physical activities or exercises to strengthen your muscles? Do not count aerobic activities like walking, running, or bicycling. Please include activities using your own body weight, such as yoga, sit-ups, or push-ups, and those using weight machines, free weights, or elastic bands."

"Meeting physical activity recommendations" includes adequate levels of both aerobic and strengthening activity:

- Aerobic activity is at least 150 minutes per week of light to moderate activity, 75 • minutes per week of vigorous physical activity, or an equivalent combination of both;
- Strengthening activity is at least 2 sessions per week of exercise designed to . strengthen muscles.



# Meets Physical Activity Recommendations

Notes:

2019 PRC Community Health Survey, PRC, Inc. [Item 152] US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective PA-2.4]

Asked of all respondents.

Asked or all respondents. Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "MidHigh Income" includes households with incomes at 200% or more of the federal poverty level. Meeting both judiclines is defined as the number of persons age 18+ who report light or moderate aerobic activity for at least 150 minutes per week or who report vigorous physical activity 75 minutes per week or an equivalent combination of moderate and vigorous-intensity activity <u>and</u> report doing physical activities specifically designed to strengthen muscles at least twice

per week.
 The 18-to-44 age group and the low-income group include fewer than 50 respondents. Use caution when interpreting these results.

#### Weight Status

#### About Overweight & Obesity

Because weight is influenced by energy (calories) consumed and expended, interventions to improve weight can support changes in diet or physical activity. They can help change individuals' knowledge and skills, reduce exposure to foods low in nutritional value and high in calories, or increase opportunities for physical activity. Interventions can help prevent unhealthy weight gain or facilitate weight loss among obese people. They can be delivered in multiple settings, including healthcare settings, worksites, or schools.

The social and physical factors affecting diet and physical activity (see Physical Activity topic area) may also have an impact on weight. Obesity is a problem throughout the population. However, among adults, the prevalence is highest for middle-aged people and for non-Hispanic black and Mexican American women. Among children and adolescents, the prevalence of obesity is highest among older and Mexican American children and non-Hispanic black girls. The association of income with obesity varies by age, gender, and race/ethnicity.

Healthy People 2020 (www.healthypeople.gov)

Body Mass Index (BMI), which describes relative weight for height, is significantly correlated with total body fat content. The BMI should be used to assess overweight and obesity and to monitor changes in body weight. In addition, measurements of body weight alone can be used to determine efficacy of weight loss therapy. BMI is calculated as weight (kg)/height squared (m<sup>2</sup>). To estimate BMI using pounds and inches, use: [weight (pounds)/height squared (inches<sup>2</sup>)] x 703.

In this report, overweight is defined as a BMI of 25.0 to 29.9 kg/m<sup>2</sup> and obesity as a BMI  $\ge$ 30 kg/m<sup>2</sup>. The rationale behind these definitions is based on epidemiological data that show increases in mortality with BMIs above 25 kg/m<sup>2</sup>. The increase in mortality, however, tends to be modest until a BMI of 30 kg/m<sup>2</sup> is reached. For persons with a BMI  $\ge$ 30 kg/m<sup>2</sup>, mortality rates from all causes, and especially from cardiovascular disease, are generally increased by 50 to 100 percent above that of persons with BMIs in the range of 20 to 25 kg/m<sup>2</sup>.

 Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults: The Evidence Report. National Institutes of Health. National Heart, Lung, and Blood Institute in Cooperation With The National Institute of Diabetes and Digestive and Kidney Diseases. September 1998.

Classification of Overweight and Obesity by BMI	BMI (kg/m <sup>2</sup> )
Underweight	<18.5
Healthy Weight	18.5 – 24.9
Overweight, not Obese	25.0 - 29.9
Obese	≥30.0

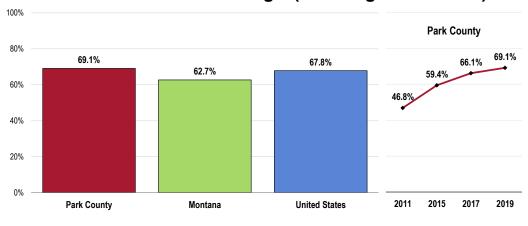
Source: Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults: The Evidence Report. National Institutes of Health. National Heart, Lung, and Blood Institute in Cooperation With The National Institute of Diabetes and Digestive and Kidney Diseases. September 1998.

#### Adult Weight Status

"About how much do you weigh without shoes?"

"About how tall are you without shoes?"

Reported height and weight were used to calculate a Body Mass Index or BMI value (described above) for each respondent. This calculation allows us to examine the proportion of the population who is at a healthy weight, or who is overweight or obese (see table above).



Prevalence of Total Overweight (Overweight and Obese)

Sources: • 2019 PRC Community Health Survey, PRC, Inc. [Item 191] • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2016 Montane data. 2017 PRC National Health Survey, PRC, Inc

Notes: ٠

Based on reported heights and weights, asked of all respondents. The definition of overweight is having a body mass index (BMI), a ratio of weight to height (kilograms divided by meters squared), greater than or equal to 25.0, regardless of gender. The definition for obesity is a BMI greater than or equal to 30.0.

Prevalence of Obesity

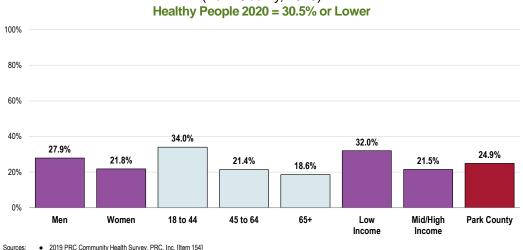


Sources: • 2019 PRC Community Health Survey, PRC, Inc. [Item 154] • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2016 Montana data. 2017 PRC National Health Survey, PRC, Inc.

 US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective NWS-9] Based on reported heights and weights, asked of all respondents.

Notes: ٠

The definition of obesity is having a body mass index (BMI), a ratio of weight to height (kilograms divided by meters squared), greater than or equal to 30.0, regardless of gender.



### Prevalence of Obesity (Park County, 2019)

٠ 2019 PRC Community Health Survey, PRC, Inc. [Item 154]

Notes:

US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective NWS-9]

Based on reported heights and weights, asked of all respondents

Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

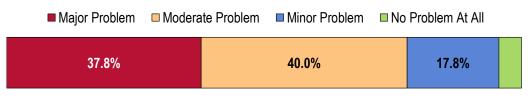
The definition of obesity is having a body mass index (BMI), a ratio of weight to height (kilograms divided by meters squared), greater than or equal to 30.0, regardless of gender. The 18-to-44 age group and the low-income group include fewer than 50 respondents. Use caution when interpreting these results.

# Key Informant Input: Nutrition, Physical Activity & Weight

The following chart outlines key informants' perceptions of the severity of Nutrition, Physical Activity & Weight as a problem in the community:

# Perceptions of Nutrition, Physical Activity, and Weight as a Problem in the Community

(Key Informants, 2019)



Sources: • PRC Online Key Informant Survey, PRC, Inc. Notes: · Asked of all respondents.

Among those rating this issue as a "major problem," reasons related to the following:

#### **Contributing Factors**

Physical activity. Lack of safe and accessible walking or biking system. Nutrition, lack of education on proper nutrition. Weight, customers disclosing battling with achieving weight loss. - Social Services Provider

Lack of education, weather keeping folks indoors nine months of the year, lack of money to engage in classes, etc. - Physician

Indoor recreation is lacking. Lack of adult education about accessibility of good nutritious food and poverty. - Physician

The complacent attitude about the extreme dangers of poor nutrition and limited activity. - Public Health Representative

Families who are struggling to make rent, heat, etc. cannot afford healthy food for their families. Even if they are aware of the importance of eating nutritious food, they don't always have the resources to obtain healthy food. Making their food budget stretch to include fresh fruits and veggies is just not possible, so they are forced to feed their families less expensive processed foods instead. This perpetuates obesity, diabetes, and other illnesses. It also leads to learning loss and the lack of emotional stability in young children. - Social Services Provider

A population with a large percentage of citizens living below poverty level is a set-up for poor nutrition. Healthy food is expensive. Sedentary lifestyles. - Social Services Provider

A cultural shift toward highly bio-available carbohydrate diets and away from physical activity. -Community Leader

Cost of food, lack of nutrition awareness, bad choices, and unhealthy lifestyles. - Social Services Provider

#### Sedentary Lifestyle

Sedentary due to devices and screens. - Public Health Representative

Sedentary lifestyle (sitting at work, video games and TV at home), coupled with poor eating habits and expense of health choices, means that many people in our community are overweight and at risk of higher rates of health disease, diabetes, some cancers, and joint problems. - Community Leader

Sedentary adults and children. I believe there is a certain percentage of our community that does not get enough physical activity. - Community Leader

#### Access to Facilities

Lacking a recreational center. - Other Health Provider

Lack of free or very low-cost access to exercise facilities year-round, lack of fully connected in-town trail system, grocery stores located only on the west end of town while more affordable housing is located downtown or on the east end of town. Inclement winter weather limiting outdoor activity for the elderly or less able-bodied. - Physician

#### Health Awareness/Education

Not enough education around the subject; computer screen time for adults and children replacing healthy outdoor and other physical activities. - Social Services Provider

An educated culture of nutrition, activity, and lifestyle is not pervasive. - Community Leader

#### Obesity

Although less than some areas throughout the country, obesity and nutrition concerns still exist in the community. These contribute to other health problems such as diabetes, heart disease, and musculoskeletal issues. There is limited access to indoor facilities during winter months (gyms, pool). Gym memberships can be cost-prohibitive for people. - Public Health Representative

# Substance Abuse

#### About Substance Abuse

Substance abuse has a major impact on individuals, families, and communities. The effects of substance abuse are cumulative, significantly contributing to costly social, physical, mental, and public health problems. These problems include:

- Teenage pregnancy
- Human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS)
- Other sexually transmitted diseases (STDs)
- Domestic violence
- · Child abuse
- Motor vehicle crashes
- Physical fights
- Crime
- Homicide
- Suicide

Substance abuse refers to a set of related conditions associated with the consumption of mind- and behavior-altering substances that have negative behavioral and health outcomes. Social attitudes and political and legal responses to the consumption of alcohol and illicit drugs make substance abuse one of the most complex public health issues. In addition to the considerable health implications, substance abuse has been a flash-point in the criminal justice system and a major focal point in discussions about social values: people argue over whether substance abuse is a disease with genetic and biological foundations or a matter of personal choice.

Advances in research have led to the development of evidence-based strategies to effectively address substance abuse. Improvements in brain-imaging technologies and the development of medications that assist in treatment have gradually shifted the research community's perspective on substance abuse. There is now a deeper understanding of substance abuse as a disorder that develops in adolescence and, for some individuals, will develop into a chronic illness that will require lifelong monitoring and care.

Improved evaluation of community-level prevention has enhanced researchers' understanding of environmental and social factors that contribute to the initiation and abuse of alcohol and illicit drugs, leading to a more sophisticated understanding of how to implement evidence-based strategies in specific social and cultural settings.

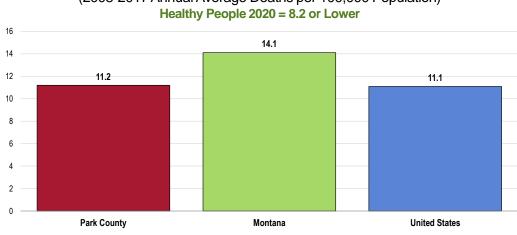
A stronger emphasis on evaluation has expanded evidence-based practices for drug and alcohol treatment. Improvements have focused on the development of better clinical interventions through research and increasing the skills and qualifications of treatment providers.

Healthy People 2020 (www.healthypeople.gov)

#### Alcohol

#### Cirrhosis/Liver Disease

Heavy alcohol use contributes to a significant share of liver disease, including cirrhosis. The following chart outlines age-adjusted mortality for cirrhosis/liver disease in the area.



# **Cirrhosis/Liver Disease: Age-Adjusted Mortality**

(2008-2017 Annual Average Deaths per 100,000 Population)

 CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Sources: Informatics. Data extracted August 2019.

US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective SA-11]
 Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).

Notes:

Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

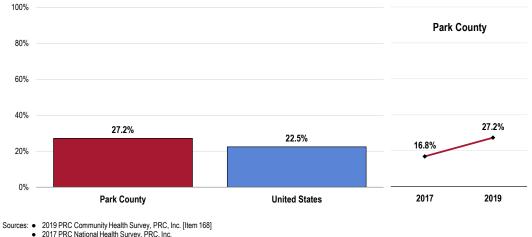
#### **Excessive Drinking**

Excessive drinking reflects the number of adults (age 18+) who drank more than two drinks per day on average (for men) or more than one drink per day on average (for women), or who drank 5 or more drinks during a single occasion (for men) or 4 or more drinks during a single occasion (for women) during the past 30 days.

"During the past 30 days, on how many days did you have at least one drink of any alcoholic beverage such as beer, wine, a malt beverage, or liquor?"

"On the day(s) when you drank, about how many drinks did you have on the average?"

"Considering all types of alcoholic beverages, how many times during the past 30 days did you have 5 (if male)/4 (if female) or more drinks on an occasion?"



# **Excessive Drinkers**

Healthy People 2020 = 25.4% or Lower

2017 PRC National Health Survey, PRC, Inc. US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective SA-15]

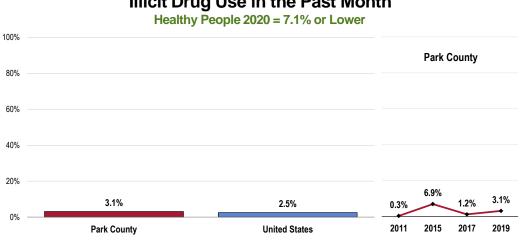
Notes: ٠ Asked of all respondents.

Excessive drinking reflects the number of persons aged 18 years and over who drank more than two drinks per day on average (for men) or more than one drink per day on average (for women) <u>OR</u> who drank 5 or more drinks during a single occasion (for men) or 4 or more drinks during a single occasion (for women) during the past 30 • days.

### **Drugs**

Illicit Drug Use

"During the past 30 days, have you used an illegal drug or taken a prescription drug that was not prescribed to you?"



**Illicit Drug Use in the Past Month** 

Sources: • 2019 PRC Community Health Survey, PRC, Inc. [Item 59]

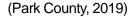
2017 PRC National Health Survey, PRC, Inc.
US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective SA-13.3]

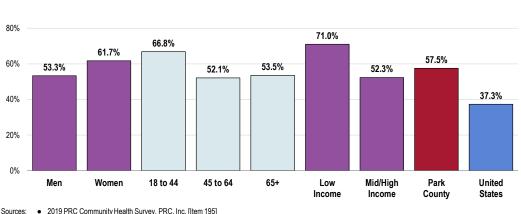
Notes: • Asked of all respondents.

### **Personal Impact of Substance Abuse**

"To what degree has your life been negatively affected by your own or someone else's substance abuse issues, including alcohol, prescription, and other drugs? Would you say: a great deal, somewhat, a little, or not at all?"

# Life Has Been Negatively Affected by Substance Abuse (by Self or Someone Else)





Sources: • 2019 PRC Community Health Survey, PRC, Inc. [Item 195] Notes: • Asked of all respondents.

100%

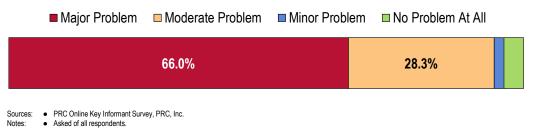
- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.
- The 18-to-44 age group and the low-income group include fewer than 50 respondents. Use caution when interpreting these results.

### Key Informant Input: Substance Abuse

The following chart outlines key informants' perceptions of the severity of *Substance Abuse* as a problem in the community:

# Perceptions of Substance Abuse as a Problem in the Community

(Key Informants, 2019)



Includes response of "a great deal," "somewhat," and "a little."

Among those rating this issue as a "major problem," the greatest barriers to accessing substance abuse treatment are viewed as:

#### **Contributing Factors**

Police have indicated they are losing the substance abuse battle. It is too culturally acceptable. -Community Leader

The bars, the culture, and denial. - Community Leader

Cultural acceptance. - Community Leader

The culture and availability. - Community Leader

Few locations that will accept Medicaid or slide and have current openings. - Other Health Provider

Lack of desire to quit. Hard to quit and easy to start again. - Social Services Provider

Substance abuse, medical marijuana isn't medical, alcohol consumption by townspeople. - Other Health Provider

Funding being pulled, lack of education around what creates an addiction, and money. I don't think it's necessarily specific to our community, but it is a highly stressful world these days. Many people are numbing out. There is a need to teach healthy tools for relaxation and calming the system. - Physician

Awareness of resources, willingness to seek help. Peer pressure to not seek help. Stigma related to seeking help. Generational substance use and no familial support. - Social Services Provider

Cost and availability. - Social Services Provider

We have SWCDC to assist with counseling – inpatient and referral to outpatient. It is closely tied in with court system and probation, and clients often go elsewhere where they have to pay or be on insurance, which is at times nonexistent, so go without treatment trying to recover on their own. Abstinence-based treatment doesn't work – harm reduction not practiced. - Social Services Provider

Cost and denial. - Community Leader

#### Access to Care/Services

No resources and fear to get help. Too many obstacles to get appropriate treatment. - Other Health Provider

We don't have many options for treatment here in Livingston and none that I know of in the rural communities. Southwest Chemical Dependency does a decent job; however, they are the only SUD treatment facility, and it is outpatient. SWCD does have a halfway house; however, teens and women with children are not accepted. - Community Leader

No options for inpatient treatment. - Other Health Provider

Total lack of substance abuse treatment in area. No inpatient treatment or prolonged treatment available. - Other Health Provider

Lack of consistent providers at SWCD, lack of inpatient and intensive outpatient care. - Physician

There are no treatment centers that I am aware of in this community. - Public Health Representative

Not enough resources to deal with all the users. - Social Services Provider

Lack of facilities and modalities to treat substance abuse. Lack of quality services. - Social Services Provider

The only substance abuse treatment agency does not seem to be very effective, from my point of view. There seems to be a disproportionate amount of alcoholics for a community this size. - Social Services Provider

#### Denial/Stigma

Stigma associated with seeking treatment. Serious lack of licensed addiction treatment professionals. Lack of professionals trained in using medically assisted treatment. - Community Leader

People don't think they have a problem. Alcohol is used as a fundraiser for every nonprofit in the county, including children's nonprofits. Often alcohol is seen as a solution, rather than a problem. - Community Leader

People don't think they have a problem. Substance use is a disease where one of its top symptoms is denial. People deny they have a problem. Prevention activities have been cut due to funding cuts. People are not receiving enough routine education about substance use prevention and intervention. - Social Services Provider

Same as mental health: stigma and limited qualified providers. - Community Leader

In some social circles, the stigma associated with addiction stops those needing help to seek it out. Fear of losing their job or social status and shame creates a barrier to recovery. - Social Services Provider

#### Prevalence/Incidence

Methamphetamine abuse is rampant, and proliferation of opioid abuse in Park County seems imminent. Children are being impacted in utero, which, either because of physical changes to the developing brain or because of the likelihood of reactive attachment disorder after birth, correlates directly with struggles in school with focus and disruptive and physically aggressive behavior. Violent crime is often associated with substance abuse. - Community Leader

Montana has a high rate alcohol abuse. Only treatment I am aware of is Southwest Montana Chemical Dependency. From what I know, a lot of people are court-ordered to receive these services. Services are available for the general public but are not intensive programs. - Community Leader

There is a huge problem with the abuse of alcohol and other drugs in our community. There are no inpatient or residential resources available to serve folks with these conditions, and there is only one provider serving the outpatient/intensive outpatient needs of our county. If someone has had an issue with this program, there are no other options available. Someone would have to go to Bozeman, Billings, Butte, or some other larger community to get inpatient/residential help for their alcohol and drug problems. Again, a lot of our residents do not have the ability to leave Livingston due to their substance abuse issues. Again, transportation to these facilities is a major challenge to arrange. - Other Health Provider

#### Culture

Reluctance to participate in group treatment programs. Shame. Town culture that endorses alcohol use. Small-town atmosphere makes recovery and behavior change difficult. High early childhood trauma rates contributing to comorbid mental health disorders. Lack of treatment resources. - Physician

The greatest barrier, in my opinion, is the lack of self-initiative of someone with substance abuse seeking support and treatment. Also, more referrals to adults and some youth could be a more preventive approach regarding this health issue. Youth are often on probation, and they are not drug tested. Their usage often times will increase once released from probation. - Social Services Provider

#### Lack of Local Care

Lack of effective treatment options. SWCD is not integrated into care system, limiting its effectiveness. No clear system of treatment; e.g. intensive use of resources treating alcohol withdrawal in LHC with no clear or good options for follow-up care. Not enough providers offering MAT. - Physician

Currently have to send patient to Billings for substance abuse treatment 130 miles away. - Physician

#### Awareness/Education

Lack of awareness that the substance abuse is a problem. - Other Health Provider

#### Lack of Funding

Funding for substance abuse prevention, education, counseling, and treatment. - Community Leader

Problematic Substances as Identified by Key Informants						
	Most Problematic	Second-Most Problematic	Third-Most Problematic	Total Mentions		
Alcohol	78.8%	22.6%	0.0%	33		
Methamphetamines or Other Amphetamines	21.2%	54.8%	20.0%	30		
Prescription Medications	0.0%	6.5%	33.3%	12		
Heroin or Other Opioids	0.0%	3.2%	26.7%	9		
Marijuana	0.0%	9.7%	6.7%	5		
Over-The-Counter Medications	0.0%	3.2%	3.3%	2		
Club Drugs (e.g. MDMA, GHB, Ecstasy, Molly)	0.0%	0.0%	3.3%	1		
Cocaine or Crack	0.0%	0.0%	3.3%	1		
Synthetic Drugs (e.g. Bath Salts, K2/Spice)	0.0%	0.0%	3.3%	1		

# **Tobacco Use**

### About Tobacco Use

Tobacco use is the single most preventable cause of death and disease in the United States. Scientific knowledge about the health effects of tobacco use has increased greatly since the first Surgeon General's report on tobacco was released in 1964.

Tobacco use causes:

- Cancer
- Heart disease
- · Lung diseases (including emphysema, bronchitis, and chronic airway obstruction)
- Premature birth, low birth weight, stillbirth, and infant death

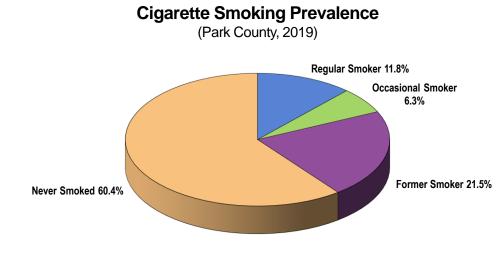
There is no risk-free level of exposure to secondhand smoke. Secondhand smoke causes heart disease and lung cancer in adults and a number of health problems in infants and children, including: severe asthma attacks; respiratory infections; ear infections; and sudden infant death syndrome (SIDS).

Smokeless tobacco causes a number of serious oral health problems, including cancer of the mouth and gums, periodontitis, and tooth loss. Cigar use causes cancer of the larynx, mouth, esophagus, and lung.

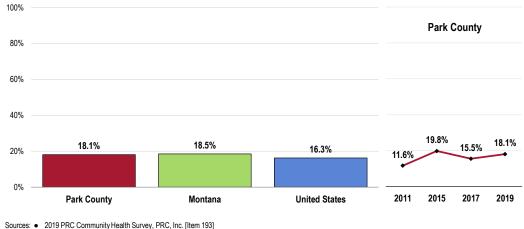
Healthy People 2020 (www.healthypeople.gov)

### **Cigarette Smoking**

"Do you now smoke cigarettes every day, some days, or not at all?" ("Current smokers" include those smoking "every day" or on "some days.")



Sources: • 2019 PRC Community Health Survey, PRC, Inc. [Item 159] Notes: • Asked of all respondents.



### **Current Smokers** Healthy People 2020 = 12.0% or Lower

Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2016 Montana data.

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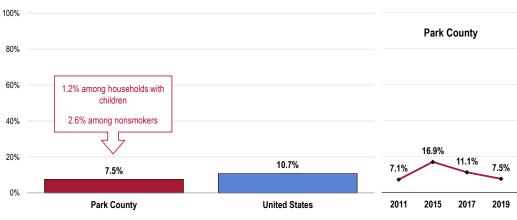
2017 PRC National Health Survey, PRC, Inc. US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective TU-1.1] Asked of all respondents.

Notes: ٠ Includes regular and occasional smokers (those who smoke cigarettes every day or on some days).

#### **Exposure to Tobacco Smoke**

# "In the past 30 days, has anyone, including yourself, smoked cigarettes, cigars or pipes anywhere in your home on an average of four or more days per week?"

The following chart details these responses among the total sample of respondents, as well as among only households with children (age 0-17).



# Member of Household Smokes at Home

Sources: 
 2019 PRC Community Health Survey, PRC, Inc. [Items 52, 161-162]

 2017 PRC National Health Survey, PRC, Inc. Notes:

"Smokes at home" refers to someone smoking cigarettes, cigars, or a pipe in the home an average of four or more times per week in the past month.

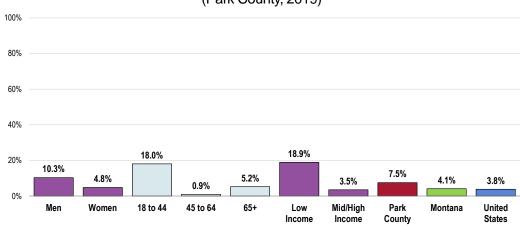
Asked of all respondents. ٠

#### **Use of Vaping Products**

"The next questions are about electronic vaping products, such as electronic cigarettes, also known as e-cigarettes. These are battery-operated devices that simulate traditional cigarette smoking, but do not involve the burning of tobacco. The cartridge or liquid "e-juice" used in these devices produces vapor and comes in a variety of flavors. Have you ever used an electronic vaping product, such as an ecigarette, even just one time in your entire life?"

"Do you now use electronic vaping products, such as e-cigarettes, "every day," "some days," or "not at all"?"

"Current use" includes use "every day" or on "some days."



# **Currently Use Vaping Products**

(Park County, 2019)

2019 PRC Community Health Survey, PRC, Inc. [Item 194] Sources: ٠ Notes:

Asked of all respondents.

Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households • with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level. Includes regular and occasional users (those who smoke e-cigarettes every day or on some days).

The 18-to-44 age group and the low-income group include fewer than 50 respondents. Use caution when interpreting these results.

#### Key Informant Input: Tobacco Use

The following chart outlines key informants' perceptions of the severity of Tobacco Use as a problem in the community:

# Perceptions of Tobacco Use as a Problem in the Community (Key Informants, 2019) Major Problem Moderate Problem Minor Problem No Problem At All 32.0% 48.0% 8.0% 12.0%

Sources: • PRC Online Key Informant Survey, PRC, Inc. Notes: • Asked of all respondents.

#### Among those rating this issue as a "major problem," reasons related to the following:

#### Prevalence/Incidence

High use in community of chewing tobacco and cigarettes. - Social Services Provider

I see the majority of my friends/family relying on tobacco products on a consistent basis. - Public Health Representative

High rate of use with long-term health implications. - Physician

I just see a lot of people smoking. I also see a lot of people come into the hospital with lung issues related to smoking, COPD. - Other Health Provider

Simply walking the streets of our community is a visible indication of the incidence rate of smoking in Livingston. Vaping is also a problem. - Community Leader

Many still smoke, chew, or JUUL. - Community Leader

#### **Contributing Factors**

Poverty, low income, drug and alcohol use, obesity, and self-medicating. - Social Services Provider

Waste of money, increases health burdens for poor community. - Physician

Drug and alcohol use are very high in Park County, according to the CHIP statistics. Tobacco use goes hand-in-hand with drugs and alcohol. - Social Services Provider

People were raised with tobacco and have a hard time quitting as adults. New devices such as JUUL are opening the doors to this addictive behavior. - Public Health Representative

Strong tobacco culture in this western town. High teen smoking rates. High rates of comorbid conditions, such as substance use and mental health disorders. - Physician

#### **E-Cigarettes**

Vaping in middle and high school. I see daily driving around town people smoking in their cars. Children in the back seats. I also see where I work a large number of males using smokeless tobacco. - Community Leader

The schools have identified vaping as a growing and critical problem for our youth. - Community Leader

## **Sexual Health**

#### HIV

#### About Human Immunodeficiency Virus (HIV)

The HIV epidemic in the United States continues to be a major public health crisis. An estimated 1.1 million Americans are living with HIV, and 1 in 5 people with HIV do not know they have it. HIV continues to spread, leading to about 56,000 new HIV infections each year.

HIV is a preventable disease, and effective HIV prevention interventions have been proven to reduce HIV transmission. People who get tested for HIV and learn that they are infected can make significant behavior changes to improve their health and reduce the risk of transmitting HIV to their sex or drugusing partners. More than 50% of new HIV infections occur as a result of the 21% of people who have HIV but do not know it.

In the era of increasingly effective treatments for HIV, people with HIV are living longer, healthier, and more productive lives. Deaths from HIV infection have greatly declined in the United States since the 1990s. As the number of people living with HIV grows, it will be more important than ever to increase national HIV prevention and healthcare programs.

There are gender, race, and ethnicity disparities in new HIV infections:

- Nearly 75% of new HIV infections occur in men.
- More than half occur in gay and bisexual men, regardless of race or ethnicity.
- 45% of new HIV infections occur in African Americans, 35% in whites, and 17% in Hispanics.

Improving access to quality healthcare for populations disproportionately affected by HIV, such as persons of color and gay and bisexual men, is a fundamental public health strategy for HIV prevention. People getting care for HIV can receive:

- Antiretroviral therapy
- · Screening and treatment for other diseases (such as sexually transmitted infections)
- HIV prevention interventions
- Mental health services
- · Other health services

As the number of people living with HIV increases and more people become aware of their HIV status, prevention strategies that are targeted specifically for HIV-infected people are becoming more important. Prevention work with people living with HIV focuses on:

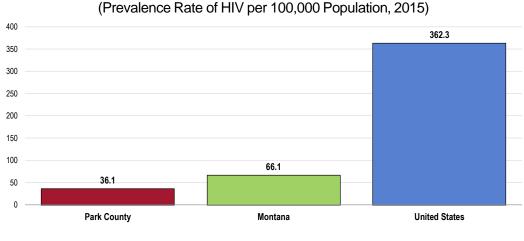
- · Linking to and staying in treatment.
- Increasing the availability of ongoing HIV prevention interventions.
- Providing prevention services for their partners.

Public perception in the US about the seriousness of the HIV epidemic has declined in recent years. There is evidence that risky behaviors may be increasing among uninfected people, especially gay and bisexual men. Ongoing media and social campaigns for the general public and HIV prevention interventions for uninfected persons who engage in risky behaviors are critical.

Healthy People 2020 (www.healthypeople.gov)

#### **HIV Prevalence**

The following chart outlines prevalence (current cases, regardless of when they were diagnosed) of HIV per 100,000 population in the area.



HIV Prevalence

 Sources:
 • Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention.

 Retrieved August 2019 from CARES Engagement Network at https://engagementnetwork.org.

 Notes:
 • This indicator is relevant because HIV is a life-threatening communicable disease that disproportionately affects minority populations and may also indicate the prevalence of unsafe sex practices.

#### Key Informant Input: HIV/AIDS

The following chart outlines key informants' perceptions of the severity of *HIV/AIDS* as a problem in the community:

# Perceptions of HIV/AIDS as a Problem in the Community (Key Informants, 2019) Major Problem Moderate Problem Minor Problem No Problem At All



Sources: • PRC Online Key Informant Survey, PRC, Inc. Notes: • Asked of all respondents.

Among those rating this issue as a "major problem," reasons related to the following:

#### **Contributing Factors**

No support groups and stigma. - Other Health Provider

Awareness/Education

It is not talked about, nor do I personally know of available resources. - Social Services Provider No support groups and stigma. - Other Health Provider

#### **Sexually Transmitted Diseases**

#### About Sexually Transmitted Diseases

STDs refer to more than 25 infectious organisms that are transmitted primarily through sexual activity. Despite their burdens, costs, and complications, and the fact that they are largely preventable, STDs remain a significant public health problem in the United States. This problem is largely unrecognized by the public, policymakers, and health care professionals. STDs cause many harmful, often irreversible, and costly clinical complications, such as: reproductive health problems; fetal and perinatal health problems; cancer; and facilitation of the sexual transmission of HIV infection.

Because many cases of STDs go undiagnosed—and some common viral infections, such as human papillomavirus (HPV) and genital herpes, are not reported to CDC at all—the reported cases of chlamydia, gonorrhea, and syphilis represent only a fraction of the true burden of STDs in the US. Untreated STDs can lead to serious long-term health consequences, especially for adolescent girls and young women. Several factors contribute to the spread of STDs.

**Biological Factors.** STDs are acquired during unprotected sex with an infected partner. Biological factors that affect the spread of STDs include:

- Asymptomatic nature of STDs. The majority of STDs either do not produce any symptoms or signs, or they produce symptoms so mild that they are unnoticed; consequently, many infected persons do not know that they need medical care.
- **Gender disparities**. Women suffer more frequent and more serious STD complications than men do. Among the most serious STD complications are pelvic inflammatory disease, ectopic pregnancy (pregnancy outside of the uterus), infertility, and chronic pelvic pain.
- Age disparities. Compared to older adults, sexually active adolescents ages 15 to 19 and young adults ages 20 to 24 are at higher risk for getting STDs.
- Lag time between infection and complications. Often, a long interval, sometimes years, occurs between acquiring an STD and recognizing a clinically significant health problem.

**Social, Economic, and Behavioral Factors.** The spread of STDs is directly affected by social, economic, and behavioral factors. Such factors may cause serious obstacles to STD prevention due to their influence on social and sexual networks, access to and provision of care, willingness to seek care, and social norms regarding sex and sexuality. Among certain vulnerable populations, historical experience with segregation and discrimination exacerbates these factors. Social, economic, and behavioral factors that affect the spread of STDs include: racial and ethnic disparities; poverty and marginalization; access to healthcare; substance abuse; sexuality and secrecy (stigma and discomfort discussing sex); and sexual networks (persons "linked" by sequential or concurrent sexual partners).

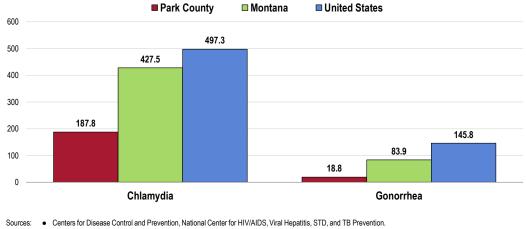
Healthy People 2020 (www.healthypeople.gov)

#### Chlamydia & Gonorrhea

Chlamydia. Chlamydia is the most commonly reported STD in the United States; most people who have chlamydia are unaware, since the disease often has no symptoms.

Gonorrhea. Anyone who is sexually active can get gonorrhea. Gonorrhea can be cured with the right medication; left untreated, however, gonorrhea can cause serious health problems in both women and men.

The following chart outlines local incidence for these STDs.



# Chlamydia & Gonorrhea Incidence

(Incidence Rate per 100,000 Population, 2016)

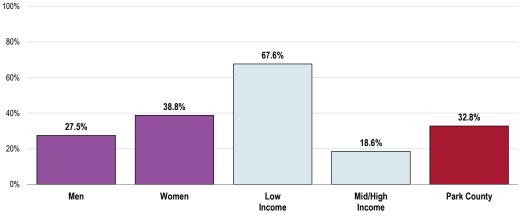
Retrieved August 2019 from CARES Engagement Network at https://engagementnetwork.org. Notes This indicator is relevant because it is a measure of poor health status and indicates the prevalence of unsafe sex practices .

#### STD Testing

"When was the last time you were tested for sexually transmitted infections other than HIV, such as HPV, gonorrhea, chlamydia, or syphilis?"

# Have Been Tested for Sexually Transmitted Diseases (Other Than HIV) Within the Past Three Years

(Adults Age 18-49; Park County, 2019)



2019 PRC Community Health Survey, PRC, Inc. [Item 331] Sources: ٠ Notes:

Asked of respondents ages 18 to 49.

Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

The low-income group includes fewer than 50 respondents. Use caution when interpreting these results.

Key Informant Input: Sexually Transmitted Diseases

The following chart outlines key informants' perceptions of the severity of *Sexually Transmitted Diseases* as a problem in the community:

# Perceptions of Sexually Transmitted Diseases as a Problem in the Community

(Key Informants, 2019)

■ M	Major Problem  Mod		te Problem Minor Problem		■ No Problem At All	
12.5%	27.5%			50.0%		10.0%

 Sources:
 • PRC Online Key Informant Survey, PRC, Inc.

 Notes:
 • Asked of all respondents.

Among those rating this issue as a "major problem," reasons related to the following:

#### **Contributing Factors**

High amounts of tourism. - Public Health Representative

Transient nature of parts of the county, misinformation, and/or apathy of the problem. - Public Health Representative

Unsafe sex, which is always an issue, but also goes in hand with alcohol and drug abuse. - Social Services Provider

#### **Unprotected Sex**

More people ages 15 to 40 consider sexual activity as an aspect of "friendship" and are having prolific, unprotected sex. Sexually transmitted diseases are therefore transmitted between sex partners. -Social Services Provider

# **Access to Health Services**

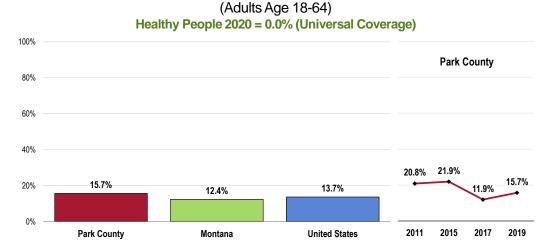
## Lack of Health Insurance Coverage (Age 18 to 64)

Survey respondents were asked a series of questions to determine their healthcare insurance coverage, if any, from either private or government-sponsored sources.

"Do you have any government-assisted healthcare coverage, such as Medicare, Medicaid (or another state-sponsored program), or VA/military benefits?"

"Do you currently have: health insurance you get through your own or someone else's employer or union; health insurance you purchase yourself; or, you do <u>not</u> have health insurance and pay for health care entirely on your own?"

Here, lack of health insurance coverage reflects respondents <u>age 18 to 64</u> (thus excluding the Medicare population), who have <u>no</u> type of insurance coverage for healthcare services – neither private insurance nor government-sponsored plans (e.g., Medicaid).



# Lack of Healthcare Insurance Coverage

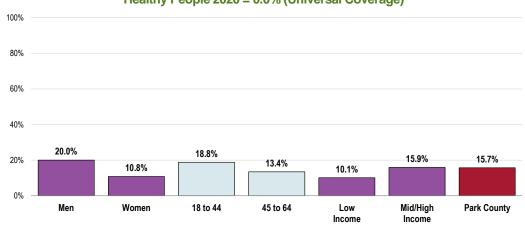
Sources: • 2019 PRC Community Health Survey, PRC, Inc. [Item 169]

Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control
and Prevention (CDC): 2016 Montana data.

• 2017 PRC National Health Survey, PRC, Inc.

US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective AHS-1]

Notes: • Asked of all respondents under the age of 65.



# Lack of Healthcare Insurance Coverage

(Adults Age 18-64; Park County, 2019) Healthy People 2020 = 0.0% (Universal Coverage)

Sources: ٠ 2019 PRC Community Health Survey, PRC, Inc. [Item 169]

US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective AHS-1] Asked of all respondents under the age of 65.

Notes: ٠

Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.
 The 18-to-44 age group and the low-income group include fewer than 50 respondents. Use caution when interpreting these results.

## **Difficulties Accessing Primary Care**

#### About Access to Healthcare

Access to comprehensive, quality health care services is important for the achievement of health equity and for increasing the quality of a healthy life for everyone. It impacts: overall physical, social, and mental health status; prevention of disease and disability; detection and treatment of health conditions; quality of life; preventable death; and life expectancy.

Access to health services means the timely use of personal health services to achieve the best health outcomes. It requires three distinct steps: 1) Gaining entry into the health care system; 2) Accessing a health care location where needed services are provided; and 3) Finding a health care provider with whom the patient can communicate and trust.

Healthy People 2020 (www.healthypeople.gov)

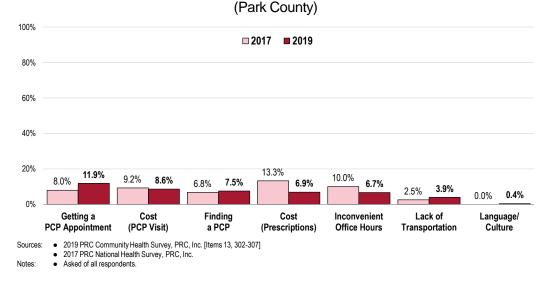
#### **Barriers to Accessing Primary Medical Care**

To better understand healthcare access barriers, survey participants were asked whether any of the following barriers to access prevented them from seeing a primary care provider (PCP) or obtaining a needed prescription in the past year.

#### "Was there a time in the past 12 months when...

- ... you needed medical care, but had difficulty finding a primary care provider?"
- ... you had difficulty getting an **appointment** to see a primary care provider?"
- ... you needed to see a primary care provider, but could not because of the cost?"
- ... a **lack of transportation** made it difficult or prevented you from seeing a primary care provider or making a medical appointment?"
- ... you were not able to see a primary care provider because the office hours were not convenient?"
- ... you needed a **prescription medicine**, but did not get it because you could not afford it?"
- ... you were not able to see a primary care provider due to **language or cultural differences**?"

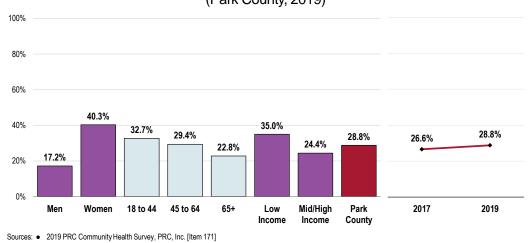
The percentages shown in the following chart reflect the total population, regardless of whether primary medical care was needed or sought.



# **Barriers to Access Have Prevented Primary Medical Care in the Past Year**

The following charts reflect the composite percentage of the total population experiencing problems accessing primary medical care in the past year (indicating one or more of the aforementioned barriers or any other problem not specifically asked), again regardless of whether they needed or sought care.

# **Experienced Difficulties or Delays of Some Kind** in Receiving Needed Primary Care in the Past Year (Park County, 2019)



Notes: 
 Asked of all respondents.

Percentage represents the proportion of respondents experiencing one or more barriers to accessing healthcare in the past 12 months.

 Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

The 18-to-44 age group and the low-income group include fewer than 50 respondents. Use caution when interpreting these results

#### Key Informant Input: Access to Healthcare Services

The following chart outlines key informants' perceptions of the severity of Access to Healthcare Services as a problem in the community:

# Perceptions of Access to Healthcare Services as a Problem in the Community

(Key Informants, 2019)

■ Moderate Problem ■ Minor Problem ■ No Problem At All Major Problem

9.6% 50.0%	26.9%	13.5%
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Sources: • PRC Online Key Informant Survey, PRC, Inc. Notes:

Asked of all respondents.

Among those rating this issue as a "major problem," reasons related to the following:

#### Access to Care/Services

Providers are concentrated in Livingston. Rural community members have a long way to drive. Missing work opportunities. It's costly on many levels. - Public Health Representative

Distance and discretion. Proximity to services is a challenge for much of Park County. In small communities and rural areas, being able to access services discreetly can be a challenge. -Community Leader

Access to specialty care, particularly cardiology. - Community Leader

Need improved access to LHC for people with transportation barriers. How can you build a community hospital without a way for most vulnerable to get to it? Need walking/bike path completed. - Physician

#### Affordable Care/Services

Cost of care and access to specialty care locally. - Community Leader

Insurance and cost. Rural EMS is not sustainable. Declining number of EMTs. Health care is geographically distant for many. - Community Leader

#### Cost of Care

Cost and lack of insurance. - Community Leader

Key informants (who rated this as a "major problem") were further asked to identify the type of care they perceive as the most difficult to access in the community.

Medical Care Difficult to Access as Identified by Key Informants							
	Most Difficult	Second- Most Difficult	Third-Most Difficult	Total Mentions			
Behavioral Health	60.0%	40.0%	0.0%	5			
Specialty Care	20.0%	20.0%	40.0%	4			
Chronic Disease	0.0%	0.0%	40.0%	4			
Dental Care	20.0%	0.0%	0.0%	1			
Elder Care	0.0%	20.0%	0.0%	1			
Substance Abuse Treatment	0.0%	20.0%	0.0%	1			
Primary Care	0.0%	0.0%	20.0%	1			

# **Primary Care Providers**

#### **About Primary Care**

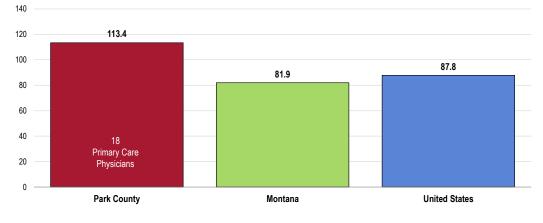
Improving health care services depends in part on ensuring that people have a usual and ongoing source of care. People with a usual source of care have better health outcomes and fewer disparities and costs. Having a primary care provider (PCP) as the usual source of care is especially important. PCPs can develop meaningful and sustained relationships with patients and provide integrated services while practicing in the context of family and community. Having a usual PCP is associated with:

- · Greater patient trust in the provider
- · Good patient-provider communication
- Increased likelihood that patients will receive appropriate care

Improving health care services includes increasing access to and use of evidence-based preventive services. Clinical preventive services are services that: **prevent** illness by detecting early warning signs or symptoms before they develop into a disease (primary prevention); or **detect** a disease at an earlier, and often more treatable, stage (secondary prevention).

Healthy People 2020 (www.healthypeople.gov)

This indicator is relevant because a shortage of health professionals contributes to access and health status issues.



### Access to Primary Care (Number of Primary Care Physicians per 100,000 Population, 2014)

Sources: • US Department of Health & Human Services, Health Resources and Services Administration, Area Health Resource File.

Retrieved August 2019 from CARES Engagement Network at https://engagementnetwork.org.

 Doctors classified as "primary care physicians" by the AMA include: General Family Medicine MDs and DOs, General Practice MDs and DOs, General Internal Medicine MDs, and General Pediatrics MDs. Physicians age 75 and over and physicians practicing sub-specialties within the listed specialties are excluded. This indicator is relevant because a shortage of health professionals contributes to access and health status issues.

Notes:

## **Oral Health**

#### **About Oral Health**

Oral health is essential to overall health. Good oral health improves a person's ability to speak, smile, smell, taste, touch, chew, swallow, and make facial expressions to show feelings and emotions. However, oral diseases, from cavities to oral cancer, cause pain and disability for many Americans. Good self-care, such as brushing with fluoride toothpaste, daily flossing, and professional treatment, is key to good oral health. Health behaviors that can lead to poor oral health include: **tobacco use;** excessive alcohol use; and poor dietary choices.

The significant improvement in the oral health of Americans over the past 50 years is a public health success story. Most of the gains are a result of effective prevention and treatment efforts. One major success is community water fluoridation, which now benefits about 7 out of 10 Americans who get water through public water systems. However, some Americans do not have access to preventive programs. People who have the least access to preventive services and dental treatment have greater rates of oral diseases. A person's ability to access oral healthcare is associated with factors such as education level, income, race, and ethnicity.

Barriers that can limit a person's use of preventive interventions and treatments include: limited access to and availability of dental services; lack of awareness of the need for care; cost; and fear of dental procedures.

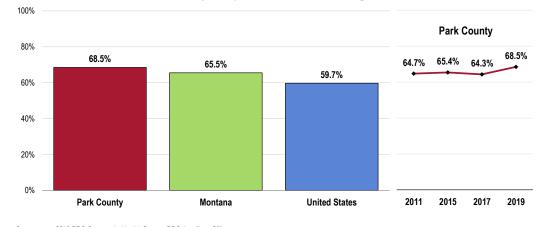
There are also social determinants that affect oral health. In general, people with lower levels of education and income, and people from specific racial/ethnic groups, have higher rates of disease. People with disabilities and other health conditions, like diabetes, are more likely to have poor oral health.

Potential strategies to address these issues include:

- Implementing and evaluating activities that have an impact on health behavior.
- Promoting interventions to reduce tooth decay, such as dental sealants and fluoride use.
- Evaluating and improving methods of monitoring oral diseases and conditions.
- Increasing the capacity of State dental health programs to provide preventive oral health services.
- Increasing the number of community health centers with an oral health component.
  - Healthy People 2020 (www.healthypeople.gov)

#### **Dental Care**

Adults: "About how long has it been since you last visited a dentist or a dental clinic for any reason?"



# Have Visited a Dentist or Dental Clinic Within the Past Year

Healthy People 2020 = 49.0% or Higher

Sources: • 2019 PRC Community Health Survey, PRC, Inc. [Item 20] • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2016 Montana data.

2017 PRC National Health Survey, PRC, Inc.

• US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective OH-7]

Notes: • Asked of all respondents.

#### Key Informant Input: Oral Health

The following chart outlines key informants' perceptions of the severity of *Oral Health* as a problem in the community:

## Perceptions of Oral Health as a Problem in the Community (Key Informants, 2019)

 Major Problem
 Moderate Problem
 Minor Problem
 No Problem At All

 28.9%
 48.9%
 11.1%
 11.1%

Sources: • PRC Online Key Informant Survey, PRC, Inc. • Asked of all respondents.

Among those rating this issue as a "major problem," reasons related to the following:

Access for Uninsured/Underinsured

Community Health Partners, as far as I know, is the only option available if you don't have insurance. - Social Services Provider

Lack of dental insurance, not enough money to see dentist when you are paying bills, utilities, rent and food. I do think kids are covered pretty well if we can get them in, but a lot of times adults lack the resources. - Social Services Provider

Most adults do not have insurance. Adults not generally covered by Medicaid. - Community Leader

#### Affordable Care/Services

Customers requesting financial help to pay for oral/dental care due to years of neglect due to lacking health coverage. - Social Services Provider

There is a huge lack of qualified, affordable dentists in Park County, and most dentists don't take adults with Medicaid. - Social Services Provider

Cost. - Social Services Provider

#### **Contributing Factors**

Meth is a problem in our community, and meth users have poor oral hygiene. Also, there are many people who don't have dental insurance and are in a "gray area" where they make enough to live and pay rent but don't have enough to pay for crowns or root canals, so they put it off and manage the issue when it is an emergency. - Social Services Provider

Poor diet coupled with poor oral hygiene and lack of ready access to dental care means more people with potentially lifelong oral health problems and associated other health problems. - Community Leader

#### Access to Care/Services

I believe access and cost are issues in our community. - Social Services Provider

There are major issues with dental. Just not enough available resources, especially for people needing dentures. - Other Health Provider

Access for Medicaid/Medicare Patients

Lack of access for Medicaid-insured. - Physician

## Local Resources

#### **Resources Available to Address the Significant Health Needs**

The following represent potential measures and resources (such as programs, organizations, and facilities in the community) identified by key informants as available to address the significant health needs identified in this report. This list only reflects input from participants in the Online Key Informant Survey and should not be considered to be exhaustive nor an all-inclusive list of available resources.

#### **Access Problems**

Angel Line Community Health Partners Doctor's Offices Emergency Responders Health Department HMK/Medicaid Transportation Assistance Human Resources Development Council Karst Stage Transportation L'esprit Life Flight Air Ambulance Livingston HealthCare Ranger Clinic School System Yellowstone National Park

#### Arthritis/Osteoporosis/Back Conditions

Acupuncture Behavioral Health Services Chico Hot Springs Community Health Partners Livingston HealthCare Massage Therapy Physical Therapy

#### Cancer

Bozeman Care Van Bozeman Health Cancer Center Cancer Support Community Community Health Partners DPHHS Drug and Alcohol Resource Center Gallatin/Park County Public Health Health Department Livingston Food Resource Center Livingston HealthCare Loaves and Fishes St. Vincent's Healthcare

#### **Chronic Kidney Disease**

Bozeman Deaconess

#### **Dementia/Alzheimer's Disease**

Community Health Partners Council on Aging/Home Assistance Doctor's Offices Frontier Memory Unit Livingston HealthCare Nursing Homes Park County Assisted Living/Dementia Care Community Park County Medical Community Park County Medical Community Park County Medical Community Park County Medical Community Park County Senior Center Park County Senior Center Park County Senior Citizens Corporation Senior Center State Agency on Aging State Senior and Aging Programs

#### Diabetes

Bozeman Health Bridgercare Community Health Partners **DEEP** Classes Doctor's Offices Fire Hall Fitness Gardiner Food Bank Human Resources Development Council Livingston Food Resource Center Livingston HealthCare Meals on Wheels Nutrition Services Park County Health Department Park County Senior Citizens Corporation Restaurants School System

#### **Family Planning**

ASPEN Bridgercare Community Health Partners Counseling Services DPHHS Health Department Livingston HealthCare Park County Health Department Park County Rural Health Nurse Ranger Clinic School System Zoe Care

#### **Hearing and Vision Problems**

Bear Hearing Solutions VA Clinic

#### Heart Disease and Stroke

Chronic Disease Education Community Health Partners Doctor's Offices Fitness Centers/Gyms Gallatin/Park County Public Health Healthy Steps Hospitals Livingston HealthCare Park County Health Department Park County Senior Center Smoking Cessation Programs Yoga Studios

#### **HIV/AIDS**

Community Health Partners Livingston HealthCare

#### Immunization/Infectious Disease

Antibiotic Stewardship Programs Community Health Partners DPHHS Health Department imMTrax Livingston HealthCare Livingston School District Park County Health Department Park County Public Health Pharmacies School System

#### Infant and Child Health

Community Health Partners Early Childhood Coalition of Park County Learning Partners Livingston HealthCare Park County Health Department Ranger Clinic

#### **Injury and Violence**

Adult Protective Services ASPEN Child and Family Services City/County Community Health Partners DPHHS Drug Court Emergency Responders Health Department HRDC Juvenile Court Law Enforcement L'esprit Livingston HealthCare Livingston Police Department Livingston School District Parents as Teachers Park County Health Department Park County Sheriff Rise Montana School System Southwest Chemical Dependency Program Treatment Court

#### **Mental Health Issues**

1-800-273-TALK AMB West Philanthropies ASPEN Community Health Partners Counseling Services Crisis Response Team Doctor's Offices DPHHS Emergency Responders Employee Assistance Program Employee Wellness Plans Faith Community Family Services Gallatin Mental Health Center

#### Hospitals

Human Resources Development Council Law Enforcement L'esprit LiveWell 49 Livingston HealthCare Livingston Hospital Livingston School District Mental Health Center National Alliance on Mental Illness Park County Health Department Park County Public Health Peer Network Public Health Rise Montana School System Southwest Chemical Dependency Program Southwest Montana Alcohol and Drug Program United Way 211 We Will Listen Western Montana Mental Health

#### Nutrition, Physical Activity, and Weight

Civic Center Community Gardens Community Health Partners County Active Transportation Committee Doctor's Offices DPHHS Educational Classes Employee Wellness Plans Farm to School Fire Hall Fitness Fitness Centers/Gyms Food Stamps LiveWell 49 Livingston Food Resource Center Livingston HealthCare Loaves and Fishes Nutrition Services Park County Health Department Park County Senior Citizens Corporation Parks and Recreation Park County Community Foundation School System Weight Watchers Yoga Studios

#### **Oral Health/Dental Care**

CHIP or Medicaid Community Closet Grant for Financial Assistance Community Health Partners Dentist's Offices DPHHS Friends of the Community Hospitals Livingston HealthCare Park County Health Department School System

#### **Respiratory Diseases**

Community Health Partners Health Department Livingston HealthCare Park County Health Department

#### **Sexually Transmitted Diseases**

Bridgercare Community Health Partners Doctor's Offices Health Department Livingston HealthCare Park County Health Department Zoe Care

#### **Substance Abuse**

Alcoholics Anonymous/Narcotics Anonymous ASPEN Celebrate Recovery Churches Community Health Partners Counseling Services Doctor's Offices Drug and Alcohol Resource Center Drug Court Emergency Responders Families Human Resources Development Council Juvenile Court Law Enforcement L'esprit Licensed Addiction Counselors Livingston HealthCare Livingston Hospital Mental Health Services Park County Health Department

Peer Network School System Sober Housing Programs Southwest Chemical Dependency Program

#### **Tobacco Use**

Community Health Partners Doctor's Offices Health Department Indoor Air Quality Law Enforcement Livingston HealthCare Montana Tobacco Use Prevention Program Park County Community Foundation Park County Health Department Public Health Quit Line Ranger Clinic School System Southwest Chemical Dependency Program State Program



# **Evaluation of Past Work from Livingston HealthCare's 2016 Community Health Needs Assessment (2016-2019)**

# Goal 1: Improve access to and coordination of mental and behavioral health services in Park County.

Alcohol and substance abuse followed by suicide and depression/anxiety raked first and second respectively as the highest health concerns facing the community in the 2016 CHNA. Approximately 15% of survey respondents indicating that they felt depressed on most days for at least three consecutive months. Livingston HealthCare's implementation of the following strategies aimed to increase access to behavioral health services, increase utilization of preventative mental health measures, and improve mental and behavioral health outcomes.

# Strategy 1: Assess mental and behavioral health workforce at LHC by 1. Determine social worker staffing needs and 2. Hire social worker(s) for Clinic/Hospital. Actions taken:

- 1. Livingston HealthCare implemented an Integrated Behavioral Health program in 2016 through a Montana Health Care Foundation Grant. Integrating behavioral health care with primary care ("integrate behavioral health" or "IBH") is now widely considered an effective strategy for improving outcomes for the millions of Americans with mental or behavioral health conditions. A model of behavioral health integration that enhances "usual" primary care by adding two key services: care management support for patients receiving behavioral health treatment; and regular psychiatric inter-specialty consultation to the primary care team, particularly regarding patients whose conditions are not improving. With the implementation of the IBH program and utilizing grant funding, Livingston HealthCare was successful in hiring a Licensed Clinical Social Worker (LCSW) to begin patient care and data collection for the behavioral health program within the Rural Health Clinic.
- 2. Through a series of grants, Livingston HealthCare was able to hire a Boar-Certified Psychiatrist, a Psychiatric Physicians Assistant-Certified and two Licensed Clinical Social Workers as well as a Registered Nurse Care Coordinator and a Medical Assistant to serve as the Behavioral Health team. As a result of increasing behavioral health staff, LHC offers psychiatric services five days per week. These services in addition to the other behavioral health providers are available to the emergency department for behavioral health crisis, in the Shields Valley Rural Health Clinic, spreading access into rural northern Park County and for inpatients of the critical access hospital. This also allows for up to forty behavioral health appointment slots per day increasing access for patients in need of behavioral health services.

Strategy 2: Enhance integration and utilization of the Connect Referral Program by 1. Delivering education for staff and providers regarding the Connect Referral Program 2. Convene staff workgroup to develop new protocol for integrating referrals for Connect Referral Program into workflow (ED, discharge, clinic, as appropriate) 3. Develop procedure to identify patients who would qualify to participate in Connect Referral Program.

#### Actions taken:

- 1. Livingston HealthCare joined the Connect Referral System in May of 2018. The purpose of Livingston HealthCare joining the Park County Connect Referral System (housed within the Park County Health Department) is to enhance the care coordination between LHC services and participating services which meet the needs of our patients in addressing social determinants of health. The goal of the Connect Referral System is to foster a collaborative culture among service providers in Park County. The Connect Referral System is a secure, web-based system for sending and receiving referrals. The system is FERPA, HIPAA, 42CFR and IDEA compliant. Agencies are brought together under a single information sharing agreement MOU and ROI. The system provides data on referral outcomes and acts as an education tool with the client on services available to themselves and their family member. The agency(s) are accountable for contacting the client for services they consent to and the reporting system tracks the number, status and outcome of all referrals sent and received. Livingston HealthCare trained all management and departments on the implementation of the Connect Referral System within the Critical Access Hospital and Rural Health Clinic. Livingston HealthCare assists the Park County Health Department in recruiting area agencies that provide services in which Livingston HealthCare patients and all community members would benefit from, therefore strengthening the collaboration between area agencies and increasing referral opportunities for community members. There are currently twenty agencies in Park County participating in the Connect Referral System. The number of referrals sent and received by Livingston Healthcare continues to grow as more agencies are onboarded to the program and education continues within Livingston Healthcare, the participating agencies and the community.
- 2. Livingston HealthCare created an internal Connect Referral process and procedure form to use as training for Livingston HealthCare managers and for the LHC employees who have been assigned "gatekeeper" status for the Connect Referral program. The Community Health Coordinator as well as the LHC gatekeepers attend monthly Connect Referral community meetings hosted by the Park County Health Department to discuss workflow and referral process of all Connect users as well as updates to agency services in order to keep collaboration and information of referring agencies current. This information is brought back to LHC and is the responsibility of

the Community Health Coordinator and the gatekeepers to update LHC departments on any changes or updates on Connect Referral services. Updates are given on an ongoing basis through monthly employee meetings, medical staff meetings and monthly department meetings to ensure communication within Livingston HealthCare continues regarding this important service to our patients and community.

3. The Connect Referral system is currently being utilized by Livingston Healthcare primary care providers in the Rural Health Clinic, the integrated behavioral health team, the infusion center, home health and hospice, rehabilitation department and the emergency department, and for patients being discharged from the medical surgical floor. Each of these departments have been trained on the services provided through the various agencies participating on the Connect Referral system and how to send referrals through the Livingston Healthcare assigned gatekeepers. Referrals to outside agencies made by Livingston Health Care providers aim to assist patients with their social determinants of health needs. Incoming referrals for Livingston HealthCare services aim to address patient's mental health and physical health needs. These referrals into and out of Livingston Healthcare continue to increase as the Connect referral program in Park County gains traction.

Strategy 3: Enhance behavioral-based screenings in clinic to assist in earlier identification of mental health needs by 1. Convene clinic provider workgroup to assess current screening protocol 2. Research best practices for screening and clinic integration processes 3. Develop and integrate referral process based on standard screening tools.

#### Actions taken:

- A team comprised of behavioral health and primary care providers and nurses was convened to create a care continuum from screening to ongoing care. Utilizing best practice information and through consultation with Montana Healthcare Foundation, Billings Clinic and the National Council for Behavioral Health, Livingston HealthCare implemented depressions screening into the patient intake process for all clinic appointments in the rural health clinic.
- 2. Shortly after convening the group Livingston HealthCare started screening all clinic patients using the Patient Health Questionnaire (PHQ2 and PHQ9) screening tools. The Patient Health Questionnaire 2 and 9 are commonly used and validated screening tools for depression. If the PHQ2 is positive for depression, the PHQ9 should be administered. If these screening tests are positive for depression, further evaluation is needed to confirm a mental health diagnosis by a behavioral health specialist.

3. Utilizing the Integrated Behavioral Health model, if a patient screens positive on the PHQ2 questionnaire they are given a PHQ9 screening. If they score high on the PHQ9 or there is a concerning jump from a previous visit staff facilitate a warm handoff to the Integrated Behavioral Health team for treatment. LHC moved further to hire a nurse coordinator in Behavioral Health to coordinate care for high-risk patients and ensure that they are also addressing their social determinates of health. After initiating the routine screening of patients utilizing the PHQ2, using the IBH model of warm handoffs, anxiety and depression rates for rural health clinic patients showed improvement. For patients with critical behavioral health needs, providers in primary care and behavioral health conduct case review meetings weekly to discuss course of treatment to best meet the needs of the patient. Developing an integrative approach with internal referrals between primary care and behavioral health has strengthened the communication between providers and improved patient care.

# Goal 2: Improve community's access to transportation in and around Park County.

Significantly more respondents indicated "transportation assistance" would improve the community's access to healthcare. Livingston HealthCare built a new facility in the fall of 2015. The new location is at the eastern edge of the city limits approximately 2.5 miles from the center of town. Before the move, Livingston HealthCare was located at 504 South 13<sup>th</sup> Street, in the middle of a residential area and was perceived as a more accessible location to walk or bike.

Strategy 1: Continue participation on Park County Active Transportation Coalition to address needs related to active transportation, public transportation and enhancing community awareness.

#### Actions taken:

1. In November 2017, the Windrider Public Transit System began operating within the City of Livingston, with Livingston HealthCare as the largest financial sponsor. Livingston HealthCare contributes \$10,000 annually to support this free transportation system that makes seven scheduled stops at Livingston HealthCare, Monday through Friday with the first stop beginning at 7:17 am and the last stop at 4:40pm coinciding with clinic/hospital outpatient hours of service. Windrider Transit is an efficient and courteous fixed-route service delivery system to citizens and disabled persons in Park County, Montana. Windrider Transit provides general public and paratransit services within the limits of the City of Livingston with 20 designated stops. All vehicles are ADA accessible and equipped with lifts. There is NO FEE to ride a Windrider bus. Windrider Transit operates Monday through Friday from 6:15 a.m. to 6:15 with 109 fixed route stops per day, 5 days a week. In the first 18 months of operation the Windrider had 4,477 passengers. Four part-time drivers spend 12 hours

of driving per day with an average of 550 miles driven per month. 56% funding comes from MDT Transit Program (state and federal funds), 44% funding comes from community partners with Livingston HealthCare being the largest financial contributor within the community partners.

# Goal 3: Enhance health and wellness education and opportunities in Park County.

Access to health care and other services and healthy behaviors and lifestyles were indicated as two of the most important components required for a healthy community. Focus groups indicated a need for more education and awareness about resources in the community and respondents indicated that "greater health education services" would improve their community's access to health care.

# Strategy 1: Improve awareness of available services for LHC staff by 1. Creating an LHC staff and services directory 2. Disseminate new directory to LHC staff. Actions Taken:

- 1. A handout including all the LHC providers and services was created. The provider handouts are kept in stock and used frequently for patient and staff education. Locations where the handouts are available include UrgentCare, LHC Registration and in the LHC Clinic. In addition, video interviews were recorded with each provider and posted to the LHC website, as well as shown in the monthly employee meetings. The provider handouts and video interviews assist in connecting community members with the best provider fit for their preferences and needs. Community members who have an established relationship with a PCP are more likely to be aware of the health and wellness resources available through LHC and in the community.
- 2. Highlights on service lines were included monthly in *Employee Connect*, the LHC employee newsletter. Provider and service line highlights were posted to LHC's social media, which is frequently used by LHC staff. Sharing the service line highlights with LHC employees and the community generates increased awareness of the health education and services that are available through LHC and in the community. Livingston Healthcare is the largest employer in Park County, it is important that Livingston HealthCare staff understand the services their organization provides to the community so they can share through word of mouth how Livingston Healthcare aims to serve the community. It is also encouraged through employee meetings and through the Employee Bright Ideas initiative, that employees share with administration ideas they have for improving patient care and services for patients and community members.

Strategy 2: Improve awareness of available services for community by 1. Development of a health and wellness services directory for public use 2. Disseminate new directory to community 3. Expand marketing outreach strategy utilizing the local newspaper, Living Well publication, social media, and community meetings.

#### Actions Taken:

- A handout including all the LHC providers and services was created. The provider handouts are kept in stock and used frequently for patient education. Locations where the handouts are available include UrgentCare, LHC Registration and LHC Clinic. In addition, video interviews were recorded with each provider and posted to the LHC website in order to serve as a way for potential patients to get to know which provider may be the best fit for them. Livingston Healthcare also rents several Billboards located throughout Park County featuring different service lines available, these have included rehabilitation services, Urgent Care services, Obstetrics and Gynecology and other services for women and infusion/oncology services.
- Provider and service line highlights were posted to LHC's social media, distributed during LHC's annual community health fair, and included in the *Living Well* newsletter, which is mailed community-wide (10,000 copies) bi-yearly.
- 3. LHC Marketing Department can assess website and social media traffic and has seen an increase in participation each year over the last three years. LHC uses digital campaigns related to services provided and targets geographic audiences throughout the county. All these touchpoints play a role in generating increased community awareness of available health and wellness resources. The greater the level of awareness, the more likely people will be to use the services.

Strategy 3: Enhance worksite wellness programs by 1. Exploring feasibility of creating an occupational health program 2. Exploring implementation of incentive program for employee health insurance.

#### Actions taken:

1. Livingston HealthCare partnered with Billings Clinic to offer Occupational Health Services via the Rural Health Clinic. These services are offered two days per week, by a Physician's Assistant, contracted through Billings Clinic. Livingston HealthCare is an affiliate of Billings Clinic and is piloting this program to assess the need for OH services in our area. If volume indicates a demand for this service, LHC will take on the responsibility of employing a provider and providing this service line independently to the community. Thus far, approximately twenty contracts have been signed with Park County businesses serving 150 members of the local workforce with goals of expanding Occupational Health services over time. 2. On July 1, 2018, Livingston HealthCare implemented a voluntary Employee Wellness Program; Livingston HealthCare's Healthy Living Rewards Program. Employees who opted to participate in the program are eligible to have their monthly insurance premium covered at 100 percent by Livingston HealthCare. Employees who opted to participate, who have family members also covered by the plan, have been able to save an additional \$150 monthly on their insurance premium costs. The Healthy Living Rewards Program requires completion of five activities for eligibility in premium reduction. The Healthy High Five consists of; enrolling in benefits, choosing to participate in wellness, creating a Café Well account, completing an on-line Health Assessment (entering biometric data collected by designated staff) and obtaining and logging fifty Reward Points from our Healthy Living Rewards Program. Our Rewards program is designed to support seven pillars of wellness; Physical, Social, Spiritual, Emotional, Environmental, Intellectual and Financial Wellness. Employee's and their covered spouses can obtain the fifty Healthy Rewards points in numerous ways as they tie into these seven pillars. Livingston HealthCare had a 98% participation rate in its first year of implementation. Year two is proving to fall within those same parameters. LHC created an Employee Wellness Perks and Resources guide in 2019, designed to steer employees out into the community to support local businesses. LHC also implemented in 2019 an Employee Health Coaching and a Clinical Support Program, offering employees and their covered spouses the opportunity to earn back half of their individual out- of-pocket deductible.

To keep the Healthy Living Rewards Program active throughout the year, any Healthy Living Rewards points logged into the Café Well portal beyond the Healthy High Five criteria, enters employees into either a Gold, Silver or Bronze reward category to be eligible for entries into raffles for PTO and gift cards throughout the year. All employees, regardless of medical coverage, are eligible to participate in the Healthy Living Rewards programs. As the largest employer in Park County, Livingston HealthCare strives to be a resource and a model for other employers in the community in implementing worksite wellness programs for the benefit of creating a healthy and productive workforce.

Strategy 4: Improve community knowledge of health and wellness programs available at LHC by 1. Continuing current programs that focus on health and wellness such as Lifestyle Balance, Healthy Seniors/Strong People program, Healthy Steps program, Walk with the Docs, Livingston Trails Rx, Community Health Day/Farmers Market 2. Develop new outreach efforts to enhance knowledge of health and wellness opportunities through LHC 3. Explore the development of youth health career exploration through partnerships with AHEC, local schools, etc. 4. Convene staff committee to evaluate effectiveness of Health Fair offerings and community partnerships 5. Reach out to new partners to participate/sponsor community Health Fair.

#### Actions taken:

- Livingston Healthcare continues to offer the following health and wellness programs: Lifestyle Balance Diabetes Prevention Program, Healthy Seniors/Strong People program, Healthy Steps program, Walk with the Docs, Livingston Trails Rx, Community Health Day/Farmers Market, Stepping On, and Diabetes Education and Empowerment Program. Participation in all the programs continues to be strong and feedback from participants has been positive.
- 2. In November of 2018 Livingston HealthCare created a new position titled Community Health Coordinator. This 1.0 FTE is responsible for engaging and supporting the community in health and wellness related issues, creating sustainable community partnerships and assisting Livingston HealthCare in adopting an anchor mission approach to hospital policies and procedures pertaining to community health and public health outreach.
- 3. Livingston HealthCare partners with the Park High School Career Internship Program by hosting students in their junior and senior year of high school explore careers in health care. As part of Park High School's Work-Based Learning efforts, the Career Internship class is a semester long opportunity for juniors and seniors to explore careers and learn applicable skills for the future. Students are matched with area businesses for a designated time each semester. The internship placement should be mutually beneficial, providing a positive return on investment of time and resources for both the student and host business.

Livingston HealthCare also participates in the Community School Collaborative efforts in hosting middle school students from Sleeping Giant Middle School (SGMS) by hosting workshops as part of the "Cougar Friday" program. The mission of the Community School Collaborative is to enrich students' educational experience and social development by engaging the talents, skills and knowledge of community members. CSC will work with teachers, volunteers, businesses and local nonprofits to develop workshops and activities for the students of SGMS.

- 4. An evaluation of the community health fair offerings took place. To make the information and activities presented as community-oriented and useful for attendees as possible, LHC's wellness compass was incorporated into the event theme, along with the tagline "Explore your path to wellness." The health compass includes sectors for financial, environmental, social, physical, intellectual, emotional and spiritual health. Each sector of the compass is represented be a local community organization with a booth at the fair; for example, Big Brothers Big Sisters had a booth and represented the "social health" compass sector.
- 5. A comprehensive list of community organizations was made, and invitation letters were sent to new partners who became first-time exhibitors at the health fair and offered the community fresh insight about local health and wellness offerings. The refreshed health fair format was met with overwhelmingly positive feedback from community members; some were exposed to community health and wellness programs that were previously unknown to them. New community wellness connections were established by health fair attendees, as well as between LHC and local partners.