

# 2018 Community Health Needs Assessment Report

## Columbus Regional Health Service Area

Prepared for:  
Columbus Regional Health

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*This document and the information  
contained herein are embargoed  
until edited to include:*

- the results of prioritization*
- an evaluation of past work to  
address health priorities*



**Professional Research Consultants, Inc.**

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# Introduction



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## Project Overview

### Project Goals

This Community Health Needs Assessment, a follow-up to similar studies conducted in 1996, 2000, 2003, 2006, 2009, 2012, and 2015, is a systematic, data-driven approach to determining the health status, behaviors and needs of residents in the service area of Columbus Regional Health. 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 Community Health Needs Assessment will serve as a tool toward reaching three basic goals:

- **To improve residents' health status, increase their life spans, and elevate their overall quality of life.** A healthy community is not only one where its residents suffer little from physical and mental illness, but also one where its residents enjoy a high quality of life.
- **To reduce the health disparities among residents.** By gathering demographic information along with health status and behavior data, it will be possible to identify population segments that are most at-risk for various diseases and injuries. Intervention plans aimed at targeting these individuals may then be developed to combat some of the socio-economic factors that historically have had a negative impact on residents' health.
- **To increase accessibility to preventive services for all community residents.** More accessible preventive services will prove beneficial in accomplishing the first goal (improving health status, increasing life spans, and elevating the quality of life), as well as lowering the costs associated with caring for late-stage diseases resulting from a lack of preventive care.

This assessment was conducted on behalf of Columbus Regional Health by Professional Research Consultants, Inc. (PRC). 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 trending and comparison to benchmark data at the state and national levels. Qualitative data input includes primary research gathered through an Online Key Informant Survey.

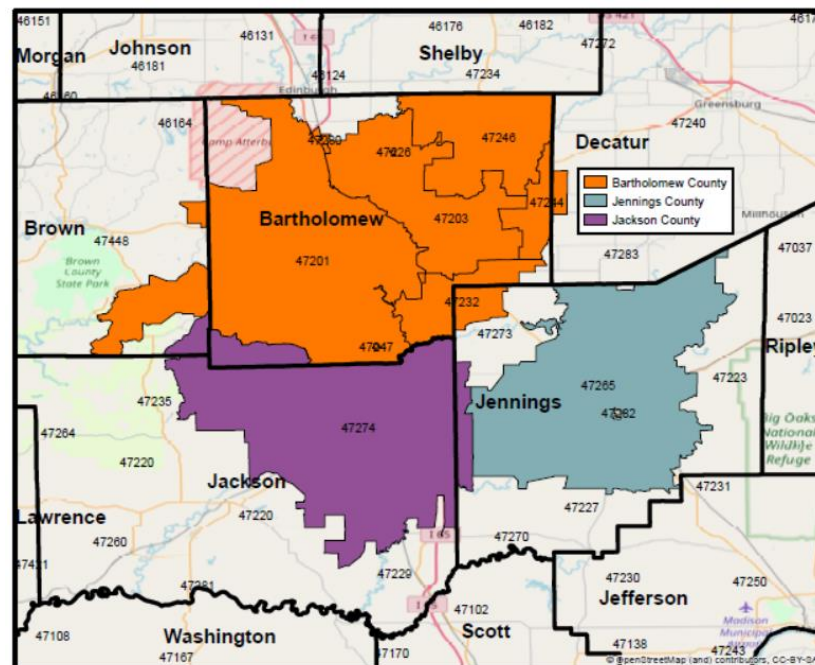
### PRC Community Health Survey

#### *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 Columbus Regional Health and PRC and is similar to the previous surveys used in the region, allowing for data trending.

#### *Community Defined for This Assessment*

The study area for the survey effort (referred to as the “Columbus Regional Health Service Area” or “CRH Service Area” in this report) is defined as each of the residential ZIP Codes primarily associated with Bartholomew County, Indiana, as well as ZIP Codes 47274 in Jackson County and 47265 in Jennings County. This community definition, determined based on the ZIP Codes of residence of recent patients of Columbus Regional Health, is illustrated in the following map.





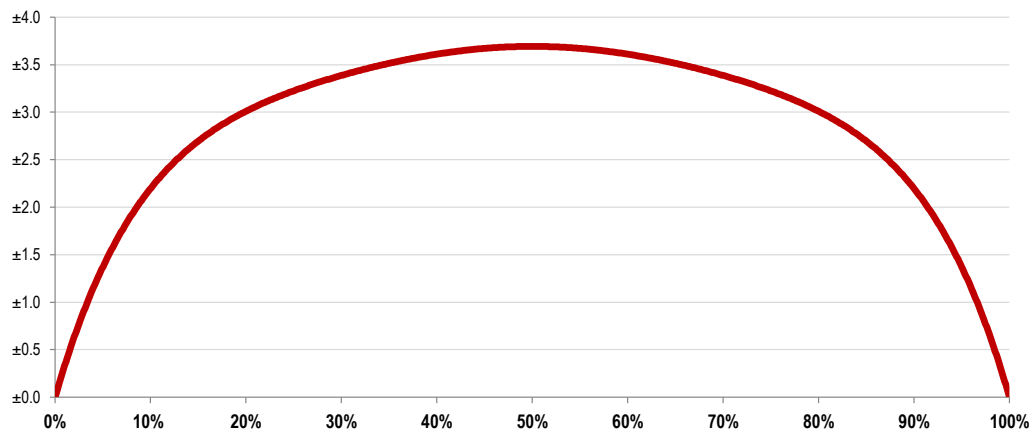
### Sample Approach & Design

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 stratified random sample of 700 individuals age 18 and older in the Columbus Regional Health Service Area, including 500 in Bartholomew County and 100 each in Jackson (ZIP Code 47274) and Jennings (ZIP Code 47265) counties. Once the interviews were completed, these were weighted in proportion to the actual population distribution so as to appropriately represent the Columbus Regional Health Service Area as a whole. 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 700 respondents is  $\pm 3.7\%$  at the 95 percent confidence level.

### Expected Error Ranges for a Sample of 700 Respondents at the 95 Percent Level of Confidence



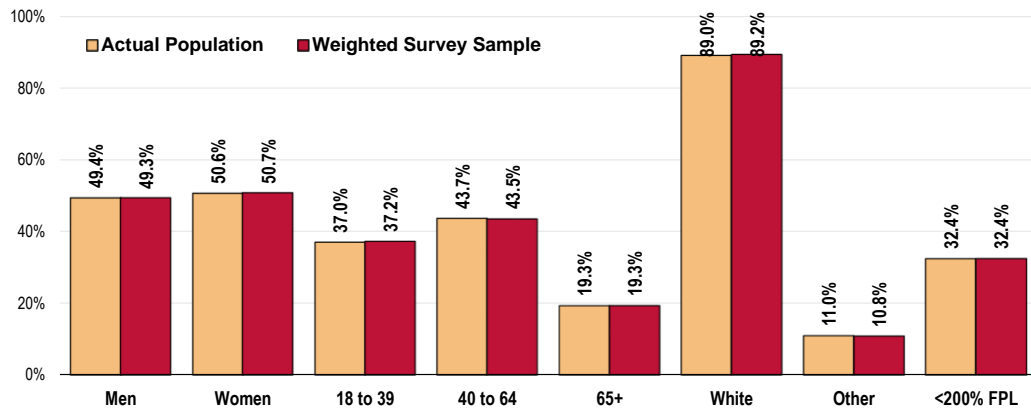
- Note:
- The "response rate" (the percentage of a population giving a particular response) determines the error rate associated with that response. A "95 percent level of confidence" indicates that responses would fall within the expected error range on 95 out of 100 trials.
- Examples:
- If 10% of the sample of 800 respondents answered a certain question with a "yes," it can be asserted that between 7.8% and 12.2% ( $10\% \pm 2.2\%$ ) of the total population would offer this response.
  - If 50% of respondents said "yes," one could be certain with a 95 percent level of confidence that between 46.3% and 53.7% ( $50\% \pm 3.7\%$ ) of the total population would respond "yes" if asked this question.

**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. Specifically, once the raw data are gathered, respondents are examined by key demographic characteristics (namely sex, age, race, ethnicity, and poverty status), and a statistical application package applies weighting variables that produce a sample which more closely matches the population for these characteristics. Thus, while the integrity of each individual’s responses is maintained, one respondent’s responses may contribute to the whole the same weight as, for example, 1.1 respondents. Another respondent, whose demographic characteristics may have been slightly oversampled, may contribute the same weight as 0.9 respondents.

The following chart outlines the characteristics of the Columbus Regional Health Service Area 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**  
(CRH Service Area, 2018)



Sources:   
 • Census 2010, Summary File 3 (SF 3). US Census Bureau.   
 • 2018 PRC Community Health Survey, Professional Research Consultants, Inc.

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 2017 guidelines place the poverty threshold for a family of four at \$24,400 annual household income or lower*). In sample segmentation: “**low income**” refers to community members living in a household with defined poverty status or living just above the poverty level, earning up to twice (<200% of) the poverty threshold; “**mid/high income**” refers to those households living on incomes which are twice or more ( $\geq 200\%$  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 Columbus Regional Health; 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, 181 community stakeholders took part in the Online Key Informant Survey, as outlined below:

Online Key Informant Survey Participation		
Key Informant Type	Number Invited	Number Participating
Physicians	18	13
Public Health Representatives	42	28
Other Health Providers	82	52
Social Services Providers	19	11
Community/Business Leaders	124	77

Final participation included representatives of the organizations are outlined below.

- Alliance for Substance Abuse Progress
- Bartholomew Consolidated School Corporation (BCSC)
- Bartholomew County Court Services
- Bartholomew County Health Department
- Bartholomew County Prosecutor's Office
- C4 Columbus Area Career Connection
- Centerstone
- Central Middle School
- City of Columbus
- City of Columbus-Bartholomew Co Planning Department
- Clarity
- Columbus Area Chamber of Commerce
- Columbus Food Cooperative
- Columbus Housing Authority
- Columbus Parks and Recreation Department
- Columbus Police Department
- Columbus Regional Health
- Columbus Regional Health Board
- Columbus Regional Health Foundation
- Columbus Regional Health WellConnect
- Columbus Running Club
- Community Education Coalition
- Council for Youth Development Bartholomew County
- Doctor's Park Family Medicine
- Faurecia Clean Mobility
- Flat Rock Township
- Goodwill Nurse-Family Partnership
- Heritage Fund, Community Foundation of Bartholomew Co
- Human Services, Inc.
- Indiana University–Purdue University Columbus
- Just Friends Adult Day Service, Columbus Bike Co-op
- Kidscommons Children's Museum
- La Leche League of Columbus
- Lincoln-Central Neighborhood Family Center
- Love Chapel
- New Hope Services–Bartholomew County WIC
- Northside Middle School
- Northside Pediatrics Associates
- Public Schools
- Purdue Extension – Bartholomew County
- Reams Asset Management
- Thrive Alliance
- Township Trustee
- United Way of Bartholomew County
- VIMCare Clinic
- White River Broadcasting, Inc.
- Zen Fitness

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

**Minority/medically underserved populations represented:**

*African-American, American Indian, Asian, autistic, children, chronically ill, cognitively impaired, college students, diabetics, disabled, dual diagnoses, elderly, ESL, female felons, foster children, free/reduced lunch recipients, Hispanic, homeless, immigrants/refugees, incarcerated, lack of transportation, LGBTQ, low education, low health literacy, low income, medically frail without healthcare, Medicare/Medicaid, mentally ill, non-English speaking, rural, single parents, substance abusers, teen parents, undocumented, unemployed, uninsured/underinsured, WIC moms*

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. Thus, these findings are not necessarily based on fact.*

**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 Columbus Regional Health Service Area were obtained from the following sources (specific citations are included with the graphs throughout this report):

- [Center for Applied Research and Environmental Systems \(CARES\)](#)
- [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](#)
- [Community Commons](#)
- [ESRI ArcGIS Map Gallery](#)
- [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

Note that secondary data reflect county-level data.

## Benchmark Data

### *Trending*

A similar survey was administered in the Columbus Regional Health Service Area in 1996, 2000, 2003, 2006, 2009, 2012, and 2015 by PRC on behalf of Columbus Regional Health. Trending data, as revealed by comparison to prior survey results, are provided throughout this report whenever available for Bartholomew County (1996 through 2009) as well as the Columbus Regional Hospital Service Area (2012 through 2018) as a whole. Historical data for secondary data indicators are also included for the purposes of trending.

### *Indiana 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 strives to:

- Identify nationwide health improvement priorities.
- Increase public awareness and understanding of the determinants of health, disease, and disability and the opportunities for progress.
- Provide measurable objectives and goals that are applicable at the national, State,

and local levels.

- Engage multiple sectors to take actions to strengthen policies and improve practices that are driven by the best available evidence and knowledge.
- Identify critical research, evaluation, and data collection needs.

### Determining Significance

Differences noted in this report represent those determined to be significant. For survey-derived 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.

## 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 Form 990 Schedule H, the following table cross-references related sections.

IRS Form 990, Schedule H (2017)	See Report Page
<b>Part V Section B Line 3a</b> <i>A definition of the community served by the hospital facility</i>	8
<b>Part V Section B Line 3b</b> <i>Demographics of the community</i>	38
<b>Part V Section B Line 3c</b> <i>Existing healthcare facilities and resources within the community that are available to respond to the health needs of the community</i>	235
<b>Part V Section B Line 3d</b> <i>How data was obtained</i>	8
<b>Part V Section B Line 3e</b> <i>The significant health needs of the community</i>	17
<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> <i>The process for identifying and prioritizing community health needs and services to meet the community health needs</i>	Pending
<b>Part V Section B Line 3h</b> <i>The process for consulting with persons representing the community's interests</i>	11
<b>Part V Section B Line 3i</b> <i>The impact of any actions taken to address the significant health needs identified in the hospital facility's prior CHNA(s)</i>	Pending



## 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 and the guidelines set forth in Healthy People 2020. 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	
<b>Access to Healthcare Services</b>	<ul style="list-style-type: none"> <li>• Insurance Instability</li> <li>• Barriers to Access               <ul style="list-style-type: none"> <li>○ Appointment Availability</li> </ul> </li> <li>• Awareness of the VIMCare Clinic</li> <li>• Primary Care Physician Ratio</li> </ul>
<b>Cancer</b>	<ul style="list-style-type: none"> <li>• Cancer is a leading cause of death.</li> <li>• Cancer Deaths               <ul style="list-style-type: none"> <li>○ Including Lung Cancer &amp; Prostate Cancer</li> </ul> </li> <li>• Cancer Incidence               <ul style="list-style-type: none"> <li>○ Including Lung Cancer</li> </ul> </li> </ul>
<b>Diabetes</b>	<ul style="list-style-type: none"> <li>• Diabetes Prevalence</li> <li>• <i>Diabetes ranked as a top concern in the Online Key Informant Survey.</i></li> </ul>
<b>Heart Disease &amp; Stroke</b>	<ul style="list-style-type: none"> <li>• Cardiovascular disease is a leading cause of death.</li> <li>• Stroke Deaths</li> <li>• High Blood Pressure Prevalence</li> <li>• High Blood Cholesterol Prevalence</li> </ul>
<b>Infant Health &amp; Family Planning</b>	<ul style="list-style-type: none"> <li>• Infant Mortality</li> <li>• Teen Births</li> </ul>
<b>Injury &amp; Violence</b>	<ul style="list-style-type: none"> <li>• Unintentional Injury Deaths               <ul style="list-style-type: none"> <li>○ Including Motor Vehicle Crash</li> </ul> </li> <li>• Firearm Prevalence               <ul style="list-style-type: none"> <li>○ Including in Homes With Children</li> </ul> </li> </ul>
<b>Kidney Disease</b>	<ul style="list-style-type: none"> <li>• Kidney Disease Deaths</li> </ul>

—continued on next page—

<b>Areas of Opportunity (continued)</b>	
<b>Mental Health</b>	<ul style="list-style-type: none"> <li>• Diagnosed Depression</li> <li>• Suicide Deaths</li> <li>• “Fair/Poor” Ease of Obtaining Local Mental Health Services</li> <li>• <i>Mental Health ranked as a top concern in the Online Key Informant Survey.</i></li> </ul>
<b>Nutrition, Physical Activity, &amp; Weight</b>	<ul style="list-style-type: none"> <li>• Low Food Access</li> <li>• Overweight &amp; Obesity [Adults]</li> <li>• Perceptions of School Meals</li> <li>• Children’s Physical Activity</li> <li>• <i>Nutrition, Physical Activity, &amp; Weight ranked as a top concern in the Online Key Informant Survey.</i></li> </ul>
<b>Potentially Disabling Conditions</b>	<ul style="list-style-type: none"> <li>• “Fair/Poor” Overall Health</li> <li>• 3+ Days of Poor Physical Health in the Past Month</li> </ul>
<b>Respiratory Diseases</b>	<ul style="list-style-type: none"> <li>• Chronic Lower Respiratory Disease (CLRD) Deaths</li> </ul>
<b>Sexually Transmitted Diseases</b>	<ul style="list-style-type: none"> <li>• Gonorrhea Incidence</li> <li>• Chlamydia Incidence</li> </ul>
<b>Substance Abuse</b>	<ul style="list-style-type: none"> <li>• Unintentional Drug-Related Deaths</li> <li>• Negatively Affected by Substance Abuse (Self or Other’s)</li> <li>• <i>Substance Abuse ranked as a top concern in the Online Key Informant Survey.</i></li> </ul>
<b>Tobacco Use</b>	<ul style="list-style-type: none"> <li>• Cigarette Smoking Prevalence</li> <li>• Use of Vaping Products</li> </ul>

## Summary Tables: Comparisons With Benchmark Data

The following tables provide an overview of indicators in the Columbus Regional Health Service Area, including comparisons among the individual communities, as well as trend data. These data are grouped to correspond with the Focus Areas presented in Healthy People 2020.

### Reading the Summary Tables

■ In the following charts, Columbus Regional Health Service Area results are shown in the larger, blue column. For survey-derived indicators, this column represents the ZIP Code–defined hospital service area; for data from secondary sources, this column represents findings for the three-county area as a whole. *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 green columns [to the left of the Columbus Regional Health Service Area column] provide comparisons among the three subareas, identifying differences for each as “better than” (☀), “worse than” (☹), or “similar to” (☺) the combined opposing areas.

■ The columns to the right of the CRH Service Area column provide trending, as well as comparisons between local data and any available state and national findings, and Healthy People 2020 targets. Again, symbols indicate whether Columbus Regional Health Service Area 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 2012. Note that survey data reflect the ZIP Code-defined Columbus Regional Health Service Area.












#### 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.








































Social Determinants	Each County vs. Others Combined			CRH Service Area	CRH Service Area vs. Benchmarks			TREND
	Bartholomew County	Jennings County	Jackson County		vs. IN	vs. US	vs. HP2020	
Linguistically Isolated Population (Percent)	 2.3	 0.3	 2.3	<b>1.9</b>  1.8	 4.5			
Population in Poverty (Percent)	 12.6	 15.3	 14.8	<b>13.7</b>  15.0	 15.1			
Population Below 200% FPL (Percent)	 29.7	 36.0	 34.6	<b>32.3</b>  34.3	 33.6			
Children Below 200% FPL (Percent)	 40.0	 48.0	 44.9	<b>42.9</b>  44.8	 43.3			
No High School Diploma (Age 25+, Percent)	 9.7	 15.5	 13.0	<b>11.7</b>  11.9	 13.0			
Unemployment Rate (Age 16+, Percent)	 3.4	 4.8	 3.7	<b>3.7</b>  4.4	 4.9			
<small>Note: In the green section, each county is compared against all other counties combined. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.</small>								
								
				better	similar	worse		











Overall Health	Each County vs. Others Combined		
	Bartholomew County	Jennings County	Jackson County
% "Fair/Poor" Overall Health	 19.5	 38.3	 23.9
% 3+ Days of Poor Physical Health	 30.4	 34.1	 26.4
% [Employed] 3+ Days of Workdays Missed	 21.1		
% Activity Limitations	 27.1	 41.0	 26.7
<small>Note: In the green section, each county is compared against all other counties combined. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.</small>			















CRH Service Area	CRH Service Area vs. Benchmarks			TREND
	vs. IN	vs. US	vs. HP2020	
23.3	 18.5	 18.1		 20.5
30.0				 6.9
21.1				 18.0
29.1	 21.2	 25.0		 24.7
	 better	 similar	 worse	




Access to Health Services	Each County vs. Others Combined		
	Bartholomew County	Jennings County	Jackson County
% [Age 18-64] Lack Health Insurance	 9.2	 3.0	 13.7
% Difficulty Getting Appointment in Past Year	 11.3	 16.5	 15.4
% Cost Prevented Physician Visit in Past Year	 8.8	 13.0	 7.6
% Transportation Hindered Dr Visit in Past Year	 4.4	 12.1	 8.8














CRH Service Area	CRH Service Area vs. Benchmarks			TREND
	vs. IN	vs. US	vs. HP2020	
9.3	 13.6	 13.7	 0.0	 15.5
13.0		 17.5		 9.1
9.2	 12.6	 15.4		 12.7
6.6		 8.3		 5.8

























Access to Health Services (continued)	Each County vs. Others Combined			CRH Service Area	CRH Service Area vs. Benchmarks			TREND
	Bartholomew County	Jennings County	Jackson County		vs. IN	vs. US	vs. HP2020	
% Cost Prevented Getting Prescription in Past Year	 10.0	 18.9	 22.0	14.1		 14.9	 12.1	
% Language/Culture Prevented Care in Past Year	 0.5	 2.7	 0.8	0.9		 1.2	 1.8	
% Difficulty Getting Child's Healthcare in Past Year	 4.7			4.4		 5.6	 3.2	
% [Age 65+] With Medicare Supplemental Coverage	 83.1			82.0			 79.8	
% [Insured] Went Without Coverage in Past Year	 7.0	 8.7	 9.9	8.0			 4.9	
% Know Dosage/Directions for Current Meds	 85.6	 80.7	 72.3	81.8			 81.8	
% Stopped Taking Meds in Past 3 Yrs w/o Dr's Orders	 17.2	 25.0	 16.1	18.2			 14.6	
% Prefer My Usual Dr for Routine Care	 76.7	 67.1	 71.0	73.9			 80.3	
% Prefer a UCC/Walk-In Clinic for Routine Care	 23.3	 32.9	 29.0	26.1			 19.7	
% Aware of the VIMCare Clinic at CRH	 37.3	 23.6	 12.3	29.5			 59.7	


























Access to Health Services (continued)	Each County vs. Others Combined		
	Bartholomew County	Jennings County	Jackson County
Primary Care Doctors per 100,000	 81.0	 50.0	 48.1
% Have a Regular Physician or Clinic for Medical Care	 82.5	 79.1	 89.5
% Have Had Routine Checkup in Past Year	 75.9	 72.7	 77.4
% Child Has Had Checkup in Past Year	 88.8		
<small>Note: In the green section, each county is compared against all other counties combined. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.</small>			

CRH Service Area	CRH Service Area vs. Benchmarks			TREND
	vs. IN	vs. US	vs. HP2020	
65.8	 75.9	 87.8		 68.4
83.6	 75.9	 82.2		 84.6
75.8	 67.2	 68.3		 65.8
92.0		 87.1		 89.8
 better  similar  worse				

Cancer	Each County vs. Others Combined		
	Bartholomew County	Jennings County	Jackson County
Cancer (Age-Adjusted Death Rate)	 161.6	 202.3	 202.6
Lung Cancer (Age-Adjusted Death Rate)			
Prostate Cancer (Age-Adjusted Death Rate)			
Female Breast Cancer (Age-Adjusted Death Rate)			

CRH Service Area	CRH Service Area vs. Benchmarks			TREND
	vs. IN	vs. US	vs. HP2020	
181.8	 176.2	 158.5	 161.4	 196.6
57.3	 50.8	 40.3	 45.5	
22.6	 19.3	 19.0	 21.8	
22.9	 20.7	 20.3	 20.7	




Cancer (continued)	Each County vs. Others Combined		
	Bartholomew County	Jennings County	Jackson County
Colorectal Cancer (Age-Adjusted Death Rate)			
Female Breast Cancer Incidence Rate	 122.7	 115.4	 117.0
Prostate Cancer Incidence Rate	 88.3	 69.2	 84.2
Lung Cancer Incidence Rate	 73.5	 93.5	 80.9
Colorectal Cancer Incidence Rate	 38.6	 39.4	 49.1
% Cancer (Other Than Skin)	 6.6	 10.3	 5.3
% Skin Cancer	 9.5	 9.3	 11.9
% [Women 50-74] Mammogram in Past 2 Years	 77.3		
% [Women 18+] Know How to Perform a Breast Self-Exam	 96.8		
% [Women 21-65] Pap Smear in Past 3 Years	 70.8		
% [Age 50-75] Colorectal Cancer Screening	 71.9	 79.3	 78.1







CRH Service Area	CRH Service Area vs. Benchmarks			TREND
	vs. IN	vs. US	vs. HP2020	
12.9	 15.5	 14.1	 14.5	
122.3	 120.1	 123.5		
84.4	 95.7	 114.8		
82.5	 72.8	 61.2		
43.5	 43.2	 39.8		
6.9	 6.3	 7.1		 7.4
10.0	 5.5	 8.5		 7.9
79.3	 72.5	 77.0	 81.1	 74.3
96.0				 96.6
74.0	 74.9	 73.5	 93.0	 77.6
74.5	 64.6	 76.4	 70.5	 71.2



Each County vs. Others Combined










Dementias, Including Alzheimer's Disease













	Bartholomew County	Jennings County	Jackson County
Alzheimer's Disease (Age-Adjusted Death Rate)	 25.4	 26.4	 45.9
<small>Note: In the green section, each county is compared against all other counties combined. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.</small>			
















CRH Service Area	CRH Service Area vs. Benchmarks			TREND
	vs. IN	vs. US	vs. HP2020	
31.6	 32.5	 28.4	 43.7	
	 better	 similar	 worse	






















Each County vs. Others Combined




Diabetes







	Bartholomew County	Jennings County	Jackson County
Diabetes (Age-Adjusted Death Rate)	 15.1	 28.6	 38.5
% Diabetes/High Blood Sugar	 15.2	 18.6	 24.9
% [Non-Diabetes] Blood Sugar Tested in Past 3 Years	 57.3	 54.4	 59.1
<small>Note: In the green section, each county is compared against all other counties combined. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.</small>			









CRH Service Area	CRH Service Area vs. Benchmarks			TREND
	vs. IN	vs. US	vs. HP2020	
24.4	 25.8	 21.1	 20.5	 24.6
17.9	 11.5	 13.3	 13.0	
57.2	 50.0		 58.2	
	 better	 similar	 worse	















Heart Disease & Stroke	Each County vs. Others Combined		
	Bartholomew County	Jennings County	Jackson County
Diseases of the Heart (Age-Adjusted Death Rate)	 195.4	 229.1	 152.8
Stroke (Age-Adjusted Death Rate)	 40.1	 58.9	 57.1
% Told Have High Blood Pressure (Ever)	 42.0	 40.3	 53.1
% [HBP] Taking Action to Control High Blood Pressure			
% Told Have High Cholesterol (Ever)	 32.1	 46.8	 39.9
% 1+ Cardiovascular Risk Factor	 86.5	 83.9	 86.2
<small>Note: In the green section, each county is compared against all other counties combined. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.</small>			












CRH Service Area	CRH Service Area vs. Benchmarks			TREND
	vs. IN	vs. US	vs. HP2020	
188.6	 181.9	 167.0	 156.9	 208.0
48.1	 40.1	 37.1	 34.8	 51.3
44.3	 32.4	 37.0	 26.9	 38.9
91.1		 93.8		
36.1		 36.2	 13.5	 29.2
86.1		 87.2		 84.8
 better  similar  worse				
















HIV	Each County vs. Others Combined		
	Bartholomew County	Jennings County	Jackson County
HIV Prevalence Rate	 80.8	 25.6	 80.9
<small>Note: In the green section, each county is compared against all other counties combined. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.</small>			




















CRH Service Area	CRH Service Area vs. Benchmarks			TREND
	vs. IN	vs. US	vs. HP2020	
70.5	 176.4	 353.2		 72.4
 better  similar  worse				

Infant Health & Family Planning	Each County vs. Others Combined		
	Bartholomew County	Jennings County	Jackson County
Low Birthweight Births (Percent)	 7.9	 8.2	 7.2
Infant Death Rate	 9.4		 6.6
Teen Births per 1,000 (Age 15-19)	 50.9	 59.8	 55.8
<small>Note: In the green section, each county is compared against all other counties combined. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.</small>			
















CRH Service Area	CRH Service Area vs. Benchmarks			TREND
	vs. IN	vs. US	vs. HP2020	
7.8	 8.2	 8.2	 7.8	 7.6
7.8	 7.3	 5.9	 6.0	 7.5
54.2	 38.9	 36.6		 60.0
	 better	 similar	 worse	

Injury & Violence	Each County vs. Others Combined		
	Bartholomew County	Jennings County	Jackson County
Unintentional Injury (Age-Adjusted Death Rate)	 41.6	 72.7	 63.2
Motor Vehicle Crashes (Age-Adjusted Death Rate)	 16.6	 23.6	 17.7
% "Always" Wear Seat Belt	 91.4	 89.8	 88.5
[65+] Falls (Age-Adjusted Death Rate)	 19.2		
Firearm-Related Deaths (Age-Adjusted Death Rate)	 8.4		

CRH Service Area	CRH Service Area vs. Benchmarks			TREND
	vs. IN	vs. US	vs. HP2020	
53.0	 47.7	 43.7	 36.4	 44.0
18.0	 11.7	 11.0	 12.4	
90.5	 93.3			 87.5
22.8	 36.4	 55.2	 47.0	
11.8	 13.3	 11.0	 9.3	

Injury & Violence (continued)	Each County vs. Others Combined		
	Bartholomew County	Jennings County	Jackson County
% Firearm in Home	 44.8	 65.2	 58.6
% [Homes With Children] Firearm in Home	 47.4		
% [Homes With Firearms] Weapon(s) Unlocked & Loaded	 21.4	 14.1	 33.3
Homicide (Age-Adjusted Death Rate)			
Violent Crime Rate	 155.4	 351.0	 245.0
% Victim of Domestic Violence (Ever)	 3.8	 4.3	 0.0
% Forced Into Sexual Activity in Past 3 Years	 0.5	 0.0	 1.6
% [Parents] Child Had Instruction in Swim/Water Safety	 69.4		
% [Parents] Have Discussed Fire Escape Plan With Child	 80.4		
% Child [Age 5-17] "Always" Wears Bicycle Helmet	 38.5		




Note: In the green section, each county is compared against all other counties combined. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.







CRH Service Area	CRH Service Area vs. Benchmarks			TREND
	vs. IN	vs. US	vs. HP2020	
51.1		 32.7		 48.9
56.4		 39.1		
23.1		 26.9		
2.5	 5.7	 5.6	 5.5	
217.7	 384.0	 379.7		
3.0		 14.2		 3.9
0.6				 1.1
68.6				 76.8
80.1				 83.3
37.5		 48.8		 31.3

 better     similar     worse

Each County vs. Others Combined




















Kidney Disease















	Bartholomew County	Jennings County	Jackson County
Kidney Disease (Age-Adjusted Death Rate)	 26.1	 22.6	 17.7
<small>Note: In the green section, each county is compared against all other counties combined. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.</small>			







CRH Service Area	CRH Service Area vs. Benchmarks			TREND
	vs. IN	vs. US	vs. HP2020	
23.2	 18.7	 13.2		 25.8
	 better	 similar	 worse	







Each County vs. Others Combined
















Mental Health







	Bartholomew County	Jennings County	Jackson County
% "Fair/Poor" Mental Health	 14.9	 14.7	 20.2
% Diagnosed Depression	 29.6	 28.0	 20.8
% Had a 2-Week Period of Sadness/Depression	 28.2	 33.9	 36.2
Suicide (Age-Adjusted Death Rate)	 14.5	 30.9	 16.1
% Considered Suicide in the Past Year	 6.9	 1.4	 2.8
% Have Ever Sought Help for Mental Health	 37.9	 33.4	 39.7
% [Those With Diagnosed Depression] Seeking Help	 83.2		





















CRH Service Area	CRH Service Area vs. Benchmarks			TREND
	vs. IN	vs. US	vs. HP2020	
16.1		 13.0		 15.6
27.4	 15.9	 21.6		 26.9
30.9				
17.7	 14.7	 13.0	 10.2	 9.2
5.2				 6.8
37.6		 30.8		 32.1
81.4		 87.1		 80.9



























Mental Health (continued)	Each County vs. Others Combined		
	Bartholomew County	Jennings County	Jackson County
% Unable to Get Mental Health Svcs in Past Yr	 3.5	 1.8	 12.2
% "Fair/Poor" Ease of Obtaining Local Mental Health Svcs	 31.4	 57.2	 41.6
<small>Note: In the green section, each county is compared against all other counties combined. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.</small>			





CRH Service Area	CRH Service Area vs. Benchmarks			TREND
	vs. IN	vs. US	vs. HP2020	
5.2		 6.8	 3.8	
37.8			 31.2	
	 better	 similar	 worse	











Nutrition, Physical Activity & Weight	Each County vs. Others Combined		
	Bartholomew County	Jennings County	Jackson County
Population With Low Food Access (Percent)	 33.9	 25.0	 30.1
% Ate 5+ Servings of Fruits/Vegetables Yesterday	 14.2	 5.8	 16.4
% Eat 5+ Meals per Week Together as a Family	 47.6	 25.0	 50.3
% Community is More Supportive of Healthy Lifestyles	 90.5	 79.0	 85.0
% Local Schools Have Improved Meals in the Past 2 Years	 72.0	 81.2	 59.3





CRH Service Area	CRH Service Area vs. Benchmarks			TREND
	vs. IN	vs. US	vs. HP2020	
31.1	 25.3	 22.4		
13.4			 11.3	
44.3			 36.4	
87.4			 85.7	
70.5			 83.6	










Nutrition, Physical Activity & Weight (continued)	Each County vs. Others Combined		
	Bartholomew County	Jennings County	Jackson County
Recreation/Fitness Facilities per 100,000	 13.0	 14.0	 7.1
% No Leisure-Time Physical Activity	 28.9	 40.4	 26.7
% Meeting Physical Activity Guidelines	 20.5	 7.2	 25.8
% Child [Age 5-17] 3+ Hours per Day of Screens	 38.8		
% Child [Age 2-17] Physically Active 1+ Hours per Day	 53.6		
% Overweight (BMI 25+)	 71.8	 70.0	 76.4
% Healthy Weight (BMI 18.5-24.9)	 26.5	 29.0	 23.6
% Obese (BMI 30+)	 38.1	 48.1	 39.7
<small>Note: In the green section, each county is compared against all other counties combined. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.</small>			

CRH Service Area	CRH Service Area vs. Benchmarks			TREND
	vs. IN	vs. US	vs. HP2020	
11.5	 9.1	 10.5		 8.1
30.2	 26.8	 26.2	 32.6	 27.4
19.6	 15.6	 22.8	 20.1	
34.7				 43.4
49.0		 50.5		 61.1
72.6	 67.2	 67.8		 67.8
26.2	 31.0	 30.3	 33.9	
40.0	 32.5	 32.8	 30.5	 31.0
 better  similar  worse				







Oral Health	Each County vs. Others Combined		
	Bartholomew County	Jennings County	Jackson County
% [Age 18+] Dental Visit in Past Year	 68.5	 38.8	 67.0
% Child [Age 2-17] Dental Visit in Past Year	 89.0		
<small>Note: In the green section, each county is compared against all other counties combined. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.</small>			










CRH Service Area	CRH Service Area vs. Benchmarks			TREND
	vs. IN	vs. US	vs. HP2020	
63.7	 61.9	 59.7	 49.0	 62.9
91.8		 87.0	 49.0	 88.2
	 better	 similar	 worse	

















Respiratory Diseases	Each County vs. Others Combined		
	Bartholomew County	Jennings County	Jackson County
CLRD (Age-Adjusted Death Rate)	 57.0	 84.5	 79.1
Pneumonia/Influenza (Age-Adjusted Death Rate)	 8.7		
<small>Note: In the green section, each county is compared against all other counties combined. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.</small>			



















CRH Service Area	CRH Service Area vs. Benchmarks			TREND
	vs. IN	vs. US	vs. HP2020	
67.8	 54.7	 40.9		 66.7
10.8	 13.6	 14.6		 17.7
	 better	 similar	 worse	






















Sexually Transmitted Diseases	Each County vs. Others Combined		
	Bartholomew County	Jennings County	Jackson County
Chlamydia Incidence Rate	 294.0	 315.1	 269.2
Gonorrhea Incidence Rate	 70.4	 24.8	 43.7
<small>Note: In the green section, each county is compared against all other counties combined. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.</small>			

















CRH Service Area	CRH Service Area vs. Benchmarks			TREND
	vs. IN	vs. US	vs. HP2020	
290.8	 433.8	 456.1	 181.0	
54.2	 110.9	 110.7	 22.2	
 better  similar  worse				
















Substance Abuse	Each County vs. Others Combined		
	Bartholomew County	Jennings County	Jackson County
Unintentional Drug-Related Deaths (Age-Adjusted Death Rate)	 11.2	 26.3	 27.0
Cirrhosis/Liver Disease (Age-Adjusted Death Rate)	 11.0		
% Current Drinker	 46.9	 38.3	 51.1
% Binge Drinker (Single Occasion - 5+ Drinks Men, 4+ Women)	 13.0	 9.8	 15.5
% Excessive Drinker	 14.1	 10.2	 17.6
% Illicit Drug Use in Past Month	 1.6	 0.0	 1.4

CRH Service Area	CRH Service Area vs. Benchmarks			TREND
	vs. IN	vs. US	vs. HP2020	
18.3	 17.4	 14.3	 11.3	 13.0
11.4	 11.0	 10.6	 8.2	 10.5
46.6	 52.0	 55.0		
13.1		 20.0	 24.4	
14.3		 22.5	 25.4	 13.7
1.3		 2.5	 7.1	 1.9

Substance Abuse (continued)	Each County vs. Others Combined		
	Bartholomew County	Jennings County	Jackson County
% Life Negatively Affected by Substance Abuse	 37.4	 50.4	 49.1
% Know Where to Access Substance Abuse Treatment	 63.4	 75.2	 66.5
% Member of Family Couldn't Get Addiction Help/Past Yr	 7.6	 2.4	 14.3
% Used Opiates/Opioids in the Past Year	 19.6	 13.7	 16.9
% Used Painkillers w/o a Dr's Orders in the Past Year	 2.6	 3.4	 3.3
<small>Note: In the green section, each county is compared against all other counties combined. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.</small>			

CRH Service Area	CRH Service Area vs. Benchmarks			TREND
	vs. IN	vs. US	vs. HP2020	
42.0		 37.3		
65.9				
8.3				
18.1				
2.9				
 better  similar  worse				

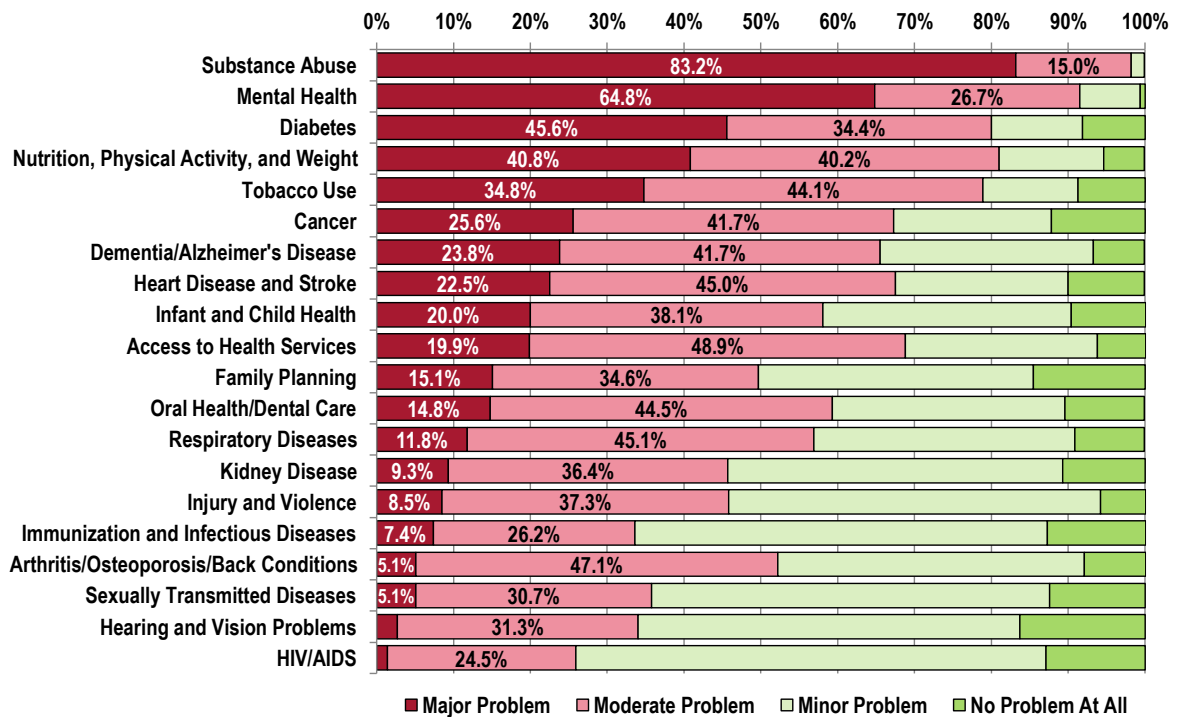
Tobacco Use	Each County vs. Others Combined		
	Bartholomew County	Jennings County	Jackson County
% Current Smoker	 15.3	 22.6	 19.5
% Aware of Indiana Tobacco Quit Line	 52.8	 63.0	 31.7
% Someone Smokes at Home	 10.1	 17.5	 11.7
% [Nonsmokers] Someone Smokes in the Home	 3.6	 6.8	 7.5
% [Household With Children] Someone Smokes in the Home	 8.5		
% Currently Use Vaping Products	 2.9	 10.3	 8.7
<small>Note: In the green section, each county is compared against all other counties combined. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.</small>			

CRH Service Area	CRH Service Area vs. Benchmarks			TREND
	vs. IN	vs. US	vs. HP2020	
17.4	 21.1	 11.0	 12.0	 22.8
49.5				 52.7
11.6		 10.7		 18.1
4.9		 4.0		
12.6		 7.2		
5.4	 4.7	 3.8		 3.2
 better  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



# Community Description



**Professional Research Consultants, Inc.**

## Population Characteristics

### Total Population

Columbus Regional Health Service Area, the focus of this Community Health Needs Assessment, encompasses 1,292.80 square miles and houses a total population of 151,863 residents, according to latest census estimates.

**Total Population**  
(Estimated Population, 2012-2016)

	Total Population	Total Land Area (Square Miles)	Population Density (Per Square Mile)
Bartholomew County	80,203	406.89	197.11
Jennings County	28,023	376.59	74.41
Jackson County	43,637	509.31	85.68
CRH Service Area	151,863	1,292.80	117.47
Indiana	6,589,578	35,826.63	183.93
United States	318,558,162	3,532,068.58	90.19

Sources:

- US Census Bureau American Community Survey 5-year estimates.
- Retrieved April 2018 from Community Commons at <http://www.chna.org>.

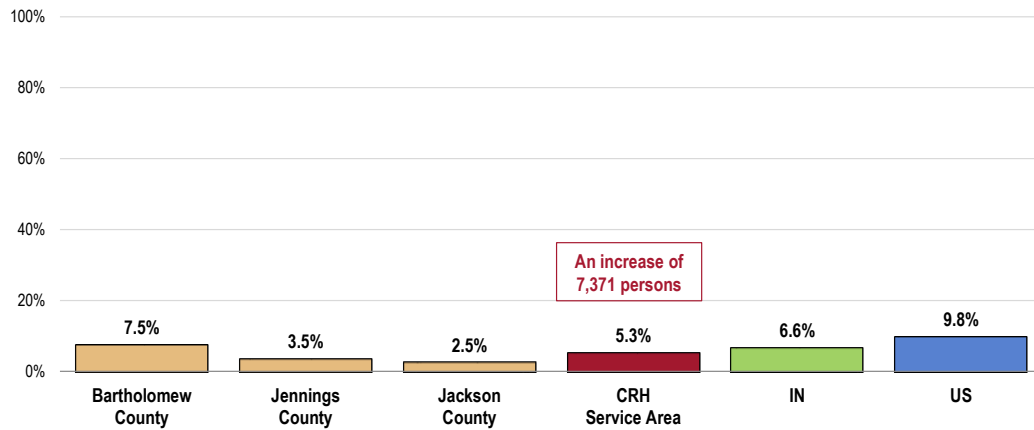
### Population Change 2000-2010

A significant positive or negative shift in total population over time impacts healthcare providers and the utilization of community resources.

**Between the 2000 and 2010 US Censuses, the CRH Service Area population increased by 7,371 persons, or 5.3%.**

- A lesser proportional increase than seen across both the state and the national overall.
- Viewed by county, population growth was highest in Bartholomew County.

## Change in Total Population (Percentage Change Between 2000 and 2010)



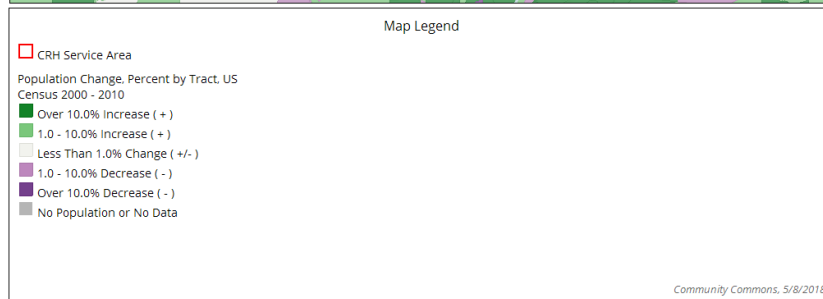
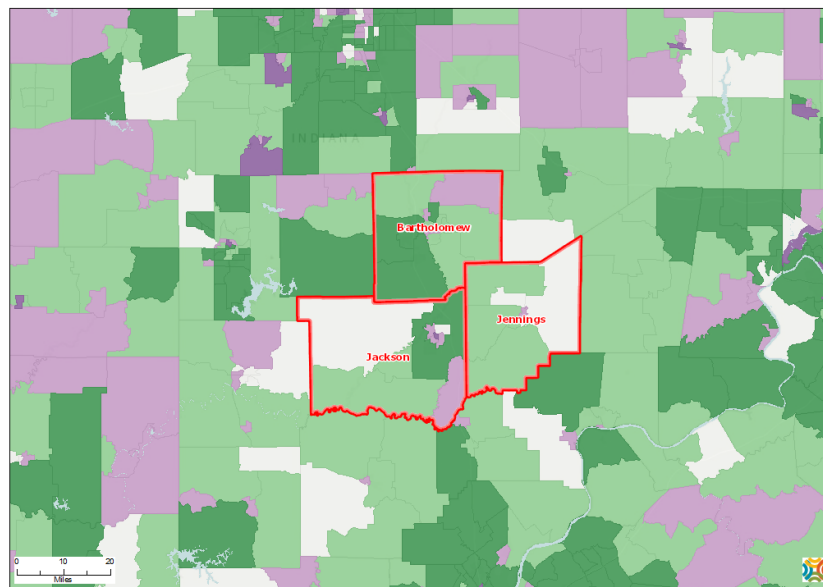
Sources: 

- US Census Bureau Decennial Census (2000-2010).
- Retrieved April 2018 from Community Commons at <http://www.chna.org>.

Notes: 

- A significant positive or negative shift in total population over time impacts healthcare providers and the utilization of community resources.

Population Change, Percent by Tract, US Census 2000-2010



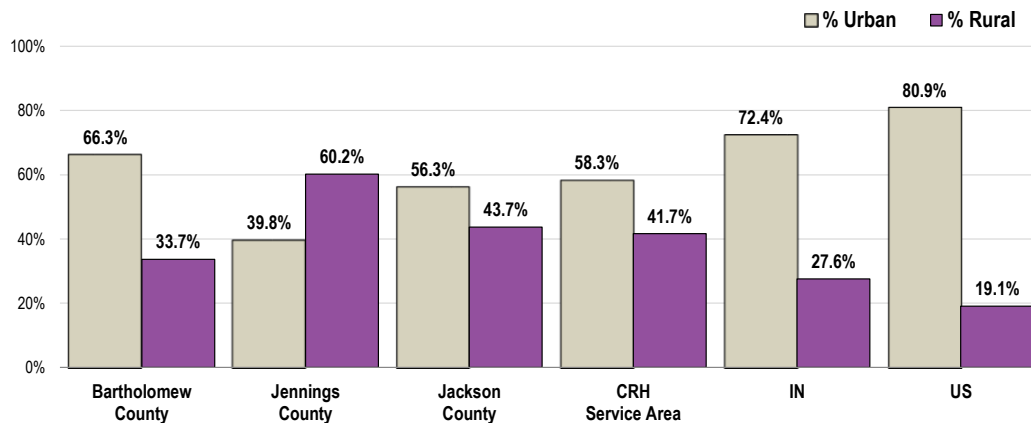
## Urban/Rural Population

Urban areas are identified using population density, count, and size thresholds. Urban areas also include territory with a high degree of impervious surface (development). Rural areas are all areas that are not urban.

**Over half of the service area is urban, with 58.3% of the population living in areas designated as urban.**

- This proportion is lower than the state and national proportions of urban dwellers.
- Viewed by county, Bartholomew County houses the largest proportion of urban residents.

**Urban and Rural Population**  
(2010)



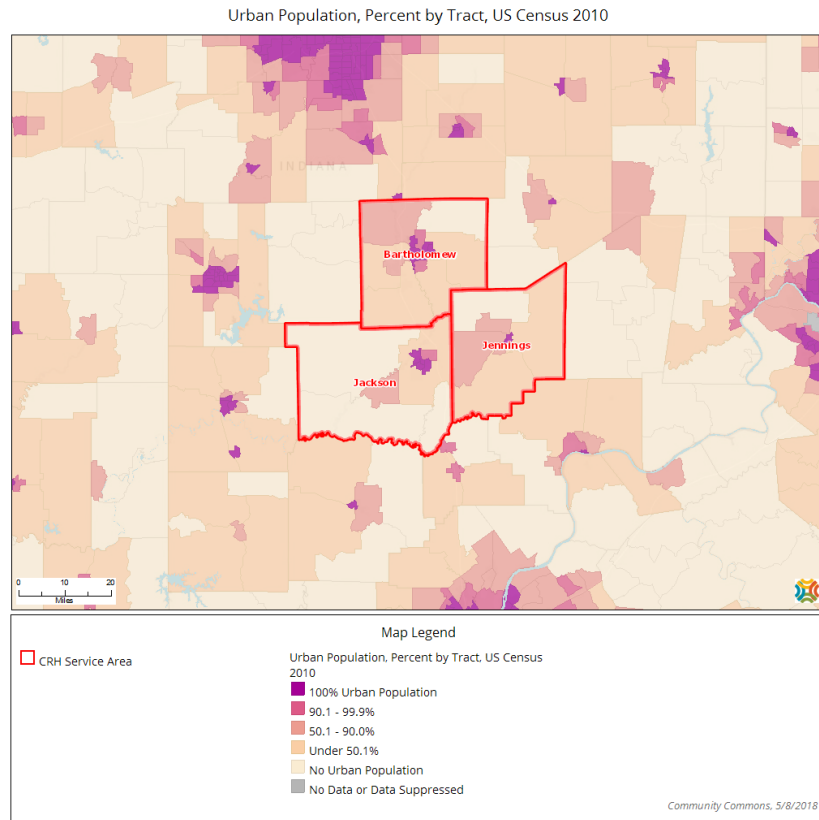
Sources:

- US Census Bureau Decennial Census (2010).
- Retrieved April 2018 from Community Commons at <http://www.chna.org>.

Notes:

- This indicator reports the percentage of population living in urban and rural areas. Urban areas are identified using population density, count, and size thresholds. Urban areas also include territory with a high degree of impervious surface (development). Rural areas are all areas that are not urban.





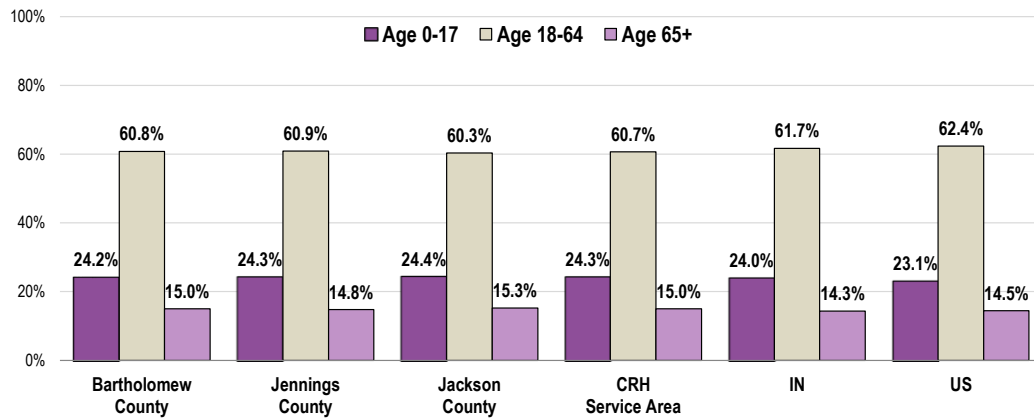
## Age

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.

**In the Columbus Regional Health Service Area, 24.3% of the population are infants, children, or adolescents (age 0-17); another 60.7% are age 18 to 64, while 15.0% are age 65 and older.**

- The proportions are largely similar across the geographies.

### Total Population by Age Groups, Percent (2012-2016)

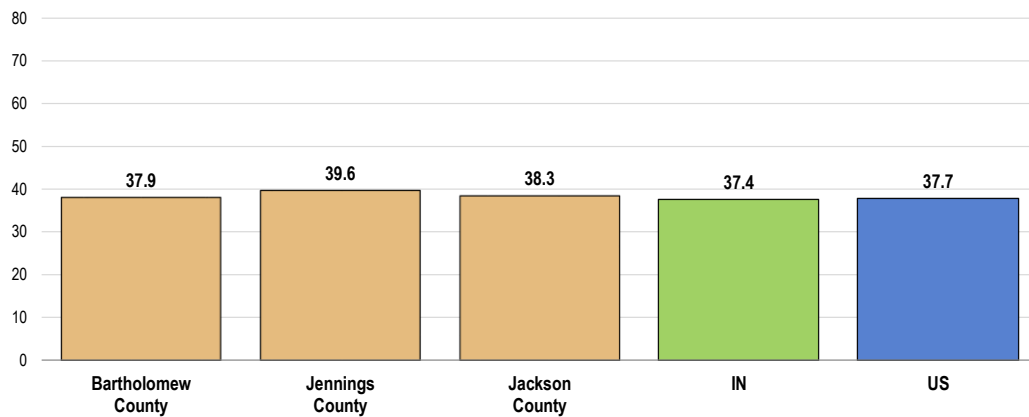


Sources:   
 • US Census Bureau American Community Survey 5-year estimates.   
 • Retrieved April 2018 from Community Commons at <http://www.chna.org>.

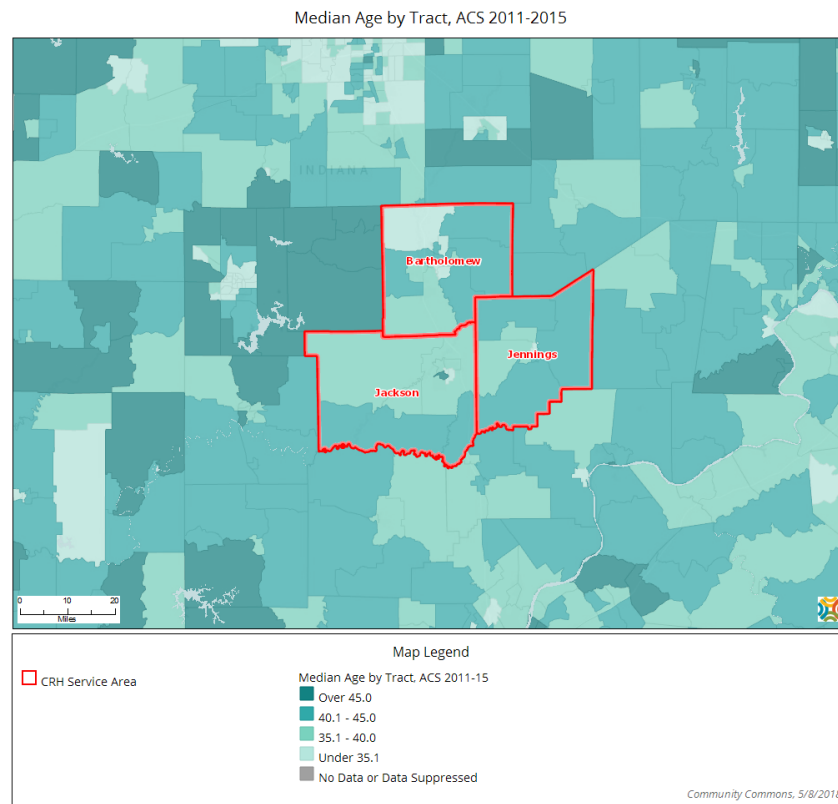
### Median Age

The median age ranges from 37.9 to 39.6 in the service area.

### Median Age (2012-2016)



Sources:   
 • US Census Bureau American Community Survey 5-year estimates.   
 • Retrieved April 2018 from Community Commons at <http://www.chna.org>.



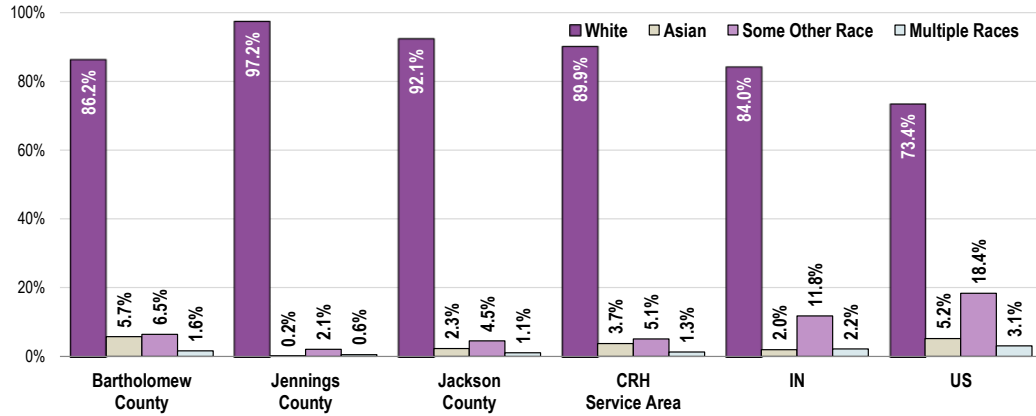
## Race & Ethnicity

### Race

In looking at race independent of ethnicity (Hispanic or Latino origin), 89.9% of residents of the CRH Service Area are White and 3.7% are Asian.

- The area is generally less diverse than the state and national population when viewed by race.
- Viewed by county, Bartholomew County is the most racially diverse in the area.

### Total Population by Race Alone, Percent (2012-2016)



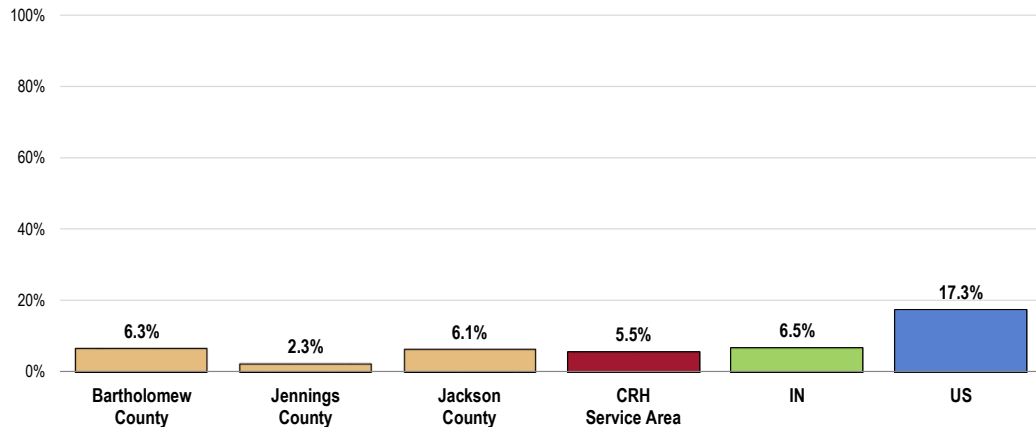
Sources:   
 • US Census Bureau American Community Survey 5-year estimates.   
 • Retrieved April 2018 from Community Commons at <http://www.chna.org>.

### Ethnicity

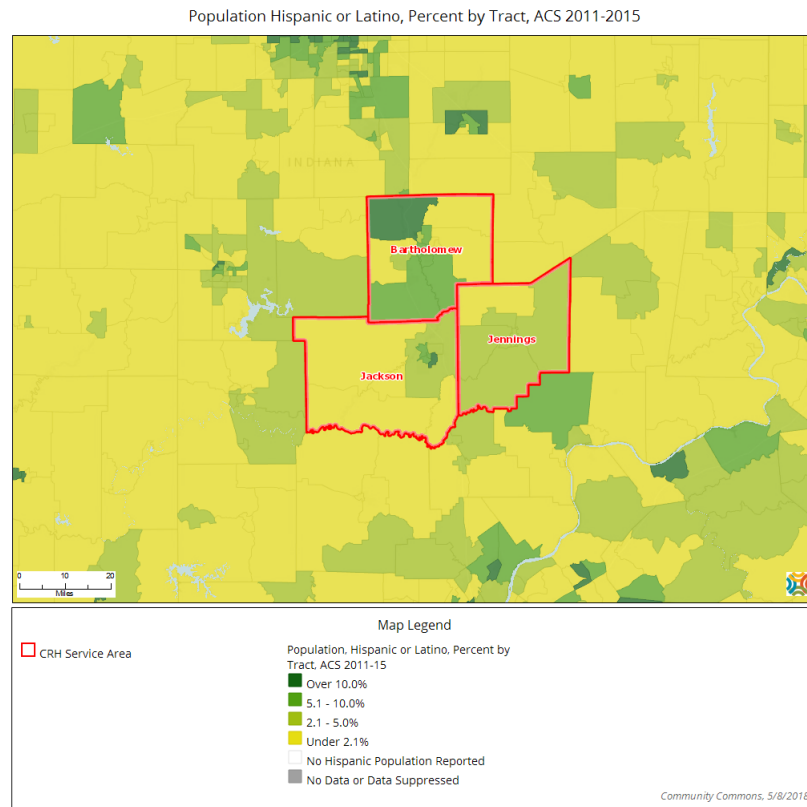
**A total of 5.5% of Columbus Regional Health Service Area residents are Hispanic or Latino.**

- Lower than the state percentage and especially the US percentage.
- The Hispanic population is least prevalent in Jennings County.

### Hispanic Population (2012-2016)

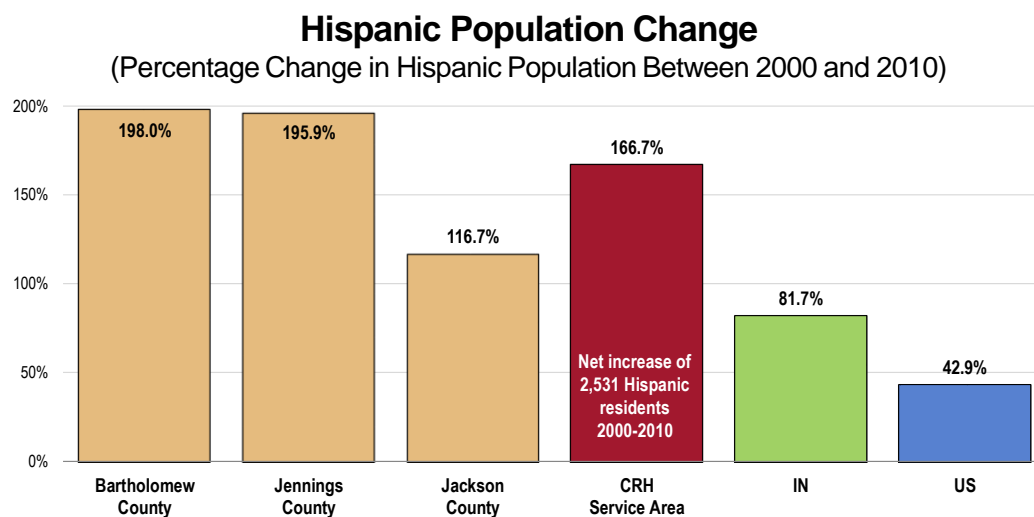


Sources:   
 • US Census Bureau American Community Survey 5-year estimates.   
 • Retrieved April 2018 from Community Commons at <http://www.chna.org>.   
 Notes:   
 • Origin can be viewed as the heritage, nationality group, lineage, or country of birth of the person or the person's parents or ancestors before their arrival in the United States. People who identify their origin as Hispanic, Latino, or Spanish may be of any race.



**Between 2000 and 2010, the Hispanic population in the service area increased by 2,531 people, or 166.7%.**

- Much higher (in terms of percentage growth) than found statewide and nationally.
- Hispanic population growth has been lowest in Jackson County.



Sources:
 

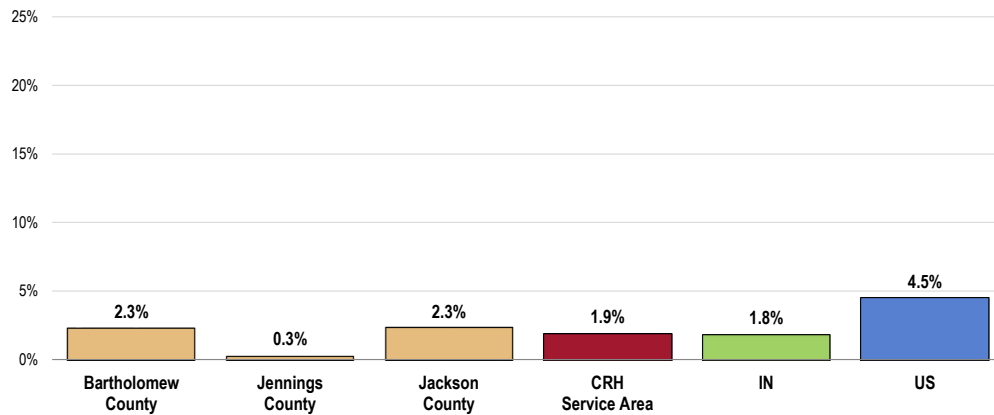
- US Census Bureau Decennial Census (2000-2010).
- Retrieved April 2018 from Community Commons at <http://www.chna.org>.

## Linguistic Isolation

A total of 1.9% of the Columbus Regional Health Service Area population age 5 and older live in a home in which **no** persons age 14 or older is proficient in English (speaking only English, or speaking English “very well”).

- Comparable to the state prevalence but well below the US proportion.
- Considerably lower in Jennings County.

### Linguistically Isolated Population (2012-2016)



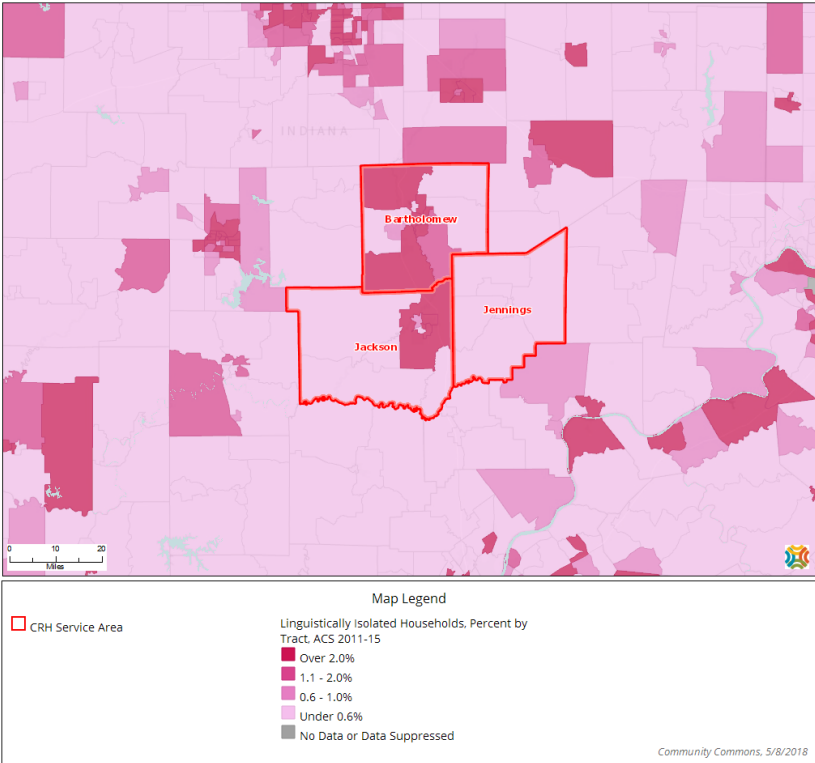
Sources:

- US Census Bureau American Community Survey 5-year estimates.
- Retrieved April 2018 from Community Commons at <http://www.chna.org>.

Notes:

- This indicator reports the percentage of the population age 5+ who live in a home in which no person age 14+ speaks only English, or in which no person age 14+ speak a non-English language and speak English "very well."

Population in Linguistically Isolated Households, Percent by Tract, ACS 2011-2015



## 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.

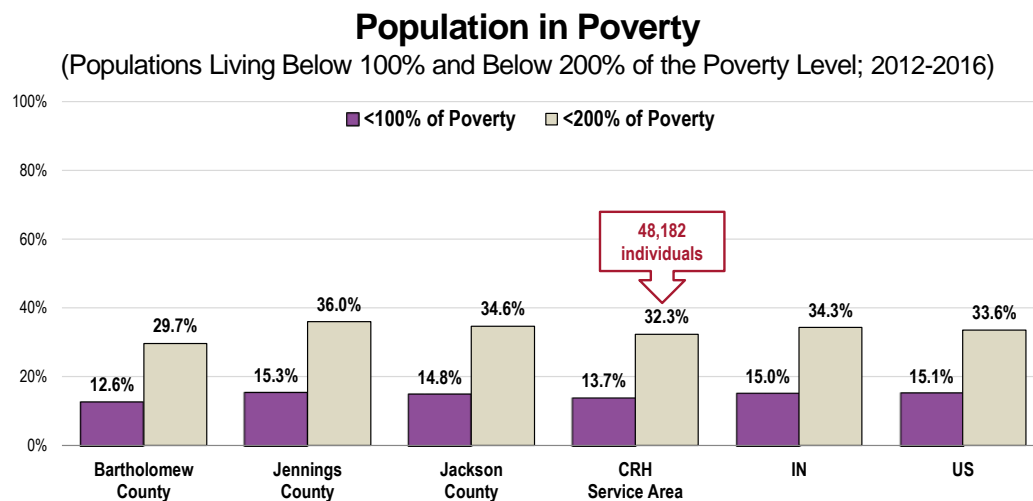
- Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

### Poverty

The latest census estimate shows **13.7% of Columbus Regional Health Service Area population living below the federal poverty level.**

**In all, 32.3% of CRH Service Area residents (an estimated 48,182 individuals) live below 200% of the federal poverty level.**

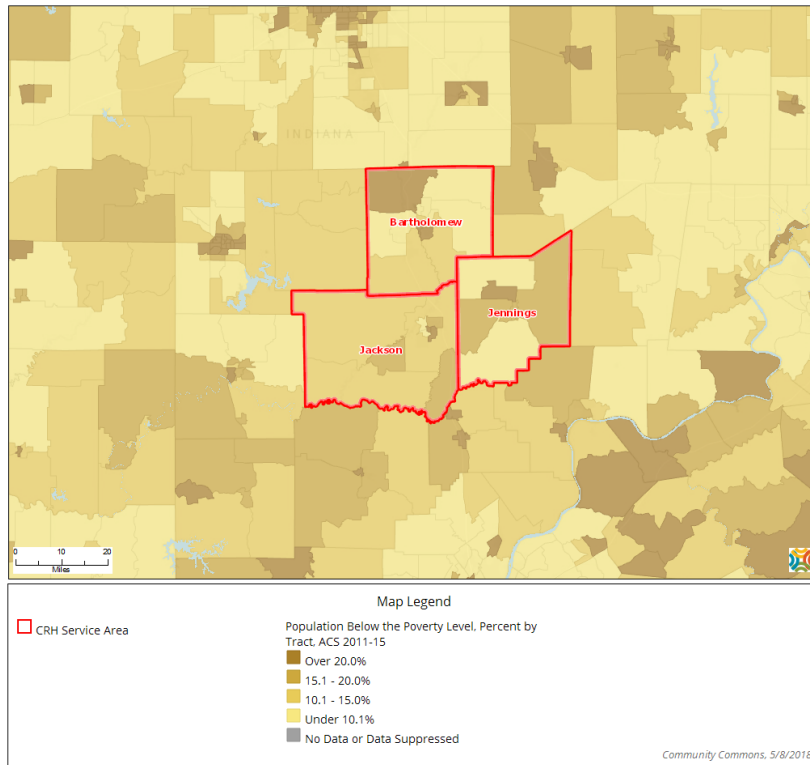
- Comparable to the proportions reported statewide and nationally.
- Poverty levels are lowest in Bartholomew County.



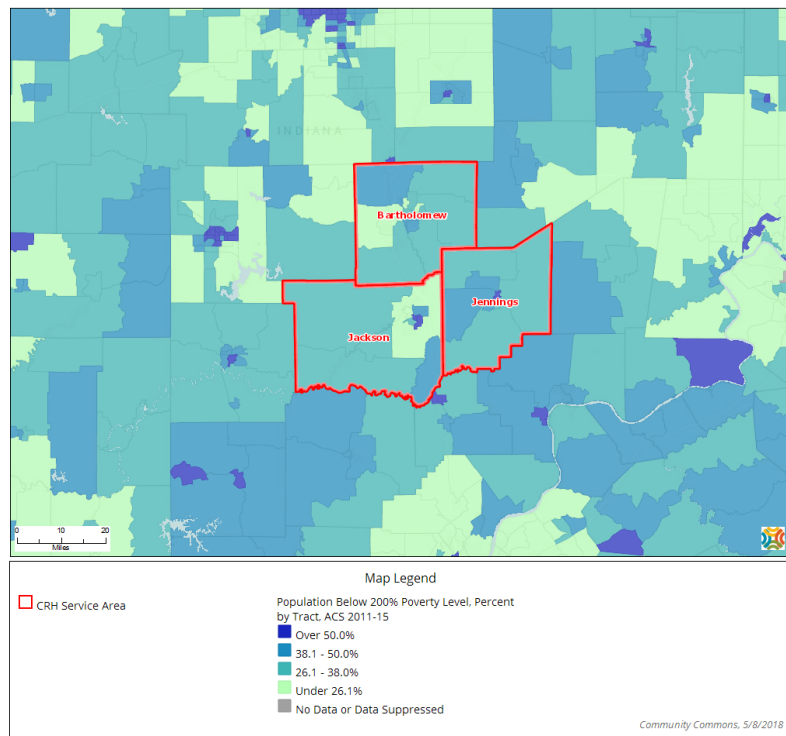
- Sources:
- US Census Bureau American Community Survey 5-year estimates.
  - Retrieved April 2018 from Community Commons at <http://www.chna.org>.
- Notes:
- Poverty is considered a key driver of health status. This indicator is relevant because poverty creates barriers to access including health services, healthy food, and other necessities that contribute to poor health status.



Population Below the Poverty Level, Percent by Tract, ACS 2011-2015



Population Below 200% of Poverty, Percent by Tract, ACS 2011-2015

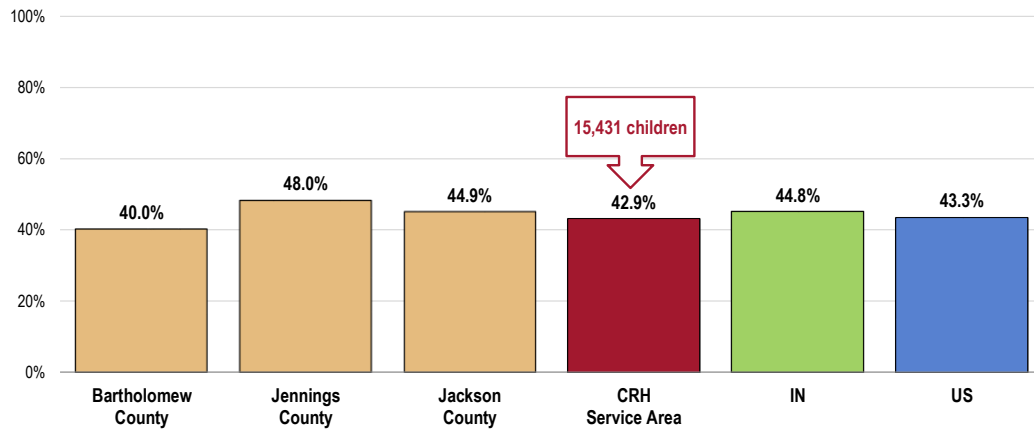


### Children in Low-Income Households

Additionally, 42.9% of Columbus Regional Health Service Area children age 0-17 (representing an estimated 15,431 children) live below the 200% poverty threshold.

- Similar to the state and US figures.
- Similar percentages by area.

**Percent of Children in Low-Income Households**  
(Children 0-17 Living Below 200% of the Poverty Level, 2012-2016)



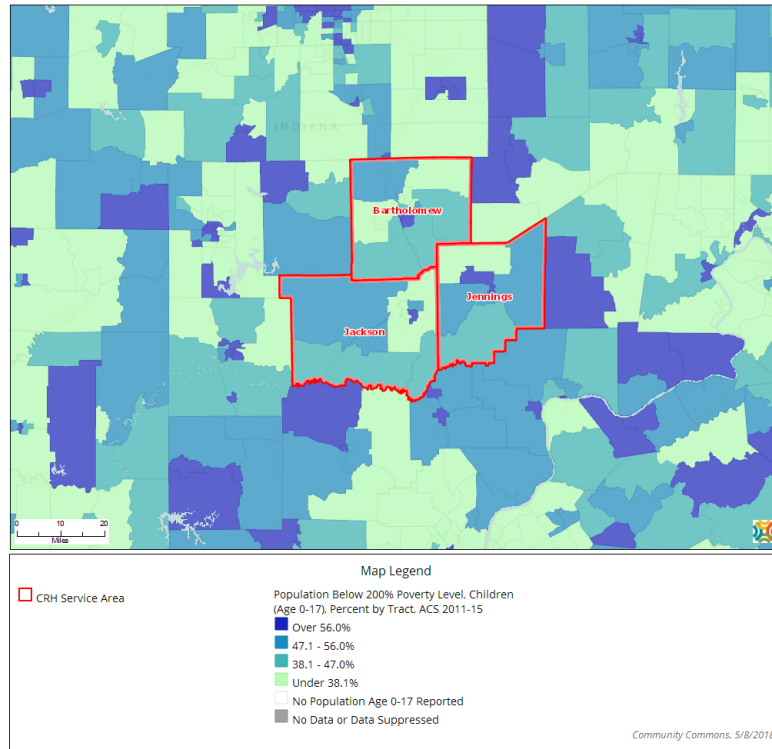
Sources:
 

- US Census Bureau American Community Survey 5-year estimates.
- Retrieved April 2018 from Community Commons at <http://www.chna.org>.

 Notes:
 

- This indicator reports the percentage of children aged 0-17 living in households with income below 200% of the Federal Poverty Level (FPL). This indicator is relevant because poverty creates barriers to access including health services, healthy food, and other necessities that contribute to poor health status.

Children (0-17) Living Below 200% of Poverty, Percent by Tract, ACS 2011-2015



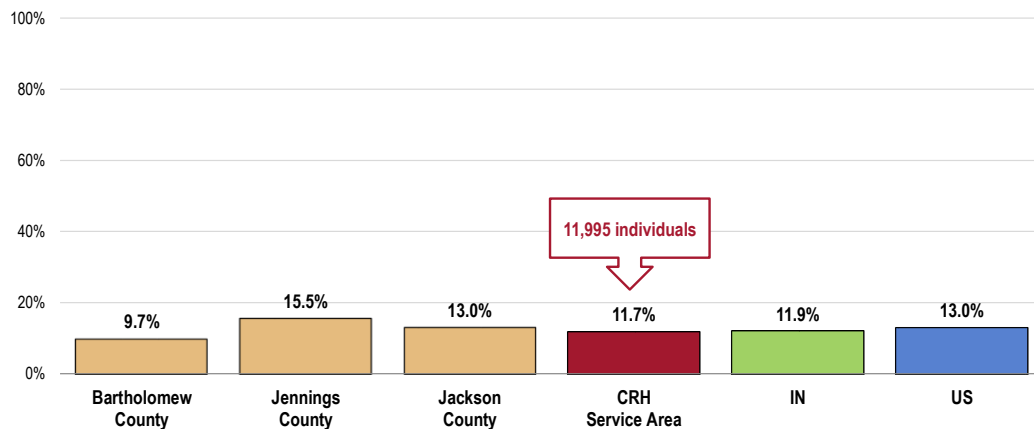
## Education

Among the service area population age 25 and older, an estimated 11.7% (nearly 12,000 people) do not have a high school education.

- Similar to the statewide and US percentages.
- The proportion is favorably low in Bartholomew County.

### Population With No High School Diploma

(Population Age 25+ Without a High School Diploma or Equivalent, 2012-2016)



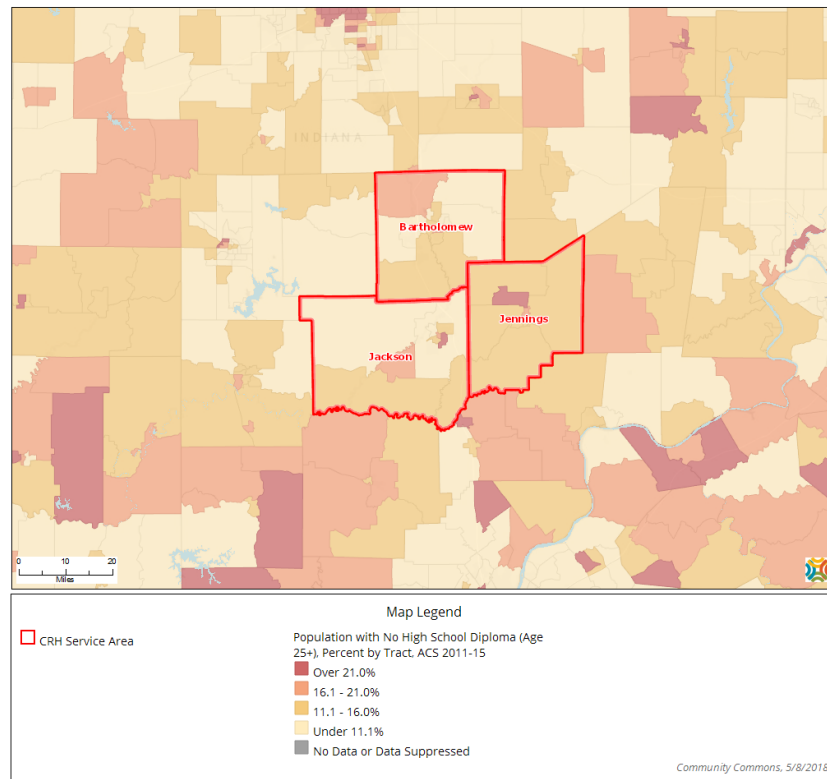
Sources:
 

- US Census Bureau American Community Survey 5-year estimates.
- Retrieved April 2018 from Community Commons at <http://www.chna.org>.

Notes:
 

- This indicator is relevant because educational attainment is linked to positive health outcomes.

Population with No High School Diploma, Percent by Tract, ACS 2011-2015



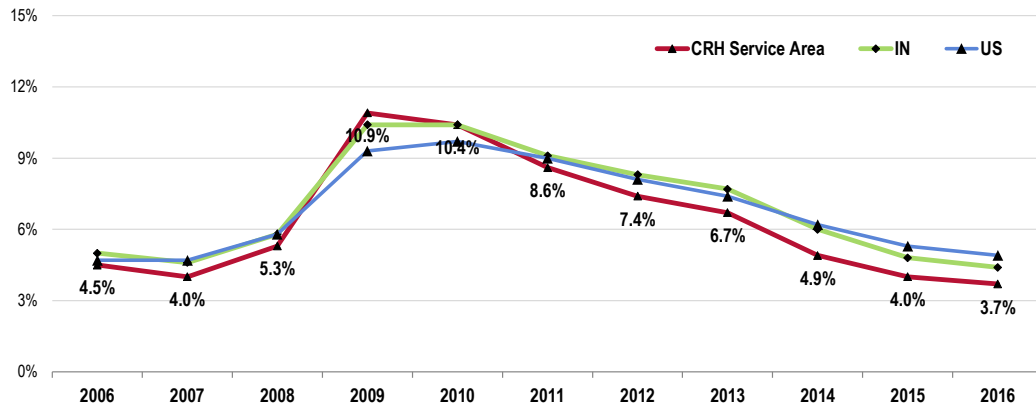
## Employment

According to data derived from the US Department of Labor, the unemployment rate in the Columbus Regional Health Service Area as of January 2017 was 3.7%.

- More favorable than the statewide and US unemployment rates.
- TREND: Unemployment for Columbus Regional Health Service Area has trended downward since 2009, echoing the state and national trends.

### Unemployment Rate

(Percent of Non-Institutionalized Population Age 16+ Unemployed, Not Seasonally-Adjusted)



Sources: 

- US Department of Labor, Bureau of Labor Statistics.
- Retrieved April 2018 from Community Commons at <http://www.chna.org>.

Notes: 

- This indicator is relevant because unemployment creates financial instability and barriers to access including insurance coverage, health services, healthy food, and other necessities that contribute to poor health status.

# General Health Status



**Professional Research Consultants, Inc.**

## Overall Health Status

### Evaluation of Health Status

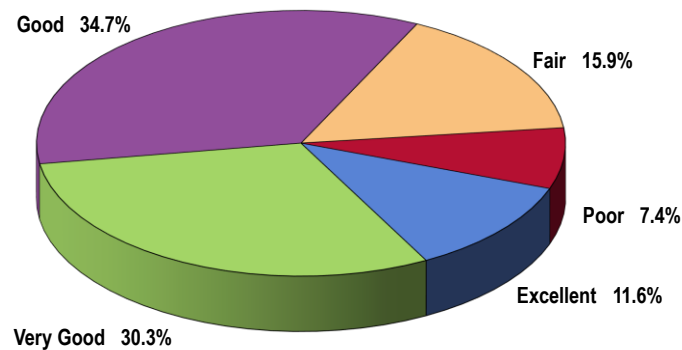
A total of 41.9% of Columbus Regional Health Service Area adults rate their overall health as “excellent” or “very good.”

- Another 34.7% gave “good” ratings of their overall health.

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?”

### Self-Reported Health Status (CRH Service Area, 2018)

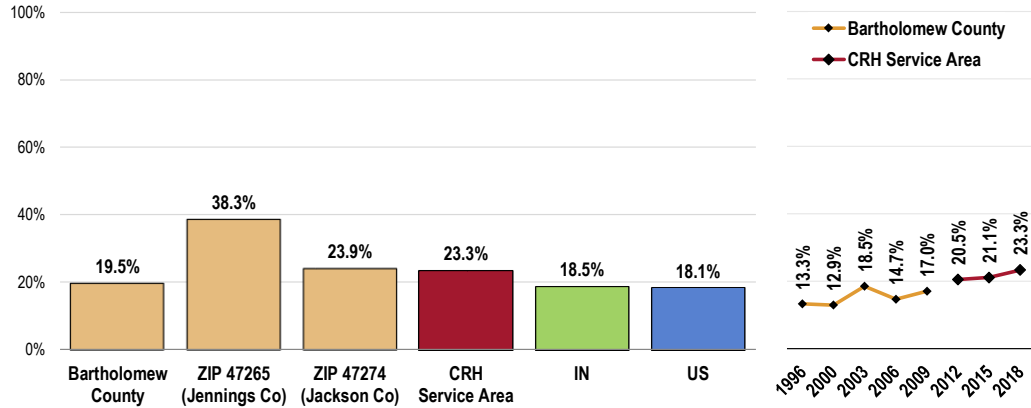


Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 5]  
Notes: • Asked of all respondents.

However, 23.3% of Columbus Regional Health Service Area adults believe that their overall health is “fair” or “poor.”

- Worse than state and national findings.
- Unfavorably high in ZIP Code 47265.
- TREND: Note the statistically significant increase that occurred in Bartholomew County between 1996 and 2009 as well as the increase for the entire service area since 2012.

### Experience “Fair” or “Poor” Overall Health



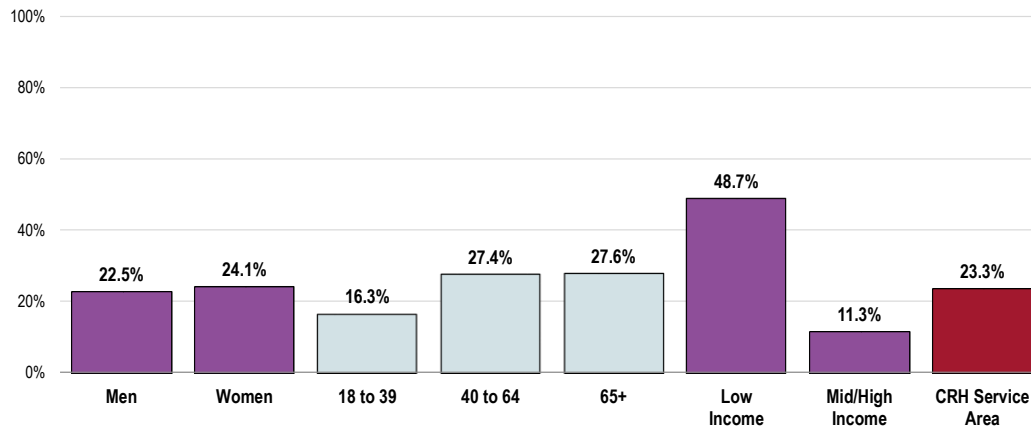
Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 5]  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2016 Indiana data.  
 • 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: • Asked of all respondents.

Adults more likely to report experiencing “fair” or “poor” overall health include:

- Those age 40 and older.
- Residents living at lower incomes.

### Experience “Fair” or “Poor” Overall Health (CRH Service Area, 2018)



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, 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.

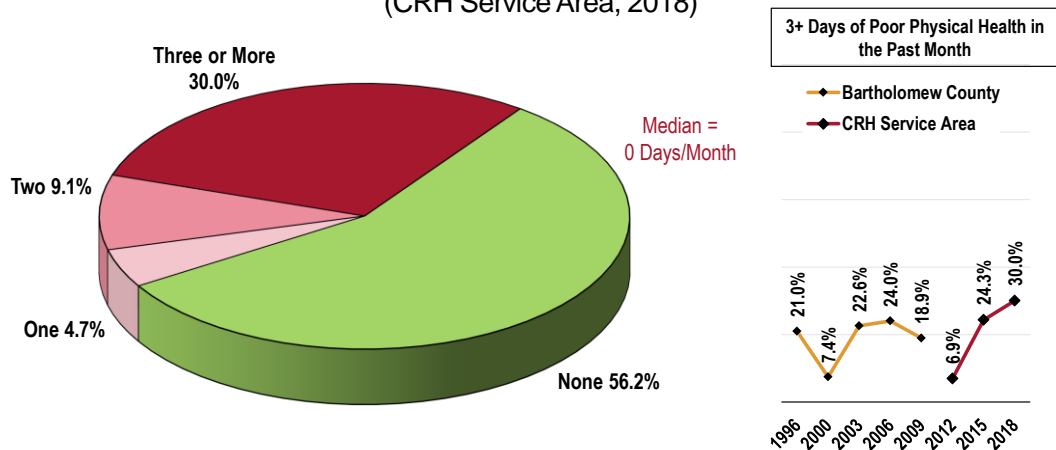


## Days of Poor Physical Health

While most Columbus Regional Health Service Area adults (56.2%) did not experience any days of poor physical health in the past month, 43.8% experienced at least one day of poor physical health in the past month.

- This includes 30.0% reporting 3+ days of poor physical health last month.
- TREND: Note the statistically significant increase over time in the CRH Service Area.

### Days of Poor Physical Health in the Past Month (CRH Service Area, 2018)

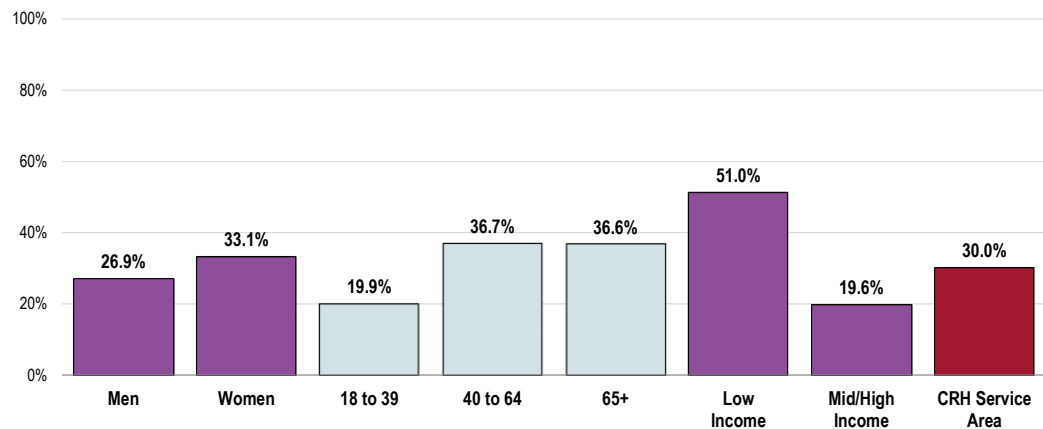


Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 301]  
 Notes: • Asked of all respondents.

Adults more likely to report 3+ days of poor physical health in the past month include:

- Residents age 40 and older.
- Those living in households with lower incomes.

### Experienced 3+ Days of Poor Physical Health in the Past Month (CRH Service Area, 2018)



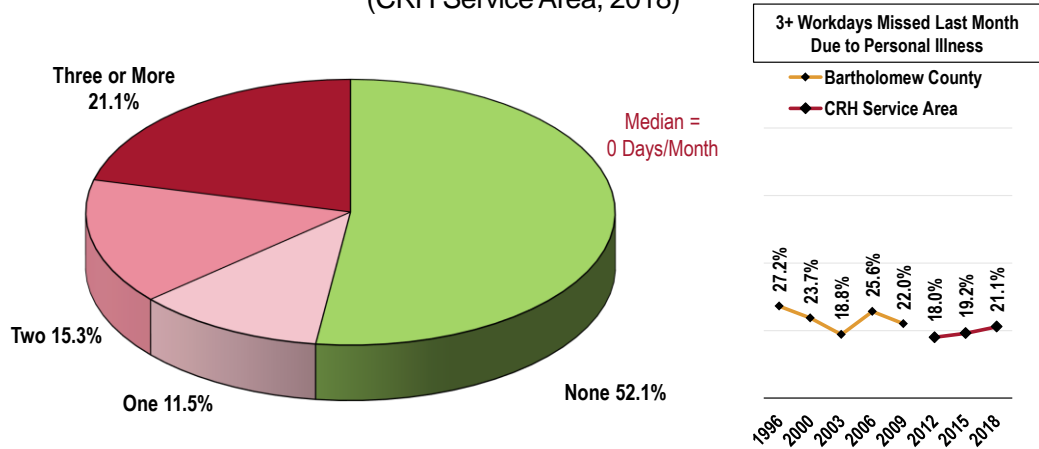
Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 301]  
 Notes: • Asked of all respondents.  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with 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.

## Workdays Missed

Among employed adults in the service area, most (78.9%) missed fewer than 3 workdays over the past year due to personal illness.

- On the other hand, 21.1% of employed survey respondents missed 3 or more workdays in the past year due to personal illness.
- TREND: While Bartholomew County experienced a decrease over time among employed residents missing work, the service area as a whole has been statistically stable over time.

### Workdays Missed in the Past Month Due to Personal Illness (CRH Service Area, 2018)



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 325]  
 Notes: • Asked of all respondents.

## 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 healthcare 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 healthcare 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 healthcare professionals.

- Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

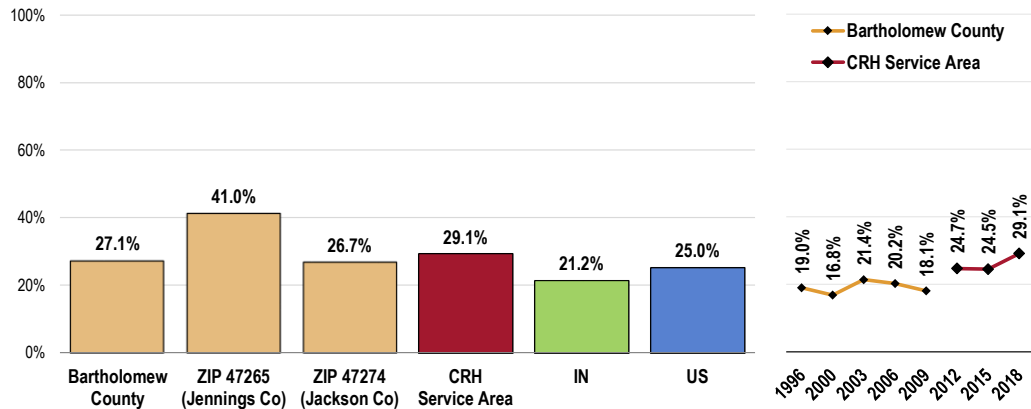
**A total of 29.1% of Columbus Regional Health Service Area adults are limited in some way in some activities, due to a physical, mental, or emotional problem.**

- Less favorable than the prevalence statewide and nationally.
- Unfavorably high in ZIP Code 47265.
- TREND: Marks a statistically significant increase in service area residents' activity limitations since 2012.

#### RELATED ISSUE:

See also *Potentially Disabling Conditions in the Death, Disease, & Chronic Conditions* section of this report.

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



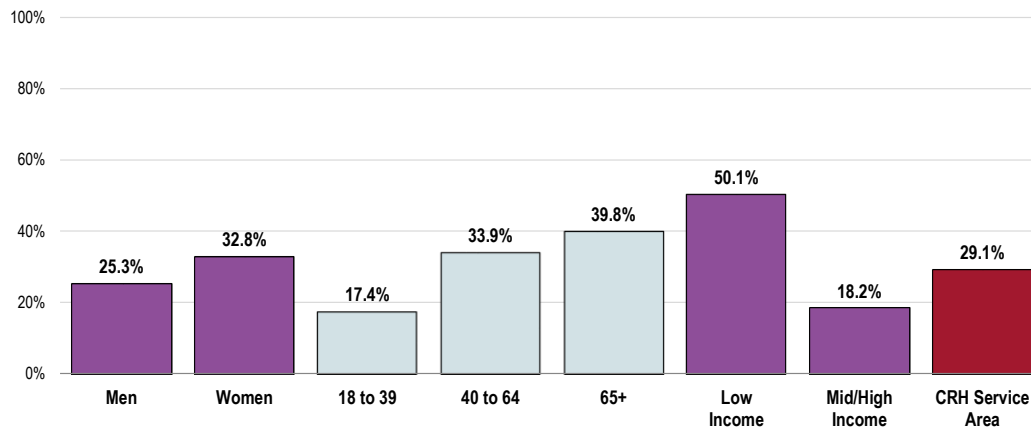
Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 109]  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2015 Indiana data.  
 • 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: • Asked of all respondents.

In looking at responses by key demographic characteristics, these adults are statistically more likely to report some type of activity limitation:

- Women.
- Adults age 40 and older (note the positive correlation with age).
- Low-income residents.

### Limited in Activities in Some Way Due to a Physical, Mental or Emotional Problem (CRH Service Area, 2018)



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 109]  
 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.

## 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](http://www.healthypeople.gov))

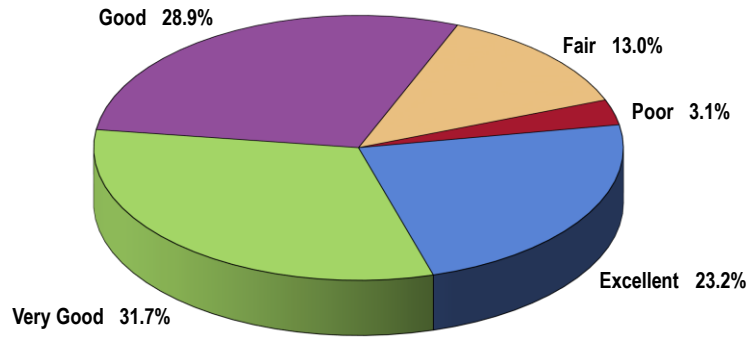
## Evaluation of Mental Health Status

A total of 54.9% of Columbus Regional Health Service Area adults rate their overall mental health as “excellent” or “very good.”

- Another 28.9% gave “good” ratings of their own 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 (CRH Service Area, 2018)

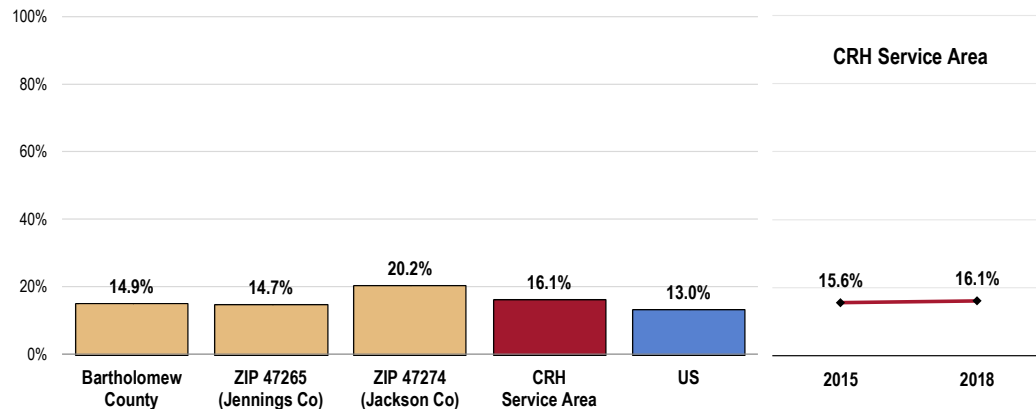


Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 99]  
Notes: • Asked of all respondents.

A total of 16.1% of Columbus Regional Health Service Area adults, however, believe that their overall mental health is “fair” or “poor.”

- Similar to the “fair/poor” response reported nationally.
- Similar findings by area.
- TREND: Statistically unchanged since 2015.

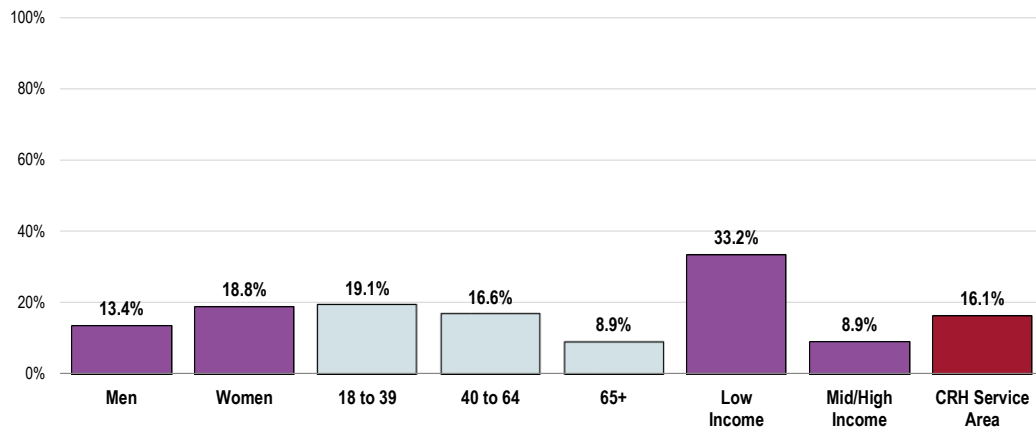
### Experience “Fair” or “Poor” Mental Health



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 99]  
• 2017 PRC National Health Survey, Professional Research Consultants, Inc.  
Notes: • Asked of all respondents.

- Note the negative correlation between poor mental health and age.
- Residents in low-income households are more than 3 times as likely to report “fair” or “poor” mental health than are their higher-income counterparts.

### Experience “Fair” or “Poor” Mental Health (CRH Service Area, 2018)



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 99]  
 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.

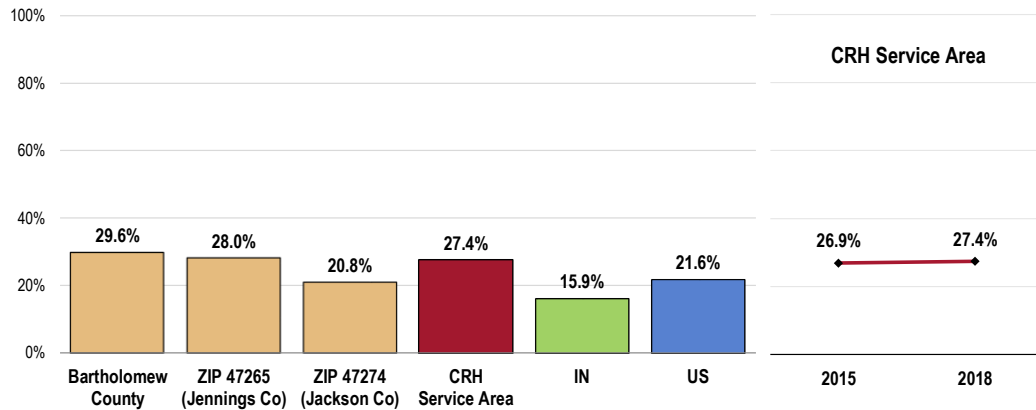
## Depression

### Diagnosed Depression

A total of 27.4% of Columbus Regional Health Service Area adults have been diagnosed by a physician as having a depressive disorder (such as depression, major depression, dysthymia, or minor depression).

- Worse than state and national findings.
- Statistically similar findings by area.
- TREND: Statistically unchanged since 2015.

### Have Been Diagnosed With a Depressive Disorder



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 102]  
 • 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 Indiana data.  
 • 2017 PRC National Health Survey, Professional Research Consultants, Inc.

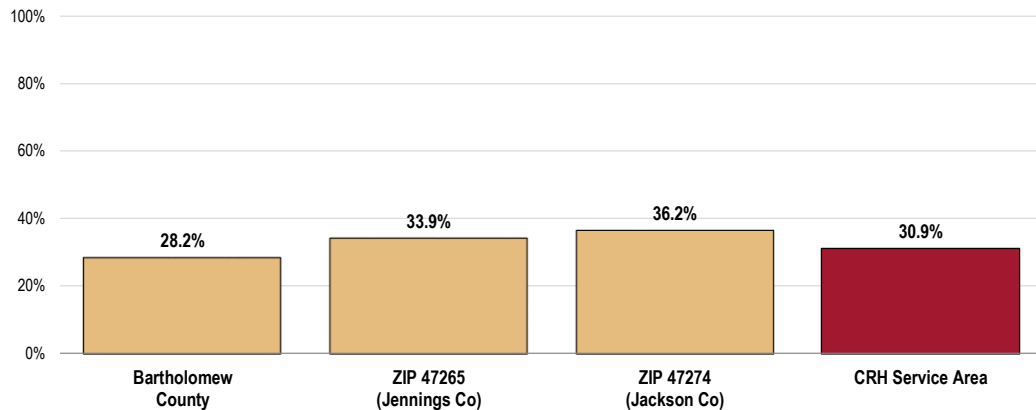
Notes: • Asked of all respondents.  
 • Depressive disorders include depression, major depression, dysthymia, or minor depression.

### Periods of Depression

In the service area, 30.9% of survey respondents report having experienced at least one 2-week period of sadness or depression.

- The prevalence is statistically similar by area.

### Have Experienced a 2-Week Period of Sadness or Depression



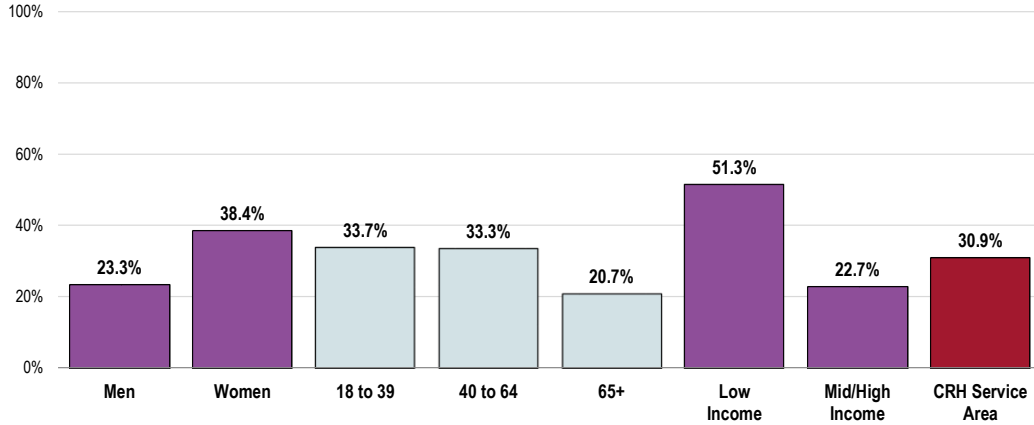
Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 341]  
 Notes: • Asked of all respondents.



Periods of sadness or depression are more often noted among these population segments:

- Women.
- Adults under age 65.
- Adults with lower incomes.

### Have Experienced a 2-Week Period of Sadness or Depression (CRH Service Area, 2018)



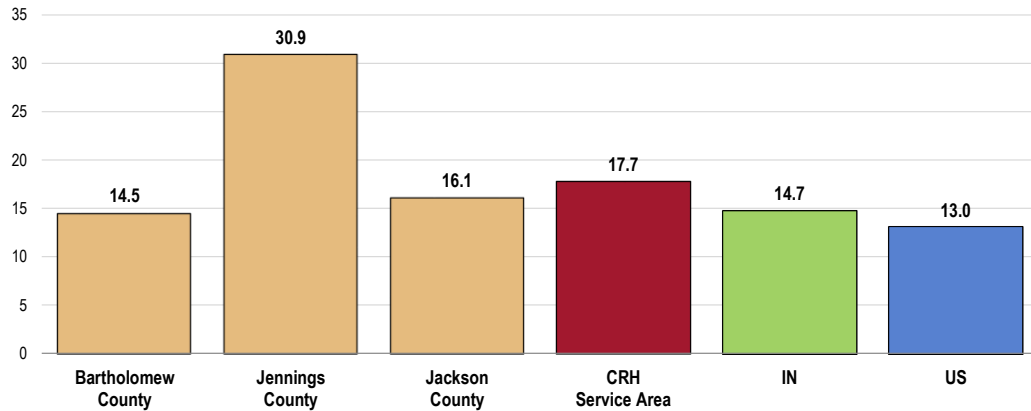
Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 341]  
 Notes: • Asked of all respondents.  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with 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.

### Suicide

Between 2014 and 2016, there was an annual average age-adjusted suicide rate of 17.7 deaths per 100,000 population in the Columbus Regional Health Service Area.

- Higher than the state and US rates.
- Fails to satisfy the Healthy People 2020 target of 10.2 or lower.
- The suicide rate is notably higher in Jennings County.

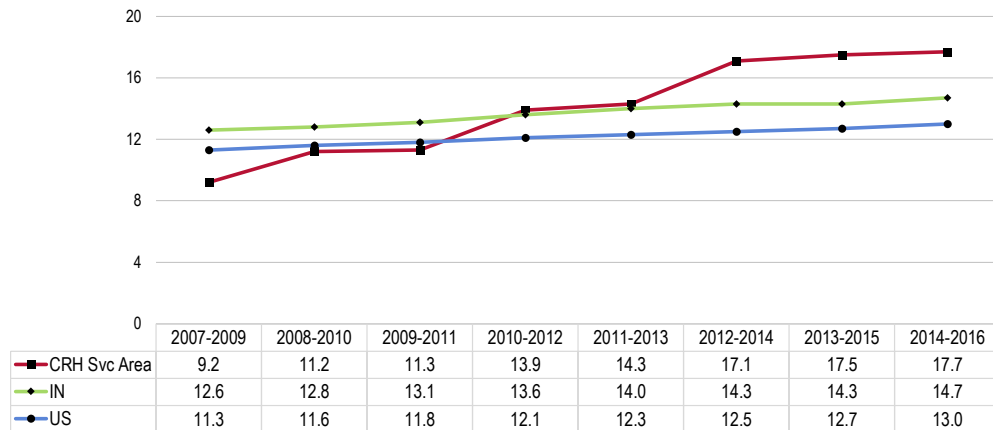
### Suicide: Age-Adjusted Mortality (2014-2016 Annual Average Deaths per 100,000 Population) Healthy People 2020 Target = 10.2 or Lower



Sources: ● CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted April 2018.  
● 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.

- TREND: The area suicide rate has overall trended upward; state and US rates have increased as well, although less dramatically.

### Suicide: Age-Adjusted Mortality Trends (Annual Average Deaths per 100,000 Population) Healthy People 2020 Target = 10.2 or Lower



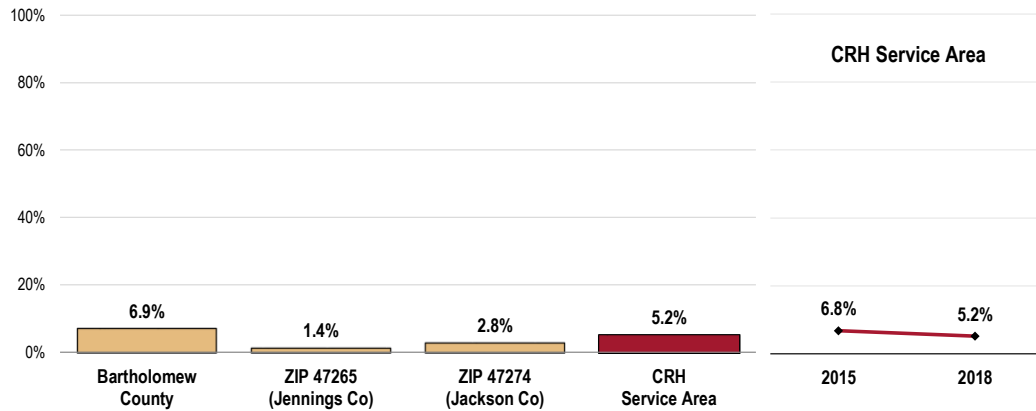
Sources: ● CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted April 2018.  
● US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [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.

### Suicide Ideation

A total of 5.2% of CRH Service Area adults have considered suicide in the past year.

- The prevalence is much higher in Bartholomew County.
- TREND: The prevalence has not changed significantly since 2015.

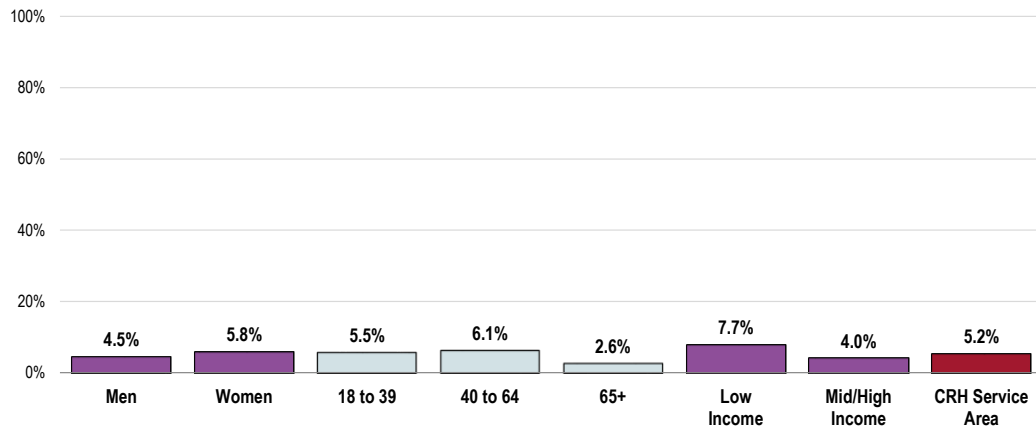
### Considered Suicide in the Past Year



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 342]  
 Notes: • Asked of all respondents.

- Suicide ideation is statistically higher among adults age 40 to 64 when compared with older residents.

### Considered Suicide in the Past Year (CRH Service Area, 2018)



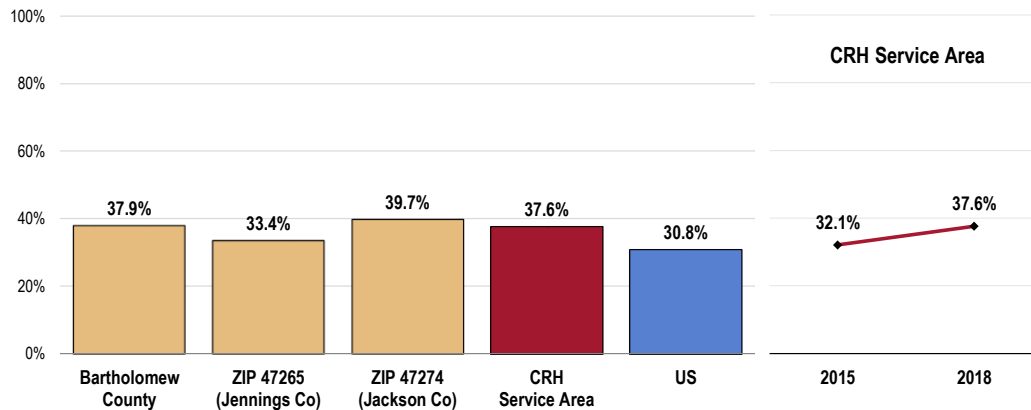
Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 342]  
 Notes: • Asked of all respondents.  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with 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.

## Mental Health Treatment

A total of 37.6% of Columbus Regional Health Service Area adults acknowledge having ever sought professional help for a mental or emotional problem.

- Higher than the national prevalence.
- Similar findings by area.
- TREND: The prevalence has increased since 2015.

### Have Sought Professional Help for a Mental or Emotional Problem in the Past Year



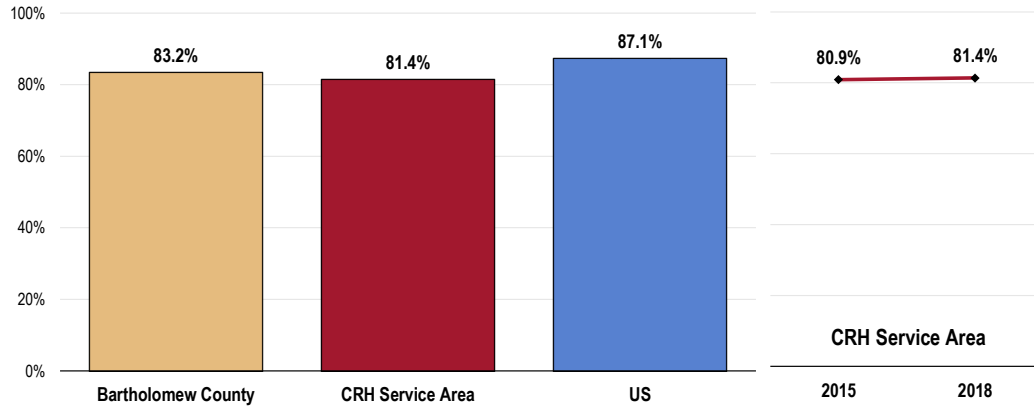
Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 104]  
 • 2017 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of all respondents.

“Diagnosed depressive disorder” includes respondents reporting a past diagnosis of a depressive disorder by a physician (such as depression, major depression, dysthymia, or minor depression).

Among respondents with a diagnosed depressive disorder, 81.4% acknowledge that they have sought professional help for a mental or emotional problem.

- Statistically comparable to national findings.
- The prevalence is similar in Bartholomew County.
- TREND: Statistically unchanged over time in the service area.

### Adults With Diagnosed Depression Who Have Ever Sought Professional Help for a Mental or Emotional Problem (Among Adults With Diagnosed Depressive Disorder)



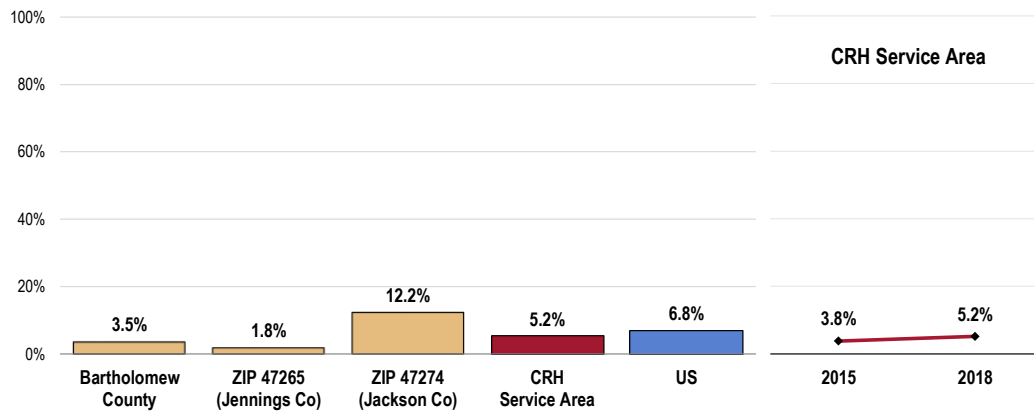
Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 127]  
 • 2017 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Reflects those respondents with a depressive disorder diagnosed by a physician (such as depression, major depression, dysthymia, or minor depression).

### Difficulty Accessing Mental Health Services

A total of 5.2% of Columbus Regional Health Service Area adults report a time in the past year when they needed mental health services, but were not able to get them.

- Similar to the national finding.
- Considerably higher in ZIP Code 47274.
- TREND: Statistically unchanged over time.

### Unable to Get Mental Health Services When Needed in the Past Year

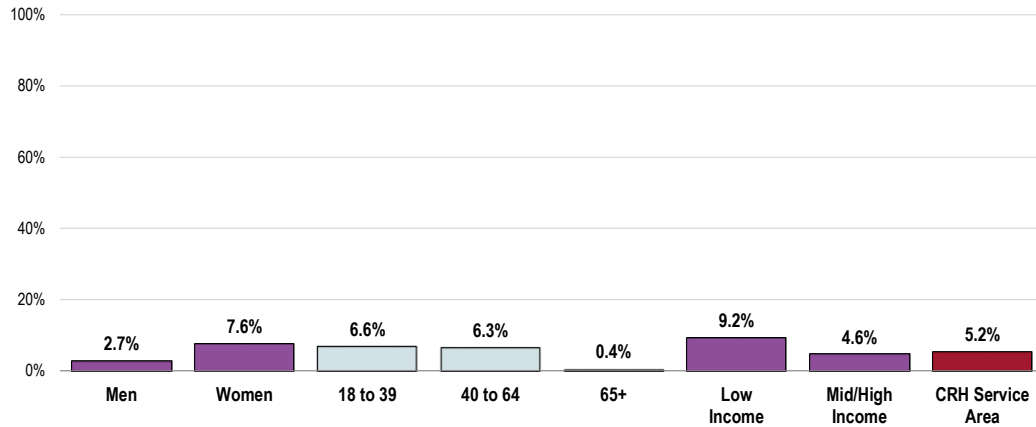


Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 105, 343]  
 • 2017 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of all respondents.

Note that access difficulty is notably more prevalent among:

- Women.
- Adults under age 65.

### Unable to Get Mental Health Services When Needed in the Past Year (CRH Service Area, 2018)



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 105]  
 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.

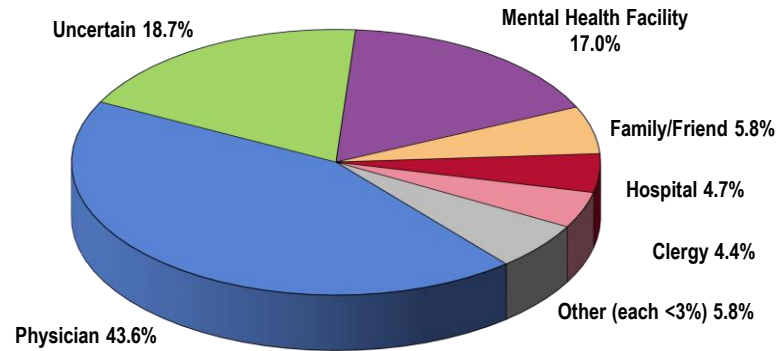
Among the people citing difficulties accessing mental health services in the past year (use caution when interpreting results as the sample size falls below 50), these are predominantly attributed to **cost or insurance issues** (mentioned by 36.3%); barriers mentioned much less frequently include difficulty getting appointments and a perceived lack of providers.

#### *Likely Place for Seeking Mental Health Treatment*

**If it were needed, 43.6% of adults said they would seek mental health treatment from a physician, and 17.0% would rely on a facility specifically geared toward mental health; note that 18.7% of respondents were uncertain.**

- Other resources for mental healthcare included family/friends, hospital, and clergy.

### Site for Mental Health Services if Needed (CRH Service Area, 2018)



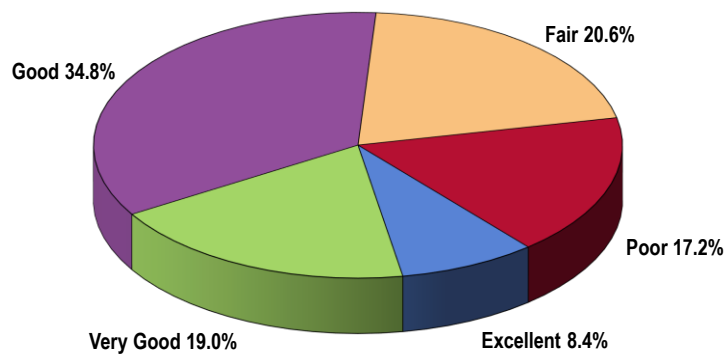
Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 344]  
 Notes: • Asked of all respondents.

### Perceived Ease of Obtaining Services

When asked to rate the ease with which they can get mental health services in the community, 27.4% of survey respondents gave “excellent” or “very good” ratings.

- The largest share of respondents (34.8%) gave “good” ratings.

### Perceived Ease of Obtaining Local Mental Health Services (CRH Service Area, 2018)

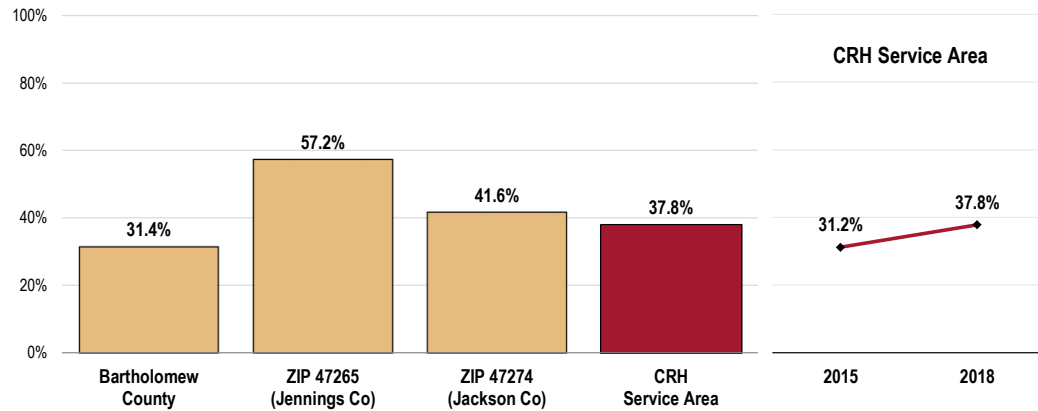


Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 340]  
 Notes: • Asked of all respondents.

In contrast, 37.8% of CRH Service Area residents rate the ease with which they can obtain mental health services in the community as “fair” or “poor.”

- The prevalence is unfavorably high in ZIP Code 47265.
- TREND: Note the statistically significant increase since 2015.

### Ease of Obtaining Local Mental Health Services Is “Fair” or “Poor”

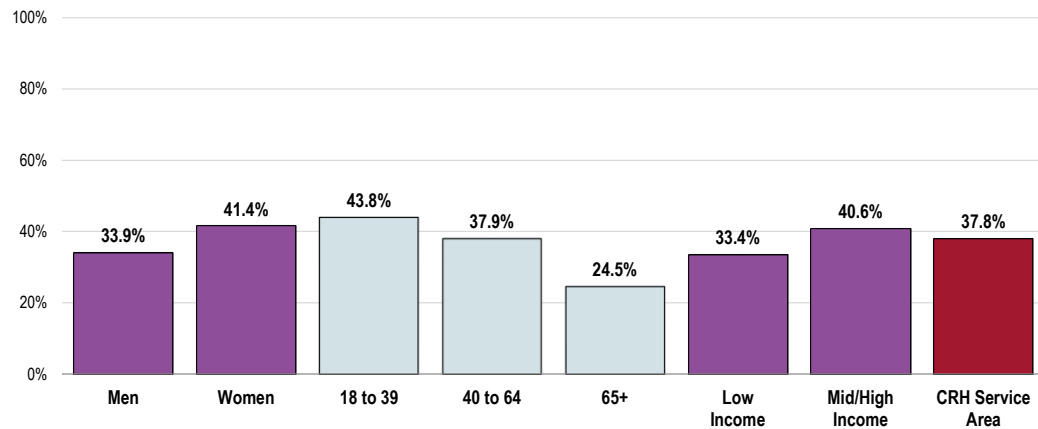


Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 340]  
 Notes: • Asked of all respondents.

Note that access difficulty is notably more prevalent among:

- Women.
- Adults under age 65 (negative correlation with age).

### Ease of Obtaining Local Mental Health Services Is “Fair” or “Poor” (CRH Service Area, 2018)



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 340]  
 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.



## Key Informant Input: Mental Health

The greatest share of key informants taking part in an online survey characterized *Mental Health* as a “major problem” in the community.

### Perceptions of Mental Health as a Problem in the Community (Key Informants, 2018)

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



Sources: ● PRC Online Key Informant Survey, Professional Research Consultants, Inc.  
Notes: ● Asked of all respondents.

### Top Concerns

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

#### Access to Care/Services

*Easy and equitable access. – Community/Business Leader*

*Obtaining urgent or semi urgent psychiatric consultation. – Public Health Representative*

*There are limited resources to select from which are covered by insurance. And to find the right person can seem overwhelming to the person already being challenged with mental health issues. – Public Health Representative*

*Access to both therapists and psychiatrists for medical management. Also access to substance abuse treatment programs. – Physician*

*So many people struggling with mental health issues and not enough options to help them. I know some of it is that these folks refuse treatment. I think some people need to be forced to take medicines/live in residential treatment facilities. – Social Services Provider*

*Not enough resources, especially for students and young adults. – Other Health Provider*

*Access limited and very common. – Physician*

*Centerstone seems to be the only option to help all these people. We need more options. – Public Health Representative*

*Not enough resources and not being proactive on identifying those in need. – Community/Business Leader*

*Not enough adequate mental health facilities for mental healthy individuals. Not enough qualified personnel for various type of mental health issues. – Social Services Provider*

*Not enough or enough access to care. – Other Health Provider*

*Access to mental healthcare, school counselor to student ratios, networked services are all factors that can be improved to assist with mental health in our community. Mental health issues caused by substance abuse are on the rise and can be affected. – Community/Business Leader*

*Access to ongoing treatment and follow up. – Other Health Provider*

*Cannot be seen unless they jump through the hoops. And it takes a long time to see a provider and obtain medications for mental health conditions. – Other Health Provider*

*Lack of access to proper treatment, medication and long-term care. There continues to be stigma associated with mental illness. Historically, insurance coverage has been very poor for people suffering with mental health issues. – Community/Business Leader*

*There is a lack of outpatient community health centers in the area. They are booked for weeks out. Some patients are dropped after missed appointments. I see where that would be a problem from a business standpoint. – Public Health Representative*

*Knowing where to go for help or fear of obtaining help. – Community/Business Leader*

*Access may be challenging, especially our large community mental health center that is often seen as impersonal and wait time too long. Copay is often difficult for families to meet. Addictions treatment needs are reported as difficult to meet. – Community/Business Leader*

*The lack of resources for any type of mental health help. – Other Health Provider*

*Knowing where to find help. – Community/Business Leader*

*Care, housing, employment, treatment. Challenge for law enforcement and social services with few treatment options. – Community/Business Leader*

*Where do people go when they know of someone who needs someone to look after a person and know they are in safe hands. – Community/Business Leader*

*Access even for those with excellent health insurance is extremely limited in terms of providers. For those with no health insurance, it is almost nonexistent. – Community/Business Leader*

*Coping with traumatic events and working through problems. – Community/Business Leader*

*We have a 17-bed facility for patients. However, we have no facility for long term care based upon mental health and substance abuse. Our own case managers have difficulty placing all of the mental health patients. – Other Health Provider*

*Need for inpatient treatment. Housing continues to be an issue for this population as well. – Community/Business Leader*

*There are not resources for families in a crisis. They have to go out of town to seek assistance. – Community/Business Leader*

*Our community does not have enough inpatient and outpatient treatment options to serve the current needs. We are just beginning to see increased services with the opiate addiction focus but it is broader than that and has been for some time. – Other Health Provider*

*Lack of resources, or paths for stakeholders to receive resources/services. – Community/Business Leader*

*Connecting with long term, problem resolving care. Barriers include health insurance, family support structure and transportation. Public safety calls to handle mental health issues have skyrocketed. – Community/Business Leader*

*We don't have the capacity to serve this population either. We only have two organizations that deal specifically with mental health and they are having trouble finding the number of staff that they need. Both have waiting lists. – Social Services Provider*

*Lack of resources. – Public Health Representative*

*Physicians with openings to accept new patients. Acceptance of mental health issues. Community support. – Public Health Representative*

*They seem to fall out of the system and there is little way to find them and facilitate/direct/encourage treatment. – Community/Business Leader*

*Timely access to qualified outpatient services. – Physician*

*Access to care and stigma are both large challenges. We also have very few child/adolescent therapists in our community. – Public Health Representative*

*Not enough long term inpatient treatment space. – Other Health Provider*

*Limited access to quality professional care that fits their individual needs, especially if an individual has a dual diagnosis. Limited number of professionals with the ability to manage medications of individual need. – Social Services Provider*

*Only one inpatient facility in Columbus. – Other Health Provider*

*Lack of resources. Centerstone is not forthcoming with information regarding the indigent population they are paid for through the county. No inpatient rehab. Centerstone's phone tree is confusing for people with college degrees and not in crisis. – Other Health Provider*

*I think the biggest challenge is that there are not enough resources for those with mental health issues or a lack of money to help pay for the resources. I also feel that some community members don't admit they have an issue so it goes untreated. – Public Health Representative*

*Insurance coverage as a determiner of care, spotty customer service/programming at the community mental health center. Lack of programming, underfunding of the CMHC and other counseling services which provide mental health care. – Other Health Provider*

*This is a legal issue as much as anything. – Community/Business Leader*

*Local mental health facility is reactive, not proactive. Also, it is too bureaucratic and inefficient. – Community/Business Leader*

*Access, community resources, housing, medication access, support systems. – Other Health Provider*

*Access to treatment. Stigma associated with admitting an issue and seeking treatment. – Community/Business Leader*

*Access, quality and supervision of care for those with mental health are ongoing concerns in this community. – Social Services Provider*

### **Lack of Providers**

*My perception is some of the community's strongest therapists are retiring in greater numbers than we are replacing them. Meanwhile, demand for those services increases. – Community/Business Leader*

*Lack of psychiatrists in the area and lack of other social support services for people with mental health issues. – Physician*

*Not enough therapists for youth or adult population. There is no local youth inpatient treatment area which is much needed. – Other Health Provider*

*Not enough mental health professionals to fill the need. Not enough inpatient facilities. Mentally ill incarcerated instead of treated for their disorders. Lack of follow up for patients to stay on their medication and treatment. – Other Health Provider*

*Very few providers. A number of specialists are filling limited available licensure seats but are not actively practicing. – Community/Business Leader*

*Shortage of mental health providers. – Physician*

*Finding mental health professionals is much more difficult than other areas that I've lived in in Indiana. The local community mental health center, Centerstone, is underfunded. This creates long waiting lists for mediocre service. – Community/Business Leader*

*Not enough mental health practitioners and not enough outpatient long term services for that population. Many patients cannot afford care and services might have to be paid out of pocket. – Other Health Provider*

*There are very few psychiatrists and no pediatric psychiatrists. There are very few psychologists and counselors to see children or teens. Many people have little or no insurance coverage for mental health services. – Physician*

*Lack of mental health professionals available to treat patients. – Other Health Provider*

*Clinic/doctor shortage to accurately handle the mental health issues and identify them accurately. – Public Health Representative*

*Not having enough providers. Not having knowledgeable people in the schools to recognize problems and refer students and families to the appropriate resources. – Other Health Provider*

*There aren't enough providers delivering mental health programming. – Public Health Representative*

### **Denial/Stigma**

*Acceptance. Employment. Feeling of worth. – Community/Business Leader*

*People accepting and openly discussing mental health conditions. General access to care. Access to care for people with limited means. – Community/Business Leader*

*The biggest challenges for people who suffer from mental health issues is the negative stigma that is associated with it. – Public Health Representative*

*Negative stigma associated with mental health is a barrier. In addition, care is determined based on a person's ability to pay instead of care that's needed. Lastly, dual diagnosis with mental health and substance abuse is not conducive for patient. – Community/Business Leader*

*They don't know they are dealing with mental health issues. Typically this term is applied in general to crazy people and they don't want to be tagged as one if visiting a mental health specialist. Depression is widely spread among students. – Public Health Representative*

*Society has not addressed the mental issues adequately. Many do not acknowledge that mental issues exist, or even understand them. – Other Health Provider*

*Stigma, access to quality psychiatric care. – Public Health Representative*

*The stigma associated with mental health prevents individuals from seeking help. Lack of resources and visibility. – Community/Business Leader*

*There is a stigma against people suffering from mental health problems. The mental health unit at Columbus Regional is seriously lacking in quality care. The only way a person can get immediate help for mental health issues is if they are suicidal. – Other Health Provider*

*The biggest challenge with mental health is the stigma associated with mental health. And equally challenging are the resources available to get help. – Public Health Representative*

*Mental health services, patient compliance with medication, insurance coverage for mental health issues. – Public Health Representative*

*Access to programs, services, supports. Stigma. Isolation. – Other Health Provider*

*Access to providers in an outpatient setting. – Public Health Representative*

*Access, integrated care with other illness needs. Concurrent addictions care, integrated vocational development. – Physician*

### **Affordable Care/Services**

*Affordable counseling services, for all ages. Youth, adult and seniors. – Social Services Provider*

*Resources for mental health counseling for lower socioeconomic population. No detox inpatient unit in community. – Other Health Provider*

*Cost to the community. Options for care limited. – Community/Business Leader*

*Lack of sufficient amount of affordable Mental health services and lack of insurance coverage.*

*Comorbidities, physical and substance abuse. Stigma. Medication and behavioral compliance. – Other Health Provider*

*Not enough access that is affordable. – Community/Business Leader*

### **Diagnosis/Treatment**

*Diagnosis and access to inpatient care are a continuous issue. Also the stigma around mental health continues but is being addressed slowly. – Other Health Provider*

*The biggest challenge is that the general public does not understand mental health issues. And that it has been hidden in the closet for so many years, that most do not feel comfortable speaking about it or confiding in others about their condition. – Community/Business Leader*

*Recognizing need for and seeking care. – Community/Business Leader*

*Lack of diagnosis. Once diagnosed, lack of access to care. – Community/Business Leader*

*Although counselors do an amazing job, we rarely see people cured from their mental health problems. Many are treated with medication, but the underlying illness still exists. So many of our students are on medication or seeing a counselor or both. – Community/Business Leader*

*No ongoing plan once mental healthcare people are identified or reach out for help. We need a process from the beginning to the end and extended care after treatment, make navigation through the system simple. Families are stressed. – Community/Business Leader*

*When being assessed by a stress team results in a mental health patient with dire needs being released from Emergency Room with no action. The results are not good. – Public Health Representative*

### **Incidence/Prevalence**

*The mental health community is growing at a rapid rate. And unfortunately, they do not have a lot of help ensuring that they have their insurance active, their medications are in order and they are being taken care of. – Other Health Provider*

*Mental health issues are prevalent across the community and are no impartial to age, race or socio-demographic. And, when someone identifies they have challenges, there are not enough providers with availability to care for them. – Other Health Provider*

*It is becoming more prevalent and it is more common in school aged students than ever before. – Community/Business Leader*

### **Substance Abuse/Use**

*Easy access to illicit drugs. Increasing number of young people with mental health issues as a result of unstable homes and or parents. – Community/Business Leader*

*Substance abuse and addiction medicine as well as inpatient behavioral health are limited. – Other Health Provider*

**Suicide**

*Suicidal ideation in young adults. – Community/Business Leader*

*Suicide. Indiana ranks higher than the national average and communities should continue to provide and increase resources. Especially to teens and at-risk groups. – Other Health Provider*

*Suicide rates are high in our community. Depression is prevalent and there is still a stigma related to mental health issues that needs to be overcome. – Public Health Representative*

**Access to Care for Youth**

*Counseling for youth. There is a shortage of psychiatrists in our area with a specialty for treating juveniles. – Community/Business Leader*

*Mental health and emotional setbacks by children because their parents are working second shift and weekends. Therefore, the children don't spend enough time with their parents. – Community/Business Leader*

# Death, Disease, & Chronic Conditions

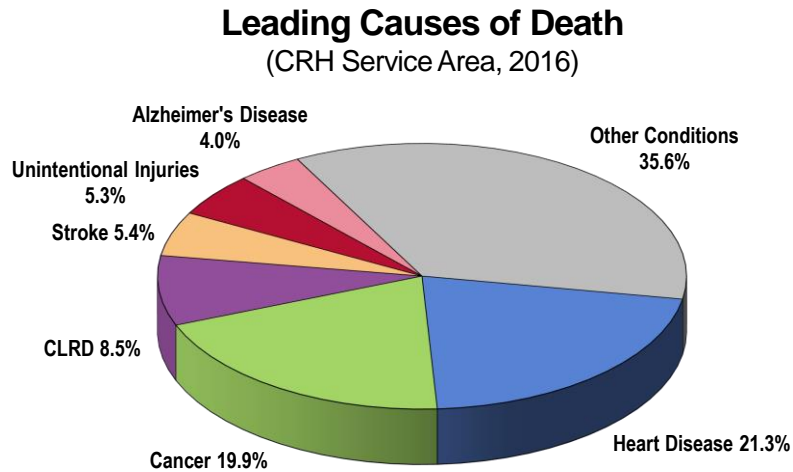


**Professional Research Consultants, Inc.**

## Leading Causes of Death

### Distribution of Deaths by Cause

Together, cardiovascular disease (heart disease and stroke) and cancers accounted for over four in 10 deaths in the Columbus Regional Health Service Area in 2016.



- Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted April 2018.
- Notes: • Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).  
• CLRD is chronic lower respiratory disease.

### Age-Adjusted Death Rates for Selected Causes

In order to compare mortality in the region with other localities (in this case, Indiana 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* targets.

The following chart outlines 2014-2016 annual average age-adjusted death rates per 100,000 population for selected causes of death in the Columbus Regional Health Service Area.

Each of these is discussed in greater detail in subsequent sections of this report.

For infant mortality data, see [Birth Outcomes & Risks](#) in the [Births](#) section of this report.

## Age-Adjusted Death Rates for Selected Causes (2014-2016 Deaths per 100,000 Population)

	CRH Service Area	Indiana	US	HP2020
Diseases of the Heart	188.6	181.9	167.0	156.9*
Malignant Neoplasms (Cancers)	181.8	176.2	158.5	161.4
Chronic Lower Respiratory Disease (CLRD)	67.8	54.7	40.9	n/a
Unintentional Injuries	53.0	47.7	43.7	36.4
Cerebrovascular Disease (Stroke)	48.1	40.1	37.1	34.8
Alzheimer's Disease	31.6	32.5	28.4	n/a
Diabetes	24.4	25.8	21.1	20.5*
Kidney Disease	23.2	18.7	13.2	n/a
Fall-Related Deaths (65+)	22.8	36.4	55.2	47.0
Unintentional Drug-Related Deaths	18.3	17.4	14.3	11.3
Motor Vehicle Deaths	18.0	11.7	11.0	12.4
Intentional Self-Harm (Suicide)	17.7	14.7	13.0	10.2
Firearm-Related	11.8	13.3	11.0	9.3
Cirrhosis/Liver Disease	11.4	11.0	10.6	8.2
Pneumonia/Influenza	10.8	13.6	14.6	n/a
Homicide	2.5	5.7	5.6	5.5

Sources: 

- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted April 2018.

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

Note: 

- 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.



## 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](http://www.healthypeople.gov))

## Age-Adjusted Heart Disease & Stroke Deaths

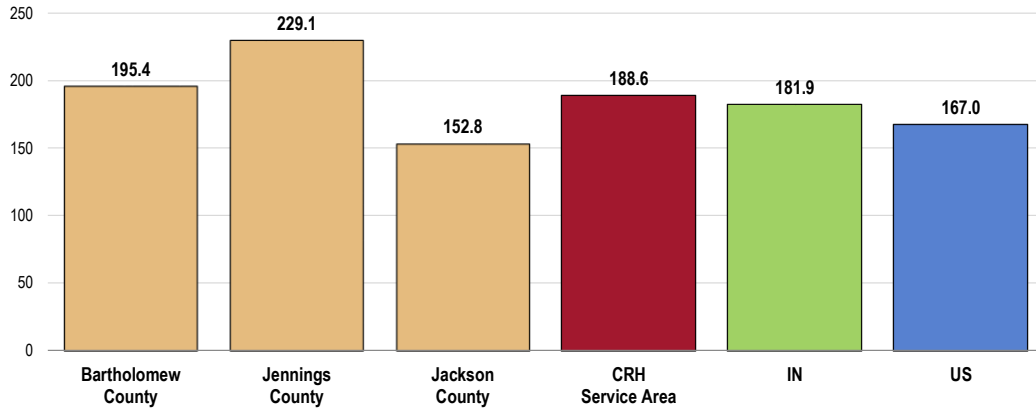
### Heart Disease Deaths

**Between 2014 and 2016 there was an annual average age-adjusted heart disease mortality rate of 188.6 deaths per 100,000 population in the Columbus Regional Health Service Area.**

- Comparable to the statewide and national rates.
- Fails to satisfy the Healthy People 2020 target of 156.9 or lower (as adjusted to account for all diseases of the heart).
- Favorably low in Jackson County.

The greatest share of cardiovascular deaths is attributed to heart disease.

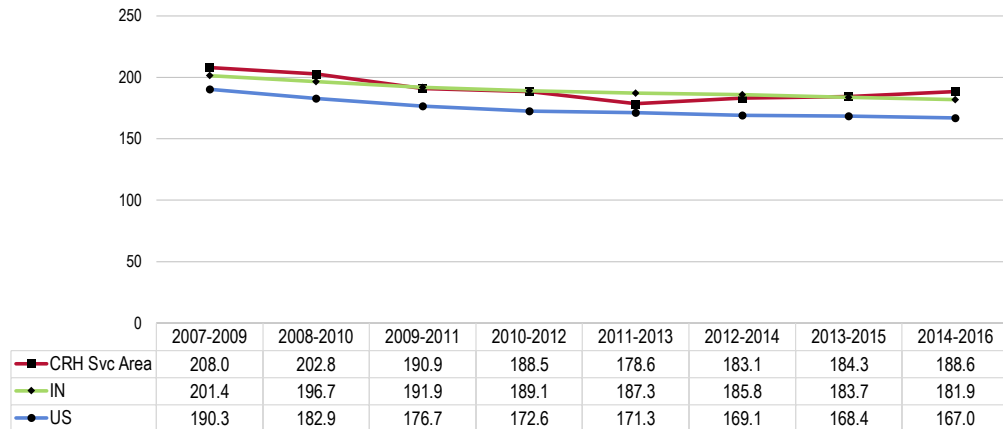
### Heart Disease: Age-Adjusted Mortality (2014-2016 Annual Average Deaths per 100,000 Population) Healthy People 2020 Target = 156.9 or Lower (Adjusted)



- Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted April 2018.
  - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective HDS-2]
- 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.
  - The Healthy People 2020 Heart Disease target is adjusted to account for all diseases of the heart.

- **TREND:** The heart disease mortality rate has decreased in the Columbus Regional Health Service Area, echoing the decreasing trends across Indiana and the US overall.

### Heart Disease: Age-Adjusted Mortality Trends (Annual Average Deaths per 100,000 Population) Healthy People 2020 Target = 156.9 or Lower (Adjusted)



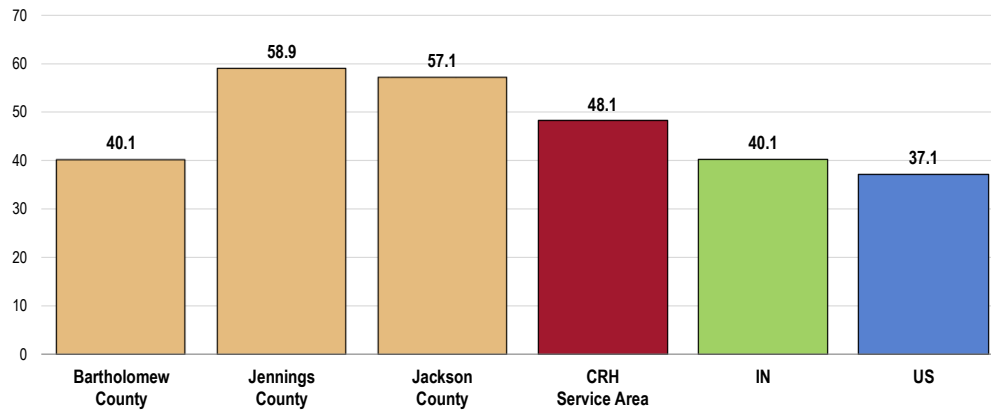
- Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted April 2018.
  - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective HDS-2]
- 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.
  - The Healthy People 2020 Heart Disease target is adjusted to account for all diseases of the heart.

### Stroke Deaths

Between 2014 and 2016, there was an annual average age-adjusted stroke mortality rate of 48.1 deaths per 100,000 population in the Columbus Regional Health Service Area.

- Less favorable than the Indiana and national rates.
- Fails to satisfy the Healthy People 2020 target of 34.8 or lower.
- Favorably low in Bartholomew County.

**Stroke: Age-Adjusted Mortality**  
(2014-2016 Annual Average Deaths per 100,000 Population)  
Healthy People 2020 Target = 34.8 or Lower

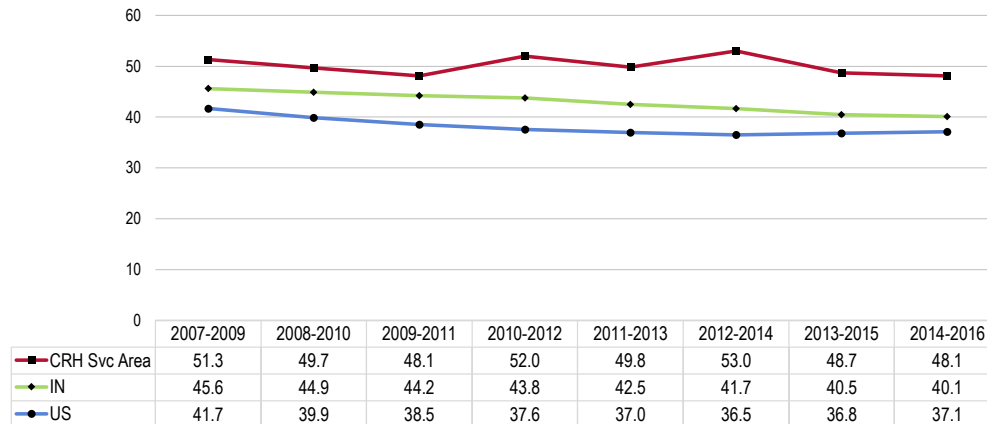


Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted April 2018.  
• US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective HDS-3]

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.

- TREND: The area rate has fluctuated over time, decreasing from baseline reports.

**Stroke: Age-Adjusted Mortality Trends**  
(Annual Average Deaths per 100,000 Population)  
Healthy People 2020 Target = 34.8 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 April 2018.  
• US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective HDS-3]

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.

## 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](http://www.healthypeople.gov))

### High Blood Pressure

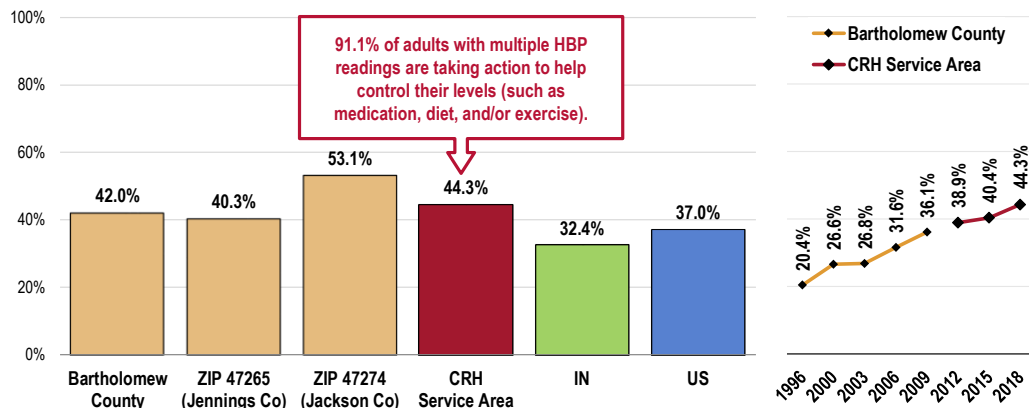
#### Prevalence of High Blood Pressure

**A total of 44.3% of Columbus Regional Health Service Area adults have been told at some point that their blood pressure was high.**

- Worse than the state and national figures.
- Far from satisfying the Healthy People 2020 target (26.9% or lower).
- Highest in ZIP Code 47274.
- TREND: Note the statistically significant increase that occurred over time in Bartholomew County, as well as the more-recent increase over time in the service area as a whole.
- Among adults with multiple high blood pressure readings, 91.1% are taking action to lower their blood pressure (such as medication, change in diet, and/or exercise).

### Prevalence of High Blood Pressure

Healthy People 2020 Target = 26.9% or Lower



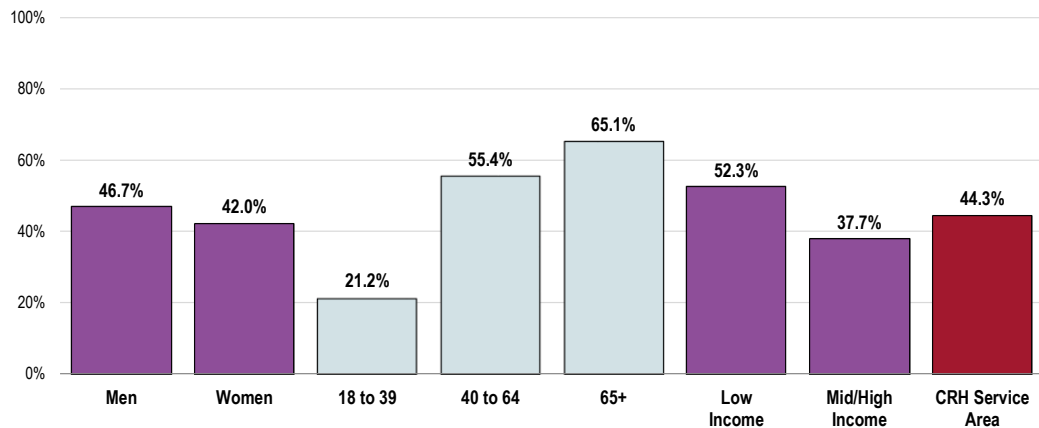
Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 39, 41]  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2015 Indiana data.  
 • 2017 PRC National Health Survey, Professional Research Consultants, Inc.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective HDS-5.1]

Notes: • Asked of all respondents.

High blood pressure is more prevalent among:

- Adults age 40 and older, and especially those age 65+.
- Lower-income residents.

### Prevalence of High Blood Pressure (CRH Service Area, 2018) Healthy People 2020 Target = 26.9% or Lower



- Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 39]
  - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective HDS-5.1]
- 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.

## High Blood Cholesterol

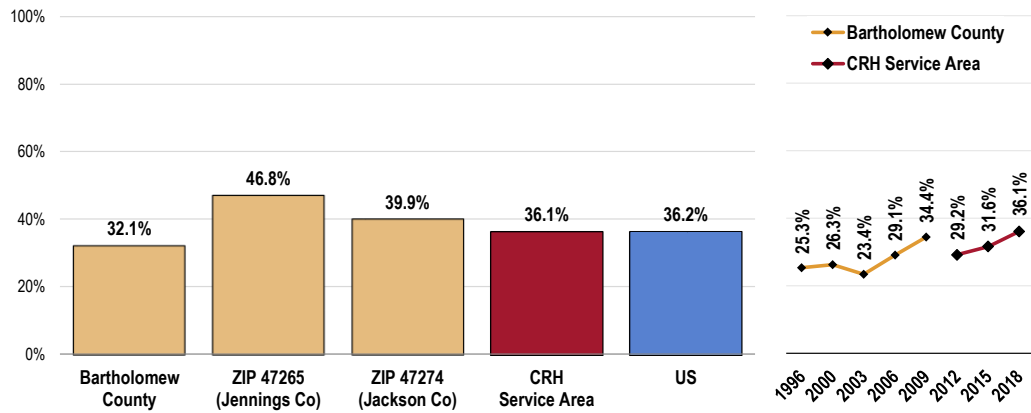
### Prevalence of High Blood Cholesterol

A total of 36.1% of adults have been told by a health professional that their cholesterol level was high.

- Similar to the national prevalence.
- Over twice the Healthy People 2020 target (13.5% or lower).
- Higher outside Bartholomew County.
- TREND: Denotes a statistically significant increase over time.

### Prevalence of High Blood Cholesterol

Healthy People 2020 Target = 13.5% or Lower



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 43]  
 • 2017 PRC National Health Survey, Professional Research Consultants, Inc.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective HDS-7]  
 Notes: • Asked of all respondents.

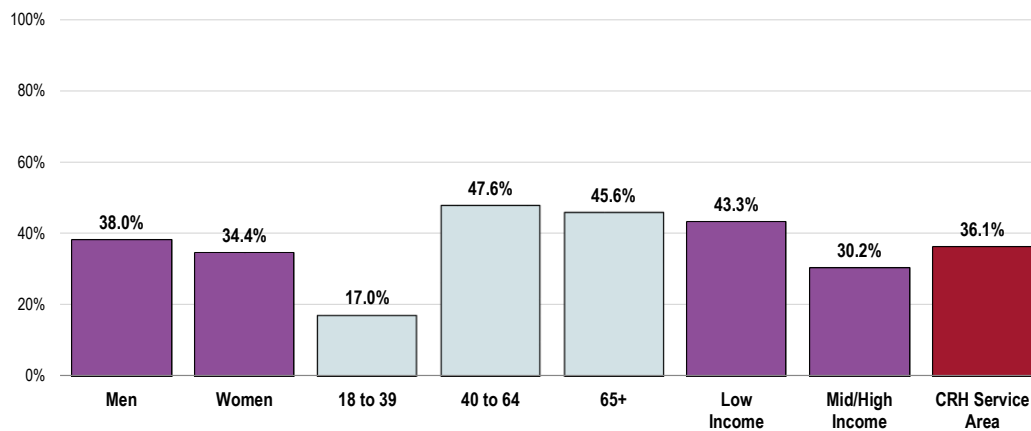
Reports of high blood cholesterol are more often found among:

- Residents age 40 and older.
- Lower-income adults.

### Prevalence of High Blood Cholesterol

(CRH Service Area, 2018)

Healthy People 2020 Target = 13.5% or Lower



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 43]  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective HDS-7]  
 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.

### 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

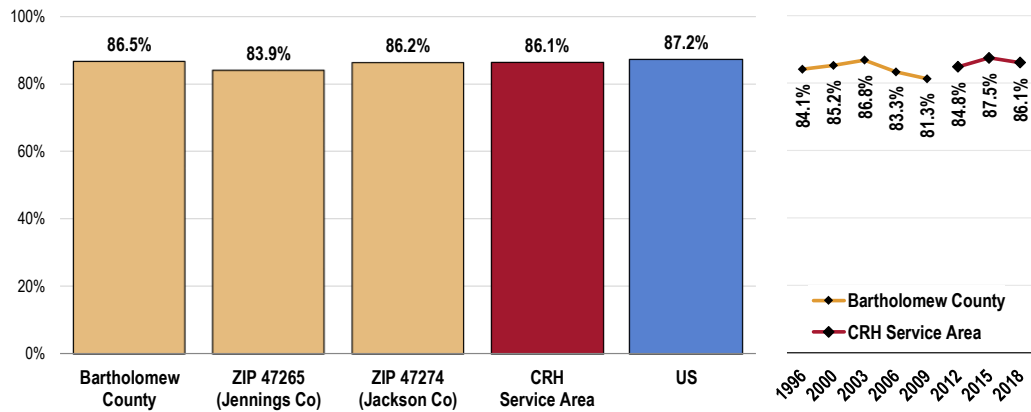
**A total of 86.1% of Columbus Regional Health Service Area adults report one or more cardiovascular risk factors, such as being overweight, smoking cigarettes, being physically inactive, or having high blood pressure or cholesterol.**

- Comparable to national findings.
- Comparable findings by area.
- TREND: Statistically comparable to the 2012 findings.

#### RELATED ISSUE:

See also *Nutrition, Physical Activity, Weight Status, and Tobacco Use* in the **Modifiable Health Risks** section of this report.

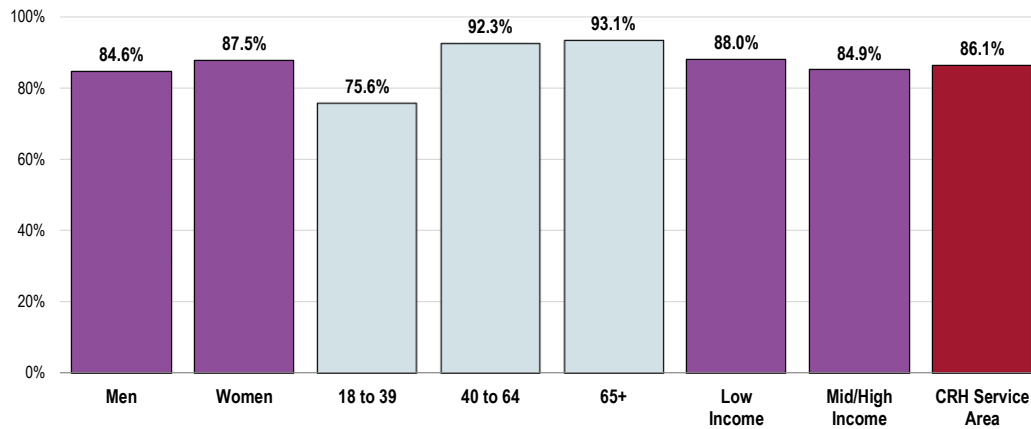
### Present One or More Cardiovascular Risks or Behaviors



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 131]  
 • 2017 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of 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) hypertension; 4) high blood cholesterol; and/or 5) being overweight/obese.

- Note the positive correlation between age and cardiovascular risk factors in the service area.

### Present One or More Cardiovascular Risks or Behaviors (CRH Service Area, 2018)



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 131]  
 Notes: • Asked of 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) hypertension; 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.

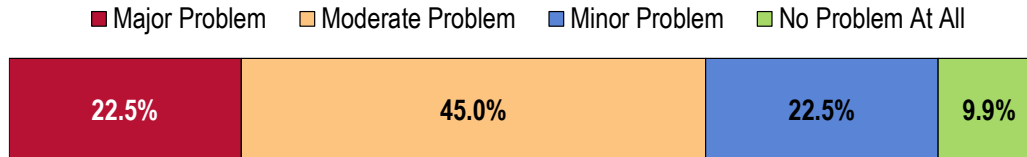


## Key Informant Input: Heart Disease & Stroke

The greatest share of key informants taking part in an online survey characterized *Heart Disease & Stroke* as a “moderate problem” in the community.

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

(Key Informants, 2018)



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

### Top Concerns

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

#### Leading Cause of Death

*These are the most common causes of death in adults and result from both modifiable and non-modifiable factors. – Community/Business Leader*

*Common causes of morbidity and mortality. – Physician*

*It's the leading cause of death in the US. CRH is exceeding its growth targets in cardiac care. – Other Health Provider*

*Leading cause of death nationwide. – Physician*

*One of the leading killers nationally. Why would we be different? – Other Health Provider*

#### Obesity

*Because obesity is prevalent along with moderate levels of tobacco use, heart disease and stroke are also prevalent. – Public Health Representative*

*Obesity is also a cause of these issues, which can be improved by increasing physical activity and more nutritious food. – Public Health Representative*

*There is a large population of obese people and people that smoke. The people that carry around polar pops and fast food is very high. – Other Health Provider*

*Obesity and smoking. – Social Services Provider*

#### Incidence/Prevalence

*Too many people smoke. Poor diets and lack of exercise also contribute. – Community/Business Leader*

*Heart disease and stroke are very prevalent in our community. – Public Health Representative*

*Large proportion of population at risk, etc. – Physician*

#### Aging Population

*Increasing aging population more likely to experience heart disease and stroke. Lack of knowledge on identifying early symptoms. Hesitancy to seek treatment with early symptoms. – Other Health Provider*

*Aging population, obesity rates, lack of exercise by community members. – Community/Business Leader*

**Co-Occurrences**

*There are many contributing factors to heart disease and stroke (such as family history), although exercise and diet can have a positive impact on prevention. Early education programs about healthy lifestyles in schools can have a positive impact. – Community/Business Leader*

*Nationally heart disease and stroke are on the rise. – Community/Business Leader*

**Insufficient Physical Activity**

*Lack of exercise/lack of healthy eating. – Community/Business Leader*

*Lack of physical activity coupled with unhealthy food choices. – Public Health Representative*

**Lack of Providers**

*Our hospital is not stroke-certified and our neurologists are aging out. – Other Health Provider*

*Not enough providers, no comprehensive programs. – Other Health Provider*

**Lifestyles**

*Lifestyle choices; however, genetics plays a big roll. Understanding early detection is getting better. – Community/Business Leader*

*Because of genetic predisposition and poor health choices, this region is highly predisposed to heart conditions and has a high stroke risk. – Other Health Provider*

**Nutrition**

*Poor nutrition and diets, lack of exercise, lack of understanding of how important these things are to our body. And the cost of good, nutritious foods and how to prepare them. – Social Services Provider*

*Our food is very processed and filled with chemicals. You need an advanced degree to be able to understand the labels because labels are misleading. We have walking trails but many housing additions don't have sidewalks. – Community/Business Leader*

**Health Education/Awareness**

*I know we have great heart doctors here in Columbus. I have had direct contact with them. It is making people see that the heart doctors and surgeons here give just as good of care as those in other big towns. We need to market those services. – Community/Business Leader*

**Built Environment**

*Not enough outdoor activities or indoor activities to encourage an active lifestyle. – Other Health Provider*

**Affordable Care/Services**

*Cost of care. – Community/Business Leader*

## 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](http://www.healthypeople.gov))

## Age-Adjusted Cancer Deaths

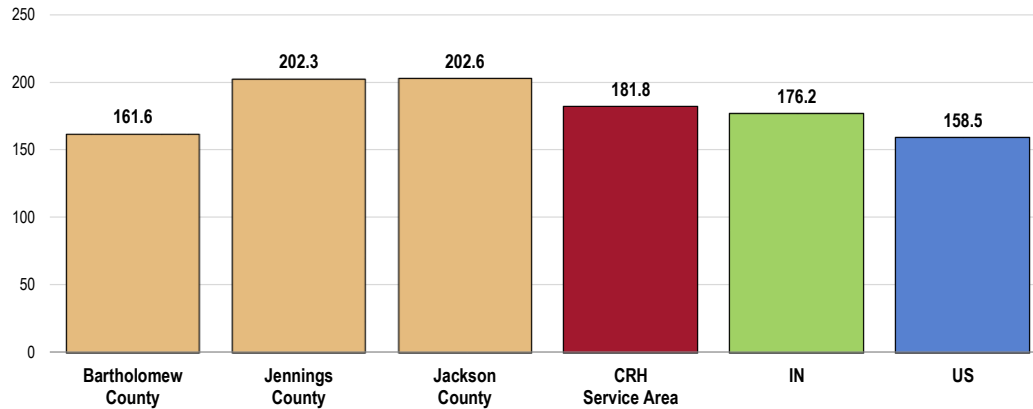
### All Cancer Deaths

**Between 2014 and 2016, there was an annual average age-adjusted cancer mortality rate of 181.8 deaths per 100,000 population in the Columbus Regional Health Service Area.**

- Comparable to the state and US rates.
- Comparable to the Healthy People 2020 target of 161.4 or lower.
- Favorably lower in Bartholomew County.

### Cancer: Age-Adjusted Mortality (2014-2016 Annual Average Deaths per 100,000 Population)

Healthy People 2020 Target = 161.4 or Lower

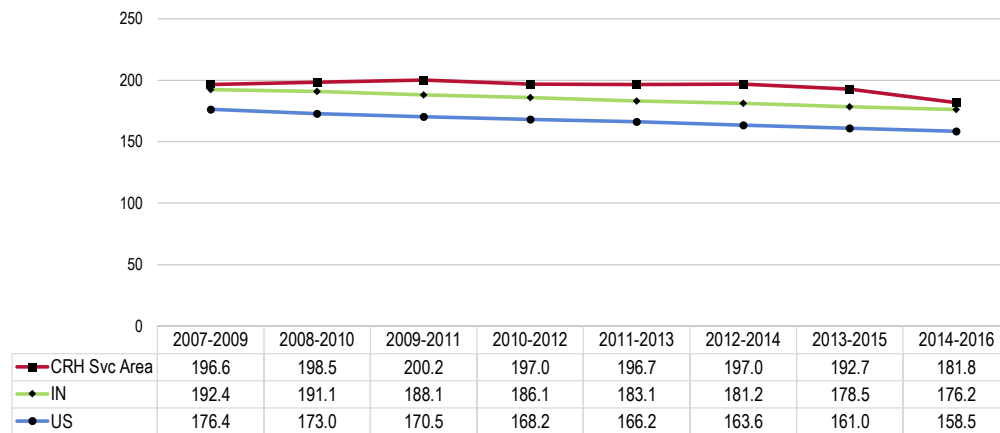


- Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted April 2018.
  - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective C-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.

- **TREND:** The decrease in cancer mortality over the past decade in the Columbus Regional Health Service Area is not statistically significant.

### Cancer: Age-Adjusted Mortality Trends (Annual Average Deaths per 100,000 Population)

Healthy People 2020 Target = 161.4 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 April 2018.
  - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective C-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.

### Cancer Deaths by Site

**Lung cancer is by far the leading cause of cancer deaths in the Columbus Regional Health Service Area.**

Other leading sites include breast cancer among women, prostate cancer, and colorectal cancer (both sexes).

As evident in the following chart (referencing 2014-2016 annual average age-adjusted death rates):

- The service area's lung and prostate cancer death rates are **worse** than US rates (female breast and colorectal cancer rates are similar).
- With the exception of colorectal cancer, the service area's cancer death rates are similar to the related state rates (the area's colorectal cancer rate is lower).
- Note that while the CRH Service Area lung cancer death rate detailed below fails to satisfy the related Healthy People 2020 target, the remaining rates are comparable to the 2020 goals.

### Age-Adjusted Cancer Death Rates by Site (2014-2016 Annual Average Deaths per 100,000 Population)

	CRH Service Area	Indiana	US	HP2020
<b>ALL CANCERS</b>	<b>181.8</b>	<b>176.2</b>	<b>158.5</b>	<b>161.4</b>
<b>Lung Cancer</b>	<b>57.3</b>	<b>50.8</b>	<b>40.3</b>	<b>45.5</b>
<b>Female Breast Cancer</b>	<b>22.9</b>	<b>20.7</b>	<b>20.3</b>	<b>20.7</b>
<b>Prostate Cancer</b>	<b>22.6</b>	<b>19.3</b>	<b>19.0</b>	<b>21.8</b>
<b>Colorectal Cancer</b>	<b>12.9</b>	<b>15.5</b>	<b>14.1</b>	<b>14.5</b>

Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted April 2018.  
• US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov>

## Cancer Incidence

Incidence rates reflect the number of newly diagnosed cases in a given population in a given year, regardless of outcome. These rates are also age-adjusted.

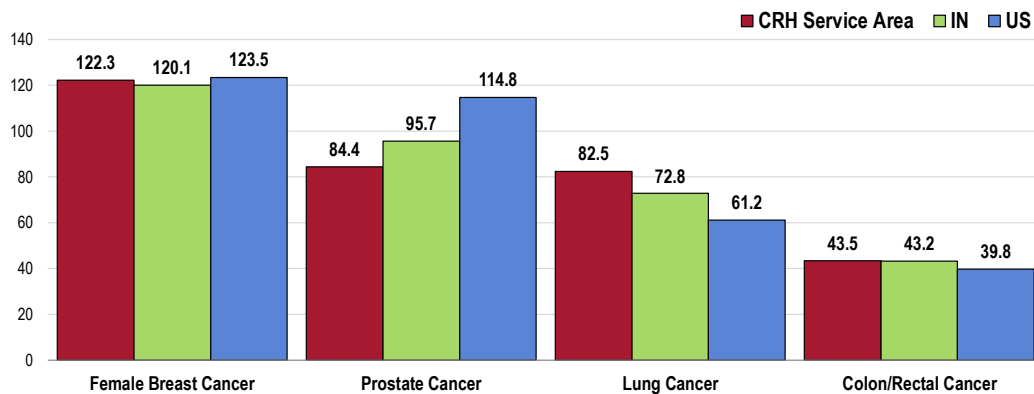
Incidence rate" or "case rate" is the number of new cases of a disease occurring during a given period of time.

It is usually expressed as cases per 100,000 population per year.

**The 2010-2014 service area annual average age-adjusted lung cancer incidence rate is worse than the US rate.**

- On the other hand, the CRH Service Area prostate cancer incidence rate is more favorable than the US rate.
- Other rates are similar to those reported statewide and nationally.

**Cancer Incidence Rates by Site**  
(Annual Average Age-Adjusted Incidence per 100,000 Population, 2010-2014)

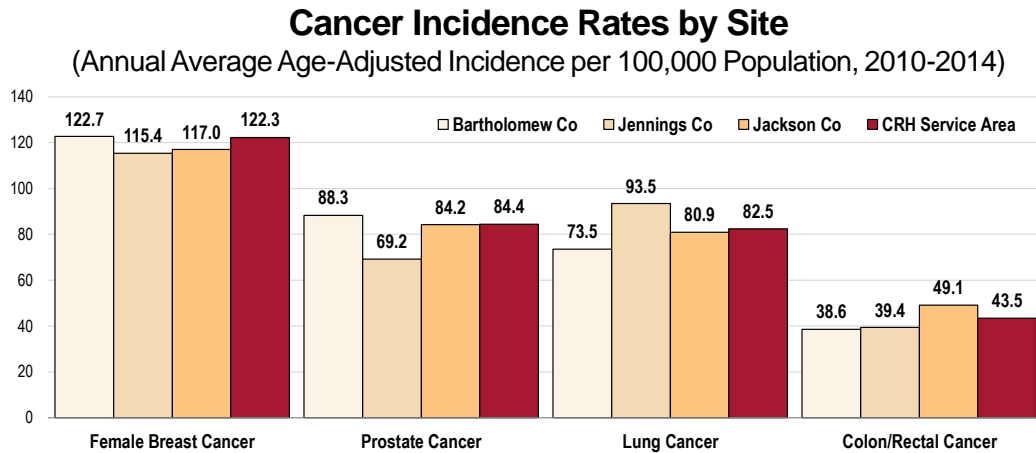


Sources: • State Cancer Profiles.

• Retrieved April 2018 from Community Commons at <http://www.chna.org>.

Notes: • 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 cancers separately to better target interventions.

- Viewed by county, Jackson County reports the statistically highest colon/rectal cancer rate in the area, while Jennings County reports the lowest prostate cancer incidence rate (other rates are comparable within the service area).



Sources: 

- State Cancer Profiles.
- Retrieved April 2018 from Community Commons at <http://www.chna.org>.

Notes: 

- 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 cancers separately to better target interventions.

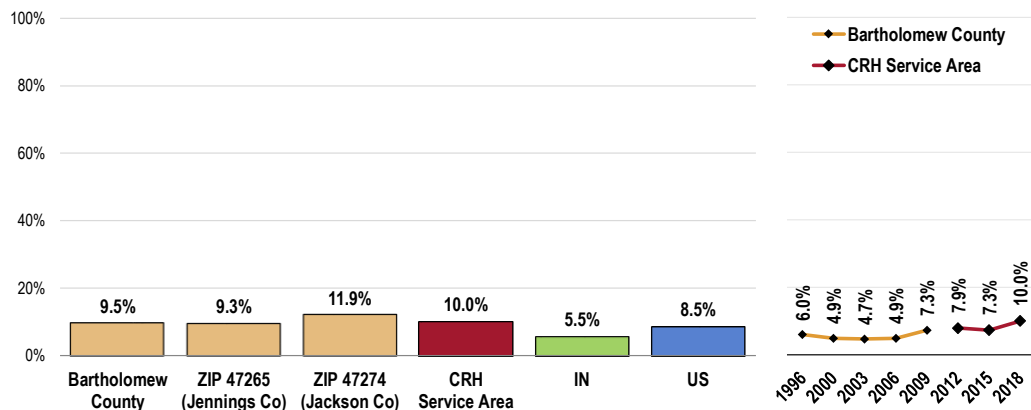
## Prevalence of Cancer

### Skin Cancer

**A total of 10.0% of surveyed Columbus Regional Health Service Area adults report having been diagnosed with skin cancer.**

- Worse than the state percentage.
- Similar to the US percentage.
- Similar findings by area.
- TREND: The prevalence of skin cancer has not changed significantly over time.

## Prevalence of Skin Cancer



Sources: 

- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 28]
- 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 Indiana data.
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: 

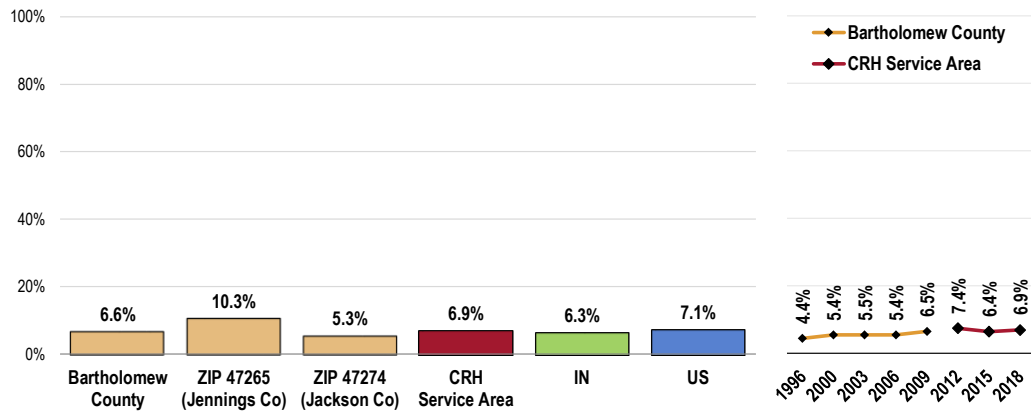
- Asked of all respondents.

### Other Cancer

A total of 6.9% of survey respondents have been diagnosed with some type of (non-skin) cancer.

- Similar to the statewide and national percentages.
- Statistically similar by area.
- TREND: The prevalence of cancer has remained unchanged over time.

### Prevalence of Cancer (Other Than Skin Cancer)



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 27]  
 • 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 Indiana data.  
 • 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: • Asked of all respondents.

RELATED ISSUE:  
 See also *Nutrition, Physical Activity, Weight Status, and Tobacco Use* in the **Modifiable Health Risks** section of this report.

### Cancer Risk

#### 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 Screening

### About Screening for Breast Cancer

The US Preventive Services Task Force (USPSTF) recommends screening mammography, with or without clinical breast examination (CBE), every 1-2 years for women age 40 and older.

Rationale: The USPSTF found fair evidence that mammography screening every 12-33 months significantly reduces mortality from breast cancer. Evidence is strongest for women age 50-69, the age group generally included in screening trials. For women age 40-49, the evidence that screening mammography reduces mortality from breast cancer is weaker, and the absolute benefit of mammography is smaller, than it is for older women. Most, but not all, studies indicate a mortality benefit for women undergoing mammography at ages 40-49, but the delay in observed benefit in women younger than 50 makes it difficult to determine the incremental benefit of beginning screening at age 40 rather than at age 50.

The absolute benefit is smaller because the incidence of breast cancer is lower among women in their 40s than it is among older women. The USPSTF concluded that the evidence is also generalizable to women age 70 and older (who face a higher absolute risk for breast cancer) if their life expectancy is not compromised by comorbid disease. The absolute probability of benefits of regular mammography increase along a continuum with age, whereas the likelihood of harms from screening (false-positive results and unnecessary anxiety, biopsies, and cost) diminish from ages 40-70. The balance of benefits and potential harms, therefore, grows more favorable as women age. The precise age at which the potential benefits of mammography justify the possible harms is a subjective choice. The USPSTF did not find sufficient evidence to specify the optimal screening interval for women age 40-49.

- 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.

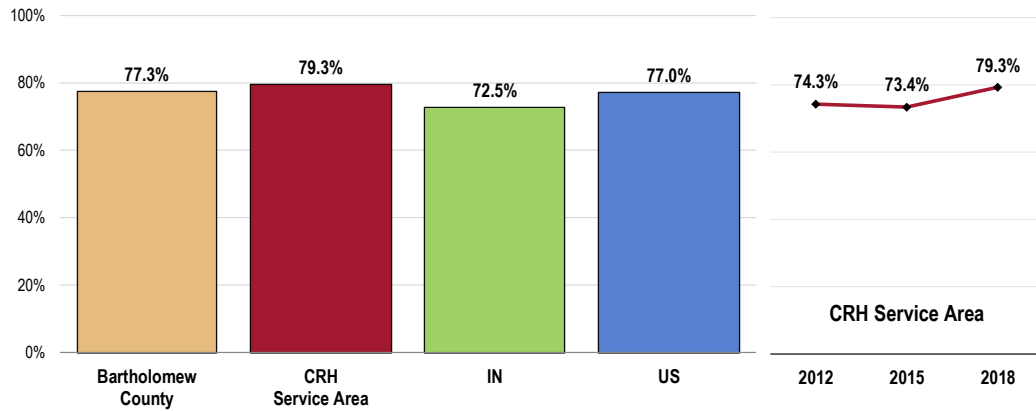
### *Mammography*

**Among women age 50-74, 79.3% have had a mammogram within the past 2 years.**

- Higher than statewide findings.
- Comparable to national findings.
- Comparable to the Healthy People 2020 target (81.1% or higher).
- The prevalence is 77.3% in Bartholomew County (*sample sizes did not allow for breakouts by ZIP Code for this indicator*).
- TREND: Statistically unchanged from 2012 survey findings.

## Have Had a Mammogram in the Past Two Years (Among Women Age 50-74)

Healthy People 2020 Target = 81.1% or Higher



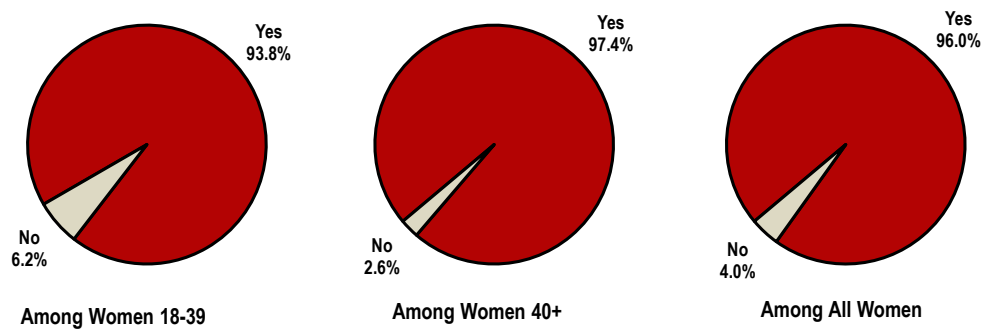
Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 133]  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC). 2016 Indiana data.  
 • 2017 PRC National Health Survey, Professional Research Consultants, Inc.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective C-17]  
 Notes: • Reflects female respondents 50-74.

### Breast Self-Exams

Among service area women, most (96.0%) say they know how to perform a breast self-exam.

- The proportion is higher in the 40+ age group than among younger women.

## Know How to Perform a Breast Self-Exam (CRH Service Area Women 18+, 2018)

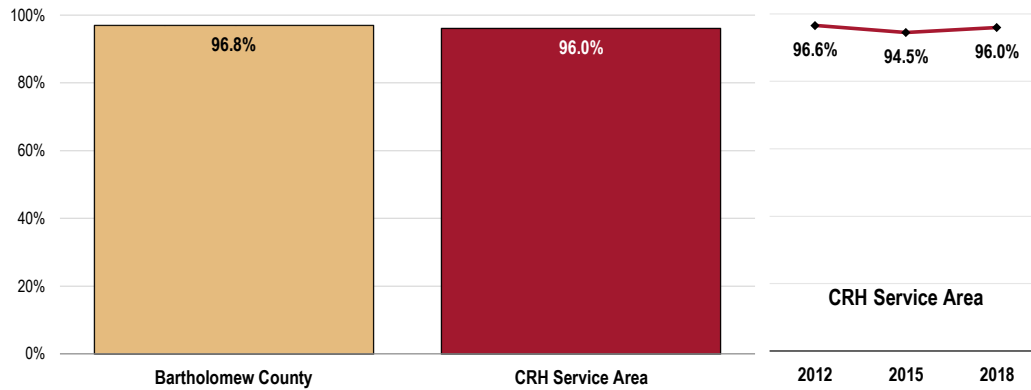


Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 330]  
 Notes: • Asked of all female respondents.

In Bartholomew County, the proportion among women is similar to the overall service area.

- TREND: The service area proportion is statistically unchanged since 2012.

### Know How to Perform a Breast Self-Exam (CRH Service Area Women 18+)



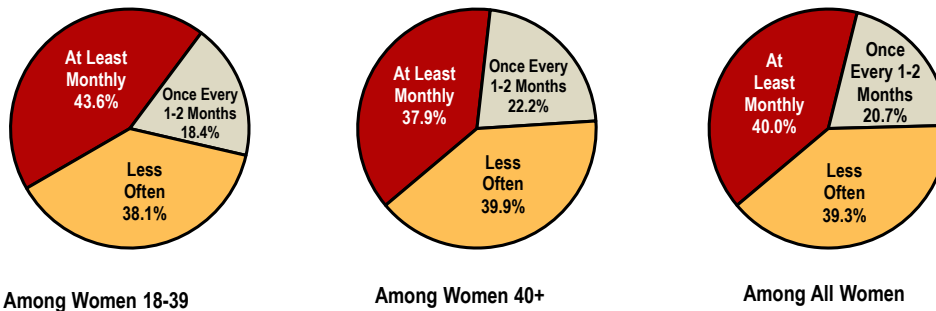
Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 330]  
Notes: • Asked of all female respondents.

When asked about the frequency with which they perform such breast self-exams, 4 in 10 women (40.0%) do so monthly, while the remainder do so less often.

- Younger women are more likely to perform these exams at least monthly.

### Frequency of Breast Self-Exams

(CRH Service Area Women Who Know How to Perform Such Exams; 2018)

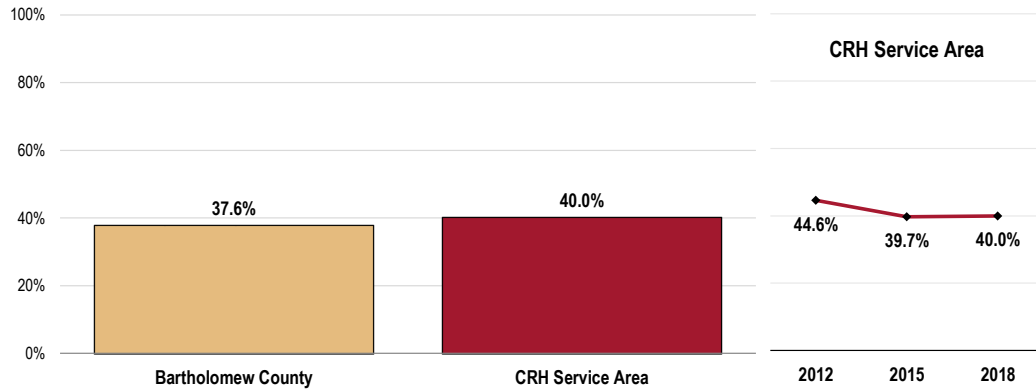


Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 331]  
Notes: • Asked of all female respondents.

In Bartholomew County, 37.6% of women perform monthly breast self-exams.

- TREND: The prevalence of monthly breast self-exams has decreased from 2012 service area findings (similar to the 2015 prevalence).

**Perform a Breast Self-Exam at Least Monthly**  
(CRH Service Area Women Who Know How to Perform Such Exams)



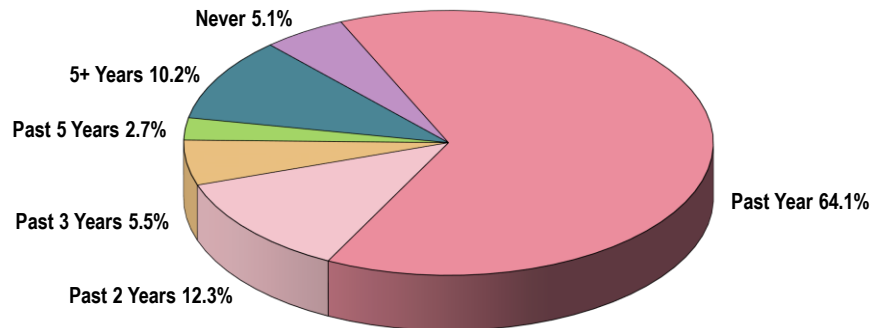
Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 331]  
Notes: • Asked of all female respondents who know how to perform breast self-exams.

*Clinical Breast Exams*

With regard to clinical breast exams, nearly 2 in 3 service area women (64.1%) had an exam in the past year.

- In contrast, note that 10.2% of service area women have not had a clinical breast exam in 5+ years, and 5.1% have never had such an exam.

**Most Recent Clinical Breast Exam**  
(CRH Service Area Women 18+, 2018)



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 329]  
Notes: • Asked of all female respondents.

## Cervical Cancer Screenings

### About Screening for Cervical Cancer

The US Preventive Services Task Force (USPSTF) strongly recommends screening for cervical cancer in women who have been sexually active and have a cervix.

Rationale: The USPSTF found good evidence from multiple observational studies that screening with cervical cytology (Pap smears) reduces incidence of and mortality from cervical cancer. Direct evidence to determine the optimal starting and stopping age and interval for screening is limited. Indirect evidence suggests most of the benefit can be obtained by beginning screening within 3 years of onset of sexual activity or age 21 (whichever comes first) and screening at least every 3 years. The USPSTF concludes that the benefits of screening substantially outweigh potential harms.

The USPSTF recommends against routinely screening women older than age 65 for cervical cancer if they have had adequate recent screening with normal Pap smears and are not otherwise at high risk for cervical cancer.

Rationale: The USPSTF found limited evidence to determine the benefits of continued screening in women older than 65. The yield of screening is low in previously screened women older than 65 due to the declining incidence of high-grade cervical lesions after middle age. There is fair evidence that screening women older than 65 is associated with an increased risk for potential harms, including false-positive results and invasive procedures. The USPSTF concludes that the potential harms of screening are likely to exceed benefits among older women who have had normal results previously and who are not otherwise at high risk for cervical cancer.

The USPSTF recommends against routine Pap smear screening in women who have had a total hysterectomy for benign disease.

Rationale: The USPSTF found fair evidence that the yield of cytologic screening is very low in women after hysterectomy and poor evidence that screening to detect vaginal cancer improves health outcomes. The USPSTF concludes that potential harms of continued screening after hysterectomy are likely to exceed benefits.

- 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.

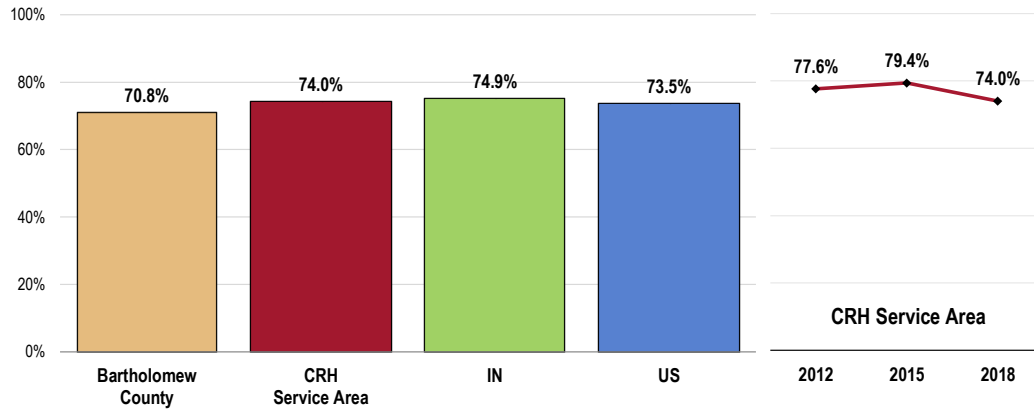
### *Pap Smear Testing*

**Among Columbus Regional Health Service Area women age 21 to 65, 74.0% have had a Pap smear within the past 3 years.**

- Comparable to Indiana and US findings.
- Fails to satisfy the Healthy People 2020 target (93% or higher).
- The Bartholomew County prevalence is 70.8%.
- TREND: Statistically unchanged since 2012.

## Have Had a Pap Smear in the Past Three Years (Among Women Age 21-65)

Healthy People 2020 Target = 93.0% or Higher



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 134]  
 • 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 Indiana data.  
 • 2017 PRC National Health Survey, Professional Research Consultants, Inc.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective C-15]

Notes: • Reflects female respondents age 21 to 65.

## Colorectal Cancer Screenings

### About Screening for Colorectal Cancer

The USPSTF recommends screening for colorectal cancer using fecal occult blood testing, sigmoidoscopy, or colonoscopy in adults, beginning at age 50 years and continuing until age 75 years.

The evidence is convincing that screening for colorectal cancer with fecal occult blood testing, sigmoidoscopy, or colonoscopy detects early-stage cancer and adenomatous polyps. There is convincing evidence that screening with any of the three recommended tests (fecal occult blood testing, sigmoidoscopy, colonoscopy) reduces colorectal cancer mortality in adults age 50 to 75 years. Follow-up of positive screening test results requires colonoscopy regardless of the screening test used.

- 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.

### Colorectal Cancer Screening

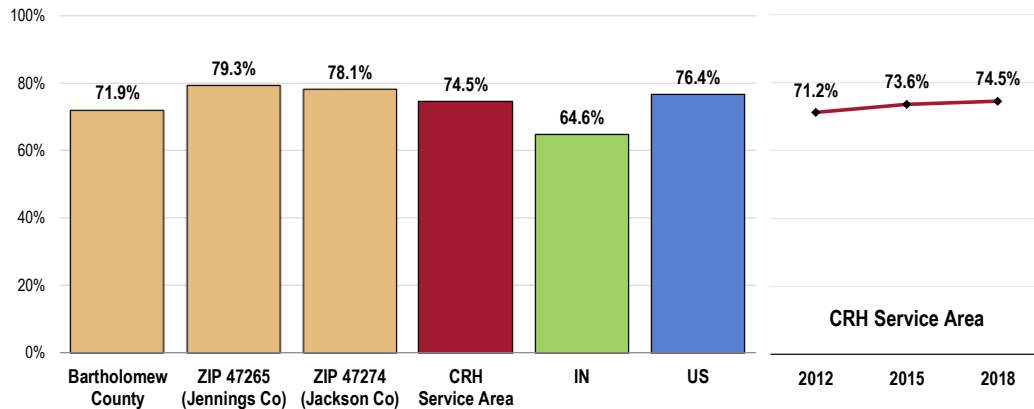
Among adults age 50-75, 74.5% have had an appropriate colorectal cancer screening.

- Better than the Indiana prevalence.
- Similar to national findings.
- Similar to the Healthy People 2020 target (70.5% or higher).
- Similar findings by area.
- TREND: Statistically unchanged over time.

"Appropriate colorectal cancer screening" includes a fecal occult blood test within the past year and/or a lower endoscopy (sigmoidoscopy or colonoscopy) within the past 10 years.

## Have Had a Colorectal Cancer Screening (Among Adults Age 50-75)

Healthy People 2020 Target = 70.5% or Higher



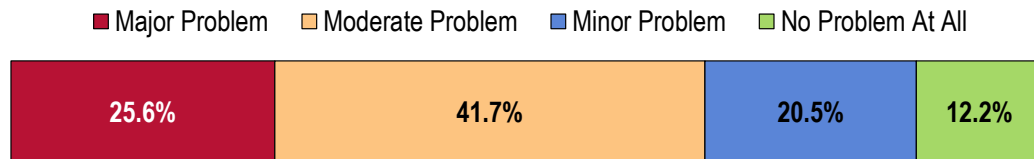
Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 137]  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2016 Indiana data.  
 • 2017 PRC National Health Survey, Professional Research Consultants, Inc.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective C-16]

Notes: • Asked of all respondents age 50 through 75.  
 • In this case, the term "colorectal screening" refers to adults age 50-75 receiving a FOBT (fecal occult blood test) in the past year and/or a lower endoscopy (sigmoidoscopy/colonoscopy) in the past 10 years.

### Key Informant Input: Cancer

The greatest share of key informants taking part in an online survey characterized **Cancer** as a "moderate problem" in the community.

### Perceptions of Cancer as a Problem in the Community (Key Informants, 2018)



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

### Top Concerns

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

#### Incidence/Prevalence

*There seems to be a higher-than-normal incidence of brain cancers. I've known several people from the Tipton Lakes area, and people who frequently swim in that area, that have later been diagnosed with glioblastoma or ependymoma, and that seems unusual. – Community/Business Leader*

*The incidence of smoking is still too high. Unhealthy eating habits are also contributing to health problems, including cancer. – Community/Business Leader*

*The number of people with cancer seems to be on the rise. – Community/Business Leader*

*Volume is growing. – Other Health Provider*

*The number of people affected by cancer is rising. Access to early screening and detection needs to improve. – Community/Business Leader*

*Cancer is prominent everywhere. I feel that Columbus loses out to services for these patients. So many patients opt to go to Indianapolis for their treatment. I think we can change our program to match what is being offered up there. – Community/Business Leader*

*Seems to affect so many people in the community. – Other Health Provider*

*As pervasive as the problem is just within my family and friends, it indicates a significant overall problem and has become an issue of concern of my own. I don't spend much time worrying about my health. – Community/Business Leader*

*A family-related problem. – Social Services Provider*

*Cancer incidences are very high in our region due to poor health and poor choices. – Other Health Provider*

*The number of families that are impacted by cancer and the high cost of treatment. – Community/Business Leader*

*You hear more and more about it and I guess that is a positive thing. But does someone have access to everything they need to physically and emotionally deal with it. – Community/Business Leader*

*Seems to be a high incidence in community. Many resources directed to this. – Public Health Representative*

*Cancer rates are on the rise and are an issue everywhere. – Public Health Representative*

*It continues to be a problem nationwide. – Community/Business Leader*

*There seem to be a lot of people suffering from cancer, but we are also fortunate to have an outstanding Cancer Center at our local hospital. Along with the great services provided through Our Hospice of South Central Indiana. – Social Services Provider*

*Cancer is so very prominent, yet financial costs are so high, many are not appropriately covered through insurance. – Other Health Provider*

*I believe it is a major problem in every community. The incidence of cancer seems to continually rise without known cures. – Public Health Representative*

*CRH is exceeding its growth goals in cancer care. Growth is exceeding population growth. – Other Health Provider*

*It is in every community. – Public Health Representative*

*It still exists and in multiple forms. I have concern around childhood cancer's prevalence in our community. – Community/Business Leader*

### **Leading Cause of Death**

*According to the latest local health needs assessment our region's cancer death rate was higher than IN and US averages as were specific types of cancer. Since chronic illnesses and diseases are on the rise nationally. – Community/Business Leader*

*Cancer appears to be one of the more common causes of death in the community. – Community/Business Leader*

*The death rate of cancer seems to be on the rise. The number of younger people who are passing away seems to be very high. – Public Health Representative*

*Cancer is a leading cause of death and illness. Everyone knows someone who has had cancer or had it themselves. – Public Health Representative*

### **Diagnosis/Treatment**

*There have been some missed diagnoses that I am aware of from physicians in this community. If someone gets cancer, most people have a belief that appropriate care cannot be obtained in Columbus, and you must travel to Indianapolis or another facility. – Community/Business Leader*

*We limit medical trials to one experimental drug at a time. Cancer needs to be addressed in the same fashion as was HIV/AIDS. The medical community was allowed to throw a cocktail of drugs at the disease and then remove them one by one. – Community/Business Leader*

*Too many people struggle with finding care which addresses not only their illness, but the treatment for the illness. Options in surrounding larger communities and hospitals seem to be more interesting and appealing. – Community/Business Leader*



**Lack of Providers**

*At the local hospital, the number of physicians in medical oncology and radiation oncology seems so small compared to the number of cases of cancer. – Public Health Representative*

*Due to my role, I know that we are currently short medical oncology and supporting specialty services. – Other Health Provider*

**Environmental Contributors**

*I believe environmental factors are a major concern: pollutants, chemicals, etc. – Public Health Representative*

*It's our lifestyles and lack of access to affordable, non-antibiotic food. – Community/Business Leader*

**Access for Uninsured/Underinsured**

*Several patients who do not have insurance are afraid of seeking help for their illness because of costs. And inability to pay for medicine and treatment. – Other Health 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](http://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

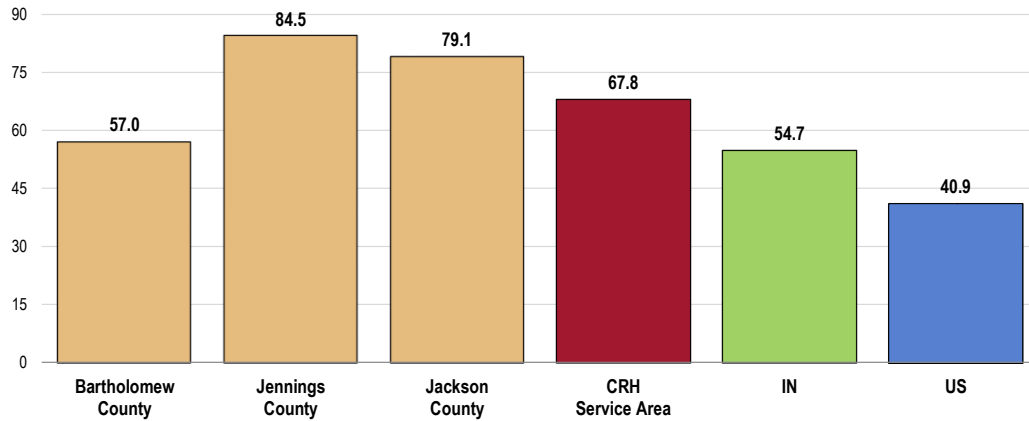
### Chronic Lower Respiratory Disease Deaths (CLRD)

Between 2014 and 2016, there was an annual average age-adjusted CLRD mortality rate of 67.8 deaths per 100,000 population in the CRH Service Area.

- Well above the state and US rates.
- Notably higher in Jennings and Jackson counties.

Note: COPD was changed to chronic lower respiratory disease (CLRD) in 1999 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.

**CLRD: Age-Adjusted Mortality**  
(2014-2016 Annual Average Deaths per 100,000 Population)

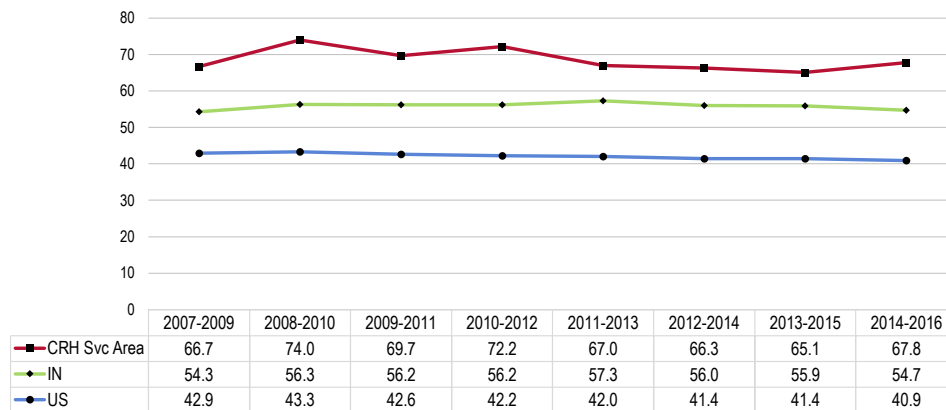


Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted April 2018.

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.

- TREND: CLRD mortality in the Columbus Regional Health Service Area has fluctuated over time, showing no clear trend.

**CLRD: Age-Adjusted Mortality Trends**  
(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 April 2018.

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.

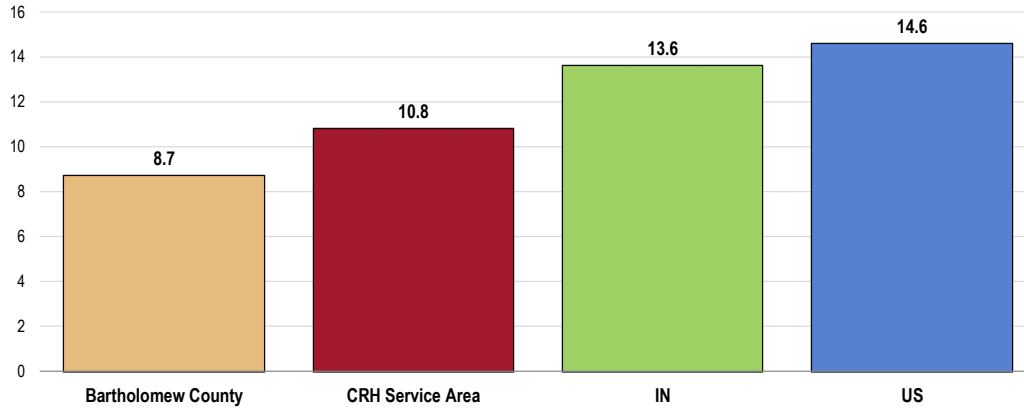
### Pneumonia/Influenza Deaths

Between 2014 and 2016, the service area reported an annual average age-adjusted pneumonia influenza mortality rate of 10.8 deaths per 100,000 population.

- Lower than found statewide and nationally.
- The Bartholomew County rate is statistically similar.

For prevalence of vaccinations for pneumonia and influenza, see also *Immunization & Infectious Diseases* in the *Infectious Disease* section of this report.

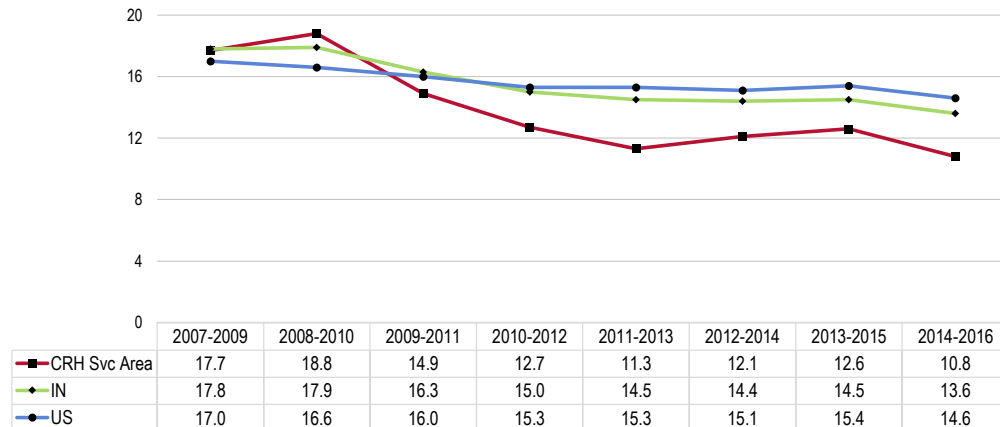
### Pneumonia/Influenza: Age-Adjusted Mortality (2014-2016 Annual Average Deaths per 100,000 Population)



- Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted April 2018.
- 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.

- **TREND:** Note the decreasing trend in the area's pneumonia/influenza mortality rate. Rates have decreased across Indiana and the US overall, though less dramatically.

### Pneumonia/Influenza: Age-Adjusted Mortality Trends (Annual Average Deaths per 100,000 Population)

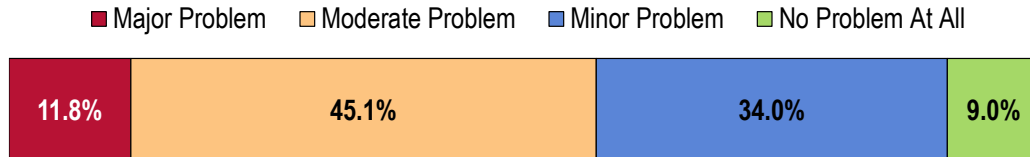


- Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted April 2018.
- Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
  - Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

## Key Informant Input: Respiratory Disease

The greatest share of key informants taking part in an online survey characterized *Respiratory Disease* as a “moderate problem” in the community.

### Perceptions of Respiratory Diseases as a Problem in the Community (Key Informants, 2018)



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

### Top Concerns

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

#### Incidence/Prevalence

*Large number of people with COPD. – Physician*

*Chronic lower respiratory disease, CLRD deaths. COPD prevalence. Asthma prevalence. – Community/Business Leader*

*COPD, lung cancer. – Other Health Provider*

*COPD/asthma is very common. – Other Health Provider*

#### Tobacco Use

*High smoking rate leads to increased lung disease in our community. – Physician*

*Smoking and drug use. – Public Health Representative*

*Smoking rates. – Other Health Provider*

*Smoking and asthma. Southern Indiana is historically coal country and has poor air quality. Allergens are plentiful. Secondhand smoking is damaging to children, and adults. – Other Health Provider*

#### Access to Care for Youth

*Seems like a high number of youth with asthma or allergies but very difficult to get an appointment with an allergist. Currently booked months in advanced. – Other Health Provider*

#### Comorbidities

*There is a large population of obese people and people that smoke. The people that carry around polar pops and fast food is very high. – Other Health Provider*

#### Access to Care/Services

*Our health system currently relies heavily on locums for respiratory and critical care services. – Other Health Provider*

#### Affordable Care/Services

*Cost of care, mainly prescriptions. – Community/Business Leader*

## 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](http://www.healthypeople.gov))

## Unintentional Injury

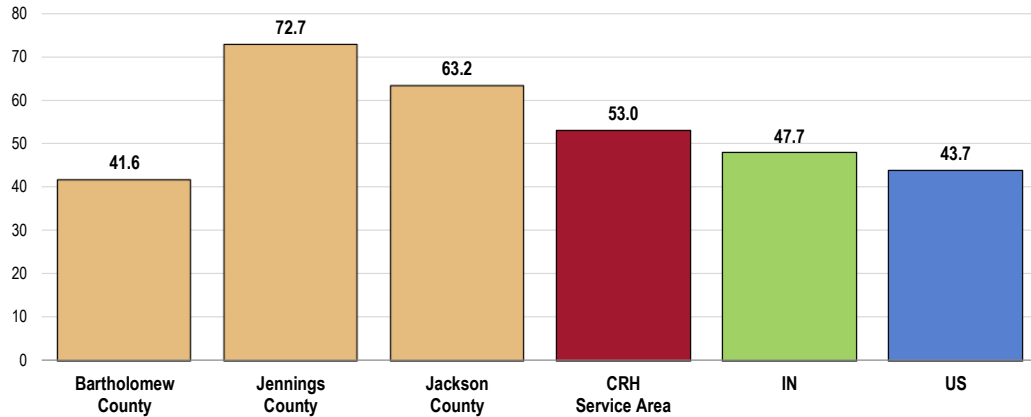
### Age-Adjusted Unintentional Injury Deaths

**Between 2014 and 2016, there was an annual average age-adjusted unintentional injury mortality rate of 53.0 deaths per 100,000 population in the Columbus Regional Health Service Area.**

- Similar to the Indiana rate.
- Higher than the US rate.

- Fails to satisfy the Healthy People 2020 target (36.4 or lower).
- Notably higher outside Bartholomew County.

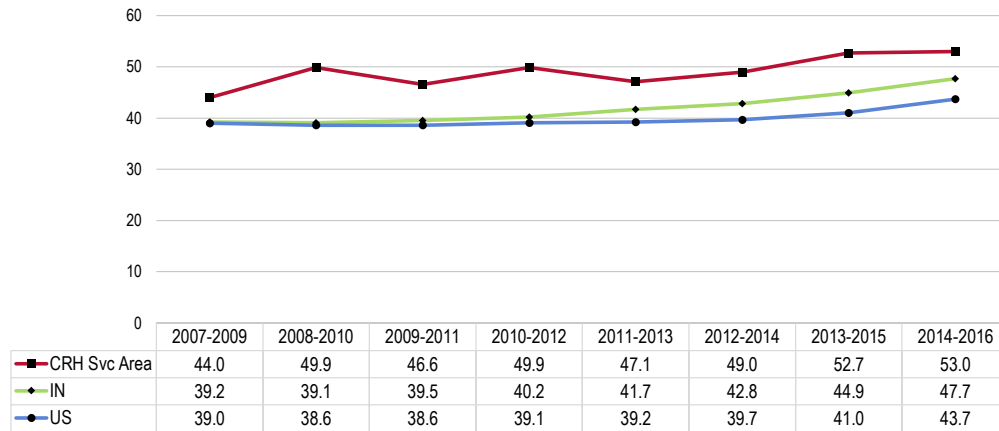
### Unintentional Injuries: Age-Adjusted Mortality (2014-2016 Annual Average Deaths per 100,000 Population) Healthy People 2020 Target = 36.4 or Lower



- Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted April 2018.
  - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective IVP-11]
- 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.

- **TREND:** Despite fluctuations, there is an overall upward trend in the unintentional injury mortality rate in the Columbus Regional Health Service Area, echoing the slowly increasing trends reported in Indiana and the US overall.

### Unintentional Injuries: Age-Adjusted Mortality Trends (Annual Average Deaths per 100,000 Population) Healthy People 2020 Target = 36.4 or Lower

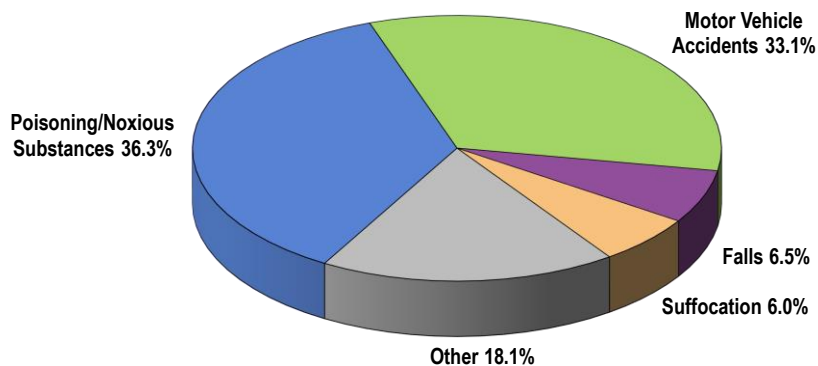


- Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted April 2018.
  - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective IVP-11]
- 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.

### Leading Causes of Accidental Death

Poisoning (including accidental drug overdose), motor vehicle accidents, falls, and suffocation accounted for most accidental deaths in the Columbus Regional Health Service Area between 2014 and 2016.

#### Leading Causes of Accidental Death (CRH Service Area, 2014-2016)



Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted April 2018.

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

#### Selected Injury Deaths

The following chart outlines mortality rates for unintentional drug-related deaths, motor vehicle crashes, and falls (among adults age 65 and older).

**These Columbus Regional Health Service Area annual average age-adjusted mortality rates are worse than US rates for:**

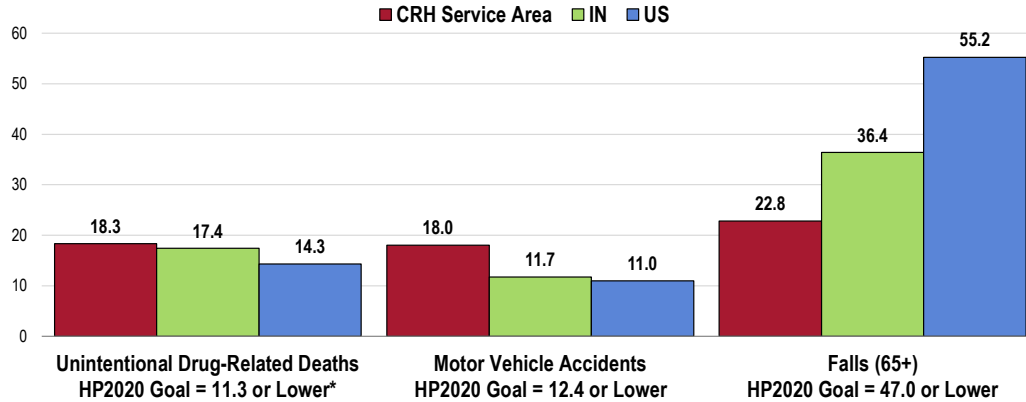
- Drug-related deaths.
- Motor vehicle accidents.

**The area's annual average age-adjusted motor vehicle mortality rate is worse than the Indiana rate.**



### Select Injury Death Rates

(By Cause of Death; 2014-2016 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 April 2018.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective IVP-13.1, IVP-23.2, SA-12]  
 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.  
 • \*Healthy People 2020 goal reflects all drug-induced deaths, both intentional and unintentional.

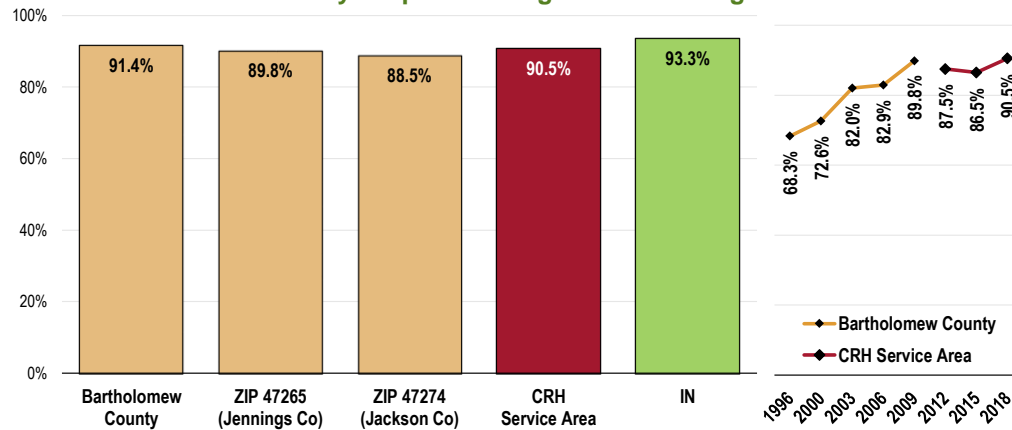
### Seat Belts

Among surveyed Columbus Regional Health Service Area adults age 45 and older, **90.5% report “always” wearing a seat belt when riding in or driving a car.**

- The proportion is worse than the state prevalence.
- Similar findings by area.
- TREND: Statistically unchanged since 2012 (after increasing significantly for Bartholomew County over the years).

### “Always” Wear a Seat Belt When Driving or Riding in a Vehicle

Healthy People 2020 Target = 92.0% or Higher



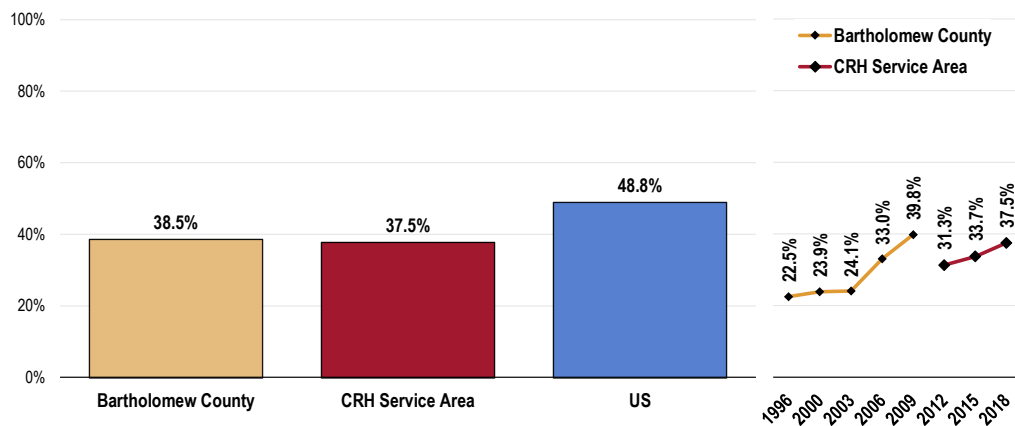
Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 308]  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2016 Indiana data.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective IVP-15]  
 Notes: • Asked of all respondents.

### Bike Helmets

Among service area parents of children age 5 through 17, 37.5% report that their child “always” wears a protective helmet when riding a bicycle.

- Statistically comparable to the national prevalence.
- The Bartholomew County prevalence is 38.5% among children 5-17.
- TREND: Statistically unchanged since 2012 (Bartholomew County reported a significant increase over time between 1996 and 2009).

#### Child “Always” Wears a Helmet When Riding a Bicycle (Among Parents of Children Age 5-17)



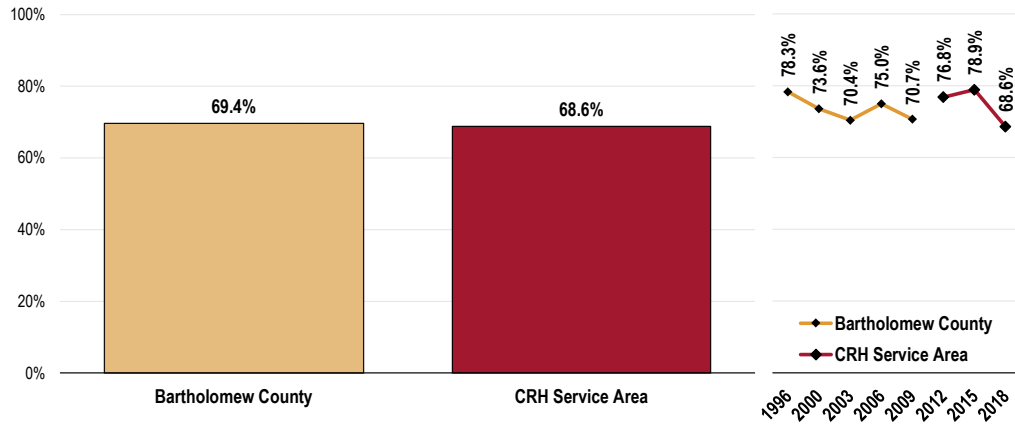
Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 349]  
 • 2017 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of all respondents with children age 5 to 17 at home.

### Water Safety

Just over 2 in 3 service area parents (68.6%) report that their child under age 18 has received instruction in swimming or water safety.

- The Bartholomew County prevalence is similar.
- TREND: This prevalence has not changed significantly over time.

### Child Has Received Instruction in Swimming or Water Safety (CRH Service Area Children <18)



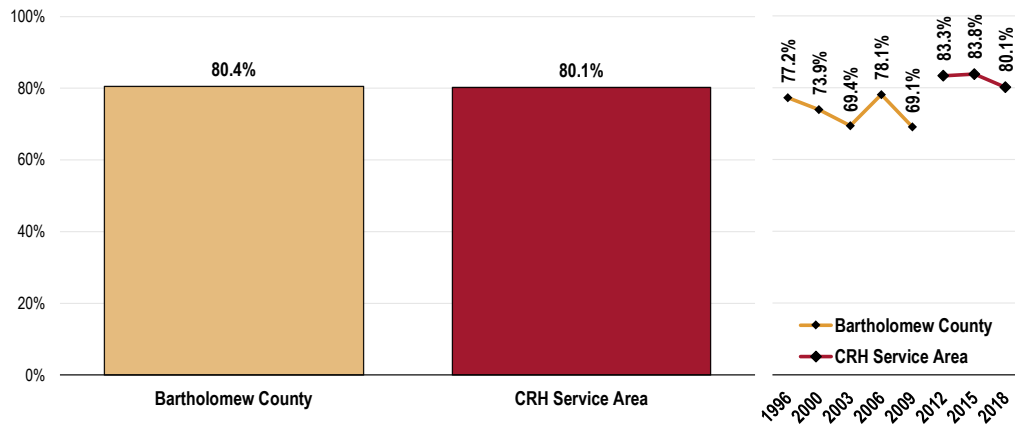
Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 347]  
 Notes: • Asked of all respondents with children under 18 at home.

### Fire Safety

**Most local parents (80.1%) have discussed a fire escape plan with their child.**

- The Bartholomew County prevalence is similar.
- TREND: Over time, the prevalence has been stable in the service area.

### Have Discussed Fire Escape Plan With Child (Columbus Regional Hospital Service Area Children <18)



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 348]  
 Notes: • Asked of all respondents with children under 18 at home.

## Firearm Safety

### Age-Adjusted Firearm-Related Deaths

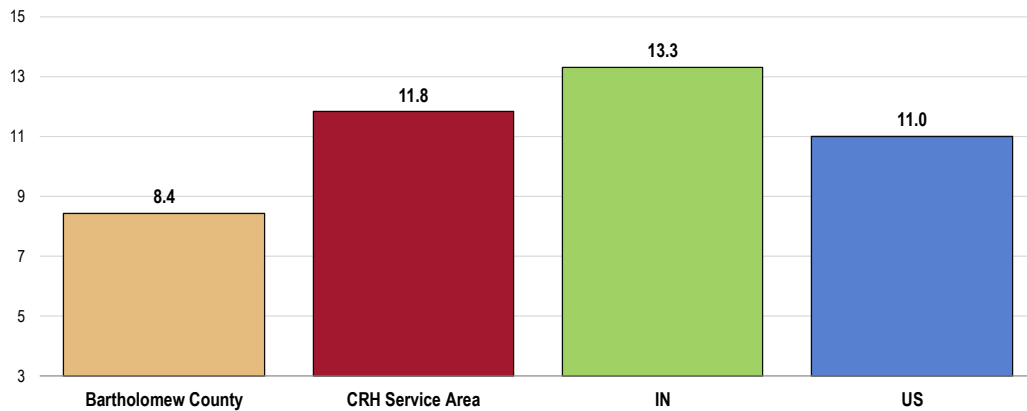
Between 2014 and 2016, firearms in the CRH Service Area contributed to an annual average age-adjusted rate of 11.8 deaths per 100,000 population.

- Comparable to state and national rates.
- Fails to satisfy the Healthy People 2020 objective (9.3 or lower).

### Firearms-Related Deaths: Age-Adjusted Mortality

(2014-2016 Annual Average Deaths per 100,000 Population)

Healthy People 2020 Target = 9.3 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 April 2018.
  - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective IVP-30]
- 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.

### Presence of Firearms in Homes

Survey respondents were asked about the presence of weapons in the home:

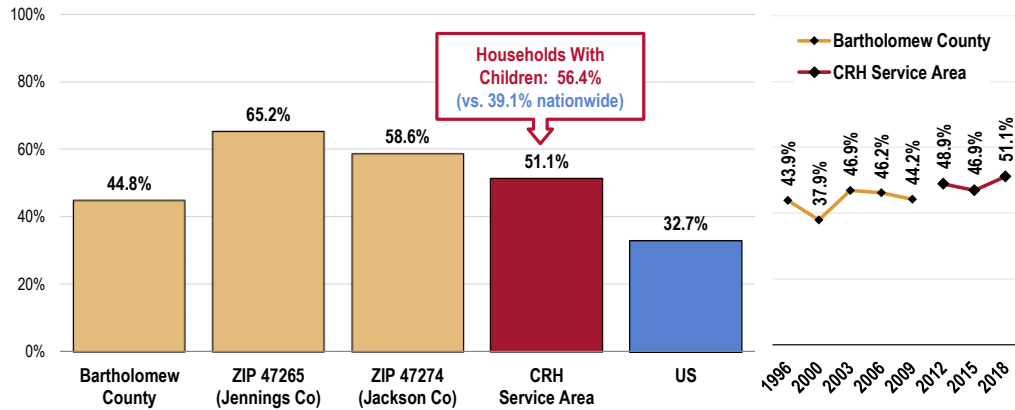
"Are there any firearms now kept in or around your home, including those kept in a garage, outdoor storage area, truck, or car? For the purposes of this inquiry, 'firearms' include pistols, shotguns, rifles, and other types of guns, but do NOT include starter pistols, BB guns, or guns that cannot fire."

Overall, just over half of CRH Service Area adults (51.1%) have a firearm kept in or around their home.

- Much higher than the national prevalence.
- Favorably low in Bartholomew County; highest in ZIP Code 47265.
- TREND: Statistically unchanged over time.
- Among Columbus Regional Health Service Area households with children, 56.4% have a firearm kept in or around the house (much higher than reported nationally).

Among service area households with firearms, 23.1% report that there is at least one weapon that is kept unlocked and loaded.

### Have a Firearm Kept in or Around the Home



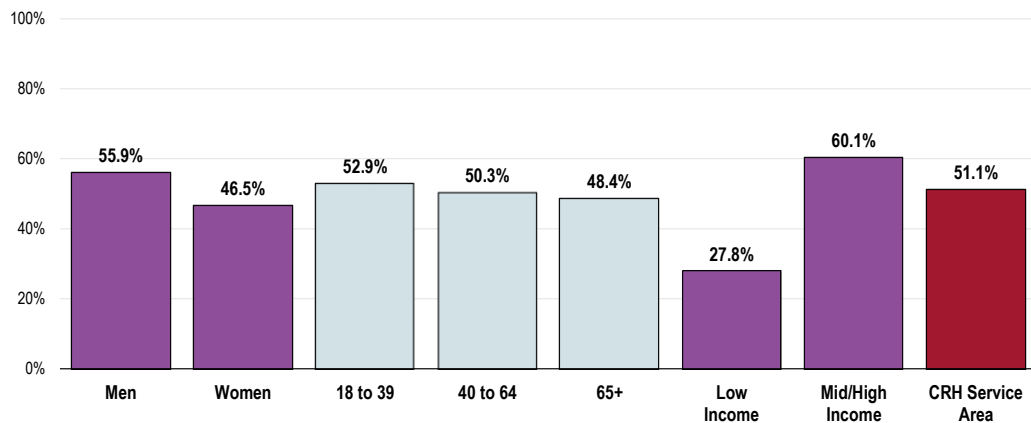
Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 310, 351-352]  
 • 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: • Asked of all respondents.  
 • In this case, firearms include pistols, shotguns, rifles, and other types of guns; this does not include starter pistols, BB guns, or guns that cannot fire.

Guns in the home are more often reported among:

- Men.
- Adults in households with higher incomes.

### Have a Firearm Kept in or Around the Home (CRH Service Area, 2018)



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 310]

Notes: • Asked of all respondents.  
 • In this case, firearms include pistols, shotguns, rifles, and other types of guns; this does not include starter pistols, BB guns, or guns that cannot fire.  
 • 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.

## Intentional Injury (Violence)

### Age-Adjusted Homicide Deaths

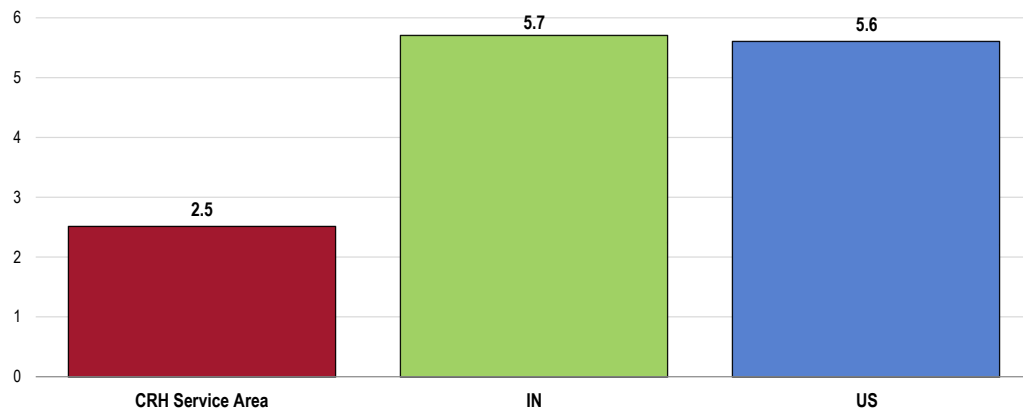
Between 2007 and 2016, there was an annual average age-adjusted homicide rate of 2.5 deaths per 100,000 population in the Columbus Regional Health Service Area.

RELATED ISSUE:

- More favorable than the rates found statewide and nationally.
- Satisfies the Healthy People 2020 target of 5.5 or lower.

See also *Mental Health: Suicide* in the **General Health Status** section of this report.

**Homicide: Age-Adjusted Mortality**  
(2007-2016 Annual Average Deaths per 100,000 Population)  
Healthy People 2020 Target = 5.5 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 April 2018.
  - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective IVP-29]
- 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.

## Violent Crime

### Violent Crime Rates

Between 2012 and 2014, there were a reported 217.7 violent crimes per 100,000 population in the Columbus Regional Health Service Area.

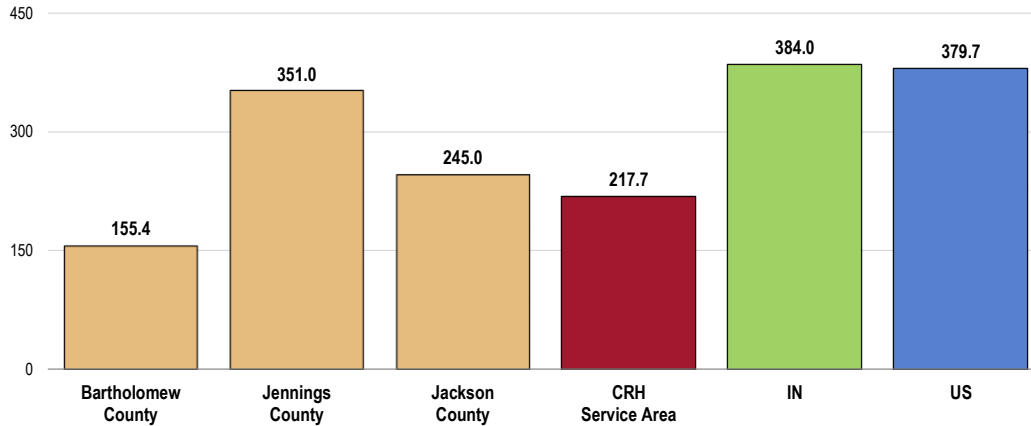
- Well below the state and US rates.
- By county, the violent crime rate ranges considerably.

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, 2012-2014)



Sources: • Federal Bureau of Investigation, FBI Uniform Crime Reports.  
 • Retrieved April 2018 from Community Commons at <http://www.chna.org>.  
 Notes: • 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 homicide, rape, robbery, and aggravated assault. This indicator is relevant because it assesses community safety.  
 • Participation by law enforcement agencies in the UCR program is voluntary. Sub-state data do not necessarily represent an exhaustive list of crimes due to gaps in reporting. Also, some institutions of higher education have their own police departments, which handle offenses occurring within campus grounds; these offenses are not included in the violent crime statistics, but can be obtained from the Uniform Crime Reports Universities and Colleges data tables.

### Family Violence

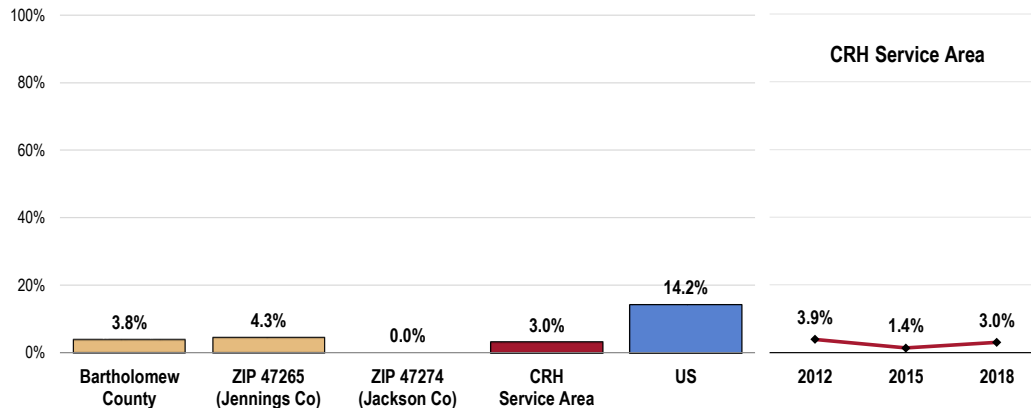
**A total of 3.0% of Columbus Regional Health Service Area adults acknowledge that they have ever been hit, slapped, pushed, kicked, or otherwise hurt by an intimate partner.**

- Well below the national findings.
- Family violence was not reported in in ZIP Code 47274.
- TREND: Similar to the 2012 prevalence (but increased since 2015).

Respondents were read:

"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."

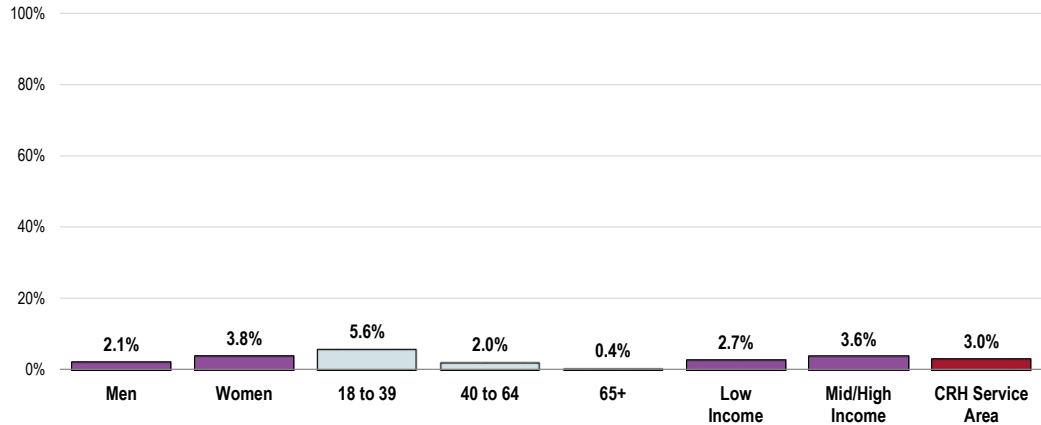
### Have Ever Been Hit, Slapped, Pushed, Kicked, or Hurt in Any Way by an Intimate Partner in the Past 3 Years



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 47]  
 • 2017 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of all respondents.

- Note the negative correlation between age and domestic violence in the community.

### Have Ever Been Hit, Slapped, Pushed, Kicked, or Hurt in Any Way by an Intimate Partner (CRH Service Area, 2018)



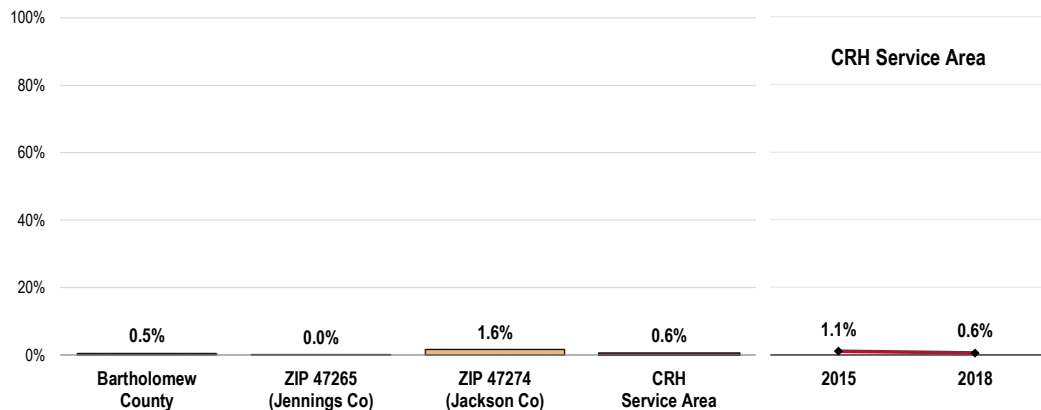
Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 47]  
 Notes: • Asked of all respondents.  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with 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.

#### Sexual Violence

A total of 0.6% of Columbus Regional Health Service Area adults acknowledge that they have ever been forced to engage in sexual activity.

- Higher in ZIP Code 47274.
- TREND: Statistically unchanged over time.

### Have Been Forced Into Sexual Activity in the Past 3 Years



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 309]  
 Notes: • Asked of all respondents.

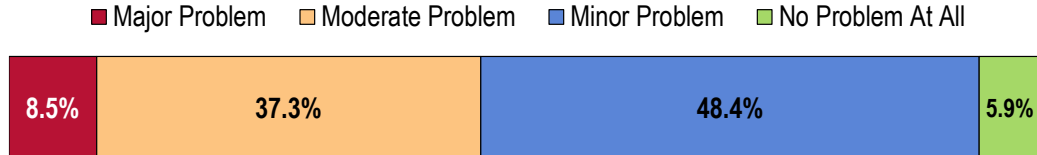


## Key Informant Input: Injury & Violence

The largest share of key informants taking part in an online survey characterized *Injury & Violence* as a “minor problem” in the community.

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

(Key Informants, 2018)



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

### Top Concerns

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

#### *Incidence/Prevalence*

*Injury and violence is always an issue in any community. – Other Health Provider*

*Cultural normalizing of incivility increasingly escalating into violent behavior. Violence related to substance abuse. Increased gun access from cultural embrace of guns. Domestic violence. – Other Health Provider*

*I believe that injury and violence are in the news every day. The Indianapolis news covers Columbus like we are a suburb. Several times a week there is a news item about criminal activity in Columbus. – Community/Business Leader*

*Rise of incidence in our community. – Community/Business Leader*

*CHINS cases continue to rise at an alarming rate in Bartholomew County. – Social Services Provider*

#### *Domestic Violence*

*As a physician I see women impacted by domestic violence. Children who are victims of abuse and neglect, teens who are bullied at school and more. – Physician*

*Any domestic violence, child abuse is too much. – Community/Business Leader*

*There is a high percent of domestic violence that I personally have experienced in my family. I have witnessed many instances of verbal abuse in public and aggressive behaviors. – Other Health Provider*

#### *Contributing Factors*

*Drugs and lack of stable family life along with mental illness and the availability of weapons. – Community/Business Leader*

*Mental health concerns for all ages. – Community/Business Leader*

#### *Health Education/Awareness*

*Lack of education on prevention and detection. – 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.

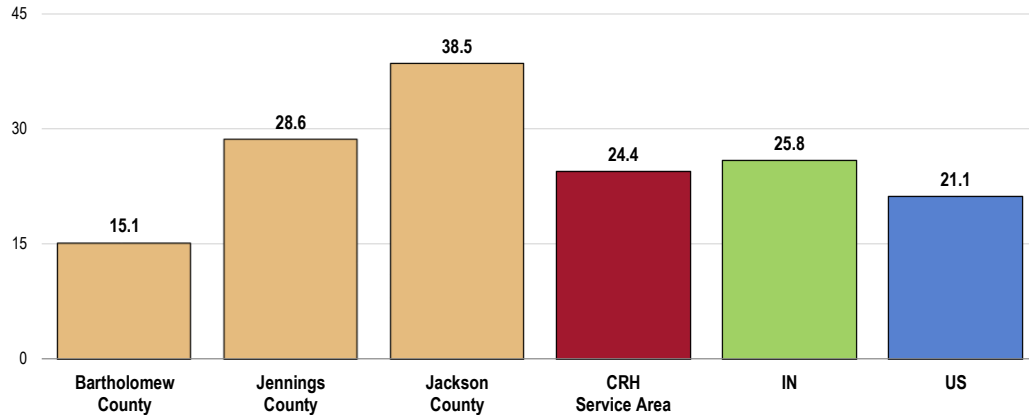
- Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

### Age-Adjusted Diabetes Deaths

**Between 2014 and 2016, there was an annual average age-adjusted diabetes mortality rate of 24.4 deaths per 100,000 population in the Columbus Regional Health Service Area.**

- Similar to the state and US rates.
- Fails to satisfy the Healthy People 2020 target (20.5 or lower, adjusted to account for diabetes mellitus-coded deaths).
- Unfavorably high in Jackson county, lowest in Bartholomew County.

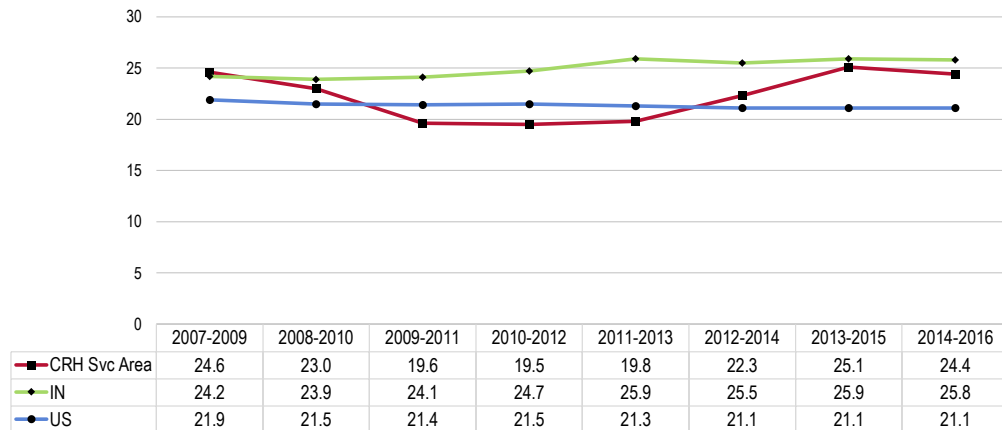
### Diabetes: Age-Adjusted Mortality (2014-2016 Annual Average Deaths per 100,000 Population) Healthy People 2020 Target = 20.5 or Lower (Adjusted)



- Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted April 2018.
  - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective D-3]
- 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.
  - The Healthy People 2020 target for Diabetes is adjusted to account for only diabetes mellitus coded deaths.

- **TREND:** No clear diabetes mortality trend is apparent in the Columbus Regional Health Service Area. Recent rates have risen in recent years but are similar to baseline rates.

### Diabetes: Age-Adjusted Mortality Trends (Annual Average Deaths per 100,000 Population) Healthy People 2020 Target = 20.5 or Lower (Adjusted)

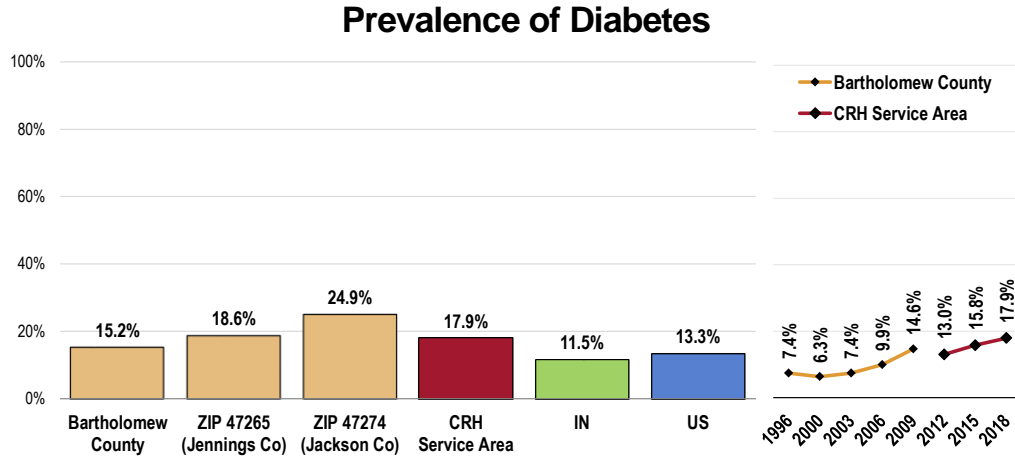


- Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted April 2018.
  - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective D-3]
- 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.
  - The Healthy People 2020 target for Diabetes is adjusted to account for only diabetes mellitus coded deaths.

## Prevalence of Diabetes

A total of 17.9% of Columbus Regional Health Service Area adults report having been diagnosed with diabetes.

- Worse than the state and US proportions.
- Highest in ZIP Code 47274.
- TREND: Marks a statistically significant increase over time.



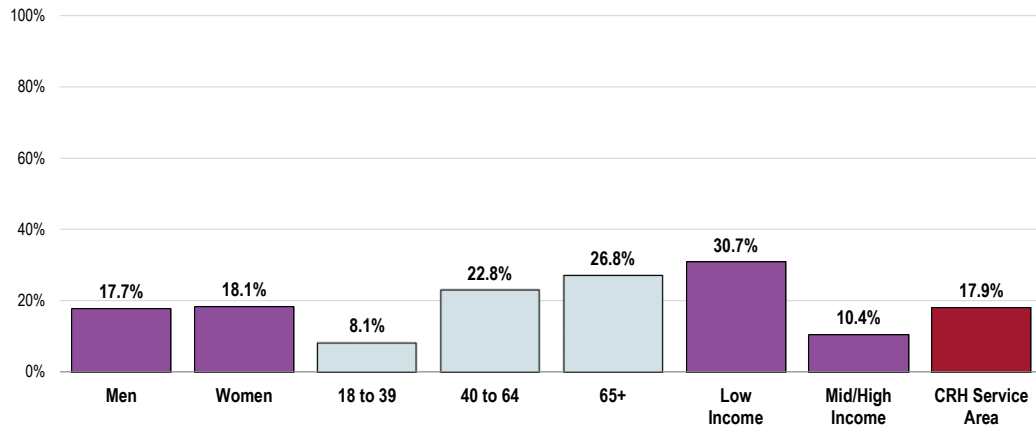
Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 36]  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2016 Indiana data.  
 • 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: • Asked of all respondents.

A higher prevalence of diagnosed diabetes (excluding pre-diabetes or borderline diabetes) is reported among:

- Low-income residents.
- Older adults (note the strong positive correlation between diabetes and age, with 26.8% of seniors diagnosed with diabetes).

### Prevalence of Diabetes (CRH Service Area, 2018)



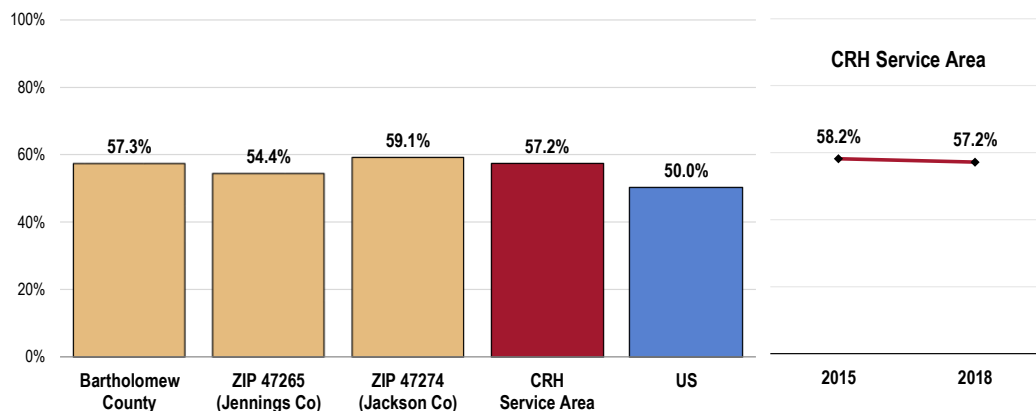
Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 36]  
 Notes: • Asked of all respondents.  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with 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.  
 • Excludes gestational diabetes (occurring only during pregnancy).

### Diabetes Testing

Of area adults who have not been diagnosed with diabetes, 57.2% report having had their blood sugar level tested within the past three years.

- Higher than the US proportion.
- Statistically similar by area.
- TREND: Statistically unchanged since 2015.

### Have Had Blood Sugar Tested in the Past Three Years (Among Nondiabetics)

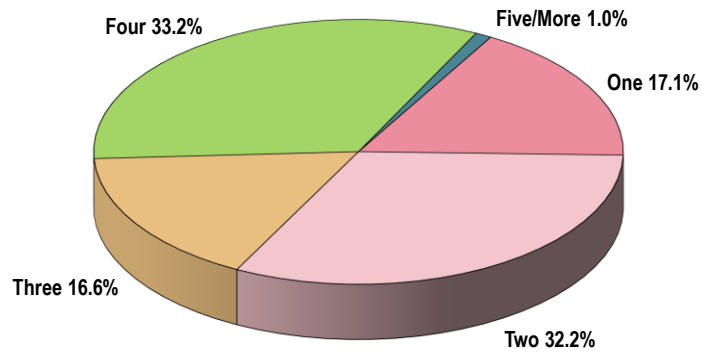


Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 37]  
 • 2017 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of respondents who have not been diagnosed with diabetes.

### A1C Checks

When asked how many A1C checks they had by a medical professional in the past year, 17.1% of service area diabetics reported having one check and 32.2% had two A1C checks. Note that half of diabetics had three or more checks in the past year.

**Number of A1C Checks  
by a Medical Professional in the Past Year**  
(Among CRH Service Area Diabetics, 2018)

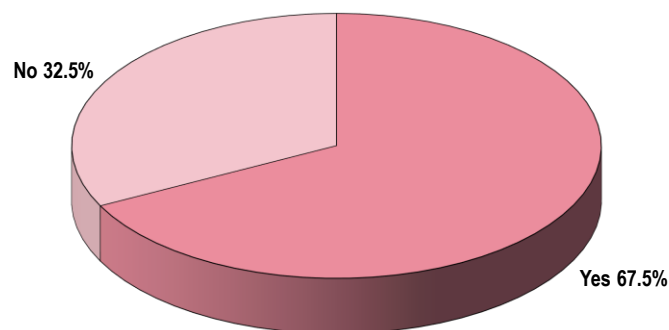


Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 306]  
Notes: • Asked of all diabetic respondents.

### Foot Exams

Among area adults with diabetes, 67.5% indicate that a physician performed an annual foot exam on them in the past year.

**Physician Performs an Annual Foot Exam**  
(Among CRH Service Area Diabetics, 2018)



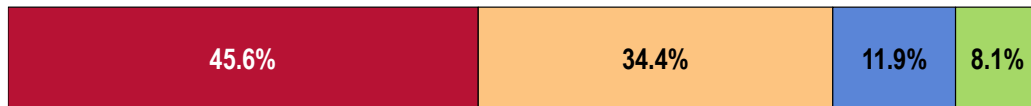
Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 307]  
Notes: • Asked of all diabetic respondents.

## Key Informant Input: Diabetes

A high percentage of key informants taking part in an online survey characterized *Diabetes* as a “major problem” in the community.

### Perceptions of Diabetes as a Problem in the Community (Key Informants, 2018)

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



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

### Top Concerns

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

#### Access/Affordable Medications

*Access to insulin. – Other Health Provider*

*Access to health supplies. Diabetic supplies are costly, even with insurance. – Other Health Provider*

*Compliance with medication due to cost, compliance with diet related to unhealthy lifestyles or cost factors related to healthier food choices. – Public Health Representative*

*Access to medication. – Other Health Provider*

*Being willing to follow prescribed care. Cost of medications. – Community/Business Leader*

*Resources, from supplies to education. – Community/Business Leader*

*The biggest challenge is the ability for some patients to afford their medications. – Public Health Representative*

*Being able to afford their insulin even with insurance. There are many patients with Medicare Part D or even commercial insurances with such high deductibles that they have to choose whether they buy their medications or pay bills and buy groceries. – Other Health Provider*

*Access and affordability of medications, supplies and education. – Other Health Provider*

*I'm aware that even though insurances cover diabetes supplies, some people don't have the copay money to pay for insulin. Also, I am aware of difficulty if someone loses their job or if there is a lag in getting new insurance to cover. – Community/Business Leader*

*Cost of care. – Community/Business Leader*

*Cost of testing supplies and medications. – Public Health Representative*

#### Lifestyles

*Practicing the life style that supports diabetes management. Healthy diet, weight management, exercise, regular provider visits. – Other Health Provider*

*Healthy lifestyle options. Healthy places to eat and stay active. – Other Health Provider*

*Healthy lifestyles. – Community/Business Leader*

*Again, poor lifestyle, access to junk food is so easy and inexpensive. Education regarding the choices we make and long-term effects of those choices on our bodies. – Community/Business Leader*

*Leading a healthy lifestyle. – Community/Business Leader*

*All the fast food restaurants, but this is a national problem. – Community/Business Leader*

*I think that the current lifestyles contribute to people developing diabetes that would not normally have it. Poor nutrition, especially not home cooked meals, sedentary lifestyle and obesity. – Community/Business Leader*

*Unhealthy diet and exercise routines that lead to diabetes and exacerbate symptoms. – Community/Business Leader*

*Poor diet and failure to take care of self. – Community/Business Leader*

*Large amount of fast food restaurants; lack of affordable fresh healthy food. Lack of healthy options in restaurants' menus. Lack of information about how to deal with diabetes. – Public Health Representative*

*Our culture does not actively promote lifestyles that would help prevent and manage this chronic condition. – Social Services Provider*

*Poor support system community wide, bad food at restaurants, poor activity level. – Physician*

### **Disease Management**

*Making sure diabetic people obtain and comply with appropriate healthcare throughout their lives. Motivation for people to address their needs as a diabetic. – Community/Business Leader*

*Incentive to pursue corrective action seems to be lacking. Individuals seem to exhibit low/little self-esteem, overeating as comfort food tool. Education is difficult but must be exercised every day. – Community/Business Leader*

*Adapting to the new diet they need to follow. Getting group support, camaraderie of fellow diabetics in their own language. Getting the family/home life to change to make the necessary changes to a healthier lifestyle. – Public Health Representative*

*Learning to live with it and get it in control and keep it in control. Diabetes leads to so many other major health concerns. Trying not to judge but we have a lot of fast food restaurants and sugary drinks. – Community/Business Leader*

*Many are given the diagnosis of diabetes but PCP's lack any follow up. I think they are too quick to prescribe medications. Medications may be needed at the current time, but more follow-up, education on how to control diabetes or decrease your numbers. – Public Health Representative*

*Medication compliance and health lifestyles. – Community/Business Leader*

*Compliance with medical plan. – Other Health Provider*

### **Health Education/Awareness**

*I think people need help and need to want to help themselves to change their diabetic state. It just amazes me how many people ignore their diabetes. I don't think that there is any way you can fix that. People have to want to help themselves. – Community/Business Leader*

*Prevention of diabetes through education about physical activity and diet starting at a young age is extremely important. Habits start young and thus early education can have a large impact long term. Improved access to healthy foods. – Community/Business Leader*

*Education on how to eat and take care of themselves. – Physician*

*Education and support of lifestyle changes necessary to improve health outcomes for those with diabetes. – Other Health Provider*

*The knowledge of how serious diabetes is on the whole body. People seem to have the idea that a simple pill can fix it. An even bigger issue is that those living with prediabetes don't even know they have it and how important it is to prevent. – Public Health Representative*

*Type one diabetes education and support for kids and families is nil. I know many people with children with Type 1 diabetes and all resources must be received in Indy related to a lack of support and doctors for endocrinology. Driving to Riley or Peyton. – Public Health Representative*

### **Diet/Exercise**

*The need for a comprehensive approach directed at weight loss, exercise and nutrition rather than just prescription medications. – Physician*

*Learning and accepting the importance of a healthy diet and exercise. This is linked to economics and education. – Community/Business Leader*

*Support for diet, exercise. – Public Health Representative*

*Eating healthy, physical exercise, and following up taking treatments. – Social Services Provider*

*Developing healthy eating habits and regular exercise. – Community/Business Leader*



**Nutrition**

*How to meal plan. – Community/Business Leader*

*Nutrition and weight loss, especially for young children. – Community/Business Leader*

*Eating nutritionally, as well as appetizingly, well with the knowledge they have acquired. – Social Services Provider*

**Access to Healthy Foods**

*Lack of healthy, affordable foods. Support systems at locations and times that make support systems more readily available. – Other Health Provider*

*High cost of healthy food. – Public Health Representative*

*Access to healthy foods and healthy options when dining out. – Physician*

**Incidence/Prevalence**

*Diabetes is major related to the dramatic increases in prevalence. And the significant burden of long-term complications in terms of functional health, quality of life, and cost. – Other Health Provider*

*Nationally, diabetes is on the rise due to increased sugar intake. – Community/Business Leader*

*The rate of diabetes has been increasing in our community for a number of years. In addition, many are likely to have prediabetes and be completely unaware of their risks. – Public Health Representative*

**Lack of Specialty Providers Locally**

*Proper care. Columbus does not have an endocrinologist and the diabetic diagnosis is increasing at an alarming rate. – Other Health Provider*

*No local DM provider who is associated with CRH and will provide discounted care to the underserved. – Other Health Provider*

*We have no endocrinologist availability in the region. – Other Health Provider*

*All pediatric endocrinology cases are referred to Riley Children's Hospital, which leaves some folks with transportation issues. Unable to visit as frequently as needed for questions or nurse support. – Other Health Provider*

**Insufficient Physical Activity**

*Lack of physical activity and poor nutrition have resulted in over one-third of our population being obese. Shifting culture to encourage physical activity and better nutrition is very difficult. – Public Health Representative*

*Children and/or choosing to not participate in play or activities which involve exercise. – Community/Business Leader*

**Obesity**

*Linked to overall health and obesity. – Community/Business Leader*

*Obesity. Foods with high sugar, fat, and salt content. – Community/Business Leader*

*Because of the rate of obesity, lack of exercise and generally poor health choices. Our region suffers the result included those genetically disposed to diabetes and those that develop it over time. – Other Health Provider*

**Diagnosis/Treatment**

*People with diabetes either unwilling to seek help/put into practice information provided. Or just feeling overwhelmed with what to do. – Other Health Provider*

*Identification and ongoing treatment and management. – Community/Business Leader*

*No coordinated approach to diabetes as a health system. – Physician Quote*

## 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.

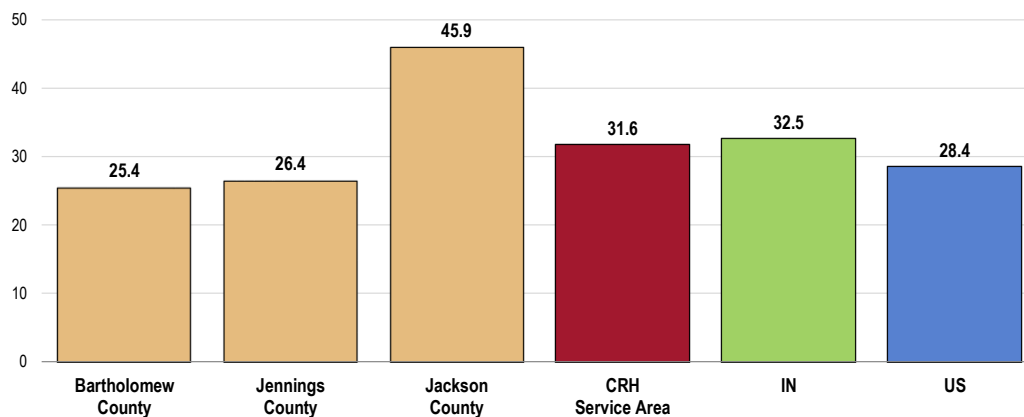
- Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

### Age-Adjusted Alzheimer's Disease Deaths

Between 2014 and 2016, there was an annual average age-adjusted Alzheimer's disease mortality rate of 31.6 deaths per 100,000 population in the service area.

- Comparable to the state and US rates.
- Significantly higher in Jackson County.

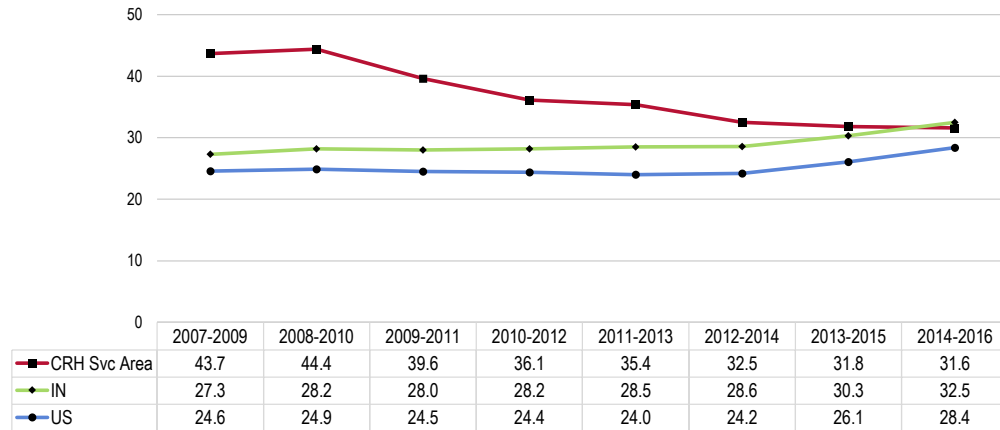
### Alzheimer's Disease: Age-Adjusted Mortality (2014-2016 Annual Average Deaths per 100,000 Population)



- Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted April 2018.
- 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.

- **TREND:** Note the decreasing trend in Alzheimer's disease mortality in the service area. In contrast, Indiana and US rates have increased steadily in recent years.

### Alzheimer's Disease: Age-Adjusted Mortality Trends (Annual Average Deaths per 100,000 Population)

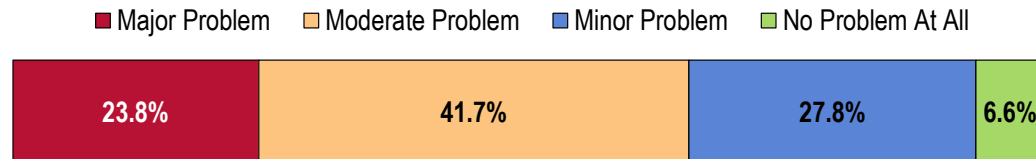


Sources: ● CDC WONDER Online Query System, Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted April 2018.  
 Notes: ● Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).  
 ● Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

### Key Informant Input: Dementias, Including Alzheimer’s Disease

Key informants taking part in an online survey are most likely to consider *Dementias, Including Alzheimer’s Disease* as a “moderate problem” in the community.

### Perceptions of Dementia/Alzheimer's Disease as a Problem in the Community (Key Informants, 2018)



Sources: ● PRC Online Key Informant Survey, Professional Research Consultants, Inc.  
 Notes: ● Asked of all respondents.

### Top Concerns

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

#### Aging Population

*We have a growing population of older adults who have or will have dementia or Alzheimer’s disease. We don’t have adequate facilities to help families care for this population. Nor do we have enough medical personnel to care for this population. – Other Health Provider*

*Aging population, no cure at this time. – Community/Business Leader*

*It is growing problem regionally and nationwide as the baby boomer generation ages. There are incidences where middle aged people are facing this diagnosis, but there is also a high number of elderly, aging people because the population is living longer. – Other Health Provider*

*Because the aging populations is growing. – Community/Business Leader*

*Dementia is becoming more widespread as people live longer and our population continues to age. The general population is not knowledgeable about how to interact in a healthy way with people with dementia. – Social Services Provider*

*Don't believe it's only in our community. Dementia/Alzheimer is a problem affecting our growing aging population. – Other Health Provider*

*As adults age, more and more are being diagnosed with dementia and/or Alzheimer's. – Public Health Representative*

*As the population in the region continues to age our primary care is also aging out of the specialty. – Other Health Provider*

*Increase in aging population would indicate an increase in number of folks being diagnosed. As a chronic condition where care is needed for patients 24/7 and support for families is so important, the resource demand is high. – Other Health Provider*

*With people living to an older age, there are more cases. The community has not yet addressed the growing demand. – Social Services Provider*

### **Incidence/Prevalence**

*Alzheimer's disease is on the rise nationally. Most recent local health assessment shows CRH area higher than IN and US averages. – Community/Business Leader*

*Growing number of families dealing with this sad disease. I feel like each week, I hear about someone else diagnosed or caring for a family member. – Social Services Provider*

*I know of many people in our community with this terrible disease. – Public Health Representative*

*Again, this is a condition that seems pervasive among family and friends. – Community/Business Leader*

*I see more and more people each day diagnosed with Alzheimer's disease. I think Columbus is on the right path with help for these families who have a family member with Alzheimer's. Just Friends Daycare helps families with loved ones who have this. – Community/Business Leader*

*It seems to be more prevalent and not sure where people go for help. Families need to be alert to signs of this disease. – Community/Business Leader*

### **Access to Care/Services**

*Need more help for caregivers, both respite care and day care. – Community/Business Leader*

*Unsure of the numbers with the disease in the community but consider it a major issue due to lack of options or care for those with dementia. – Other Health Provider*

*Not many resources available to families dealing with dementia/Alzheimer's. – Public Health Representative*

*There are not enough services available for caregivers of people with dementia/Alzheimer's disease. Respite care needs to be covered by Medicare/Medicaid as well as increases hours and awareness of adult day services. – Community/Business Leader*

### **Lack of Providers**

*Lack of local providers, lack of dementia care facilities and long wait times. – Other Health Provider*

*Lack of resources, providers, and caregivers. – Other Health Provider*

### **Denial/Stigma**

*Persons who are experiencing problems tend to ignore warning signs. Either because they just don't know them or don't have anyone to help them through the process. Many folks are single and are fearful of what a diagnosis will mean. – Social Services Provider*

### **Diagnosis/Treatment**

*Lots of problems identifying in timely manner, limited curative prescriptions, major social support needs, major collaborative needs. Major comorbid problem contributing to exacerbation other problems. – Physician*

### **Co-Occurrences**

*This is tied to mental health. – Community/Business Leader*

## 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.

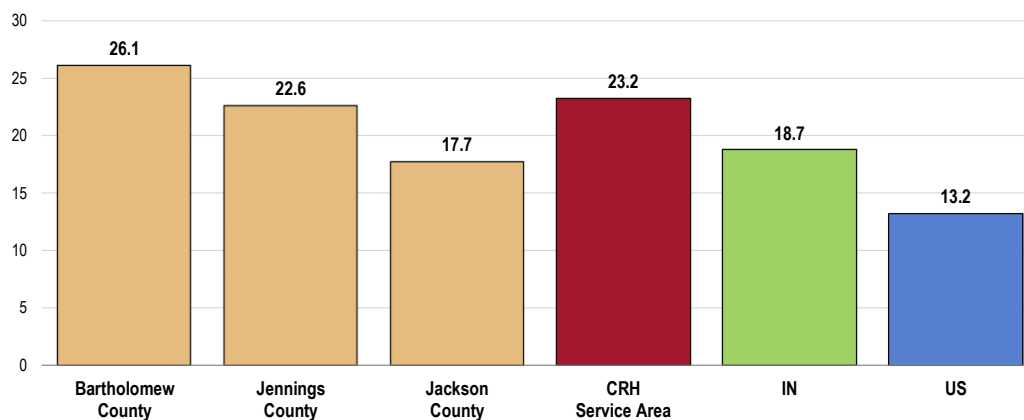
- Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

### Age-Adjusted Kidney Disease Deaths

Between 2014 and 2016, there was an annual average age-adjusted kidney disease mortality rate of 23.2 deaths per 100,000 population in the Columbus Regional Health Service Area.

- Well above state and US rates.
- Favorably low in Jackson County.

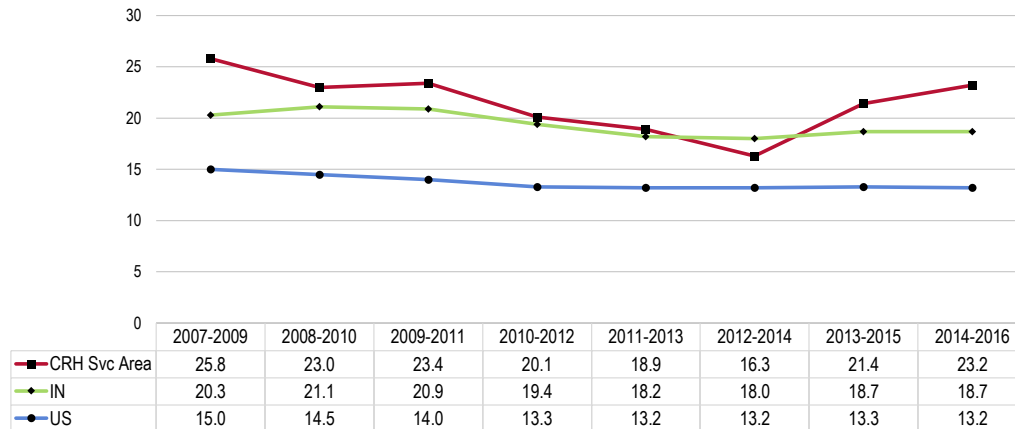
**Kidney Disease: Age-Adjusted Mortality**  
(2014-2016 Annual Average Deaths per 100,000 Population)



- Sources:
- CDC WONDER Online Query System, Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted April 2018.
- 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.

- **TREND:** Although decreasing for years in the service area, kidney disease mortality appears to be on the increase.

### Kidney Disease: Age-Adjusted Mortality Trends (Annual Average Deaths per 100,000 Population)

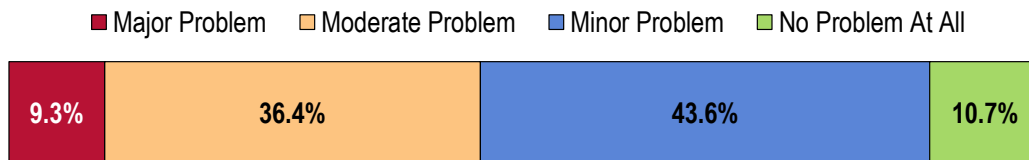


Sources: • CDC WONDER Online Query System, Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted April 2018.  
 Notes: • Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).  
 • Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

### Key Informant Input: Kidney Disease

Key informants taking part in an online survey generally characterized *Kidney Disease* as a “minor problem” in the community.

### Perceptions of Kidney Disease as a Problem in the Community (Key Informants, 2018)



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

### Top Concerns

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

#### Incidence/Prevalence

*My mother is in long-term care. I have been aware that over the course of her stay, many patients are transported to local hospital for dialysis. Also, a family member has been transported to the Indy area for problems with her chronic kidney problems. – Public Health Representative*

*More and more individuals have kidney disease or suffer from chronic kidney stones. It is not only men but women as well. – Public Health Representative*

*I can see the people that utilize our dialysis center here in town. I think that people need to be educated on how this can happen to a person before they get to that point. Example: diabetes education, smoking, and vascular education. – Community/Business Leader*

*National data shows increase in chronic diseases and illnesses and this CRH is likely to correspond to national averages. – Community/Business Leader*

*Several individuals have discussed their illness with me during my work interviews and with church members. – Social Services Provider*

#### **Access to Care/Services**

*We don't have a lot to offer from a medical standpoint for chronic kidney issues and dialysis. – Public Health Representative*

*It's access to dialysis that's the issue, maybe not CKD. – Other Health Provider*

#### **Comorbidities**

*Byproduct of diabetes disease. – Other Health Provider*

*Diabetes. – Community/Business Leader*

#### **Alcohol/Drugs**

*Alcohol use at younger ages is becoming more prevalent. – Public Health Representative*

#### **Lack of Providers**

*Not enough providers. – Other Health Provider*

## Potentially Disabling Conditions

### 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](http://www.healthypeople.gov))



## Key Informant Input: Arthritis, Osteoporosis & Chronic Back Conditions

A plurality of key informants taking part in an online survey characterized *Arthritis, Osteoporosis & Chronic Back Conditions* as a “moderate problem” in the community.

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

(Key Informants, 2018)

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



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

### Top Concerns

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

#### **Lack of Specialty Providers**

*Lack of rheumatologist in the area. One orthopedic MD who specializes in surgical backs. Limited access to pain management in the area for treatment of chronic pain. Medicaid usually not accepted. – Other Health Provider*

*Pain management, lack of resources. – Physician*

#### **Incidence/Prevalence**

*The prevalence of adults and teenagers with back pain is concerning. – Public Health Representative*

*I see many people in stores with plaque psoriasis. There are also many employees that have psoriatic arthritis that work for me. – Other Health Provider*

#### **Access for Uninsured/Underinsured**

*The orthopedic providers do not have a program to provide discounted care and if uninsured, a patient cannot afford to see them. – Other Health Provider*

#### **Built Environment**

*Not enough concentration on ergonomic issues in the workplace and at home, which leads to issues that people have a hard time addressing. – Other Health Provider*

#### **Insufficient Physical Activity**

*You frequently hear of people with back conditions due to regular repetitive activity, poor posture, and lack of physical stamina. – Community/Business Leader*

## 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](http://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.

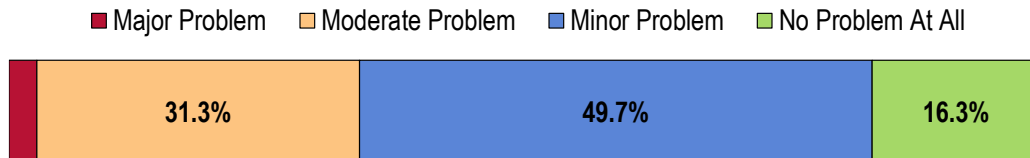
As the nation's population ages and survival rates for medically fragile infants and for people with severe injuries and acquired diseases improve, the prevalence of sensory and communication disorders is expected to rise.

- Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

## Key Informant Input: Vision & Hearing

Half of key informants taking part in an online survey most often characterized *Vision & Hearing* as a “minor problem” in the community.

### Perceptions of Vision and Hearing as a Problem in the Community (Key Informants, 2018)



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

### Top Concerns

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

#### **Access for Medicaid/Medicare**

*From the Medicaid side of it, sometimes students and families have to wait long amounts of times to get appointments or needs. If something is expired, they are diverted to other cities, which is challenging to some families. – Community/Business Leader*

#### **Insurance Coverage Barriers**

*Insurance will not pay for the cost of hearing aids. – Other Health Provider*

# Infectious Disease



**Professional Research Consultants, Inc.**

## 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 drug-using 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.

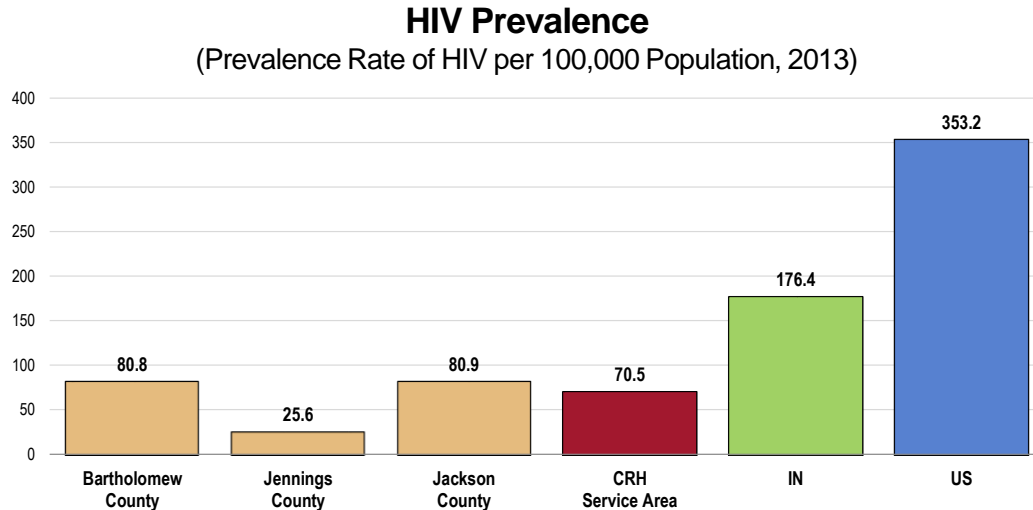
Public perception in the US about the seriousness of the HIV epidemic has declined in recent years. There is evidence that risky behaviors may be increasing among uninfected people, especially gay and bisexual men. Ongoing media and social campaigns for the general public and HIV prevention interventions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

- Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

## HIV Prevalence

In 2013, the area reported 70.5 HIV cases per 100,000 population.

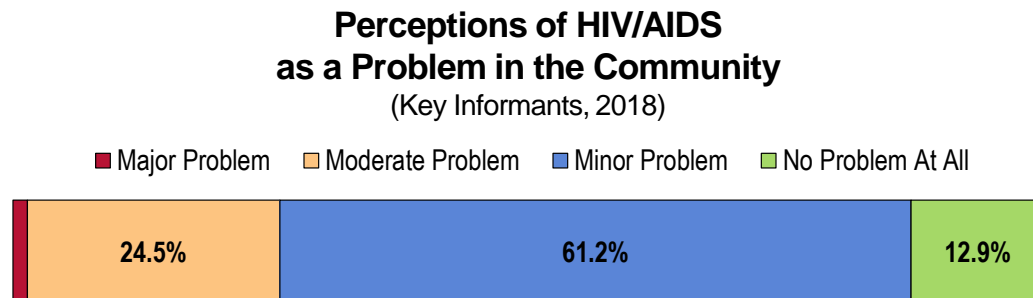
- Much more favorable than the statewide and US proportions.
- Favorably lower in Jennings County.



Sources: • Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention.  
 • Retrieved April 2018 from Community Commons at <http://www.chna.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

Key informants taking part in an online survey most often characterized *HIV/AIDS* as a “minor problem” in the community.



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

## Top Concerns

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

### Contributing Factors

Needle sharing, unprotected sexual intercourse. – Public Health Representative

## 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 healthcare 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](http://www.healthypeople.gov))

### Chlamydia & Gonorrhea

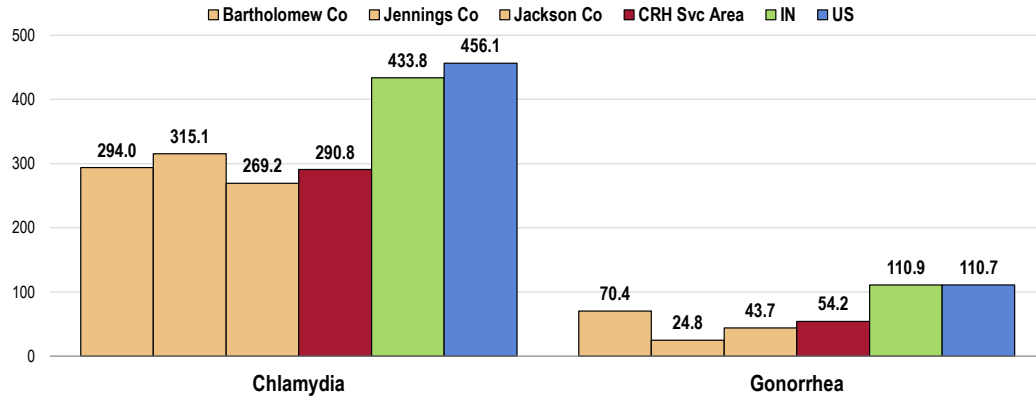
In 2014, the chlamydia incidence rate in the Columbus Regional Health Service Area was 290.8 cases per 100,000 population.

- Notably lower than the Indiana and US incidence rates.
- Similar rates by county.

The Columbus Regional Health Service Area gonorrhea incidence rate in 2014 was 54.2 cases per 100,000 population.

- Well below the state and US rates.
- Highest in Bartholomew County, lowest in Jennings County.

### Chlamydia & Gonorrhea Incidence (Incidence Rate per 100,000 Population, 2014)

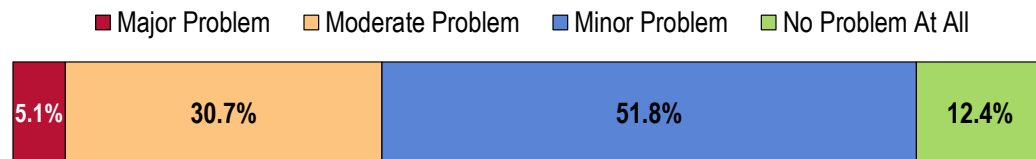


Sources: ● Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention.  
 ● Retrieved April 2018 from Community Commons at <http://www.chna.org>.  
 Notes: ● This indicator is relevant because it is a measure of poor health status and indicates the prevalence of unsafe sex practices.

### Key Informant Input: Sexually Transmitted Diseases

A plurality of key informants taking part in an online survey characterized *Sexually Transmitted Diseases* as a “minor problem” in the community.

### Perceptions of Sexually Transmitted Diseases as a Problem in the Community (Key Informants, 2018)



Sources: ● PRC Online Key Informant Survey, Professional Research Consultants, Inc.  
 Notes: ● Asked of all respondents.



## Top Concerns

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

### ***Incidence/Prevalence***

*The number of sexually transmitted diseases increased. – Social Services Provider*

*We see in an increase amount of people inquiring about where to go for STD testing. – Other Health Provider*

### ***Health Education/Awareness***

*Schools are allowed to teach health, but they do not bring in anyone to speak about sexually transmitted diseases. There are no other outlets for the kids to be informed. I believe guest speakers and doctors are an option for this. – Public Health Representative*

*Conversations with our youth. – Community/Business Leader*

### ***Cultural Beliefs***

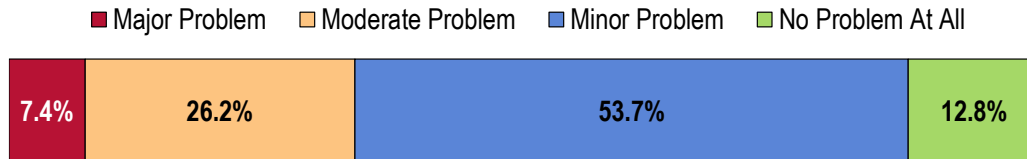
*Many people don't take protection from disease very seriously. I think they think it won't happen to them. – Social Services Provider*

## Immunization & Infectious Diseases

### Key Informant Input: Immunization & Infectious Diseases

Key informants taking part in an online survey most often characterized *Immunization & Infectious Diseases* as a “minor problem” in the community.

### Perceptions of Immunization and Infectious Diseases as a Problem in the Community (Key Informants, 2018)



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

### Top Concerns

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

#### Access to Care/Services

*It's difficult for working parents to schedule appointments during working hours. We need more options for evening appointments. – Other Health Provider*

*Can't take time to be seen by doctor. Our urgent care situation is the most concerning. Prompt medical attention. – Community/Business Leader*

*Immunizations will help in the prevention of many diseases which cause illness and/or death. If we can prevent the spread of infectious diseases with immunizations or quick detection of source, we help prevent pain and suffering. – Public Health Representative*

#### Personal/Cultural Beliefs

*Many families falsely believe that vaccines are not safe. – Physician*

*As a school official, I've seen students in our schools without immunizations. – Community/Business Leader*

#### Affordable Care/Services

*Immunizations against disease can be costly, even with insurance. Education of the need for immunizations needs to be provided. – Other Health Provider*

#### Immunization Rates

*Trends toward not immunized. – Public Health Representative*

# Births



Professional Research Consultants, Inc.

## Birth Outcomes & Risks

### Low-Weight Births

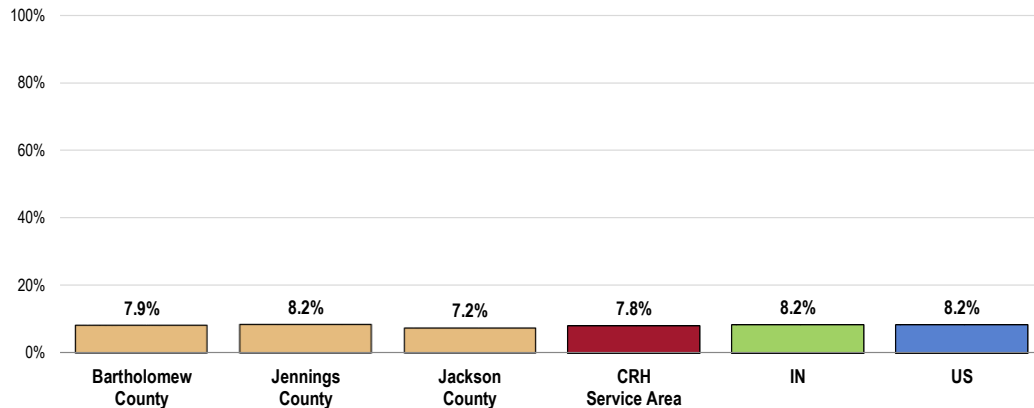
**A total of 7.8% of 2006-2012 Columbus Regional Health Service Area births were low-weight.**

- Comparable to the Indiana and US proportions.
- Identical to the Healthy People 2020 target (7.8% or lower).
- Comparable proportions by county.

Low birthweight babies, those who weigh less than 2,500 grams (5 pounds, 8 ounces) at birth, are much more prone to illness and neonatal death than are babies of normal birthweight.

Largely a result of receiving poor or inadequate prenatal care, many low-weight births and the consequent health problems are preventable.

### Low-Weight Births (Percent of Live Births, 2006-2012) Healthy People 2020 Target = 7.8% or Lower



Sources: • Centers for Disease Control and Prevention, National Vital Statistics System. Accessed using CDC WONDER.  
• Retrieved from Community Commons at <http://www.chna.org>.

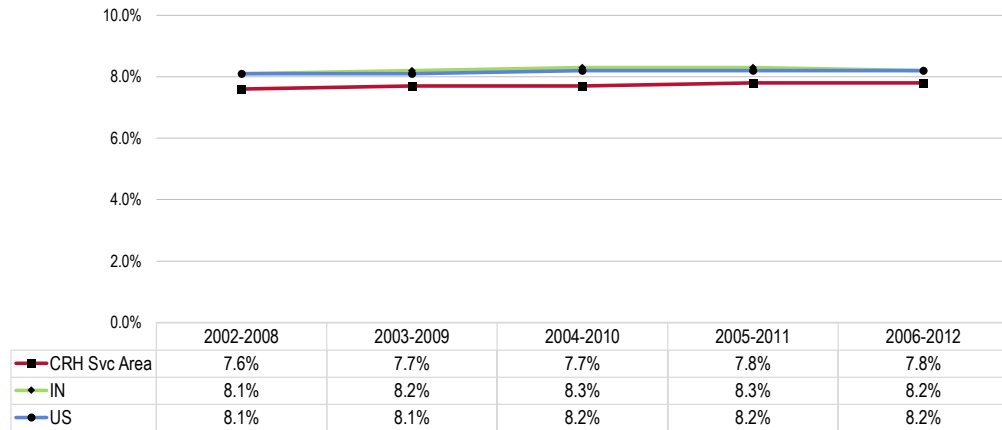
• US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective MICH-8.1]

Note: • This indicator reports the percentage of total births that are low birth weight (Under 2500g). This indicator is relevant because low birth weight infants are at high risk for health problems. This indicator can also highlight the existence of health disparities.

- **TREND:** Over time, the prevalence of low-weight births in the service area has been stable, echoing the stability noted statewide and across the US.

## Low-Weight Births (Percent of Live Births)

Healthy People 2020 Target = 7.8% or Lower



Sources: ● CDC WONDER Online Query System. Centers for Disease Control and Prevention, National Center for Health Statistics, Division of Vital Statistics. Data extracted April 2018.  
 ● US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective MICH-8.1]

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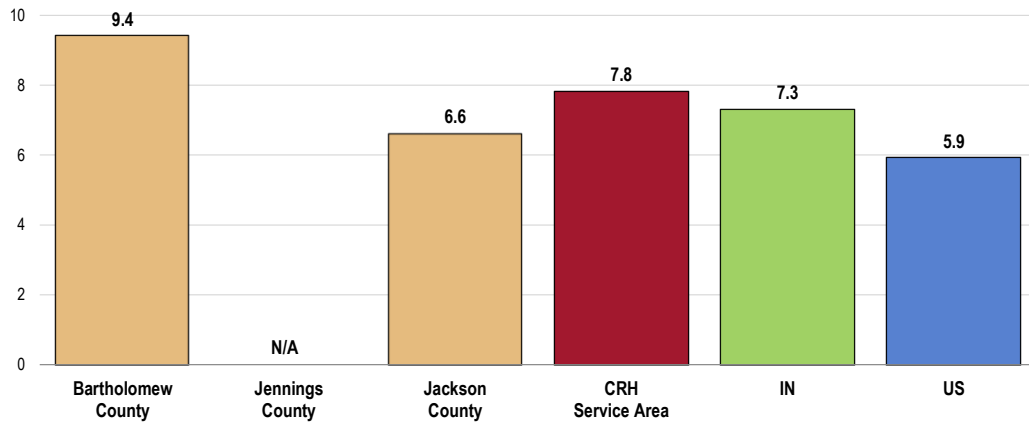
## Infant Mortality

Between 2014 and 2016, there was an annual average of 7.8 infant deaths per 1,000 live births.

Infant mortality rates reflect deaths of children less than one year old per 1,000 live births.

- Similar to the Indiana rate.
- Above the US rate.
- Fails to satisfy the Healthy People 2020 target of 6.0 per 1,000 live births or lower.
- Lower in Jackson County.

### Infant Mortality Rate (Annual Average Infant Deaths per 1,000 Live Births, 2014-2016) Healthy People 2020 Target = 6.0 or Lower



Sources: 

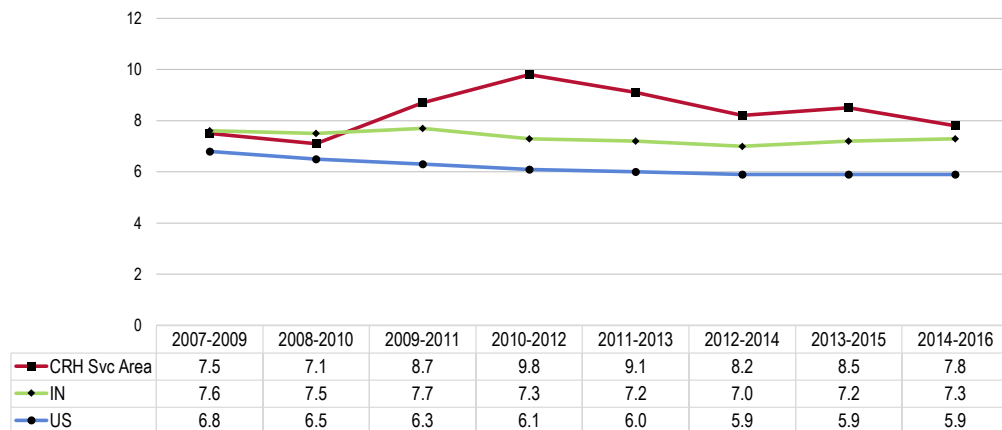
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, National Center for Health Statistics, Division of Vital Statistics. Data extracted April 2018.
- US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective MICH-1.3]

Notes: 

- 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.

- TREND: After increasing for a period of time, the service area infant mortality rate has decreased in recent years.

### Infant Mortality Rate (Annual Average Infant Deaths per 1,000 Live Births) Healthy People 2020 Target = 6.0 or Lower



Sources: 

- CDC WONDER Online Query System. Centers for Disease Control and Prevention, National Center for Health Statistics, Division of Vital Statistics. Data extracted April 2018.
- Centers for Disease Control and Prevention, National Center for Health Statistics.
- US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective MICH-1.3]

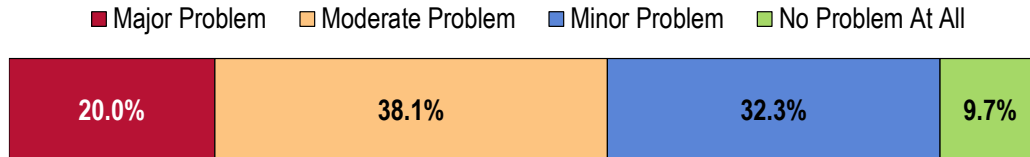
Notes: 

- Rates are three-year averages of deaths of children under 1 year old per 1,000 live births.

## Key Informant Input: Infant & Child Health

Key informants taking part in an online survey generally characterized *Infant & Child Health* as a “moderate problem” in the community.

### Perceptions of Infant and Child Health as a Problem in the Community (Key Informants, 2018)



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

### Top Concerns

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

#### Access to Care/Services

*Barriers exist to people bringing their children to all well exams, etc. High deductibles and copays, penalties for missing work to take children to the doctor, etc. – Physician*

*Access to mental and physical needs. – Community/Business Leader*

*There are not enough supports in place for young mothers, young parents, to ensure the health of infants and children. – Other Health Provider*

*Not all mothers have access to prenatal care and/or care for their infant and child. And many substance abuse mothers are unaware of options. – Other Health Provider*

*We need to have more facilities here that take medical needs and prescription needs. There are a ton of kids who do not have medicine filled because their parents dropped the ball on paperwork, so they are forced to see a doctor in another city. – Community/Business Leader*

#### Lack of Providers

*Not enough pediatricians. – Community/Business Leader*

*Access to pediatric physicians is very limited if at all. I have encountered friends that tried to make an appointment and were told neither groups are accepting new patients. All access to Medicaid providers is very limited. – Other Health Provider*

*We have only one pediatric practice in town accepting new patients. – Other Health Provider*

*Not enough pediatric offices in Columbus. For a city of our size is ineffective. – Community/Business Leader*

#### Infant Mortality Rates

*High infant mortality rates. High number of neonatal abstinence syndrome births. – Other Health Provider*

*Infant mortality in this region is much too high. And personal experience in speaking to soon to be new mothers. Young mothers who come from undereducated families are most at risk. – Community/Business Leader*

*We have one of the highest infant mortality rates in the state of Indiana, and Indiana has one of the highest rates in the country. Our postnatal services are skimpy. Our Medicaid providers for children are overbooked, school nurses are overburdened. – Other Health Provider*

*High infant mortality, substance, tobacco use during pregnancy. Lack of resources. – Public Health Representative*

*Our infant mortality rate is one of the highest in the state. We also have many children who are uninsured, despite the CHIP program. – Public Health Representative*

#### **Health Education/Awareness**

*To give an unborn child the best possible start in life, the expectant woman needs access to information on that will not only keep her healthy during her pregnancy but before she gets pregnant. Young adults need to understand how they can create that. – Other Health Provider*

*Many community members do not have the education to understand the importance of infant and child health. Insurance is a major issue as well. – Other Health Provider*

*Lack of parents' knowledge and the drug crisis affecting the caregivers. – Community/Business Leader*

#### **Poverty**

*Infants and children in the community are being failed, especially from low income households. Parents are having trouble taking care of their children properly. There aren't enough foster families and DCS is overloaded. – Other Health Provider*

*Homeless and indigent people are often out of the loop when it comes to finding services and getting to the sites. Undocumented people may not be aware of or may be afraid to seek out health services. – Public Health Representative*

#### **Access for Uninsured/Underinsured**

*Lack of access by working poor. – Community/Business Leader*

*Lack of insurance for regular healthcare provider visits. Poor parent knowledge of developmental needs and parenting skills. Exposure to unsafe home environments, drugs and/or violence. – Other Health Provider*

#### **Learning Challenges**

*Firsthand experiences in our schools seeing children with poor health. This leads to challenges in learning. – Community/Business Leader*

#### **Breastfeeding**

*We have good breastfeeding initiation, but limited amounts of moms/babies breastfeeding exclusively by three months of age. – Public Health Representative*

#### **Contributing Factors**

*Because of the high incident of tobacco use, illegal drugs, alcohol and low activity, obesity and poor diet, children are encircled by poor health influences. – Other Health Provider*

#### **Teenage Pregnancies**

*Babies are having babies. – Community/Business Leader*



## Family Planning

### Births to Teen Mothers

#### About Teen 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.

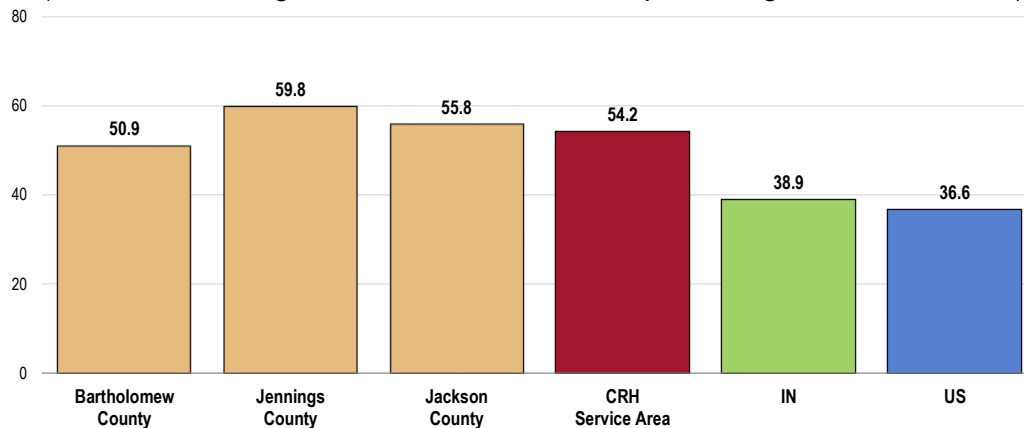
- Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

**Between 2006 and 2012, the service area reported 54.2 births to women age 15 to 19 per 1,000 women in this age group.**

- Well above the state and US teen birth rates.
- Similar rates by county.

#### Teen Birth Rate

(Births to Women Age 15-19 Per 1,000 Female Population Age 15-19, 2006-2012)

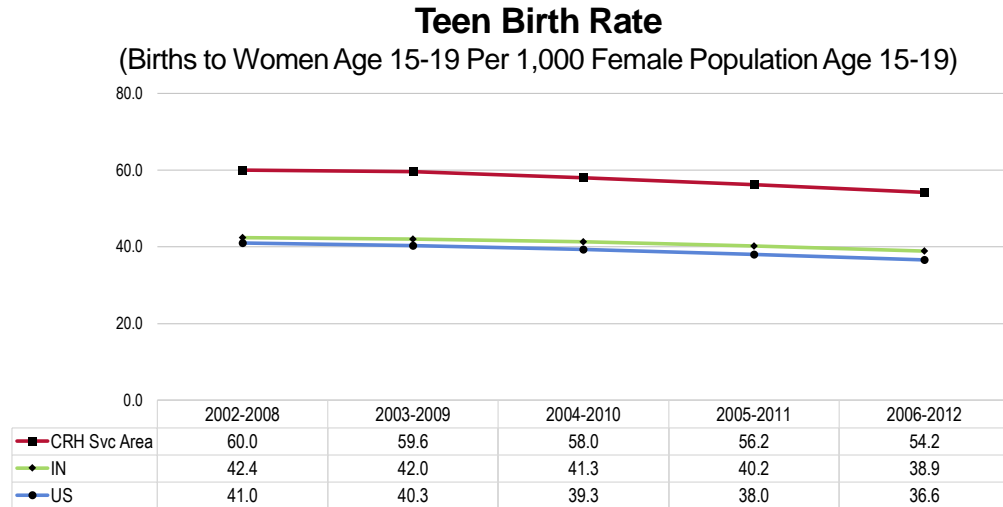


Sources: • Centers for Disease Control and Prevention, National Vital Statistics System. Accessed using CDC WONDER.

• Retrieved from Community Commons at <http://www.chna.org>.

Notes: • 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.

- **TREND:** The service area’s teen birth rate has decreased over time, echoing the state and national trends.



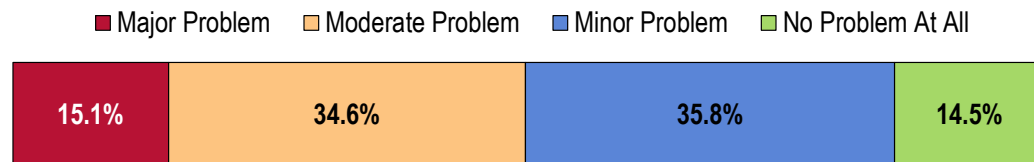
Sources: • Centers for Disease Control and Prevention, National Vital Statistics System. Accessed using CDC WONDER.  
 • Retrieved from Community Commons at <http://www.chna.org>.

Notes: • 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

Key informants taking part in an online survey were equally likely to characterize *Family Planning* as a “moderate problem” or a “minor problem” in the community.

### Perceptions of Family Planning as a Problem in the Community (Key Informants, 2018)



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

## Top Concerns

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

### Health Education/Awareness

*I believe there are many people who are not aware of how to plan for family effectively and efficiently. I think some wait until a crisis mode to act. – Community/Business Leader*

*Younger people are adverse to commitment, such as marriage and lack the knowledge of what it means to be a parent. – Community/Business Leader*

*Sometimes people who have families do not know all of the resources the community has. And even point people do not know all of the resources. – Community/Business Leader*

*Learning what it means to enjoy each other sexually without pregnancy. Education/understanding of toxins that are consumed by new mother passed to unborn and the negative effects. – Community/Business Leader*

*It provides families an opportunity to think about family short- and long-term goals. – Social Services Provider*

*There is no education provided by locally. What is available by providers focuses on medical-based topics and actions. Teaching young adults about family planning will make a difference in how our children and grandchildren are raised and mentored. – Other Health Provider*

*Lack of knowledge about the variety of family planning options. Cost, lack of insurance coverage. Culture, beliefs that limit availability and access to use. – Other Health Provider*

### **Access to Affordable Care**

*There are many young women who do not have access to affordable birth control. – Physician*

*Contraception can be expensive, takes a while to get an appointment. – Community/Business Leader*

*Low-cost family planning is more difficult than it needs to be. Planned Parenthood does a great job with lower income people. Those young women with insurance and/or supportive parents can be covered in primary care. – Other Health Provider*

*Women are giving birth to children when they have difficulty even providing for themselves or the children they already have in the household. There's a false feeling of it won't happen to me and I'll do it just this once. – Social Services Provider*

### **Teenage Pregnancies**

*Teen birth rate. – Social Services Provider*

### **Access for Uninsured/Underinsured**

*For people without insurance, the only realistic, whole-options clinic is Planned Parenthood, which is constantly under scrutiny/attack from political/religious factions. This is stressful and worrisome with the current political climate. – Public Health Representative*

### **Access to Care**

*Planned Parenthood. Limited availability and no option for women to make a personal decision on abortion without going to Indianapolis. – Community/Business Leader*

# Modifiable Health Risks



Professional Research Consultants, Inc.

## 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
- 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.

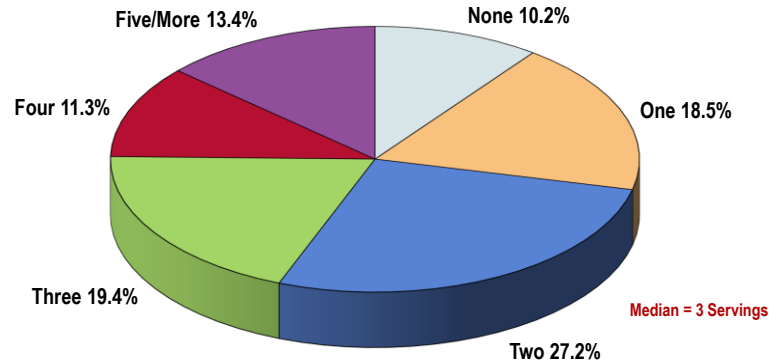
- Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

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

## Fruit & Vegetable Consumption

While 10.2% of survey respondents did not have any fruits or vegetables during the day preceding the interview and 18.5% report eating just one fruit or vegetable on that day, a total of 13.4% report eating 5+ fruits/vegetables on the day prior to the interview.

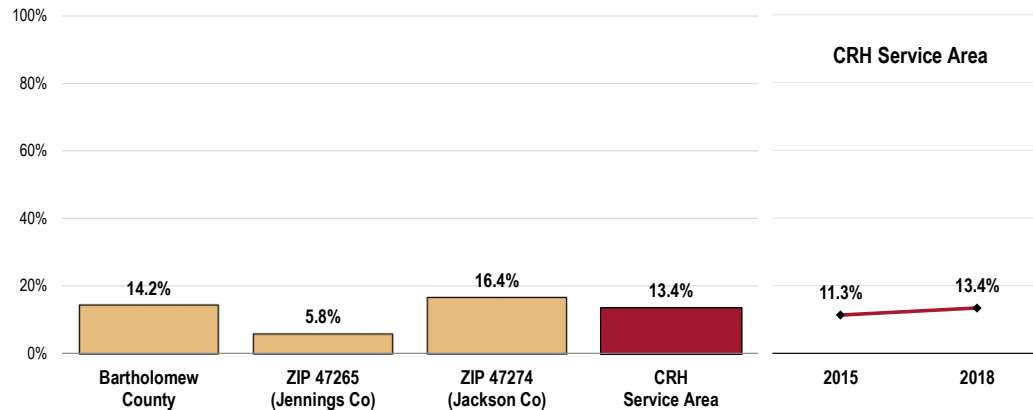
### Servings of Fruits and Vegetables Eaten Yesterday (CRH Service Area, 2018)



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 332]  
 Notes: • Asked of all respondents.

- The prevalence of adults eating 5+ servings of produce yesterday is much lower in ZIP Code 47265.
- TREND: Fruit/vegetable consumption has not changed significantly since 2015.

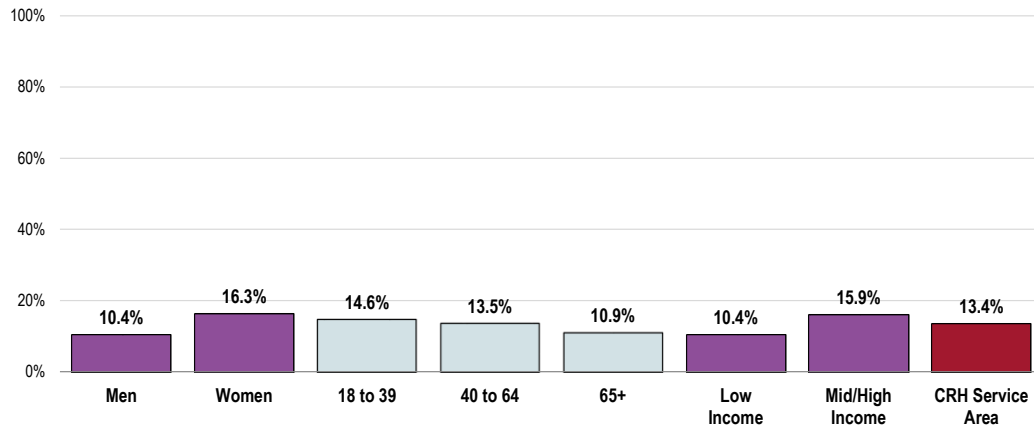
### Ate 5+ Servings of Fruits and Vegetables Yesterday



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 148]  
 Notes: • Asked of all respondents.  
 • For this issue, respondents were asked to recall their food intake on the previous day.

- Area men are less likely to have eaten 5+ servings of fruits/vegetables on the day prior to the survey interview.

### Ate 5+ Servings of Fruits and Vegetables Yesterday (CRH Service Area, 2018)



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 148]  
 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.  
 • For this issue, respondents were asked to recall their food intake on the previous day.

### Low Food Access (Food Deserts)

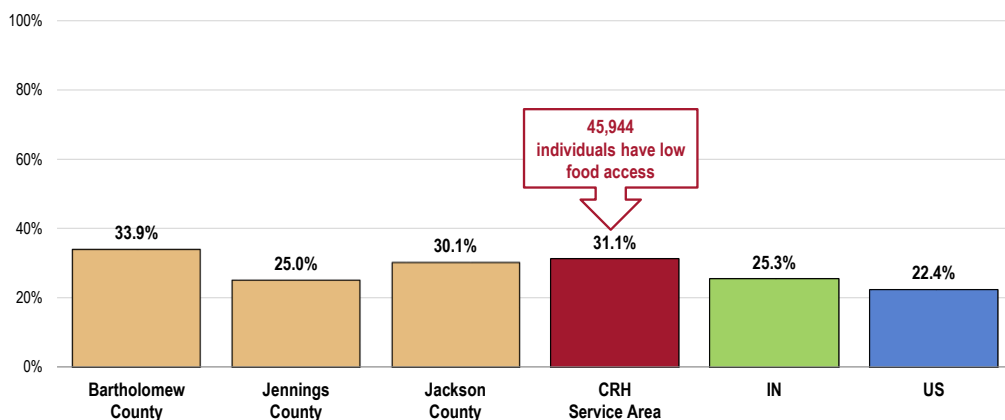
A food desert is defined as a low-income area where a significant number or share of residents is far from a supermarket, where "far" is more than 1 mile in urban areas and more than 10 miles in rural areas.

US Department of Agriculture data show that 31.1% of the CRH Service Area population (representing nearly 46,000 residents) have low food access or live in a "food desert," meaning that they do not live near a supermarket or large grocery store.

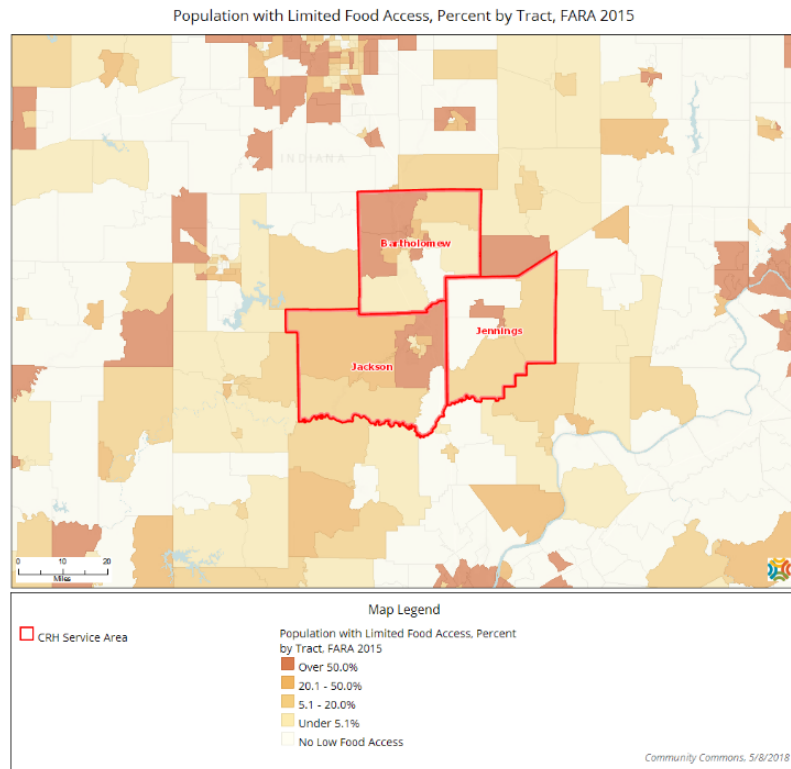
- Higher than state and US findings.
- The prevalence is highest in Bartholomew County.

### Population With Low Food Access

(Percent of Population That Is Far From a Supermarket or Large Grocery Store, 2015)



Sources: • US Department of Agriculture, Economic Research Service, USDA - Food Access Research Atlas (FARA). Retrieved April 2018 from Community Commons at <http://www.chna.org>.  
 Notes: • This indicator reports the percentage of the population living in census tracts designated as food deserts. A food desert is defined as low-income areas where a significant number or share of residents is far from a supermarket, where "far" is more than 1 mile in urban areas and more than 10 miles in rural areas. This indicator is relevant because it highlights populations and geographies facing food insecurity.



## Family Meals

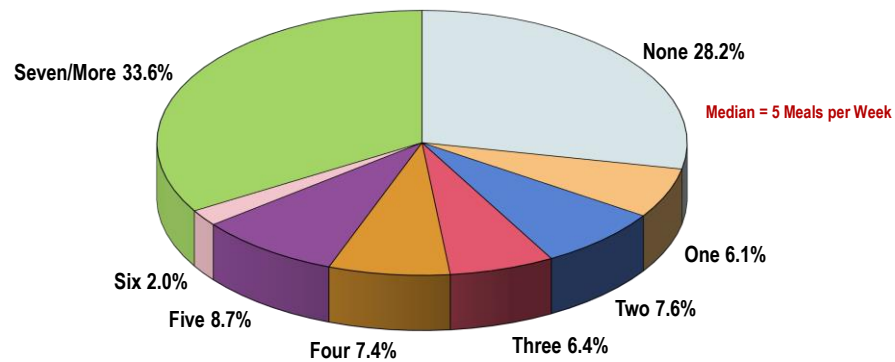
While 28.2% of survey respondents do not share any family meals without the TV on during a routine week, another one-third (33.6%) do so at least daily.

Respondents were asked:

*“How many times per week does your entire household sit down together, without the TV on, for a family meal?”*

- The median number of weekly family meals among survey respondents was 5 meals per week (up from 3 meals in 2012 and 2015).

### Number of Meals per Week Eaten Together as a Family (CRH Service Area, 2018)

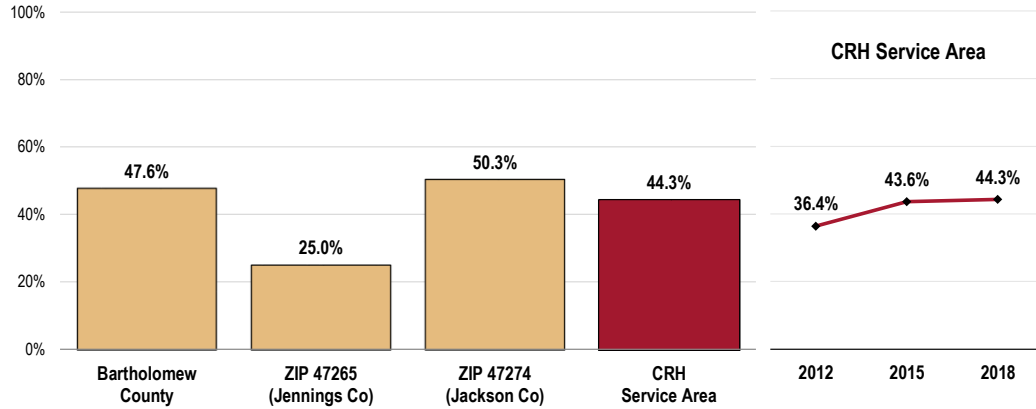


- Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 333]  
 Notes: • Asked of all respondents.  
 • Does not include meals during which the television is on.



- The proportion of service area residents who eat 5+ meals together as a family without television each week is significantly lower in ZIP Code 47265.
- TREND: The prevalence has increased over time.

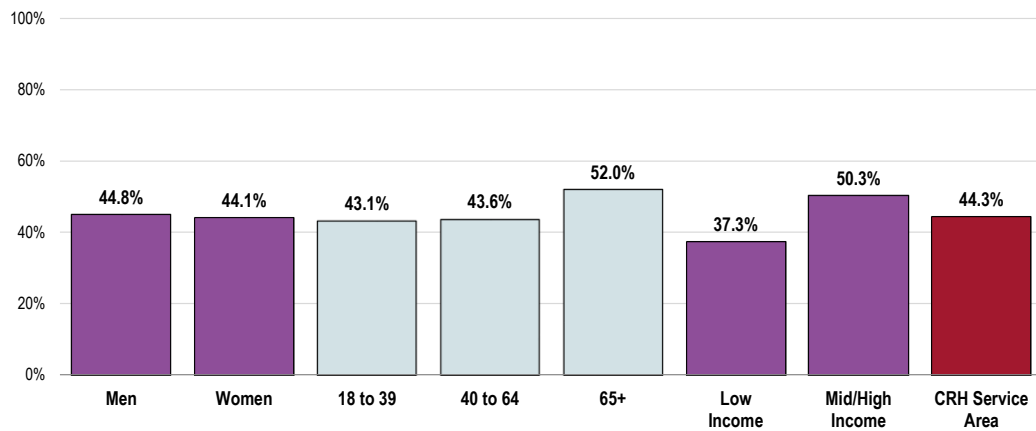
### Eat 5+ Meals per Week Together as a Family



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 333]  
 Notes: • Asked of all respondents.  
 • Does not include meals during which the television is on.

- Adults under 65 and those with lower incomes are less likely to eat 5+ meals per week as a family.

### Eat 5+ Meals per Week Together as a Family (CRH Service Area, 2018)



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 333]  
 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.  
 • Does not include meals during which the television is on.

## 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](http://www.healthypeople.gov))

### Leisure-Time Physical Activity

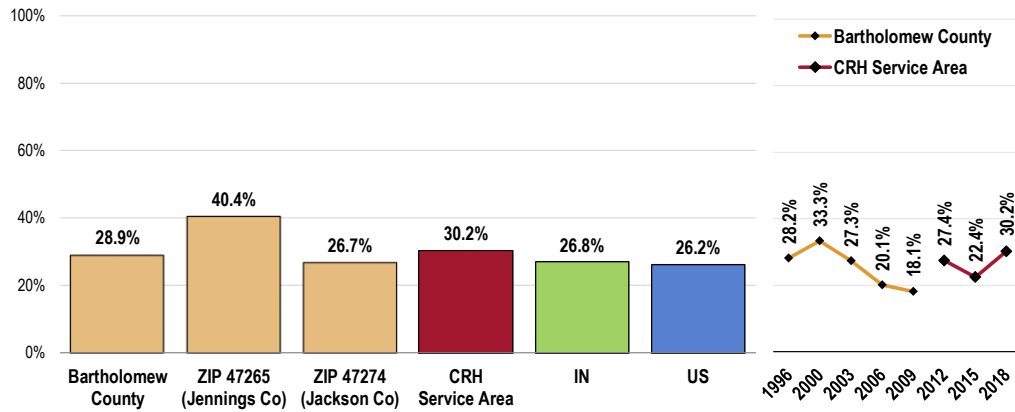
**A total of 30.2% of Columbus Regional Health Service Area adults report no leisure-time physical activity in the past month.**

- Similar to state and US findings.
- Similar to the Healthy People 2020 target (32.6% or lower).

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.

- Less favorable in ZIP Code 47265.
- TREND: Similar to 2012 service area findings but increasing significantly since 2015; Bartholomew County had appreciated a decrease in lack of physical activity over time between 2000 and 2009, as shown.

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

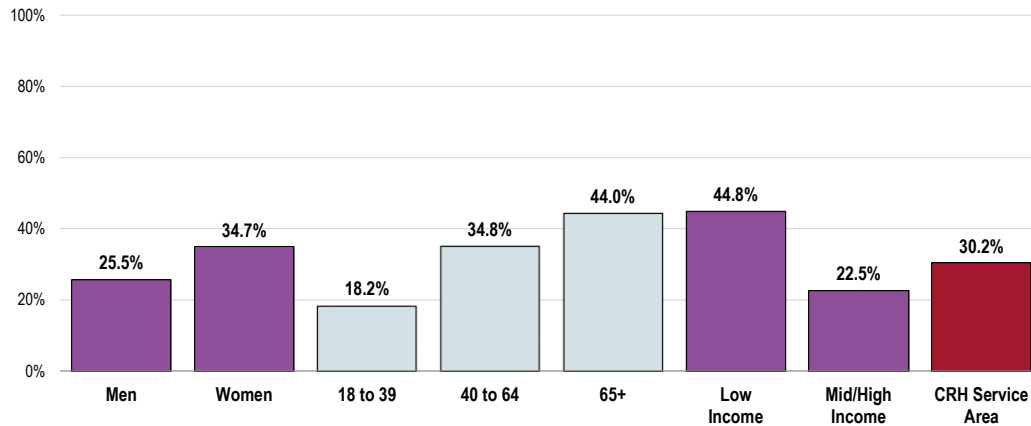


Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 89]  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2016 Indiana data.  
 • 2017 PRC National Health Survey, Professional Research Consultants, 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.

- Lack of leisure-time physical activity in the area is higher among women, older residents (positive correlation with age), and lower-income adults.

### No Leisure-Time Physical Activity in the Past Month (CRH Service Area, 2018) Healthy People 2020 Target = 32.6% or Lower



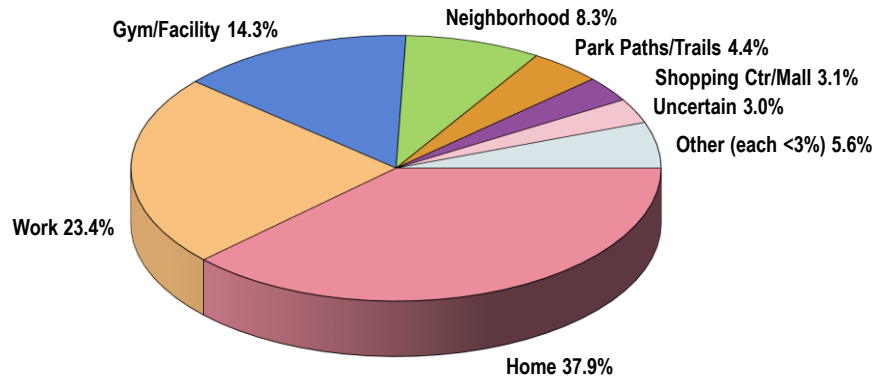
Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 89]  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective PA-1]

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.

Asked where most of their physical activity occurs, 37.9% of respondents mentioned home and 23.4% mentioned the workplace.

- Other venues commonly reported include a gym or fitness facility, neighborhood, park paths or trails, and a shopping center or mall.

### Site of Most Physical Activity (CRH Service Area, 2018)



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 335]  
 Notes: • Asked of all respondents.

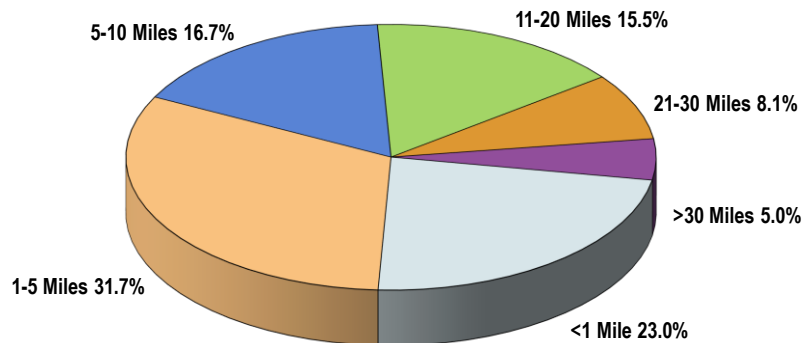
### Daily Commute

Over half of service area adults who work outside the home (54.7%) have a commute of 5 miles or less, and 16.7% commute up to 10 miles for work.

- In contrast, 5.0% of residents who work outside the home have a commute of over 30 miles.

### Length of Commute

(CRH Service Area Employed Respondents Who Work Outside the Home, 2018)



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 334]  
 Notes: • Asked of all employed respondents who work outside the home.

## Activity Levels

### Adults

#### 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](http://www.cdc.gov/physicalactivity)
- Learn more about CDC's efforts to promote walking by visiting <http://www.cdc.gov/vitalsigns/walking>.

#### Aerobic & Strengthening Physical Activity

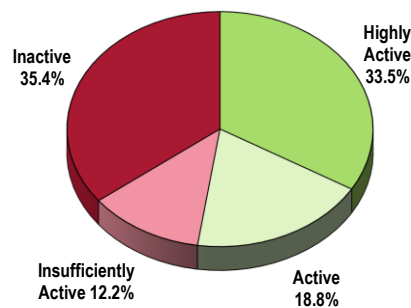
Based on reported physical activity intensity, frequency, and duration over the past month, **47.6% of Columbus Regional Health Service Area adults are found to be “insufficiently active” or “inactive.”**

**A total of 63.4% of Columbus Regional Health Service Area adults do not participate in any types of physical activities or exercises to strengthen their muscles.**

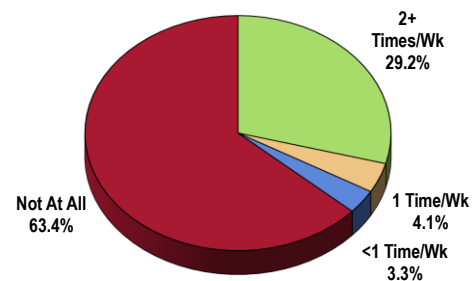
Survey respondents were asked about the types of physical activities they engaged in during the past month, as well as the frequency and duration of these activities.

- “Inactive” includes those reporting no aerobic physical activity in the past month.
- “Insufficiently active” includes those with the equivalent of 1-150 minutes of aerobic physical activity per week.
- “Active” includes those with 150-300 minutes of weekly aerobic physical activity.
- “Highly active” includes those with >300 minutes of weekly aerobic physical activity.

### Participation in Physical Activities (CRH Service Area, 2018)



**Aerobic Activity**



**Strengthening Activity**

Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 96, 150]

Notes: • Reflects the total sample of respondents.

• In this case, “inactive” aerobic activity represents those adults participating in no aerobic activity in the past week; “insufficiently active” reflects those respondents with 1–149 minutes of aerobic activity in the past week; “active” adults are those with 150–300 minutes of aerobic activity per week; and “highly active” adults participate in 301+ minutes of aerobic activity weekly.

**Recommended Levels of Physical Activity**

**A total of 19.6% of service area adults regularly participate in adequate levels of both aerobic and strengthening activities (meeting physical activity recommendations).**

- More favorable than state findings.
- Comparable to national findings.
- Comparable to the Healthy People 2020 target (20.1% or higher).
- Considerably lower in ZIP Code 47265.

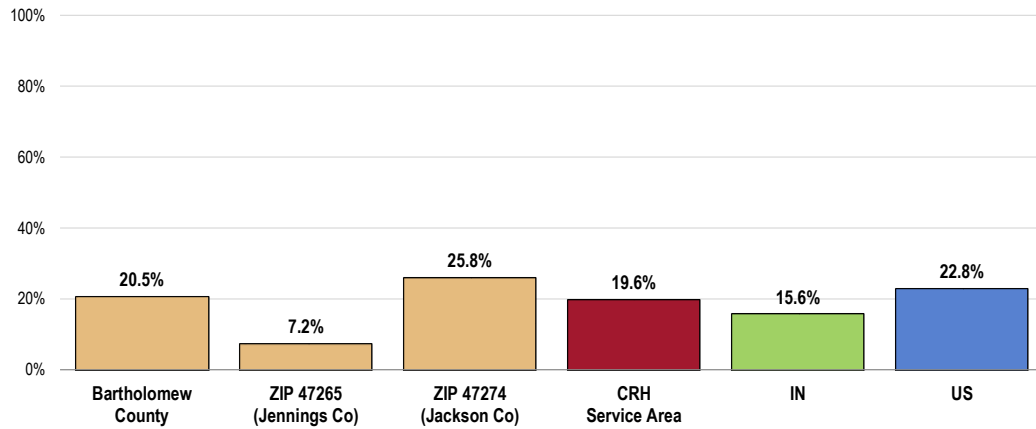
"Meeting physical activity recommendations" includes adequate levels of both aerobic and strengthening activities:

**Aerobic** activity is one of the following: at least 150 minutes per week of light to moderate activity, 75 minutes per week of vigorous 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**

Healthy People 2020 Target = 20.1% or Higher



- Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 152]
  - 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 Indiana data.
  - 2017 PRC National Health Survey, Professional Research Consultants, Inc.
  - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective PA-2.4]
- Notes:
- Meeting both guidelines 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 and report doing physical activities specifically designed to strengthen muscles at least twice per week.

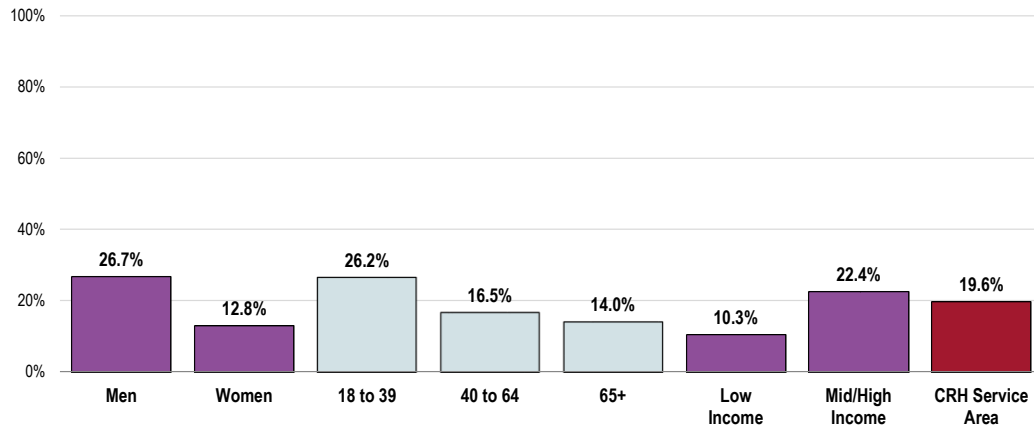
Those less likely to meet physical activity requirements include:

- Women.
- Older adults (negative correlation with age).
- Those in low-income households.

## Meets Physical Activity Recommendations

(CRH Service Area, 2018)

Healthy People 2020 Target = 20.1% or Higher



- Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 152]
  - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective PA-2.4]
- 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.
  - Meeting both guidelines 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 and report doing physical activities specifically designed to strengthen muscles at least twice per week.

## Children

### Recommended Levels of Physical Activity

Children and adolescents should do 60 minutes (1 hour) or more of physical activity each day.

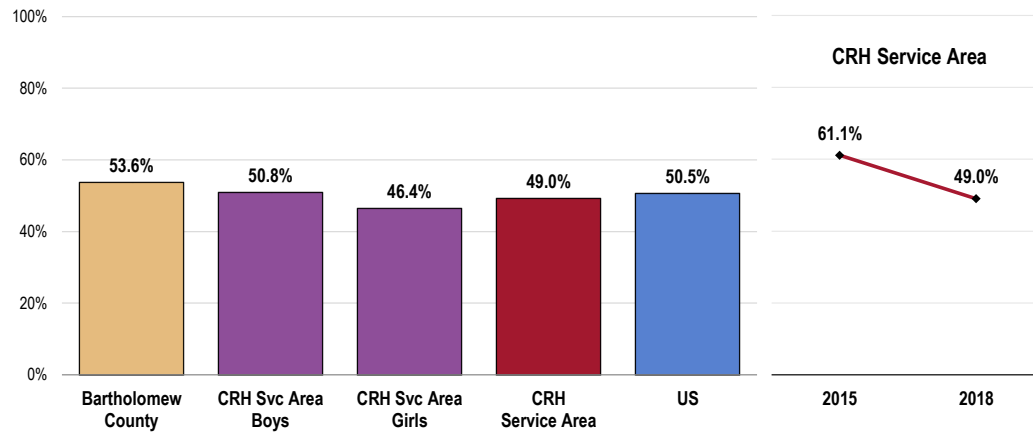
- 2013 Physical Activity Guidelines for Americans, US Department of Health and Human Services. [www.cdc.gov/physicalactivity](http://www.cdc.gov/physicalactivity)

### Daily Activity

Among Columbus Regional Health Service Area children age 2 to 17, 49.0% are reported to have had 60 minutes of physical activity on each of the 7 days preceding the interview (1+ hours per day).

- Comparable to that found nationally.
- The prevalence is 53.6% in Bartholomew County.
- Area boys and girls are similarly active.
- TREND: Marks a statistically significant decrease over time.

### Child Is Physically Active for One or More Hours per Day (Among Children Age 2-17)



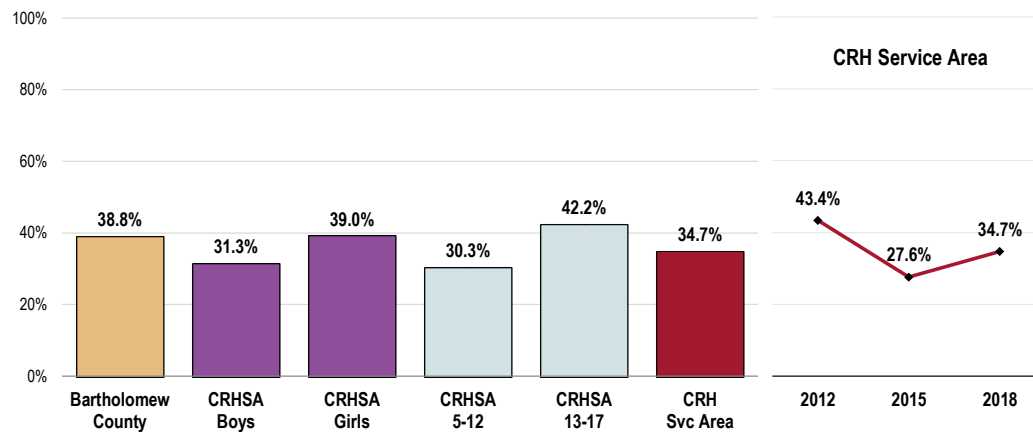
Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 124]  
 • 2017 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of all respondents with children age 2-17 at home.  
 • Includes children reported to have one or more hours of physical activity on each of the seven days preceding the survey.

#### Daily Screen Time

Among service area children age 5 to 17, 34.7% are reported to spend 3+ hours per day on screen time (TV, computer, video games, etc.).

- Girls and teens report higher prevalence levels.
- TREND: Statistically decreased from 2012 survey findings (but increasing since 2015).

### Child With 3+ Hours Per School Day of Total Screen Time [TV, Computer, Video Games, etc. for Entertainment] (Among Children Age 5-17)



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 350]  
 Notes: • Asked of all respondents with children age 5-17 at home.  
 • Screens include television, computer, video games, etc. used for entertainment.



## Access to Physical Activity

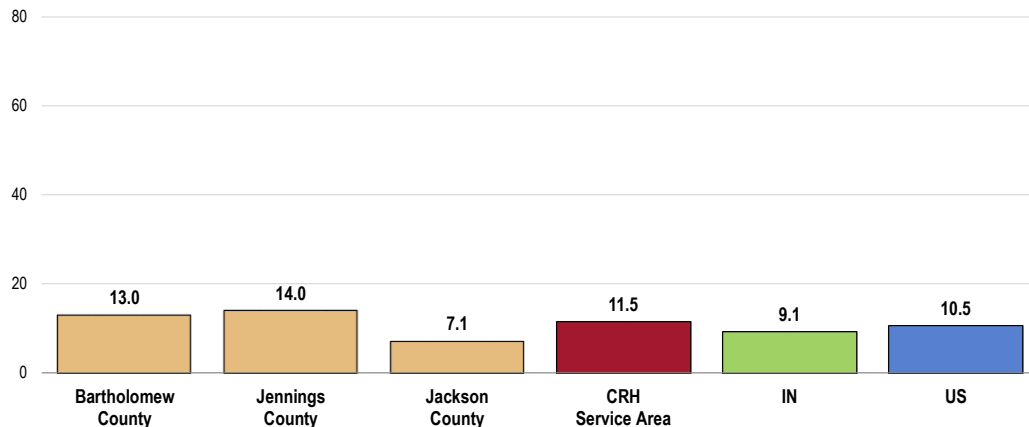
In 2015, there were 11.5 recreation/fitness facilities for every 100,000 population in the Columbus Regional Health Service Area.

- Above what is found statewide.
- Similar to the national ratio.
- The ratio is notably lower in Jackson County.

Here, recreation/fitness facilities include establishments engaged in operating facilities which offer "exercise and other active physical fitness conditioning or recreational sports activities."

Examples include athletic clubs, gymnasiums, dance centers, tennis clubs, and swimming pools.

### Population With Recreation & Fitness Facility Access (Number of Recreation & Fitness Facilities per 100,000 Population, 2015)



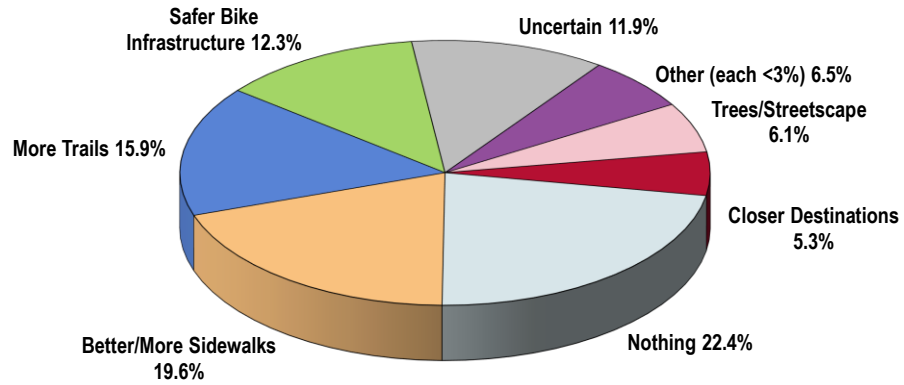
- Sources:
- US Census Bureau, County Business Patterns. Additional data analysis by CARES.
  - Retrieved April 2018 from Community Commons at <http://www.chna.org>.
- Notes:
- Recreation and fitness facilities are defined by North American Industry Classification System (NAICS) Code 713940, which include *Establishments engaged in operating facilities which offer "exercise and other active physical fitness conditioning or recreational sports activities"*. Examples include athletic clubs, gymnasiums, dance centers, tennis clubs, and swimming pools. This indicator is relevant because access to recreation and fitness facilities encourages physical activity and other healthy behaviors.

### Potential Community Improvements

Asked what they would like to see improved in the community in order to increase their physical activity opportunities, 19.6% of survey respondents mentioned better/more sidewalks, and 15.9% would like to see more trails.

- Other amenities requested included more trees or streetscapes.

**Would Like to See \_\_\_\_\_ Improve in the Community in  
Order to Increase Physical Activity Opportunities**  
(CRH Service Area, 2018)



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 336]  
Notes: • Asked of all respondents.

## 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](http://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 ( $m^2$ ). To estimate BMI using pounds and inches, use:  $[\text{weight (pounds)}/\text{height squared (inches}^2)] \times 703$ .

In this report, overweight is defined as a BMI of 25.0 to 29.9  $kg/m^2$  and obesity as a BMI  $\geq 30 kg/m^2$ . The rationale behind these definitions is based on epidemiological data that show increases in mortality with BMIs above 25  $kg/m^2$ . The increase in mortality, however, tends to be modest until a BMI of 30  $kg/m^2$  is reached. For persons with a BMI  $\geq 30 kg/m^2$ , 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  $kg/m^2$ .

- 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

Classification of Overweight and Obesity by BMI	BMI ( $kg/m^2$ )
Underweight	<18.5
Normal	18.5 – 24.9
Overweight	25.0 – 29.9
Obese	$\geq 30.0$

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.

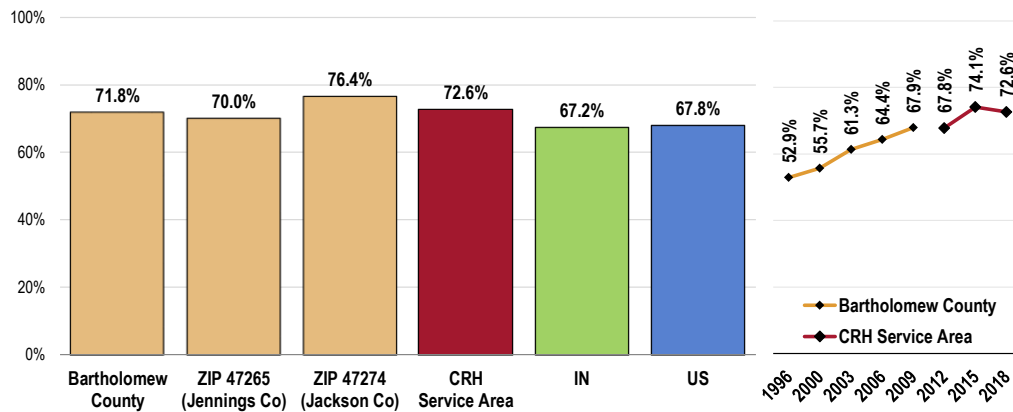
## Overweight Status

**Over 7 in 10 Columbus Regional Health Service Area adults (72.6%) are overweight.**

Here, "overweight" includes those respondents with a BMI value  $\geq 25$ .

- Worse than the Indiana and US figures.
- Similar findings by area.
- TREND: Marks a statistically significant increase over time.

### Prevalence of Total Overweight (Overweight or Obese) (Percent of Adults With a Body Mass Index of 25.0 or Higher)



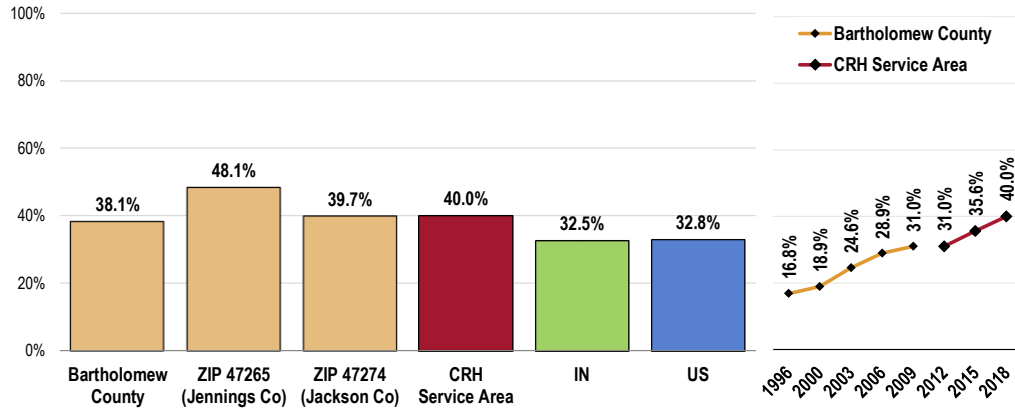
- Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 154]
  - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2016 Indiana data.
  - 2017 PRC National Health Survey, Professional Research Consultants, Inc.
- Notes:
- 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.

**Further, 40.0% of Columbus Regional Health Service Area adults are obese.**

"Obese" (also included in overweight prevalence discussed previously) includes respondents with a BMI value  $\geq 30$ .

- Worse than state and national proportions.
- Fails to satisfy the Healthy People 2020 target (30.5% or lower).
- Similar findings by area.
- TREND: Denotes a statistically significant increase in obesity over time.

### Prevalence of Obesity (Percent of Adults With a Body Mass Index of 30.0 or Higher) Healthy People 2020 Target = 30.5% or Lower

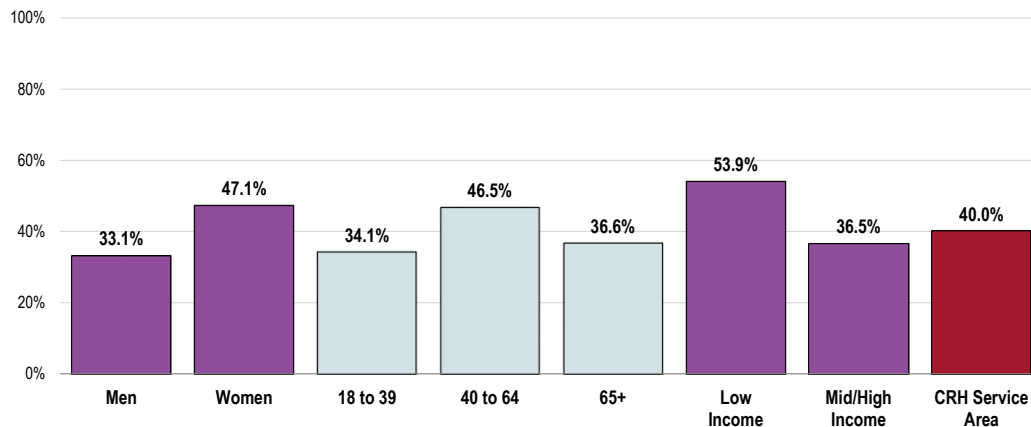


Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 154]  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2016 Indiana data.  
 • 2017 PRC National Health Survey, Professional Research Consultants, Inc.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective NWS-9]  
 Notes: • Based on reported heights and weights, asked of all respondents.  
 • 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.

Obesity is notably more prevalent among:

- Women.
- Those between the ages of 40 and 64.
- Lower-income residents.

### Prevalence of Obesity (Percent of Adults With a BMI of 30.0 or Higher; CRH Service Area, 2018) Healthy People 2020 Target = 30.5% or Lower



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 154]  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective NWS-9]  
 Notes: • 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 correlation between overweight and various health issues cannot be disputed.

### Relationship of Overweight With Other Health Issues

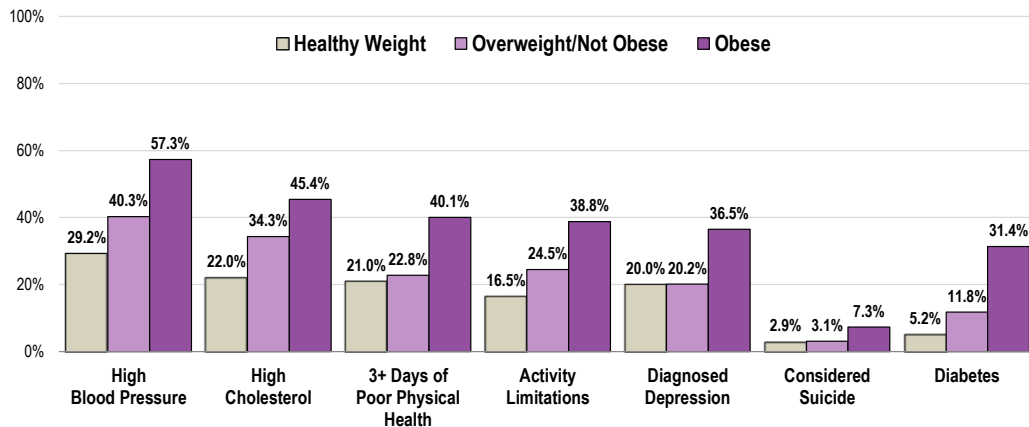
Overweight and obese adults are more likely to report a number of adverse health conditions.

Among these are:

- High blood pressure.
- High cholesterol.
- 3+ days of poor physical health.
- Activity limitations.
- Diagnosed depression.
- Suicide ideation.
- Diabetes.

### Relationship of Overweight With Other Health Issues

(By Weight Classification; CRH Service Area, 2018)



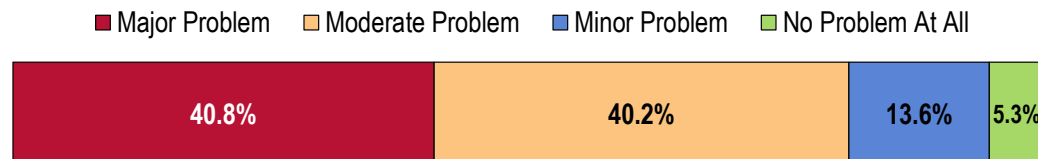
Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 36, 39, 43, 102, 109, 301, 342]  
 Notes: • Based on reported heights and weights, asked of all respondents.

### Key Informant Input: Nutrition, Physical Activity, & Weight

Key informants taking part in an online survey were equally likely to characterize *Nutrition, Physical Activity, & Weight* as a “major problem” or a “moderate problem” in the community.

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

(Key Informants, 2018)



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

## Top Concerns

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

### Prevalence of Overweight and Obese Residents

*Obesity is a huge problem in this community. Sedentary lifestyles are the norm. We do have pockets of individuals living active lifestyles, but I think they tend to be in higher income brackets. Access to healthy food at low costs. – Other Health Provider*

*We have a large percentage of overweight and obese residents, similar to Indiana as a whole. Our biggest challenge is helping people arrive at the tipping point to make healthier lifestyle choices. Lower income families often do not have available resources. – Social Services Provider*

*A high percentage of people from Bartholomew County are overweight and an even larger percentage of low income individuals are obese. Access to healthy food at reasonable prices and transportation seem to perpetuate this problem. – Community/Business Leader*

*Obesity is a big problem. Access to healthy foods and information about how to prepare them is limited. Our community is not that walkable in most areas, so physical activity levels are low. – Other Health Provider*

*Obesity. – Other Health Provider*

*Obesity is an epidemic in our community. – Community/Business Leader*

*Obesity. Short recess times. – Community/Business Leader*

*We have an overweight population, which is obvious from any group photo. Excess weight complicates any health issue. It seems resistant to change. – Community/Business Leader*

*Culture. What used to be considered overweight is now normal. High cost of healthier food. Busy schedules that keep people from exercising. – Community/Business Leader*

*Starting early in life is the key. Once children become overweight it is very difficult to reverse. Early education about healthy eating and exercise must continue to be a strong focus for our community. – Community/Business Leader*

*There is a large population of obese people and people that smoke. The people that carry around polar pops and fast food is very high. – Other Health Provider*

*Obesity and lack of availability of healthy foods is still a problem in the community. – Public Health Representative*

*There are many in our community that remain overweight or obese. Motivation is key factor. If motivated, eating habits and regular exercise will improve which decreases weight. Perhaps financial incentives for health plans could increase motivation. – Other Health Provider*

*Obesity. – Other Health Provider*

*Weight loss businesses are here but not at times that are convenient for all. Or some are cost-prohibitive. – Other Health Provider*

*Obesity epidemic, not enough physical activity integrated into everyday lifestyle. Cheaper foods are usually the healthiest choice. – Public Health Representative*

*High rate of obesity in all ages. – Physician*

*Most of the people I work with are overweight. But all the education I see is around cardio and calorie limitation. And treating meat like it's horrible, not around eliminating sugar from one's diet and lifting weights. – Other Health Provider*

*Our obesity and physical inactivity rates continue to rise. – Public Health Representative*

*High percentage of adults are obese in our community. – Physician*

*Increasing rates of obesity, preference for comfort food. – Public Health Representative*

### Health Education/Awareness

*Lack of knowledge and commitment to healthier lifestyles. – Community/Business Leader*

*Education about and promotion of physical activity. – Physician*

*Lack of education and support getting through to people with nutrition and weight issues. – Other Health Provider*

*Undereducation and/or refusal to recognize the reality of healthy diet and activity. Lack of understanding, poor eating, and consequences of sedentary lifestyle. General support for healthy eating and lifestyle needs to be fostered by more businesses. – Community/Business Leader*

*Knowledge of why it's important, how quickly problems can occur, and how much time it takes to make the improvements. And just taking time to think before you put it in your mouth. – Social Services Provider*

*Educational resources for children regarding healthy food choices and need for physical exercises. – Other Health Provider*

*Knowledge of long-term effects. – Community/Business Leader*

### **Nutrition**

*As a community I see high amount of processed foods being consumed, such as soda and chips. Some parents are aware that processed foods are usually not good for their health but for some there is just a lack of education. – Public Health Representative*

*Food labels are difficult to decipher. People are working two jobs to make ends meet and don't have the time or energy to exercise. We have been conditioned to park as close as possible to shops. Look at how long lines are at drive-up windows. – Community/Business Leader*

*Nutrition, physical activity, and weight management are not treated as disease management or avoidance. Same focus on the effects of tobacco, horrifying results and health and family impact. – Other Health Provider*

*We are a typical midwestern community that still eats like we are going to spend all day doing manual labor on the farm but sit in front of computers all day instead. – Community/Business Leader*

*Poor eating habits. Lack of exercise. – Social Services Provider*

*We are living in a sugar/grease/salt drenched environment. From babies to elderly, the constant barrage of marketing of junk/fast/high caloric foods is relentless. We have too much sedate entertainment and now we are encouraging acceptance of fat. – Public Health Representative*

*Fast, cheap, no nutritional food is consumed much more frequently than home-cooked meals. Busy lives lead to convenient options, which lead to obesity. Sitting at jobs, video games, computers, smartphones are more prevalent. – Public Health Representative*

### **Access to Healthy Foods**

*Finding healthy foods are affordable for lower income families. – Community/Business Leader*

*Families with the lack of funding and/or resources to adequately provide nutritious meals for their families. Or participate in paying physical activity classes is one of the barriers to ongoing weight issues. – Social Services Provider*

*Having the resource to truly nutritious food. Lack of a place to shop where you know everything you buy is wholesome and transparent. The misconception that we are eating healthy by marketing schemes. Lack of consistent, visible and easily accessible. – Community/Business Leader*

*Access to high quality nutrition at a price competitive with low quality high calorie food especially for school age children. We need to increase the use of the people trail system for walkers and cyclist by connecting the gaps. – Community/Business Leader*

*Lack of accessible healthy options and/or lack of interest or ability to change behaviors. – Other Health Provider*

### **Insufficient Physical Activity**

*Individuals need less screen time. – Social Services Provider*

*Generational inactivity. With tremendous people trails, state park system close by, and incentives for employees at BCSC, Cummins, Toyota, etc., obesity, inactivity, smoking, etc., still continue to plague our community. – Community/Business Leader*

*Lack of exercise. Eating larger portions of non-nutritional food. – Other Health Provider*

*Motivation of people to put the work into losing weight and eat healthy. – Public Health Representative*

### **Lifestyles**

*Time management, meal planning, low cost options. – Community/Business Leader*

*Unhealthy lifestyles. We have been supersized. – Community/Business Leader*

*Knowing how to cook and having the time to cook. Healthy food can be expensive. Weight gain prevention is overlooked. It is very hard to lose the weight once people have developed that lifestyle. Video-game culture, sedentary lifestyle. – Community/Business Leader*

*More access to healthier food options, physical activity, etc. – Community/Business Leader*



**Access to Care/Services**

*Lack of a health and well-being center open to all the community. Several businesses have centers for their employees. – Physician*

*Accessibility based on affordability. – Community/Business Leader*

*Our community does a good job with outlets for all of these options. – Public Health Representative*

**Comorbidities**

*Engaging folks with increased mental health, addictions, and higher social determinant of health problems. – Physician*

*These issues contribute to or exacerbate many of the others. – Community/Business Leader*

*Obesity epidemic which is leading to a large number that will become diabetics. Who have dramatically increased health risks and large long-term health costs. – Other Health Provider*

**Built Environment**

*Access to safe and convenient bicycle and pedestrian infrastructure is the biggest challenge related to physical activity in our community. People currently choose to drive because, in many cases, it's more convenient. – Community/Business Leader*

*The infrastructure does not allow for safe active transportation options. The people trails are not an effective way to get around town on a bike because it does not connect or go into the poorer parts of town. Things such as road diets, safe routes. – Community/Business Leader*

**Denial/Stigma**

*Ignorance and denial of the healthcare ramifications of unhealthy eating and sedentary lifestyles at all income levels. I believe we have good programming and opportunities for exercise and also good healthy food choices. People just stubbornly sit. – Other Health Provider*

**Disease Management**

*Participation. I think people understand what they need to do but engaging the individuals is the concern. Along with having healthy food choices. – Community/Business Leader*

**Environmental Contributors**

*Weather, poor habits, indoor facilities for exercise. – Community/Business Leader*

**Incidence/Prevalence**

*Nationwide epidemic. Too little activity, too much fast food and poor nutritional choices. Lack of other good options. – Physician*

**Lack of Specialists**

*See endocrinology gaps and declining primary care capacity. – Other Health Provider*

**No Coordinated Approach**

*No coordinated approach/offering etc. – Physician*

**Food Insecurity**

*Food insecurity. – Community/Business Leader*

## 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.

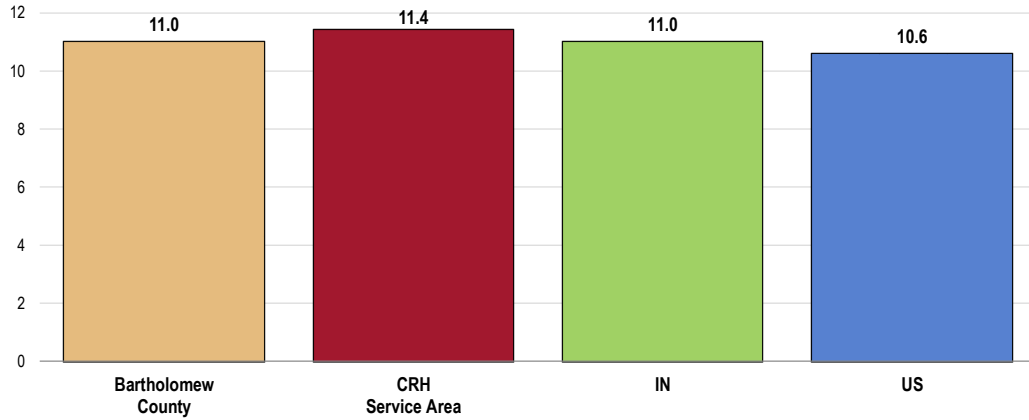
- Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

### **Age-Adjusted Cirrhosis/Liver Disease Deaths**

**Between 2014 and 2016, Columbus Regional Health Service Area reported an annual average age-adjusted cirrhosis/liver disease mortality rate of 11.4 deaths per 100,000 population.**

- Similar to the statewide and US rates.
- Fails to satisfy the Healthy People 2020 target (8.2 or lower).
- The Bartholomew County rate is 11.0 per 100,000 population.

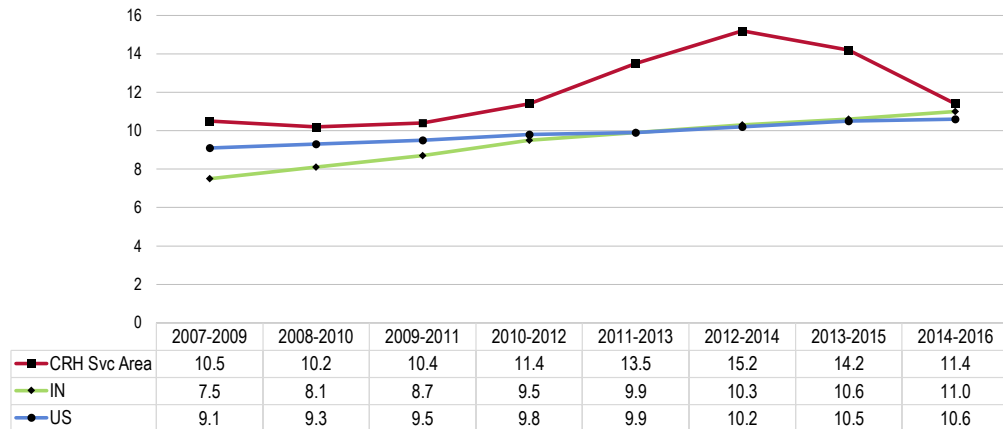
### Cirrhosis/Liver Disease: Age-Adjusted Mortality (2014-2016 Annual Average Deaths per 100,000 Population) Healthy People 2020 Target = 8.2 or Lower



- Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted April 2018.
  - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective SA-11]
- 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.

- **TREND:** After increasing for years, the service area's cirrhosis/liver disease death rate has decreased recently. State and national rates have continued to increase over time.

### Cirrhosis/Liver Disease: Age-Adjusted Mortality Trends (Annual Average Deaths per 100,000 Population) Healthy People 2020 Target = 8.2 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 April 2018.
  - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective SA-11]
- 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.

## Alcohol Use

### Excessive Drinking

**A total of 14.3% of area adults are excessive drinkers (heavy and/or binge drinkers).**

"Excessive drinking" includes heavy and/or binge drinkers:

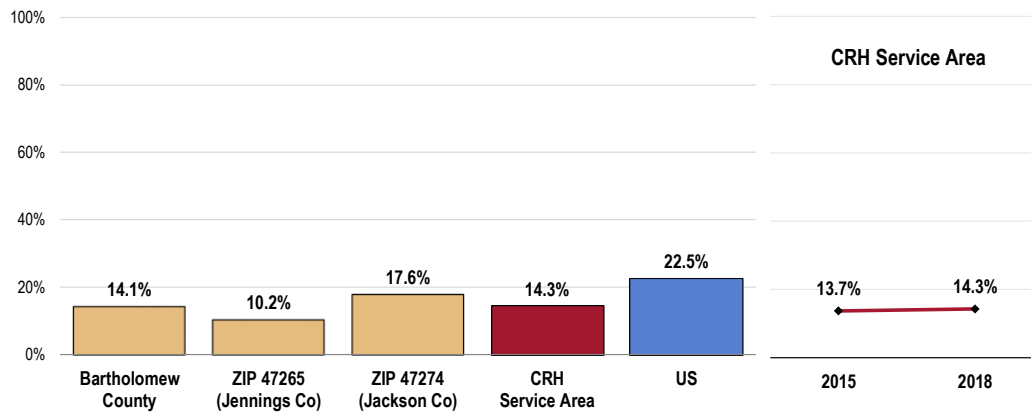
- **Heavy drinkers** include men reporting 2+ alcoholic drinks per day or women reporting 1+ alcoholic drink per day in the month preceding the interview.
- **Binge drinkers** include men reporting 5+ alcoholic drinks or women reporting 4+ alcoholic drinks on any single occasion during the past month.

- Lower than the national proportion.
- Satisfies the Healthy People 2020 target (25.4% or lower).
- Similar findings by area.
- **TREND:** Statistically unchanged since 2015.

**RELATED ISSUE:**

See also *Mental Health: Stress* in the **General Health Status** section of this report.

**Excessive Drinkers**  
Healthy People 2020 Target = 25.4% or Lower



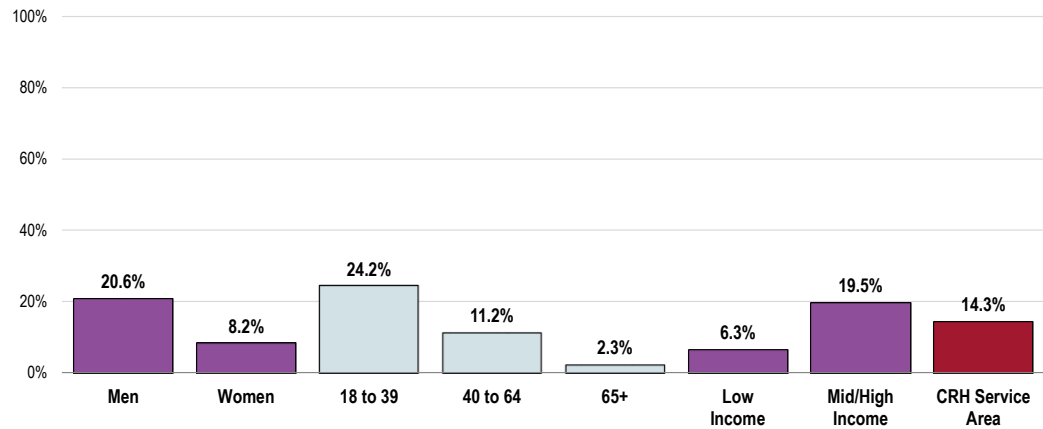
Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 168]  
 • 2017 PRC National Health Survey, Professional Research Consultants, Inc.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective SA-15]  
 Notes: • 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) 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.

- Excessive drinking is more prevalent among men, young adults, and those in higher-income households.

## Excessive Drinkers

(CRH Service Area, 2018)

Healthy People 2020 Target = 25.4% or Lower



- Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 168]
  - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective SA-15]
- 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.
  - 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) 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.

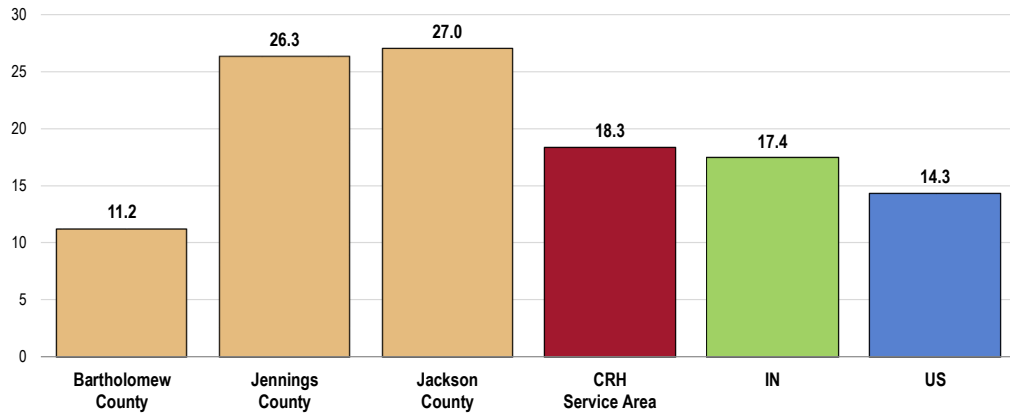
## Age-Adjusted Unintentional Drug-Related Deaths

Between 2014 and 2016, there was an annual average age-adjusted unintentional drug-related mortality rate of 18.3 deaths per 100,000 population in the service area.

- Similar to the statewide rate.
- Higher than the national rate.
- Fails to satisfy the Healthy People 2020 target (11.3 or lower).
- Much higher outside Bartholomew County.

### Unintentional Drug-Related Deaths: Age-Adjusted Mortality (2014-2016 Annual Average Deaths per 100,000 Population)

Healthy People 2020 Target = 11.3 or Lower

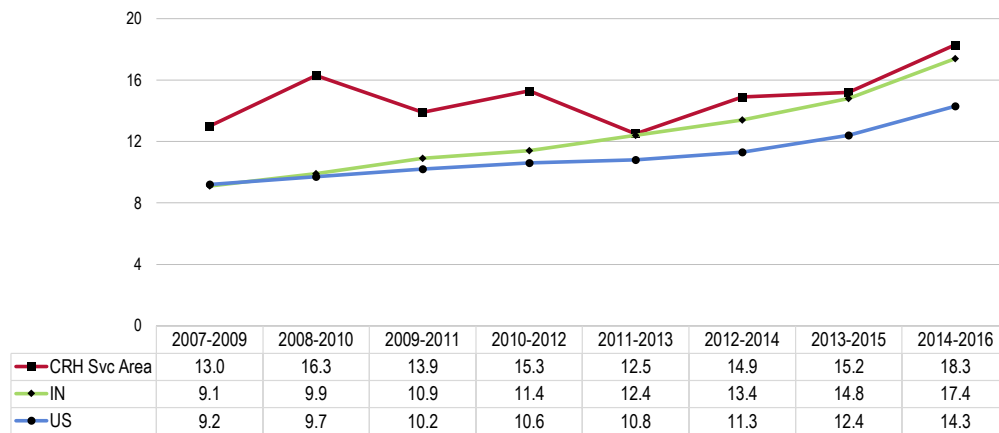


- Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted April 2018.
  - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective SA-12]
- 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.

- **TREND:** The mortality rate has fluctuated widely in the region, increasing from baseline reports. Statewide and nationwide, rates have increased steadily over time.

### Unintentional Drug-Related Deaths: Age-Adjusted Mortality Trends (Annual Average Deaths per 100,000 Population)

Healthy People 2020 Target = 11.3 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 April 2018.
  - UD Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective SA-12].
- 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.

## Illicit Drug Use

For the purposes of this survey, "illicit drug use" includes use of illegal substances or of prescription drugs taken without a physician's order.

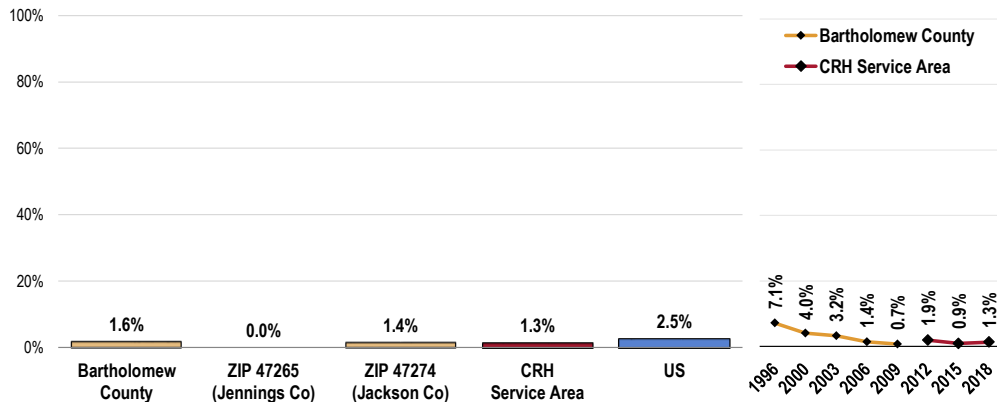
Note: As a self-reported measure – and because this indicator reflects potentially illegal behavior – it is reasonable to expect that it might be underreported, and that actual illicit drug use in the community is likely higher.

**A total of 1.3% of Columbus Regional Health Service Area adults acknowledge using an illicit drug in the past month.**

- Similar to the proportion found nationally.
- Easily satisfies the Healthy People 2020 target of 7.1% or lower.
- No illicit drug use reported in ZIP Code 47265.
- TREND: Statistically unchanged over time.

### Illicit Drug Use in the Past Month

Healthy People 2020 Target = 7.1% or Lower



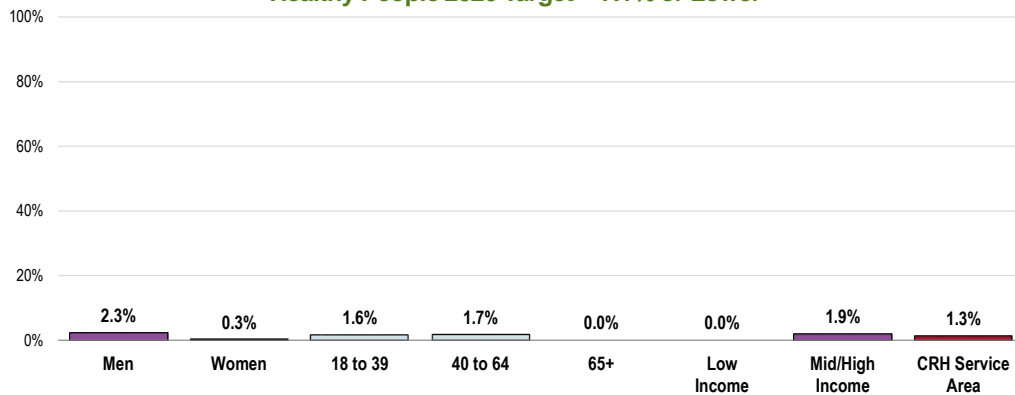
Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 59]  
 • 2017 PRC National Health Survey, Professional Research Consultants, Inc.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective SA-13.3]  
 Notes: • Asked of all respondents.

- Illicit drug use is more prevalent among men, adults under 65, and upper-income residents.

### Illicit Drug Use in the Past Month

(CRH Service Area, 2018)

Healthy People 2020 Target = 7.1% or Lower



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 59]  
 • 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.  
 • 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.

### Opiates/Opioids & Painkillers

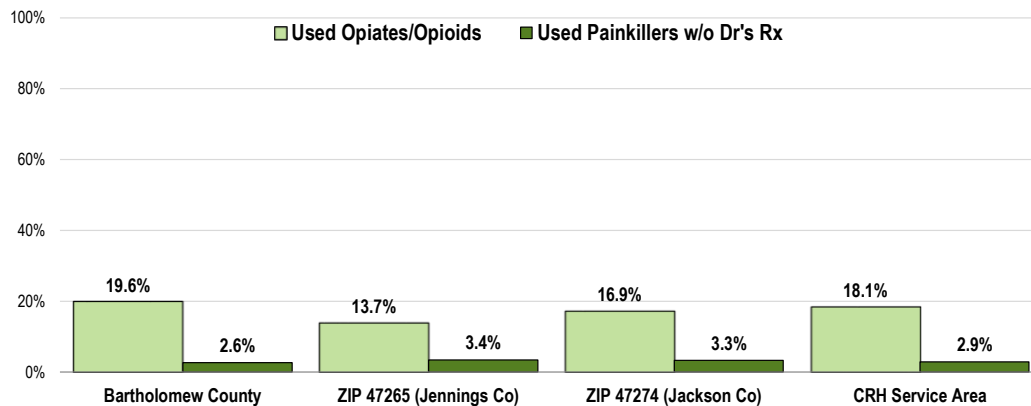
In the past year, 18.1% of survey respondents used opiates or opioids (whether with a physician's orders or not).

- Statistically similar by area.

In a related inquiry, 2.9% of CRH Service Area respondents acknowledge using a painkiller without a prescription at some point in the past year.

- Comparable findings by area.

### Use of Opiates/Opioids and Painkillers in the Past Year (CRH Service Area, 2018)

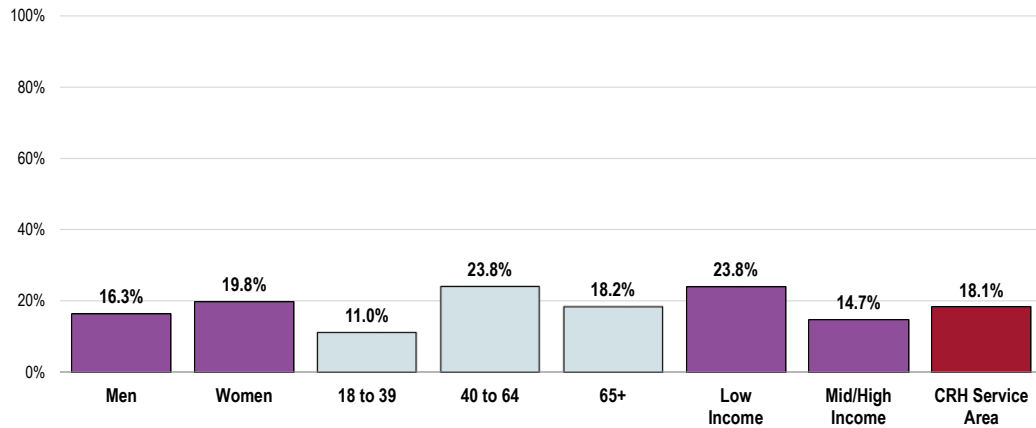


Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 316-317]  
 Notes: • Asked of all respondents.

- Residents more likely to have used opioids/opioids in the past year (with or without a prescription) include those age 40 to 64 and those living on lower incomes.



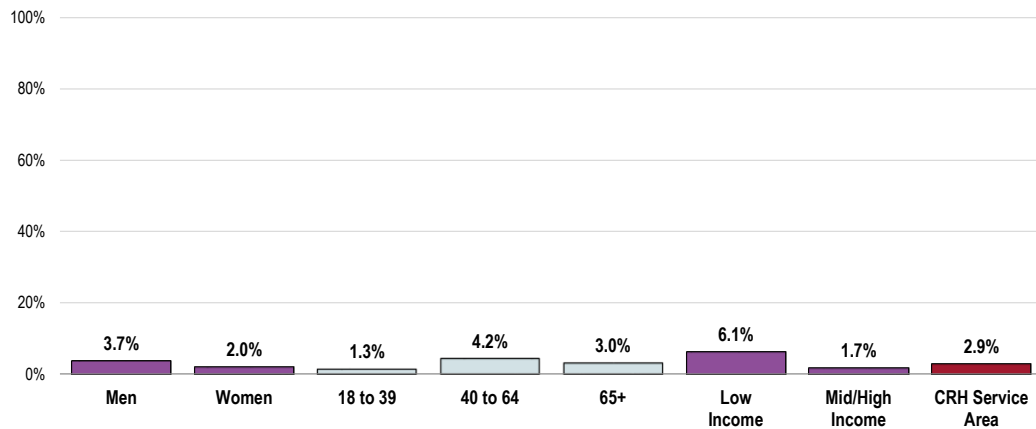
### Used Opiates/Opioids in the Past Year (Whether Prescribed or Not) (CRH Service Area, 2018)



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 316]  
 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.

- Use of a painkiller without a prescription is more prevalent in lower-income residents.

### Used Painkillers in the Past Year Without a Physician's Orders (CRH Service Area, 2018)



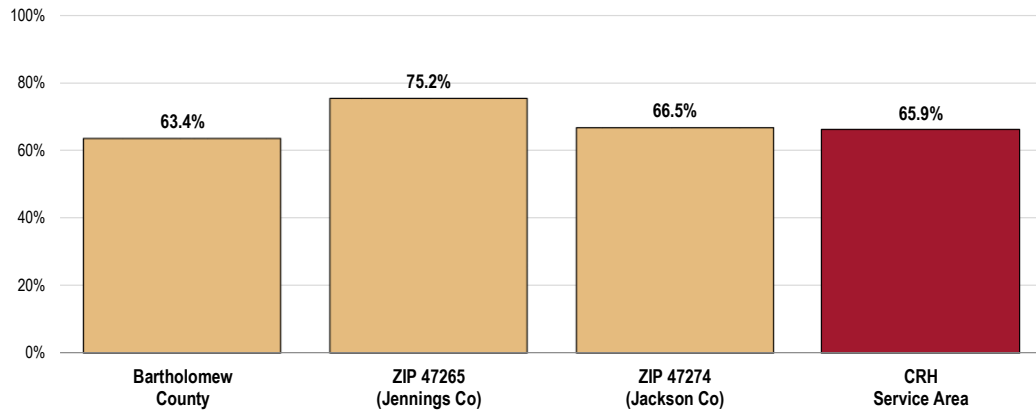
Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 317]  
 Notes: • Asked of all respondents.  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with 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.

## Alcohol & Drug Treatment

Nearly two in three survey respondents (65.9%) would know where to access treatment for a drug-related problem.

- The prevalence is higher in ZIP Code 47265.

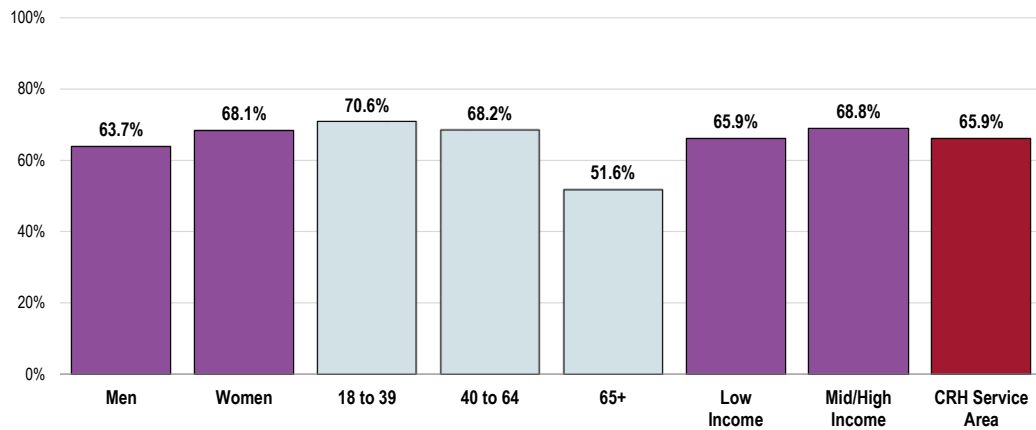
### Know Where to Access Treatment for a Drug-Related Problem



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 318]  
 Notes: • Asked of all respondents.

- Awareness of local help for drug-related problems appears to negatively correlate with age in the service area.

### Know Where to Access Treatment for a Drug-Related Problem (CRH Service Area, 2018)

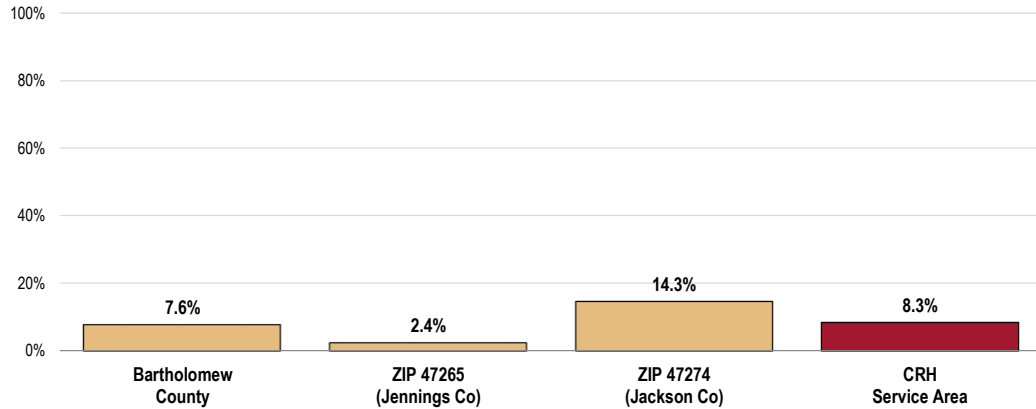


Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 318]  
 Notes: • Asked of all respondents.  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with 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.

A total of 8.3% of service area adults report that they or a family member were **unable** to get professional help for a problem with addiction in the past year.

- Unfavorably high in ZIP Code 47274.

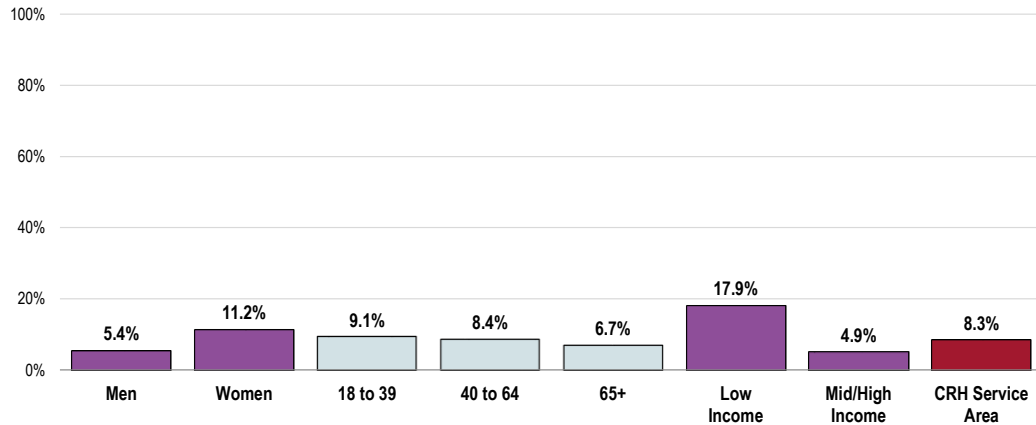
### Member of Family Was Unable to Get Professional Help for an Addiction in the Past Year



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 319]  
 Notes: • Asked of all respondents.

- The prevalence is higher among women and low-income residents.

### Member of Family Was Unable to Get Professional Help for an Addiction in the Past Year (CRH Service Area, 2018)



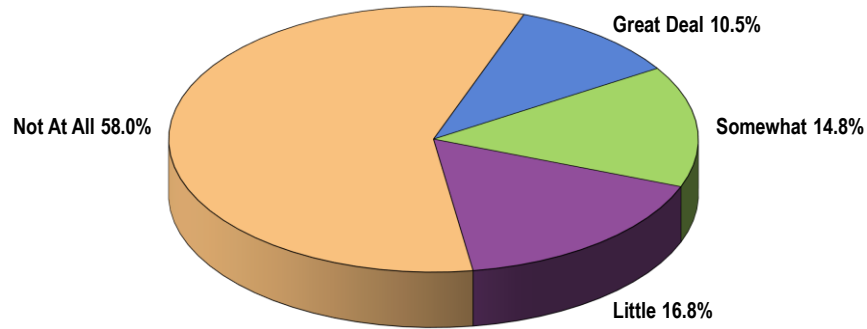
Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 319]  
 Notes: • Asked of all respondents.  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with 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.

## Negative Effects of Substance Abuse

Area adults were also asked to what degree their lives have been negatively affected by substance abuse (whether their own abuse or that of another).

Over half have not been negatively affected (58.0% “not at all” responses).

**Degree to Which Life Has Been Negatively Affected by Substance Abuse (Self or Other’s)**  
(CRH Service Area, 2018)

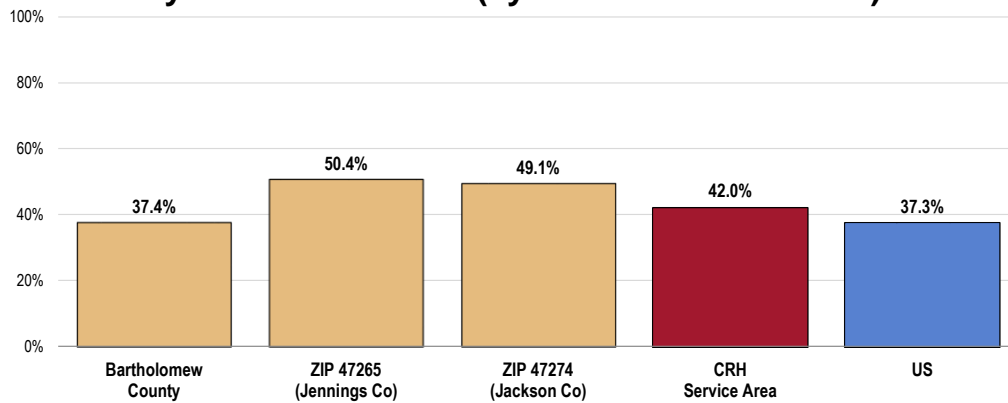


Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 61]  
Notes: • Asked of all respondents.

In contrast, 42.0% of respondents indicate that their lives have been negatively affected by substance abuse, including 10.5% who report having been affected “a great deal.”

- Worse than the US figure.
- The percentage is favorably lower in Bartholomew County.

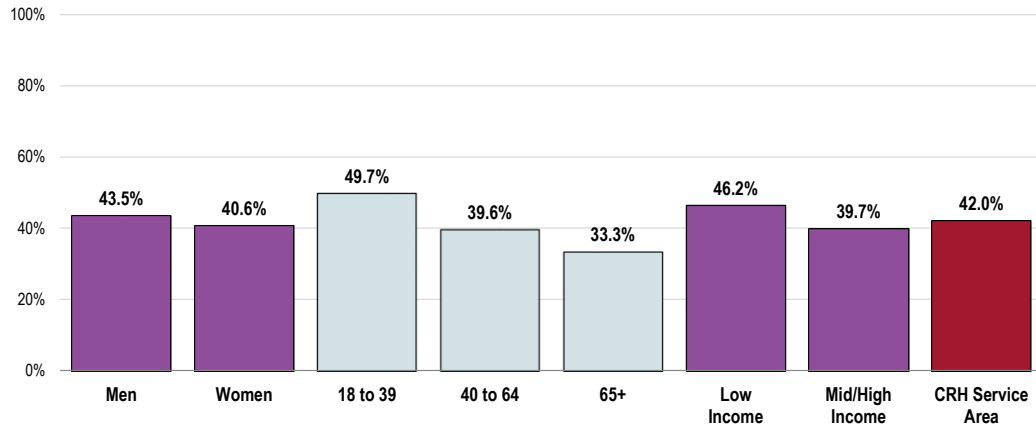
**Life Has Been Negatively Affected by Substance Abuse (by Self or Someone Else)**



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 61]  
• 2017 PRC National Health Survey, Professional Research Consultants, Inc.  
Notes: • Asked of all respondents.  
• Includes response of “a great deal,” “somewhat,” and “a little.”

- The prevalence of survey respondents whose lives have been negatively impacted by substance abuse, whether their own abuse or that of another, decreases with age in the service area.

### Life Has Been Negatively Affected by Substance Abuse (by Self or Someone Else) (CRH Service Area, 2018)

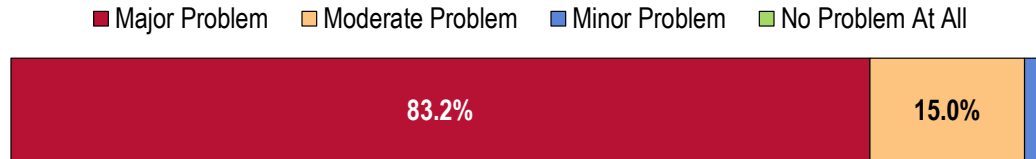


Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 61]  
 Notes: • Asked of all respondents.  
 • Includes response of "a great deal," "somewhat," and "a little."  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (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.

### Key Informant Input: Substance Abuse

The vast majority of key informants taking part in an online survey characterized *Substance Abuse* as a "major problem" in the community.

### Perceptions of Substance Abuse as a Problem in the Community (Key Informants, 2018)



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

## Top Concerns

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

### Access to Care/Services

*Access to effective services, decreased stigma, and inclusion etc. ASAP has great assessment and plan. – Physician*

*Lack of treatment facilities in Bartholomew County. – Community/Business Leader*

*Problem of addiction is greater than services available. Jail has no room for treatment of inmates. – Community/Business Leader*

*Proximity of treatment and recovery centers to Columbus and Bartholomew County. Teen and young adult options, even more challenging in the region. – Social Services Provider*

*Substance abuse is not a short-term fix. We now know that the brain is impacted by abuse. A long-term solution needed. Abusers go back to same influences and enticement to use again. – Other Health Provider*

*The people that I have known that have been successful in recovery did not go to a treatment center in Indiana. Some states like Florida are way beyond what Indiana offers. – Community/Business Leader*

*Lack of substance abuse facilities and treatment options. – Community/Business Leader*

*There are not many treatment options for substance abuse that patients can afford. There are a few places in this area, but they are turning patients away or referring them elsewhere due to be overwhelmed with patients already. – Other Health Provider*

*Mental health facilities that specifically treat those with addiction problems. This is especially true for women who are pregnant or have a baby under two years of age. – Public Health Representative*

*Resources. This is being addressed by the ASAP community initiative. – Other Health Provider*

*Treatment facilities. – Community/Business Leader*

*No inpatient treatment facilities or affordable options for treatment. – Social Services Provider*

*Not enough and variety of treatment resources available primarily as an issue of money. Cost of various types of services, level or lack of insurance coverage, understanding and acceptance that addiction is a chronic disease. – Other Health Provider*

*Again, resources and money. – Public Health Representative*

*There is not, as far as I know, a facility to treat substance abuse in my community. – Public Health Representative*

*No long-term inpatient treatment facilities in the area. Lack of places that treat people without insurance. – Public Health Representative*

*No facility in Columbus to assist with treatment, rehab, etc. – Other Health Provider*

*There are no inpatient treatment facilities in Bartholomew County. The problem compounded so quickly we have not been able to stay in front of it. There is also the barrier that people don't want treatment homes in their neighborhoods. – Social Services Provider*

*Not enough outpatient centers, not enough preventive interventions/education provided. – Other Health Provider*

*Getting access to the proper care, inpatient facilities, licensed healthcare providers for these issues, and a good navigation system. – Community/Business Leader*

*Lack of substance abuse recovery facilities. Individuals not realizing overusing drugs and alcohol can be viewed as an addiction. – Social Services Provider*

*Lack of treatment facilities along the spectrum of need. – Social Services Provider*

*Availability of treatment programs and facilities and challenges in identifying locations for new facilities. – Community/Business Leader*

*Lack of treatment programs and facilities. Poor insurance coverage for individuals suffering from addictions. Treating substance abuse as a moral failing rather than an illness. – Community/Business Leader*

*There are no treatment facilities. There are no programs to access. – Other Health Provider*

*There are no places in town that provide this service. Most folks end up in jail, which is not only costly but also not an effective way to deal with addiction. – Community/Business Leader*

*Adequate resources, community support, disentangling treatment from legal issues. – Community/Business Leader*

*Creating a structure that allows recovery programs adequate time to reach abusers. – Community/Business Leader*

*Lack of mental healthcare and after-care programs. – Other Health Provider*

*We don't have a treatment facility yet and don't have enough mental health providers to meet the current need. – Community/Business Leader*

*Available treatment options, mainly due to cost. Not in my neighborhood mentality. – Community/Business Leader*

*Programming is inadequate. – Community/Business Leader*

*Lack of services and difficulty accessing available services. – Other Health Provider*

*Not enough treatment facilities to help in solution. There is too easy access to further the disease. – Other Health Provider*

*Resources and preventative education and/or programs. – Community/Business Leader*

*Lack of treatment facilities. – Community/Business Leader*

*Qualified treatment programs and physicians. – Other Health Provider*

*Finding help and having access to local treatment facilities. – Community/Business Leader*

*Access and lack of resources. Motivation to seek help. Prevalence and easy access to drugs. Stigma. – Community/Business Leader*

*Lack of mental health resources. – Other Health Provider*

*Funding, housing, mental health professionals. – Public Health Representative*

*Funding. The stigma behind substance abuse, lack of places to access treatment and no plan after an acute event. – Other Health Provider*

*Funding, education and treatment. – Community/Business Leader*

*No inpatient care. – Public Health Representative*

*No inpatient facility close to Columbus. Transportation to other facilities, cost, support. – Public Health Representative*

*Business model and funding for a treatment facility. – Other Health Provider*

*Significant deficit of substance abuse treatment options in Columbus. – Physician*

*Very few treatment options and poor, if any insurance coverage. – Physician*

*Although it is improving, we have lacked a full array of treatment options for those with addiction. Those with no insurance have a particularly hard time finding care. – Other Health Provider*

*Lack of access especially for those who are uninsured. Very few medications assisted treatment providers. No detox. – Public Health Representative*

*Lack of treatment capabilities. – Other Health Provider*

*Lack of resources. – Other Health Provider*

*The people who are suffering from substance abuse do not have access to treatment. They are homeless or embarrassed to ask for help. – Public Health Representative*

*Health insurance or privacy concerns. – Community/Business Leader*

*Insurance or other financial support. Meaningful, long-term treatment aimed at resolving underlying issues. Family support structure. Stigma. – Community/Business Leader*

*Getting medication assisted treatment. Access to inpatient treatment programs. – Public Health Representative*

*There are not a lot of options, and if you find one they may be overcome with participants and people fall through the cracks. – Public Health Representative*

*Lack of local access to inpatient detoxification programs. Lack of access to inpatient/residential programs. – Public Health Representative*

*Options, ASAP is addressing these. – Other Health Provider*

*Like so many communities, we have a lack of available programs, including inpatient care. We have a limited number of healthcare providers participating in MAT. Many financial barriers for many people. – Physician*

*Lack of treatment options. – Public Health Representative*

### Denial/Stigma

*Stigma, lack of education/marketing about treatment options and facilities. Lack of residential treatment facilities. – Community/Business Leader*

*I wish I could have data to analyze. In my opinion, the use is a secret that people don't want exposed and may have had negative experiences with previous treatment. In my opinion, we need more options for people, especially options that help. – Community/Business Leader*

*Fear of the person abusing drugs of losing job, losing children or being arrested. – Community/Business Leader*

*The stigma related to substance abuse for the individual and the family. Also, the cost and availability of inpatient or rehabilitative treatment is out of reach for many in the community. – Other Health Provider*

*For many years the community has been in denial about this problem, it's only now being addressed locally as it is nationally. We should continue the work that has started and include the smaller towns in our community to make sure they are included. – Other Health Provider*

*Getting a person with substance abuse issues to go to treatment. Providing the person, the needed treatment regardless of ability to pay. Having the necessary treatment available at the exact time a person with substance abuse issues is ready. – Community/Business Leader*

*Most don't want help. – Other Health Provider*

*Acceptance that there is a problem. Support for finding and continuing treatment. The addiction of the disease. – Public Health Representative*

*Persons who need such treatment are typically not interested in obtaining it. – Community/Business Leader*

*People accepting and openly discussing substance abuse. General access to care. Access to care for people with limited means. – Community/Business Leader*

*Stigma. Lack of recognition on part of providers. Lack of doctors certified in addiction medicine. – Physician*

### Incidence/Prevalence

*Community wide epidemic with meth and opioid abuse/misuse. – Community/Business Leader*

*I don't have much experience with substance abuse issues, aside from what I read in the newspaper. From that exposure, I understand that substance abuse and the prevalence of drugs is a serious issue in our community. I don't have enough experience. – Community/Business Leader*

*The number of drugs flowing into our community. The huge number of drug abusers that need treatment that is long term. – Other Health Provider*

*I think our community is starting to recognize how serious of a problem substance abuse is and we are educating the community. However, we still have a long way to go. More individuals need to be trained in use of Narcan and people really need education. – Public Health Representative*

*Our ASAP team has identified and tracks this as an issue. – Other Health Provider*

*Yet another huge issue in our community. Thankfully we have a wonderful collaborative effort in ASAP, but that can't do it all. Barriers, detox, longer term treatment, including residential, finances for those needing to pay for treatment. – Social Services Provider*

*As a community we are now addressing that very problem. – Community/Business Leader*

*The statistics on the drug overdoses here in Columbus is off the charts. The problem is people are accepting the overdoses. The abusers know that if they OD that they will get brought back by Narcan. The society is encouraging Narcan. – Community/Business Leader*

*This would include all illegal use of legal drugs and all illegal drugs. We have an issue with drugs providing something to each of these individuals that they are not able to get without the use or aide of a drug. – Community/Business Leader*

### Affordable Care/Services

*Financial resources. – Public Health Representative*

*The greatest barriers is the cost of treatment is extremely expensive and not available to everyone. The lack of treatment facilities, especially long term, aren't available. – Public Health Representative*

*Cost, transportation, lack of knowledge about what treatment providers exist in nearby communities. Very little effective treatment is offered locally. – Community/Business Leader*



*The availability of affordable, long term treatment facilities. Greater access to mental health agencies specifically in areas that need the services. – Social Services Provider*

*Cost to the community. Lack of drug assisted treatment options. – Community/Business Leader*

*Cost. Stigma. Availability. – Community/Business Leader*

*Cost, location, support, after care. – Community/Business Leader*

*Cost. – Community/Business Leader*

### **Health Education/Awareness**

*Awareness. Adequate number of providers. Community education. Physician education in terms of resources available. Stigma. – Physician*

*Lack of access to information and understanding as well as treatment and recovery. – Other Health Provider*

*Society does not understand that addiction is a disease. Most think it is just a matter of abstaining. No local treatment centers. – Other Health Provider*

*Education and awareness. Stigma. Availability of treatment services. – Other Health Provider*

*Education in regard to avoiding. Building self-esteem, building confidence in life skills. – Community/Business Leader*

*Education. Funding. Public support. – Public Health Representative*

### **Opioid Use/Misuse**

*Opioid epidemic. – Community/Business Leader*

*We hear of all the opioid addiction and overdoses due to opioids. – Community/Business Leader*

*Opioid epidemic. – Other Health Provider*

*Really, look at the Narcan administration. – Community/Business Leader*

*Opioid crisis in our community. – Other Health Provider*

*Opioids, but they are being addressed locally, statewide and national, but with no clear solution anywhere. – Community/Business Leader*

*Opioid addiction. – Community/Business Leader*

### **Lack of Providers**

*Availability of providers to prescribe medication assisted treatment. Support groups to help those who want to quit the support they need. – Physician*

*Limited number of providers treating addiction. Limited number of providers prescribing suboxone. Limited number of clinics available to provide counseling. Clinics that are available take too long and make patients jump through too many hoops. – Other Health Provider*

*Few providers. – Physician*

*Lack of providers offering programs specifically designed to help with addiction that aren't solely based on prescribing more opioids. – Physician*

### **Access for Uninsured/Underinsured**

*No insurance or inability to pay for inpatient treatment. – Public Health Representative*

*Quality options for treatment for all income levels. – Public Health Representative*

*Low income. Treating drug abuse as a crime. – Community/Business Leader*

### **Prevention Initiatives**

*How to stop the progression of soft drugs, marijuana, legit narcotic prescriptions, and alcohol, use/abuse from progressing to methamphetamine and heroin/illicit access to narcotics. Access to treatment for addicts, financially out of reach for most. – Other Health Provider*

*Prevention, treatment, education, resources for children and young adults effected by parents with addiction. Foster homes. – Community/Business Leader*

### Most Problematic Substances

Key informants (who rated this as a “major problem”) clearly identified **heroin/other opioids** as the most problematic substance abused in the community, followed by **methamphetamine/other amphetamines, alcohol, and prescription medications**.

Problematic Substances as Identified by Key Informants				
	Most Problematic	Second-Most Problematic	Third-Most Problematic	Total Mentions
Heroin or Other Opioids	70.8%	24.8%	4.4%	113
Methamphetamines or Other Amphetamines	18.6%	56.9%	24.5%	102
Alcohol	28.3%	15.0%	56.7%	60
Prescription Medications	8.9%	35.7%	55.4%	56
Cocaine or Crack	0.0%	50.0%	50.0%	8
Marijuana	12.5%	12.5%	75.0%	8
Synthetic Drugs (e.g. Bath Salts, K2/Spice)	0.0%	0.0%	100.0%	7
Over-the-Counter Medications	0.0%	28.6%	71.4%	7
Inhalants	0.0%	0.0%	100.0%	3
Hallucinogens or Dissociative Drugs (e.g. Ketamine, PCP, LSD, DXM)	0.0%	0.0%	100.0%	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.

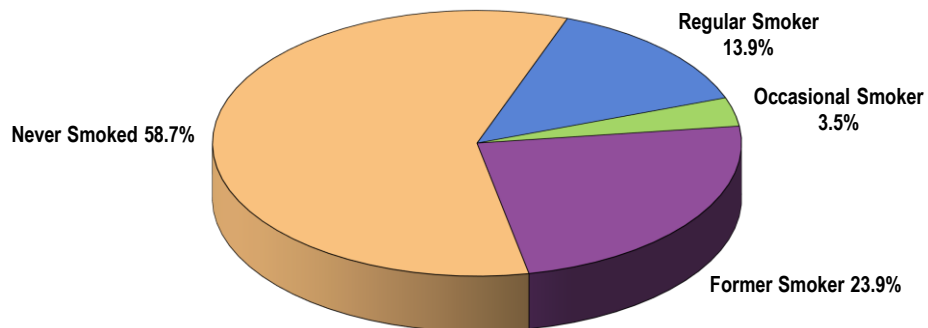
- Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

## Cigarette Smoking

### Cigarette Smoking Prevalence

A total of 17.4% of Columbus Regional Health Service Area adults currently smoke cigarettes, either regularly (13.9% every day) or occasionally (3.5% on some days).

**Cigarette Smoking Prevalence**  
(CRH Service Area, 2018)

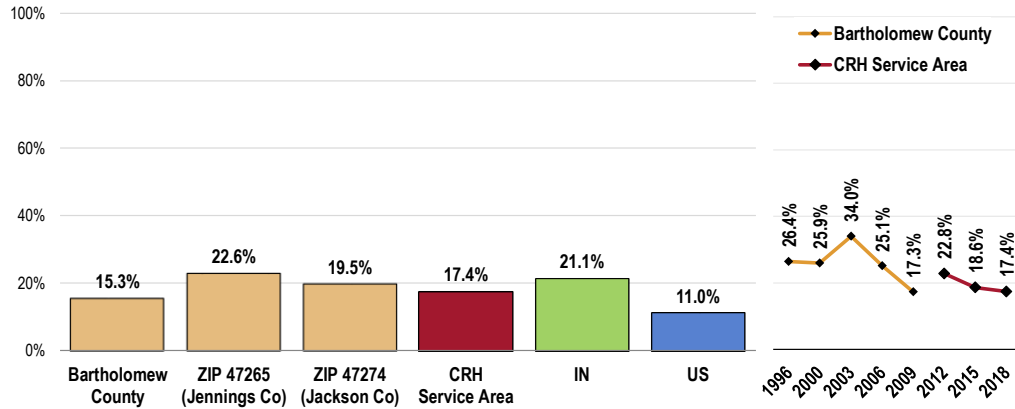


Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 159]  
Notes: • Asked of all respondents.

- More favorable than statewide findings.
- Less favorable than national findings.
- Fails to satisfy the Healthy People 2020 target (12% or lower).
- Similar percentages by area.
- TREND: The percentage has decreased over time.

### Current Smokers

Healthy People 2020 Target = 12.0% or Lower



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 159]  
 • 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 Indiana data.  
 • 2017 PRC National Health Survey, Professional Research Consultants, Inc.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective TU-1.1]

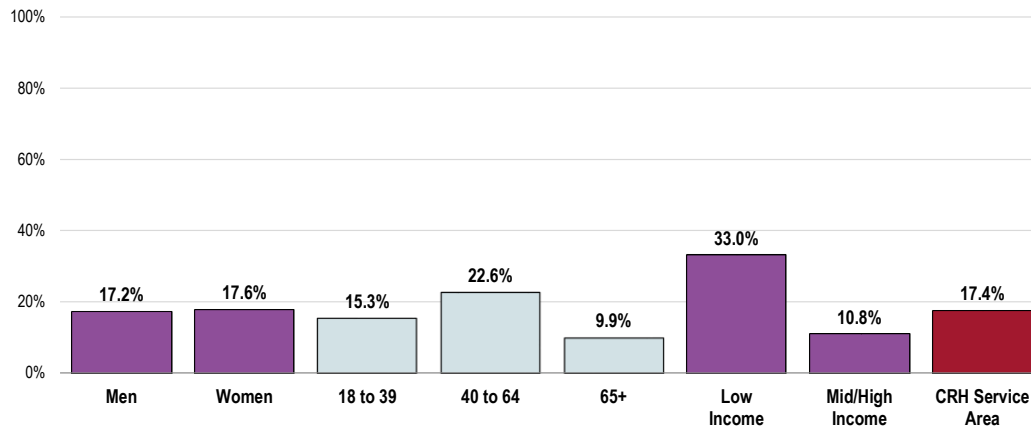
Notes: • Asked of all respondents.  
 • Includes regular and occasional smokers (those who smoke cigarettes every day or on some days).

- Smoking is more prevalent among adults age 40 to 64 and lower-income residents.

### Current Smokers

(CRH Service Area, 2018)

Healthy People 2020 Target = 12.0% or Lower



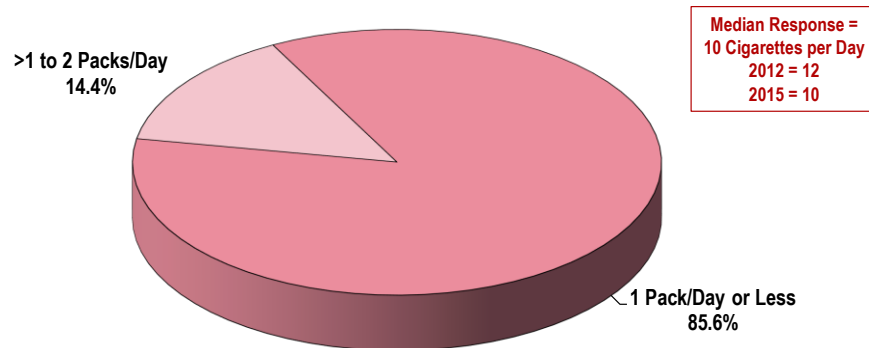
Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 159]  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective TU-1.1]

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 occasion smokers (every day and some days).

Among current smokers, the vast majority (85.6%) smokes less than one pack per day.

- TREND: The median number of daily cigarettes smoked among current CRH Service Area smokers is 10.

### Average Number of Cigarettes Smoked per Day (Among CRH Service Area Current Smokers, 2018)



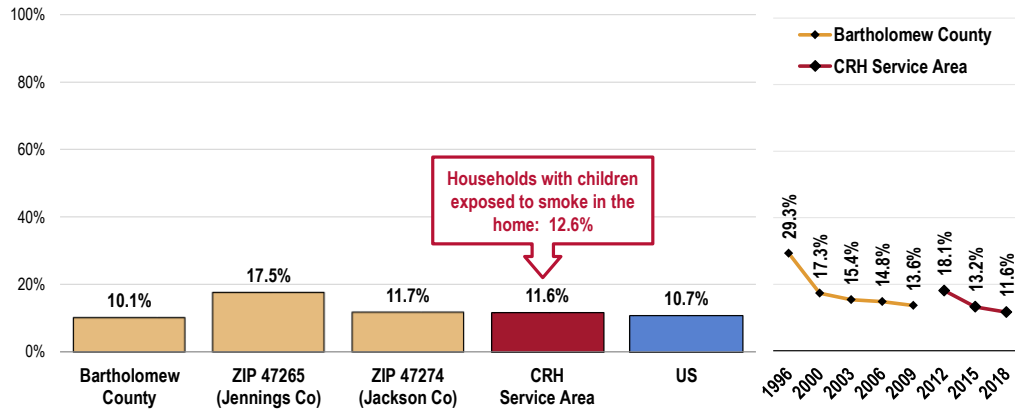
Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 314]  
Notes: • Asked of all current smokers.  
• One pack = 20 cigarettes.

### Environmental Tobacco Smoke

A total of 11.6% of Columbus Regional Health Service Area adults (including smokers and nonsmokers) report that a member of their household has smoked cigarettes in the home an average of 4+ times per week over the past month.

- Similar to national findings.
- Similar findings by area.
- TREND: Marks a statistically significant decrease over time.
- Note that 12.6% of area children are exposed to cigarette smoke at home, similar to what is found nationally (not shown).

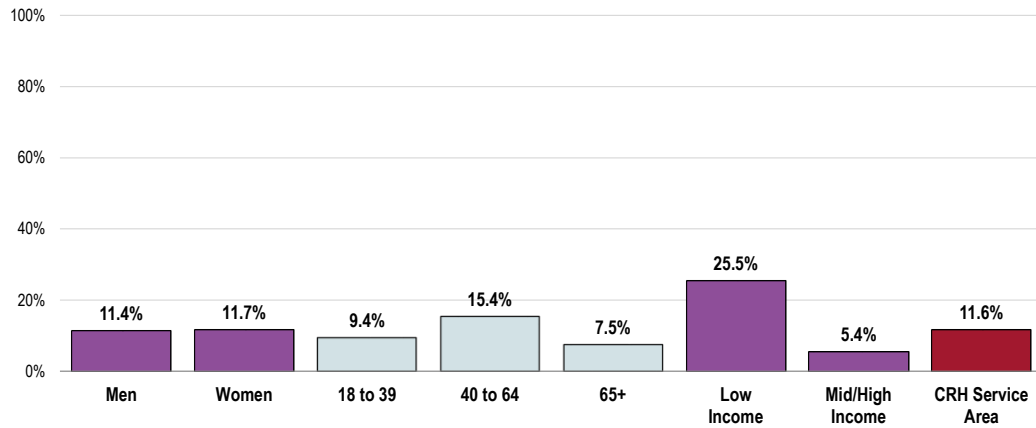
### Member of Household Smokes at Home



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 52, 162]  
 • 2017 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of all respondents.  
 • "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.

• Notably higher among residents age 40 to 64 and those with lower incomes.

### Member of Household Smokes At Home (CRH Service Area, 2018)



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 52]  
 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.  
 • "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.

## Smoking Cessation

### About Reducing Tobacco Use

Preventing tobacco use and helping tobacco users quit can improve the health and quality of life for Americans of all ages. People who stop smoking greatly reduce their risk of disease and premature death. Benefits are greater for people who stop at earlier ages, but quitting tobacco use is beneficial at any age.

Many factors influence tobacco use, disease, and mortality. Risk factors include race/ethnicity, age, education, and socioeconomic status. Significant disparities in tobacco use exist geographically; such disparities typically result from differences among states in smoke-free protections, tobacco prices, and program funding for tobacco prevention.

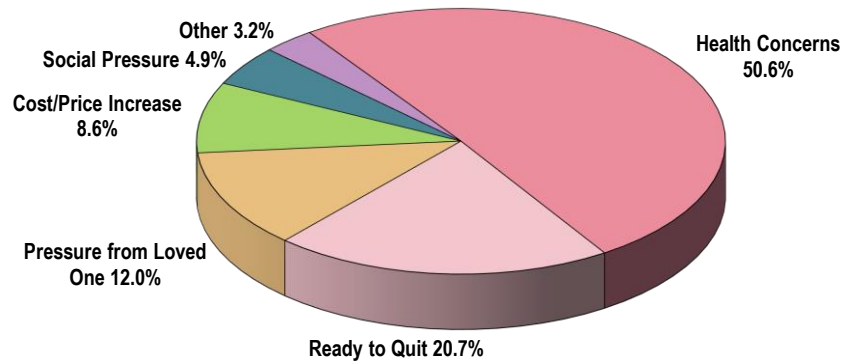
- Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

### Factors Prompting Cessation

**Among former smokers in the service area, half (50.6%) report that they quit smoking because of health concerns.**

- Other reasons for quitting smoking included pressure from loved ones, cost or price increase, and social pressure.
- *Note that these percentages represent a small sample of residents.*

### Factors Prompting Smoking Cessation (Among CRH Service Area Former Smokers, 2018)



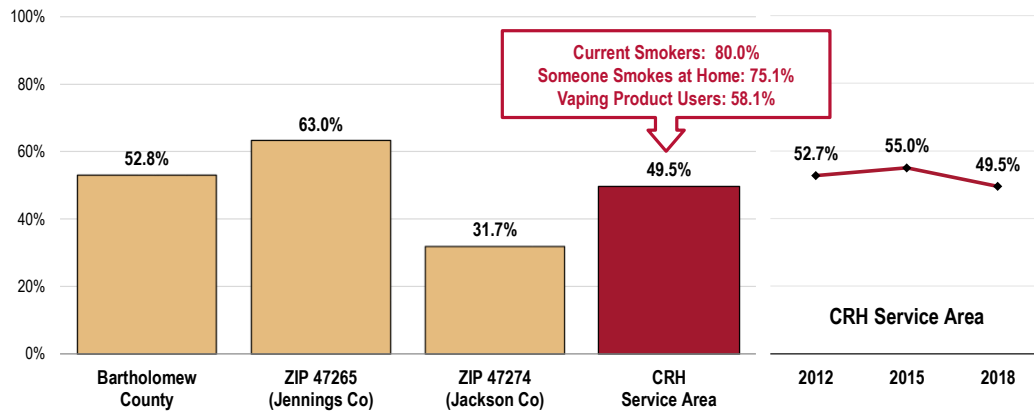
Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 313]  
Notes: • Asked of those respondents who were previous smokers.

**Awareness of the Indiana Tobacco Quit Line 1-800-QUIT-NOW**

Half of survey respondents (49.5%) are aware of the Indiana Tobacco Quit Line (1-800-QUIT-NOW).

- Awareness is considerably lower in ZIP Code 47274.
- TREND: Awareness has not changed significantly over time.
- Awareness is 80.0% among current smokers, 75.1% among respondents with someone who smokes at home, and 58.1% among users of vaping products (percentages are not mutually exclusive).

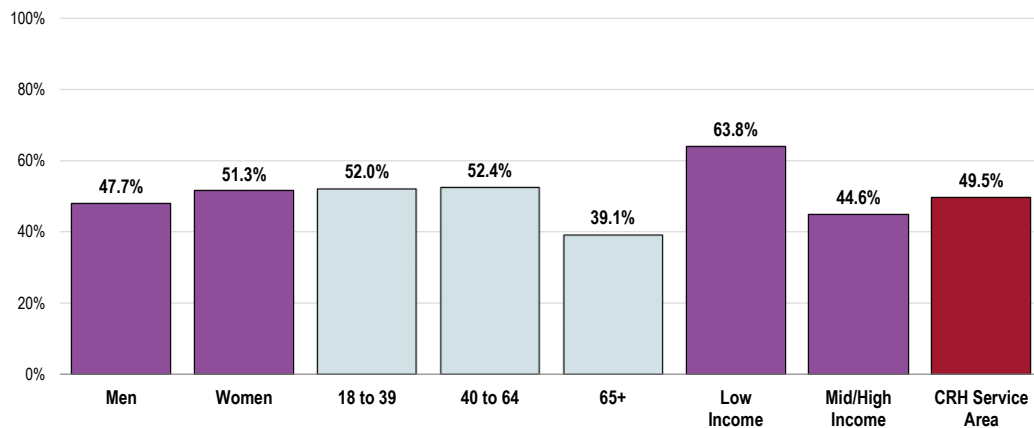
**Aware of the Indiana Tobacco Quit Line: 1-800-QUIT-NOW**



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 315]  
 Notes: • Asked of all respondents.

- Among local residents, awareness of the quit line is lowest among seniors and upper-income respondents.

**Aware of the Indiana Tobacco Quit Line: 1-800-QUIT-NOW (CRH Service Area, 2018)**



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 315]  
 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.



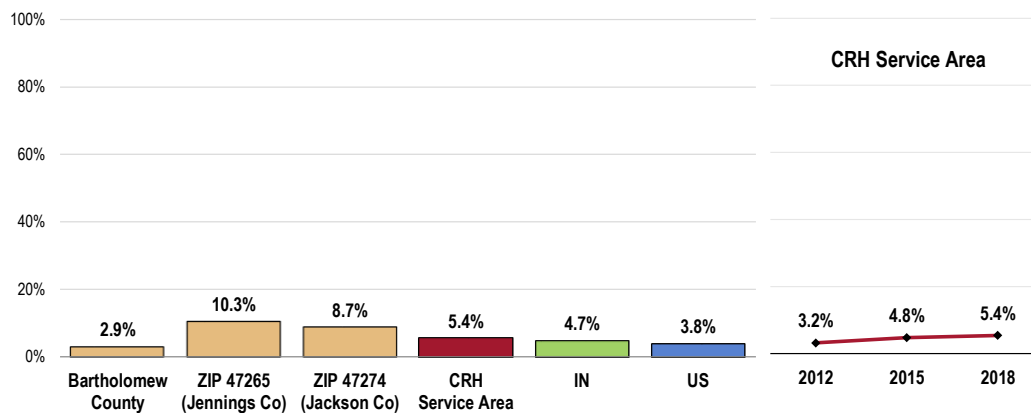
## Other Tobacco Use

### Use of Vaping Products

A total of 5.4% of Columbus Regional Health Service Area adults currently use vaping products such as electronic cigarettes (e-cigarettes) either regularly (0.8% every day) or occasionally (4.6% on some days).

- Similar to state and US percentages.
- Use of vaping products is much higher outside Bartholomew County.
- TREND: Note the statistically significant increase over time.

### Currently Use Vaping Products (Every Day or on Some Days)



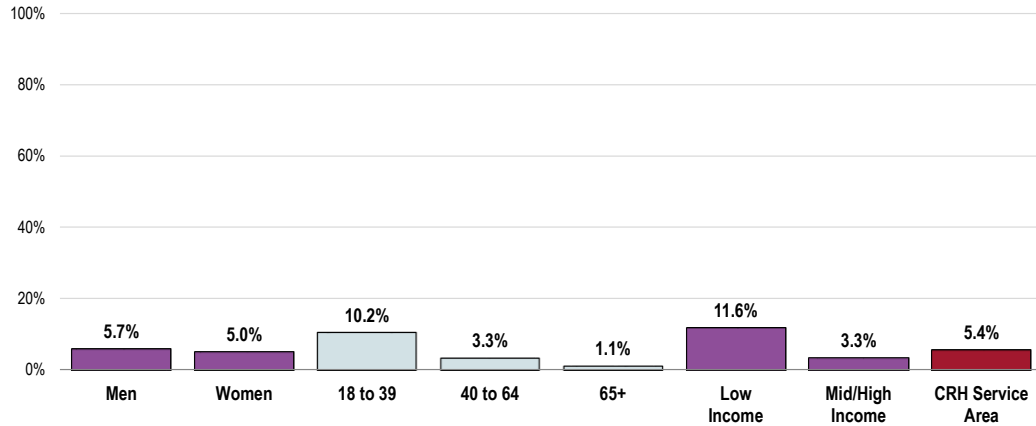
Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 54]  
 • 2017 PRC National Health Survey, Professional Research Consultants, Inc.  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2016 Indiana data.

Notes: • Asked of all respondents.  
 • Includes regular and occasional users (those who use vaping products such as e-cigarettes every day or on some days).

Electronic cigarette/other vaping product use is more prevalent among:

- Adults under age 40 (negative correlation with age).
- Lower-income residents.

### Currently Use Vaping Products (CRH Service Area, 2018)

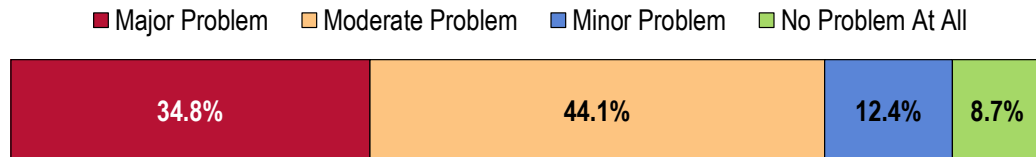


Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 54]  
 Notes: • Asked of all respondents.  
 • Income categories reflect respondent’s household income as a ratio to the federal poverty level (FPL) for their household size. “Low Income” includes households with 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 use vaping products such as e-cigarettes every day or on some days).

### Key Informant Input: Tobacco Use

The greatest share of key informants taking part in an online survey characterized *Tobacco Use* as a “moderate problem” in the community.

### Perceptions of Tobacco Use as a Problem in the Community (Key Informants, 2018)



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

### Top Concerns

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

#### Incidence/Prevalence

- With all of the information out there we still have a large percentage of our population smoking. If we look at different social, economic and ethnic groups, the newest thing in this arena is the e-cigs, etc. There’s no healthy reason to use tobacco. – Community/Business Leader*
- I feel we have a larger number of smokers than the national average. – Community/Business Leader*
- See it everywhere still. Kids exposed to smoke in cars. – Community/Business Leader*
- There are still too many adults that smoke, chew, or vape and still too many young people who start despite decades of evidence about the health effects. – Community/Business Leader*

*Tobacco use is still at an all-time high, many patients do wish to quit but can't afford the products to help them do that. Most insurance companies especially HIP and government funded do not cover stop smoking aids such as Chantix or Nicotrol inhalers. – Other Health Provider*

*Locally, the percentage of people who smoke is well above the national average. Smokeless cigarettes have created an increase in the number of young people who smoke. – Community/Business Leader*

*Addicted to tobacco. Smoking can be viewed as a stress release. Some individuals not aware smoking is harmful to their health. – Social Services Provider*

*Just look around and you will see lots of smokers. – Community/Business Leader*

*It is frequently cited on social histories from our patients. – Other Health Provider*

*I see it. – Other Health Provider*

*Common use of cigarettes and other types of tobacco. Healthcare concerns related to use. – Community/Business Leader*

*Tobacco use/abuse. – Physician*

*Any use of tobacco is too much. Although not as prevalent in public places, restaurants, sporting events, etc., as it used to be, it is still a pretty common sight. I believe things have changed for the better. – Other Health Provider*

*Too many people smoke in this county. Smoking causes many health problems. – Other Health Provider*

*See no measurable decline in adult smokers. – Other Health Provider*

*High tobacco use rates. – Physician*

*Too many people smoke and too many young people are starting the habit. – Community/Business Leader*

*Despite endeavors to cut down on public smoking, it is still happening. – Community/Business Leader*

*We have high tobacco use rates and electronic nicotine systems growing exponentially in use. Nearly every neighborhood has a convenience store selling these products nearby. So many people do not realize the ill effects on their health. – Other Health Provider*

*Extremely high population that smokes. – Other Health Provider*

*High level of tobacco use compared to the national average. – Community/Business Leader*

*Smoking has a long history of expected/tolerated behavior in individual families and in this community increasingly multi culturally. It is very addictive and the degree of that is not understood. Tobacco farming is part of the local economy. – Other Health Provider*

*Even with all of the media surrounding the effects of tobacco use, we still see people using the products. – Community/Business Leader*

*Often a generational culture and reflection of a smoking family background. – Community/Business Leader*

*There are many in the community that use tobacco. – Other Health Provider*

### **Comorbidities**

*Heavy tobacco use usually leads to chronic respiratory issues in elder adults. – Other Health Provider*

*Tobacco is addictive and many don't realize the effects on their health. – Community/Business Leader*

*Cancer, visual evidence. – Community/Business Leader*

*Because it causes such devastating effects and it's a choice by persons to use it. – Community/Business Leader*

*Smoking causes all kinds of health issues, now we are hearing that vaping is as well. The tobacco industry has done a beautiful job of making smoking look cool. – Community/Business Leader*

*One of the leading causes of heart disease, cancer and respiratory diseases. – Physician*

### **E-Cigarettes**

*Youth interest in e-cigarettes is disappointing. They appear to be after the cool affect at the expense of their health, ignoring the toxic effect of nicotine. I again link to under education and low self-esteem. – Community/Business Leader*

*I am concerned about the number of teenagers who consider vaping as a safe alternative to actual tobacco. – Community/Business Leader*

*Though cigarette use has declined, e-cigarette use, particularly among our youth, is on the rise. – Public Health Representative*

**Teen/Young Adult Usage**

*When you have high school children still choosing to smoke, that should constitute a major problem. – Other Health Provider*

*Tobacco use can start early, and often becomes a habit that lasts a lifetime and shortens lives due to health impacts. – Community/Business Leader*

*Teen use. – Social Services Provider*

*The increase of young smokers and the effects of long term tobacco use. – Other Health Provider*

*Access is too easy for young people. Smoking is too accepted among residents. – Other Health Provider*

**Denial/Stigma**

*Habit, denial disease will happen to you, laziness. Friends continue to use it, so the temptation is there. – Social Services Provider*

**Cost of Cessation Programs**

*Access to low cost quit programs and community support around quitting. – Physician*

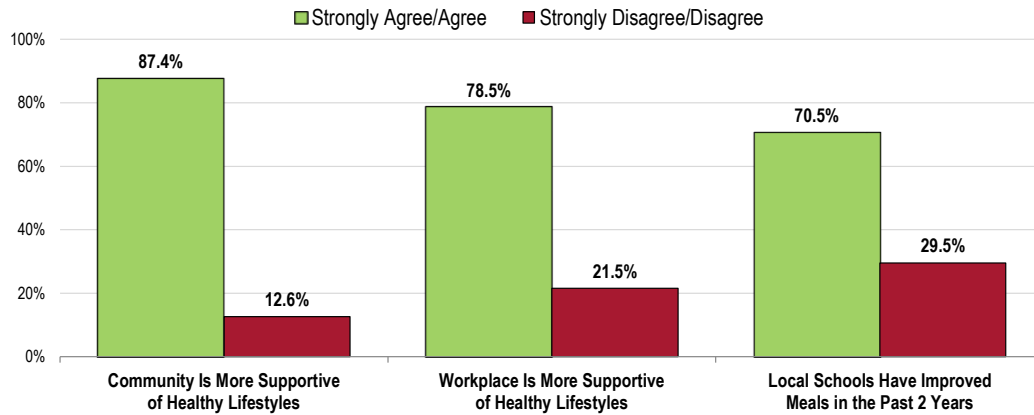
**Health Education/Awareness**

*Lack of continuing education for young adults and adults. – Other Health Provider*

## Efforts in Community Health Improvement

Most survey respondents agree that the community has made improvements in various aspects of community health over the past 3 years, including improved school meals, support for healthy lifestyles, and healthier workplaces (among employed adults).

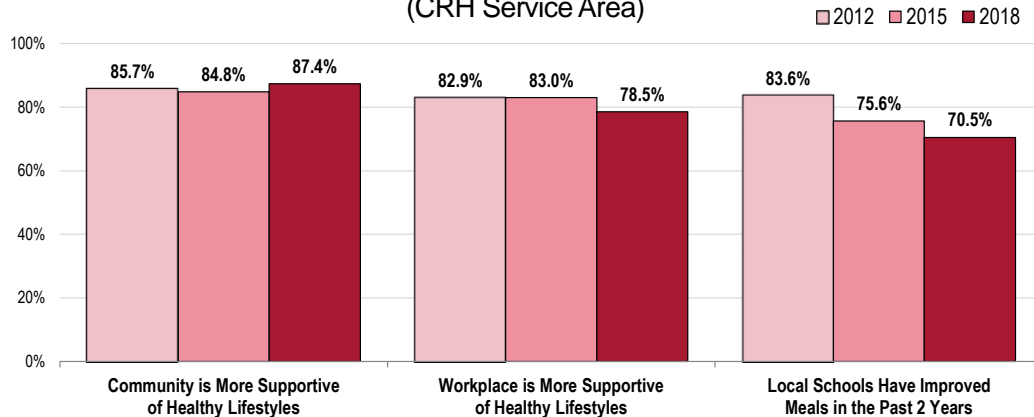
### Agreement With Statements Regarding Community Health Improvement Efforts (CRH Service Area, 2018)



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 337-339]  
 Notes: • Asked of all respondents.

- **TREND:** Over time, CRH Service Area residents are significantly less likely to agree that local schools have improved meals (the other indicators have been stable).

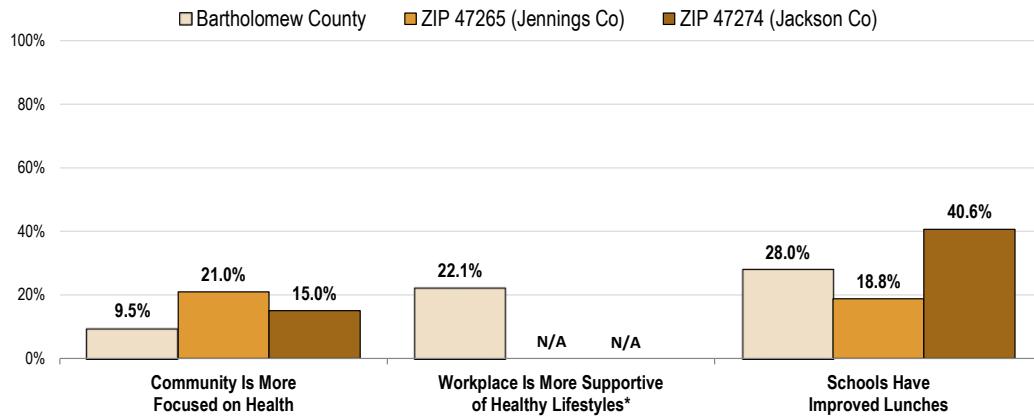
### Agree/Strongly Agree With Recent Efforts in Community Health Improvement (CRH Service Area)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Items 337-339]  
 Notes: • Asked of all respondents.  
 • Percentages represent combined "agree" and "strongly agree" responses.

- Residents of ZIP Code 47274 are more likely to **disagree** that local schools have improved lunches, and those in ZIP Code 47265 are more likely to **disagree** that the community is more focused on health these days.

### **Disagree That Community Health Improvements Have Occurred** (By County; CRH Service Area, 2018)



Sources: ● 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 337-339]  
 Notes: ● Asked of all respondents.  
 ● Percentages represent combined "disagree" and "strongly disagree" responses.  
 ● \*The sample sizes within Jennings and Jackson County ZIP Codes were too small to be shown.

# Access to Health Services



Professional Research Consultants, Inc.

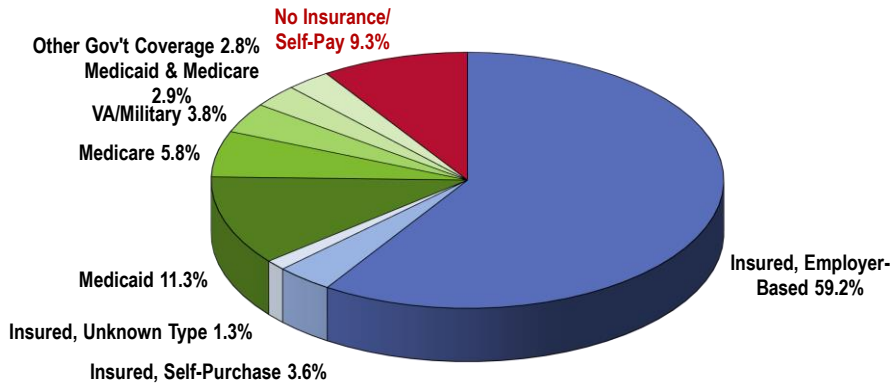
## Health Insurance Coverage

### Type of Healthcare Coverage

A total of 64.1% of Columbus Regional Health Service Area adults age 18 to 64 report having healthcare coverage through private insurance. Another 26.6% report coverage through a government-sponsored program (e.g., Medicaid, Medicare, military benefits).

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

**Healthcare Insurance Coverage**  
(Among Adults Age 18-64; CRH Service Area, 2018)



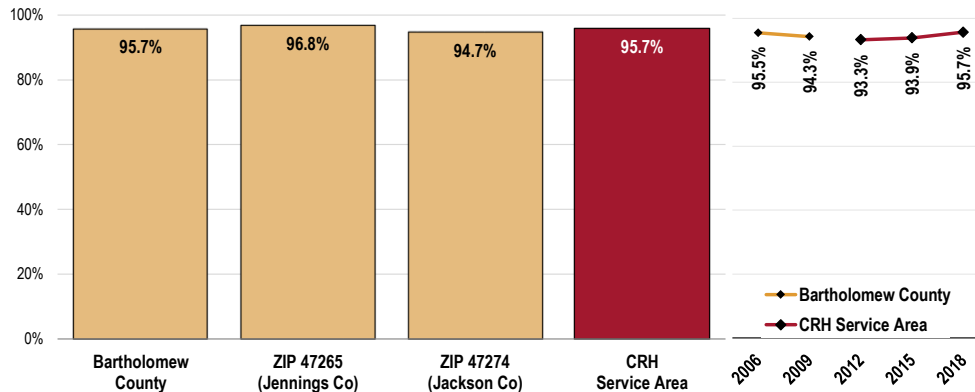
Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 169]  
Notes: • Reflects respondents age 18 to 64.

### Prescription Drug Coverage

Among insured adults, 95.7% report having prescription coverage as part of their insurance plan.

- Similar findings by area.
- TREND: Statistically unchanged over time.

**Health Insurance Covers Prescriptions at Least Partially**  
(Among Insured Respondents)



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 327]  
Notes: • Asked of all insured respondents.

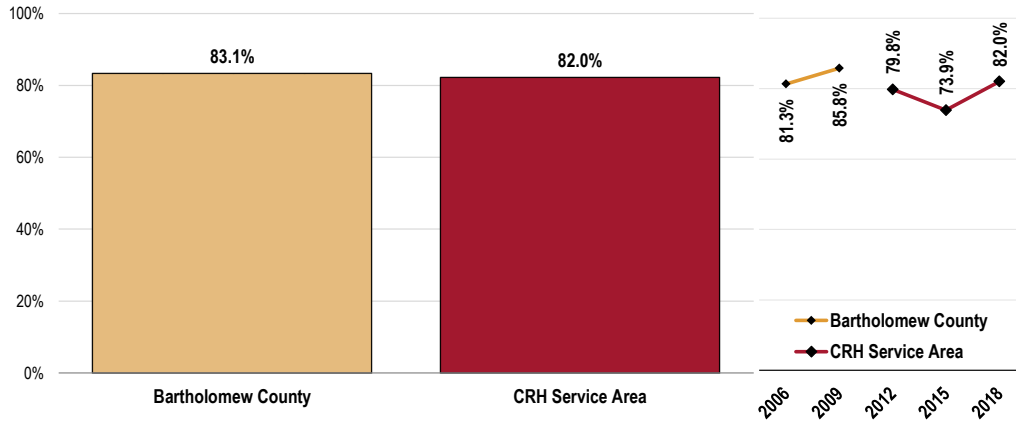


### Supplemental Coverage

Among Medicare recipients, the majority (82.0%) has additional, supplemental healthcare coverage.

- TREND: Statistically unchanged over time.

#### Have Supplemental Coverage in Addition to Medicare (Among Adults Age 65+)



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 326]  
 Notes: • Asked of respondents age 65+.

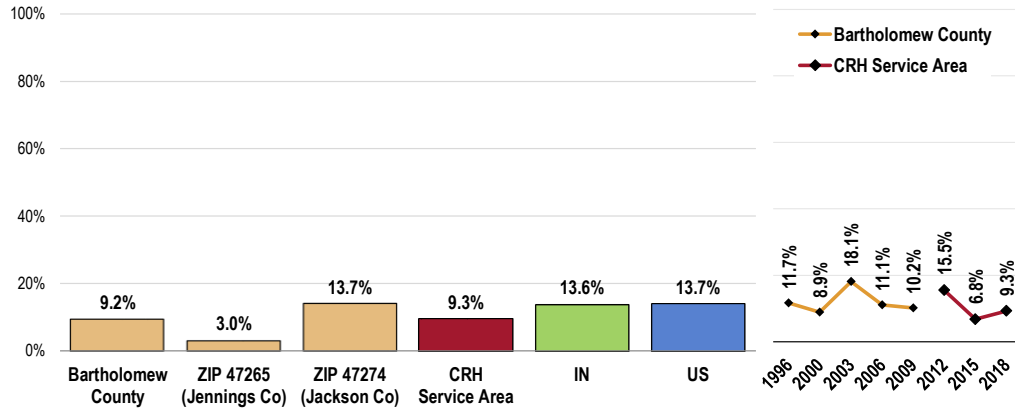
### Lack of Health Insurance Coverage

Among adults age 18 to 64, 9.3% report having no insurance coverage for healthcare expenses.

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

- More favorable than state and US findings.
- The Healthy People 2020 target is universal coverage (0% uninsured).
- Favorably low in ZIP Code 47265.
- TREND: Marks a statistically significant improvement (decrease) over time.

### Lack of Healthcare Insurance Coverage (Among Adults Age 18-64) Healthy People 2020 Target = 0.0% (Universal Coverage)

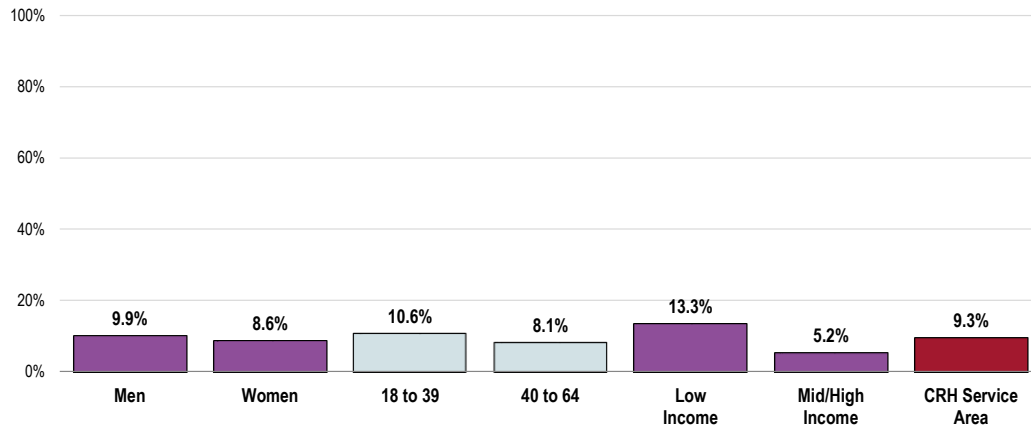


Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 169]  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2016 Indiana data.  
 • 2017 PRC National Health Survey, Professional Research Consultants, 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.

- As may be expected, residents living at lower incomes are more likely to be without healthcare insurance coverage.

### Lack of Healthcare Insurance Coverage (Among Adults Age 18-64; CRH Service Area, 2018) Healthy People 2020 Target = 0.0% (Universal Coverage)



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 169]  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective AHS-1]

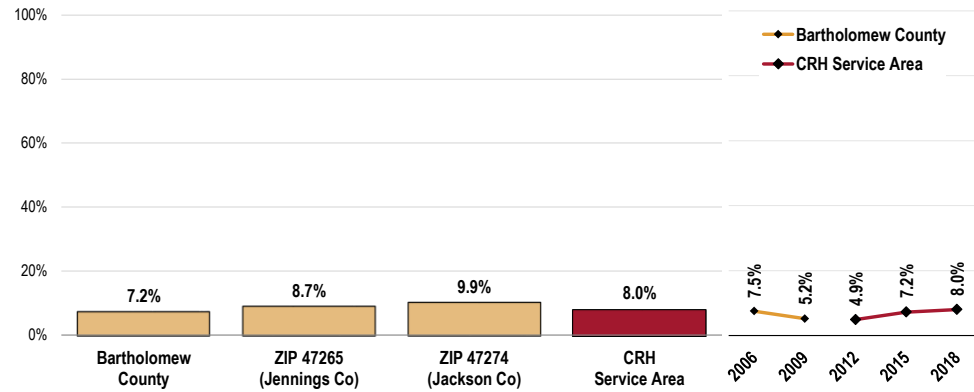
Notes: • Asked of all respondents under the age of 65.  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

### Recent Lack of Coverage

Among currently insured adults in the service area, 8.0% report that they were without healthcare coverage at some point in the past year.

- Comparable findings by area.
- TREND: Marks an increase from 2012 survey findings.

### Went Without Healthcare Insurance Coverage At Some Point in the Past Year (Among Insured Adults)

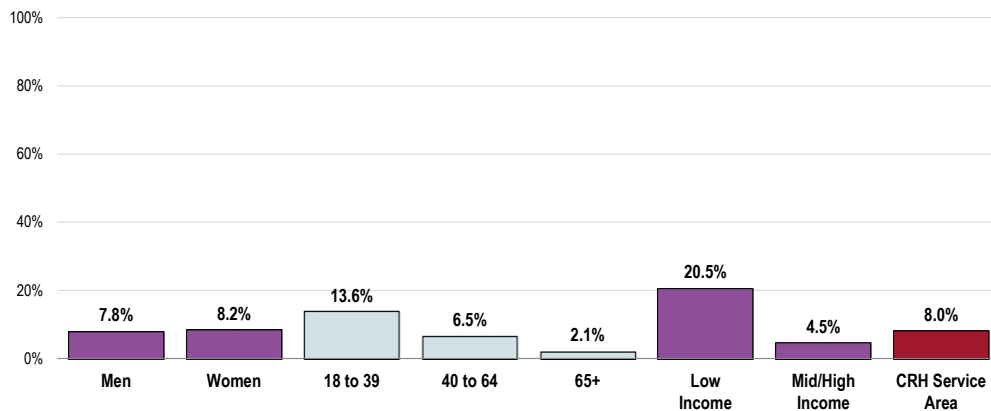


Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 328]  
 Notes: • Asked of all insured respondents.

Among insured adults, the following population segments are more likely to be without healthcare insurance coverage:

- Younger residents (negative correlation with age).
- Low-income adults.

### Went Without Healthcare Insurance Coverage At Some Point in the Past Year (Among Insured Adults; CRH Service Area, 2018)



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 328]  
 Notes: • Asked of all insured adults.  
 • 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.

# Difficulties Accessing Healthcare

## About Access to Healthcare

Access to comprehensive, quality healthcare 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 healthcare system; 2) Accessing a healthcare location where needed services are provided; and 3) Finding a healthcare provider with whom the patient can communicate and trust.

- Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

To better understand healthcare access barriers, survey participants were asked whether any of seven types of barriers to access prevented them from seeing a physician or obtaining a needed prescription in the past year.

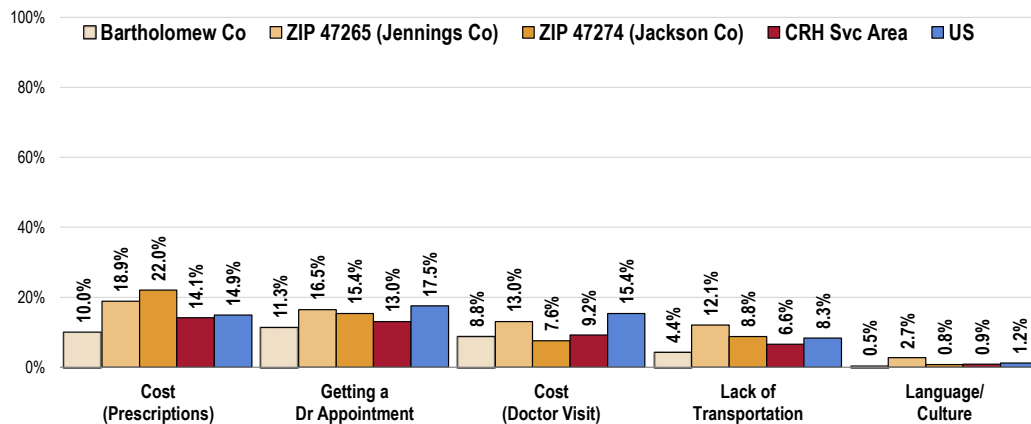
Again, these percentages reflect the total population, regardless of whether medical care was needed or sought.

## Barriers to Healthcare Access

**Of the tested barriers, cost of prescriptions impacted the greatest share of Columbus Regional Health Service Area adults (14.1% say that cost prevented them from a prescription medication at some point in the past year).**

- The proportion of impacted service area adults is statistically comparable to or better than that found nationwide for **each** of the tested barriers.
- Note that prohibitive prescription costs are much more likely to be a barrier in ZIP Code 47274.

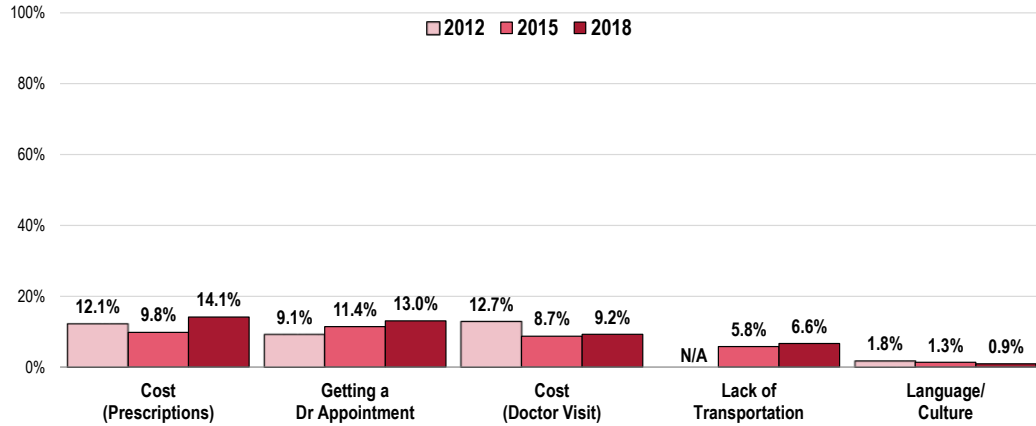
## Barriers to Access Have Prevented Medical Care in the Past Year



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 8-13, 302]  
 • 2017 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of all respondents.

- TREND: Over time, cost of doctor visits has decreased significantly as a barrier to care, while difficulty getting an appointment has increased.

### Barriers to Access Have Prevented Medical Care in the Past Year (CRH Service Area)



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 8-13, 302]  
 Notes: • Asked of all respondents.

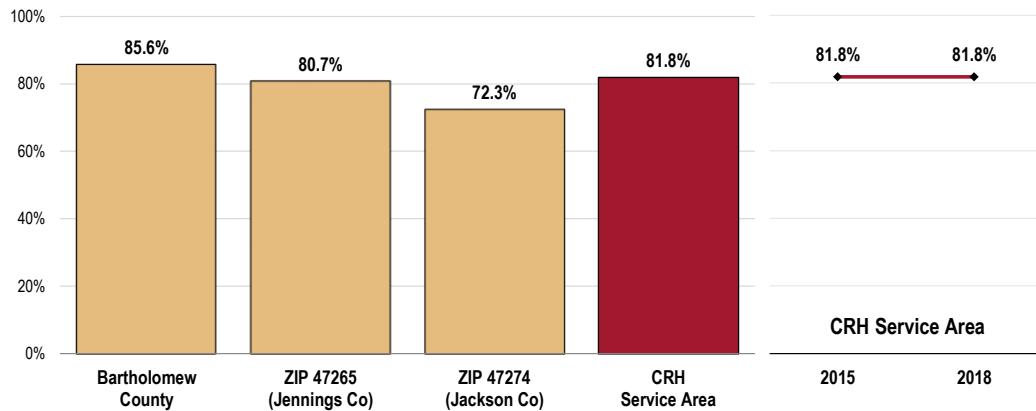
### Prescriptions

#### Understanding of Medication and Dosage

Among all respondents, 81.8% report that they would be able to describe the dosage and directions for any prescriptions they might have if asked by a medical physician.

- The prevalence is much higher in Bartholomew County than in ZIP Code 47274.
- TREND: Unchanged from 2015 survey findings.

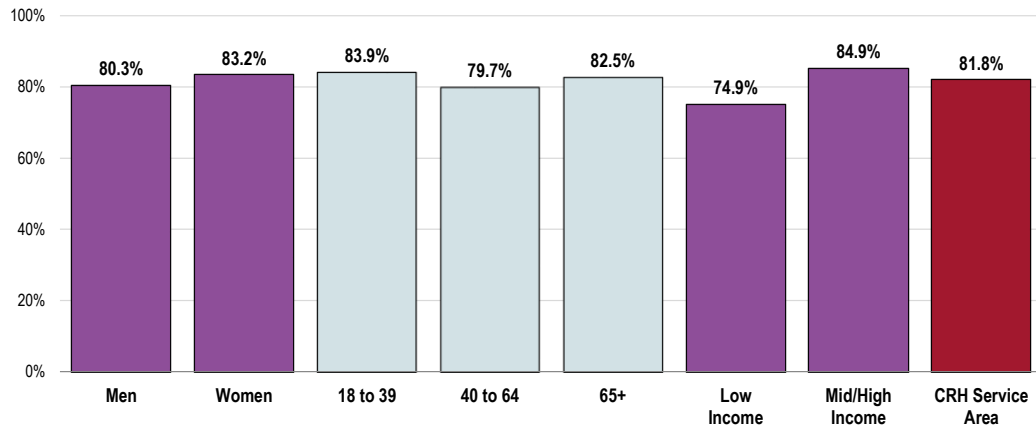
### Respondent Understands and Can Communicate Medication and Dosages to a Healthcare Professional



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 303]  
 Notes: • Asked of all respondents.

- Residents in low-income households in the service area are statistically less likely to report being able to understand and communicate their medication and dosages to a healthcare professional.

### Respondent Understands and Can Communicate Medication and Dosages to a Healthcare Professional (CRH Service Area, 2018)



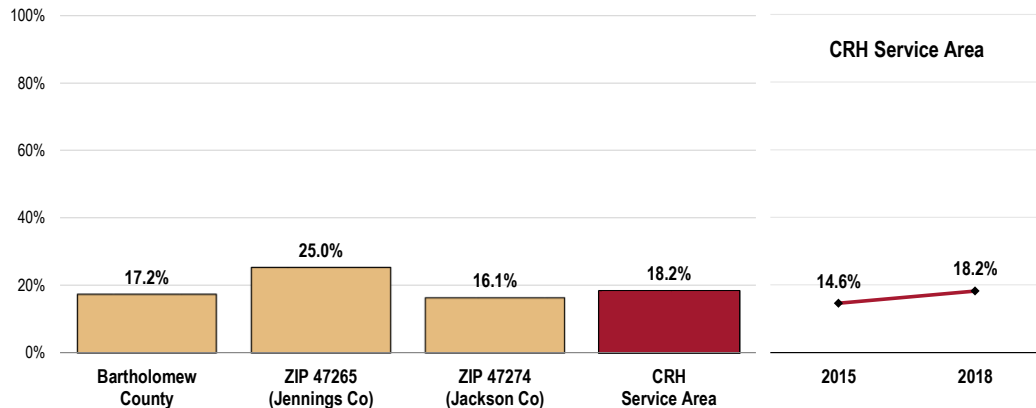
Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 303]  
 Notes: • Asked of all respondents.  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with 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.

#### Prescription Use

A total of 18.2% of survey respondents report that they have stopped taking a prescription medication in the past 3 years without a doctor's order.

- Higher in ZIP Code 47265.
- TREND: Marks an increase over time.

### Stopped Taking Medication at Some Point in the Past 3 Years Without a Physician's Order

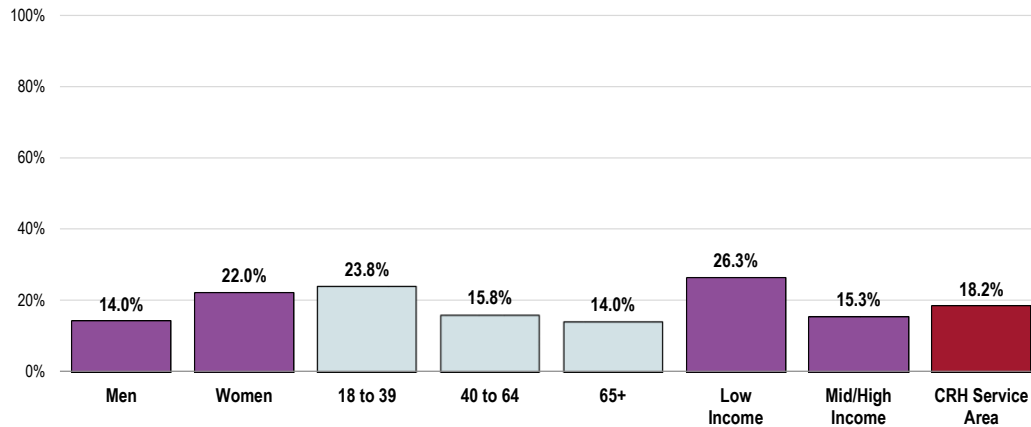


Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 304]  
 Notes: • Asked of all respondents.

Adults more likely to have stopped taking a prescription medication in the past 3 years without a doctor's order include:

- Women.
- Younger residents (negative correlation with age).
- Low-income respondents.

### Stopped Taking Medication at Some Point in the Past 3 Years Without a Physician's Order (CRH Service Area, 2018)



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 304]  
 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.

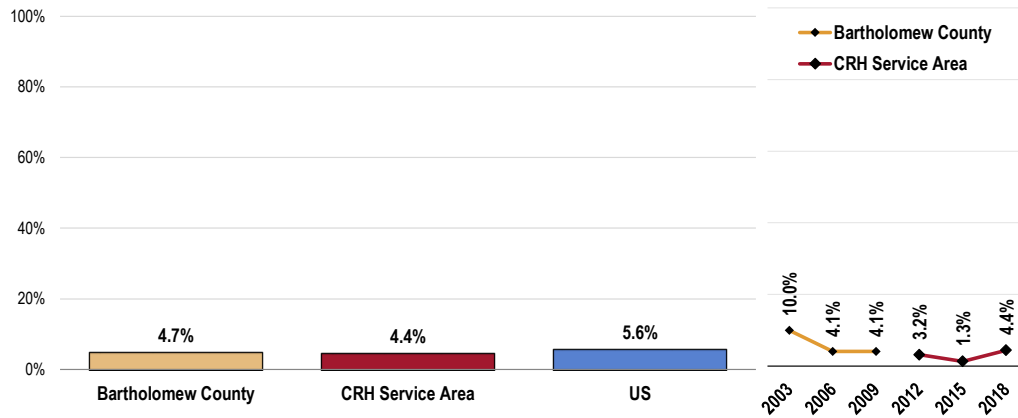
### Accessing Healthcare for Children

**A total of 4.4% of parents say there was a time in the past year when they needed medical care for their child, but were unable to get it.**

- Statistically similar to what is reported nationwide.
- The Bartholomew County figure is 4.7%.
- TREND: Unchanged from 2012 service area results (but increasing since 2015). Bartholomew County had reported a decrease in access problems for children's medical care after 2003.

Surveyed parents were also asked if, within the past year, they experienced any trouble receiving medical care for a randomly selected child in their household.

## Had Trouble Obtaining Medical Care for Child in the Past Year (Among Parents of Children 0-17)



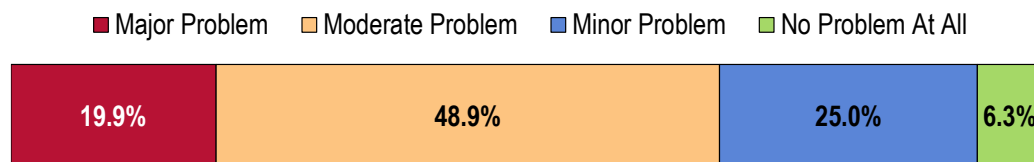
Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 118-119]  
 • 2017 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of all respondents with children 0 to 17 in the household.

Among the parents experiencing difficulties, the majority cited **cost or a lack of insurance** as the primary reason; others cited long waits for appointments.

### Key Informant Input: Access to Healthcare Services

Nearly half of key informants taking part in an online survey characterized **Access to Healthcare Services** as a “moderate problem” in the community.

### Perceptions of Access to Healthcare Services as a Problem in the Community (Key Informants, 2018)



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

### Top Concerns

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

#### Access for Uninsured/Underinsured

*The lack of availability for people without insurance, or high deductibles, to see a doctor. – Public Health Representative*

*Access to healthcare for low income individuals and families continues to be a problem. Preventive care is out of the question, so there is not a physician relationship when other care is needed. – Community/Business Leader*

*While accessible and the new VIM is helpful, cost is still an issue. – Community/Business Leader*



*Underserved, uninsured, lack of funds for healthcare and/or transportation to get healthcare. – Other Health Provider*

*Lack of insurance coverage for care that is needed. – Community/Business Leader*

*Access for the under and uninsured that are available evenings and weekends. – Other Health Provider*

*Lack of insurance. Financial constraints. – Physician*

*There are too few doctors' offices that are willing to provide care for new low-income patients. VIM is overwhelmed. – Social Services Provider*

*Lack of insurance or of providers who accept certain insurance plans. For example, the marketplace plans have few providers in Columbus. – Physician*

### **Lack of Providers**

*CRH is the only Healthcare provider in Columbus. They have no competition, they don't care. – Community/Business Leader*

*Very few practices, especially primary care physicians, diabetes, orthopedic and GI, are open to seeing a patient who is uninsured and unable to make payment. – Other Health Provider*

*Not enough providers and not enough appointment times to access a provider even if you have one.*

*Also we have an urgent care facility in this area that has a longer wait time than our ED. This unfortunately forces people to seek treatment in the ED. – Other Health Provider*

*The capacity to serve those on Medicaid and Medicare. – Social Services Provider*

*Process of how to access healthcare. Having limited providers for Medicaid users. – Community/Business Leader*

### **Barriers to Primary Care**

*New patients getting into primary care. – Other Health Provider*

*Whether real or perceived, there is the assumption that many primary care physicians are not taking new patients because they don't have capacity. We also have a mental health and substance abuse problem with need for mental health counselors. – Community/Business Leader*

*Most primary care providers not taking new patients. – Physician*

*Not enough primary care physicians. – Other Health Provider*

*There is a major shortage of primary care doctors, so people are getting healthcare as less than optimal places. Walk in clinics, etc., or not at all. We need more primary care doctors and people need better insurance coverage. – Physician*

*Access to care in a timely fashion. – Other Health Provider*

### **Contributing Factors**

*Lack of affordable insurance. Transportation. Lack of interpreting services, being a diverse community. – Public Health Representative*

*The technology of healthcare providers is not keeping up with the demands of the consumer. This alone makes access a problem. On top of that, we have a significant physician shortage in our region. I believe there are plans for expansion. – Other Health Provider*

*Aging providers and limited specialty care access. – Other Health Provider*

*Knowledge of which healthcare services are available, where, when and transportation. Lack of interpretation services is often a problem due to CRH not having a full-time translator. We put the responsibility upon the patient. – Public Health Representative*

*Same day appointments, not enough family practice providers, some specialties not represented, the need for more mental health and substance abuse resources. – Other Health Provider*

*Lack of cohesive access to healthcare coverage is the biggest problem. The insurance system is disjointed at best, dysfunctional at worst. HIP 2.0 is a big improvement for low income patients but has a financial cliff and is precarious. – Other Health Provider*

*Lack of integration and respect between medical professionals and alternative medicine providers. – Other Health Provider*

**Affordable Care/Services**

*Healthcare is expensive and unaffordable to people with low income. – Community/Business Leader*

*Community members do not have access to the best healthcare. They often fall into the gap of too rich to be on Medicaid, but too poor to pay out of pocket. Medicaid recipients have limited choice in doctors. Long-term care support service. – Community/Business Leader*

*Lack of affordability has always been the number one issue. Lack of education on necessity to immunize by both the public and medical professionals encouraging immunizing. – Public Health Representative*

**Access to Care for Youth**

*Healthcare for youth is not readily accessible. This is especially true for those who do not have health insurance. – Community/Business Leader*

*As an educator I see lots of students and parents that struggle to get appropriate healthcare. Or parents do not get their children healthcare that is needed yearly. Check-ups, vision, dental. – Community/Business Leader*

**Lack of Mental Health Services**

*Lack of services for integrated mental and physical health. People whose insurance lapsed. How to get access to healthcare without insurance or between insurance coverage. – Other Health Provider*

**Decreasing Competition in the Local Market**

*Decreasing competition in the local market. Lack of transparency in cost of services. Inability of consumers to act in their best interest because of the previous two items. – Community/Business Leader*

**Dental and Eye Care**

*Dental and eye care. – Social Services Provider*

### Type of Care Most Difficult to Access

Key informants (who rated this as a “major problem”) most often identified substance abuse treatment, behavioral health, primary care, and dental care 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
Substance Abuse Treatment	50.0%	33.3%	16.7%	24
Behavioral Healthcare	42.1%	42.1%	15.8%	19
Primary Care	38.5%	15.4%	46.2%	13
Dental Care	10.0%	40.0%	50.0%	10
Pain Management	0.0%	16.7%	83.3%	6
Specialty Care	40.0%	60.0%	0.0%	5
Chronic Disease Care	25.0%	25.0%	50.0%	4
Palliative Care	0.0%	25.0%	75.0%	4
Urgent Care	66.7%	0.0%	33.3%	3
Elder Care	0.0%	100.0%	0.0%	2
Affordable Care	0.0%	0.0%	100.0%	1

## Primary Care Services

### About Primary Care

Improving healthcare 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

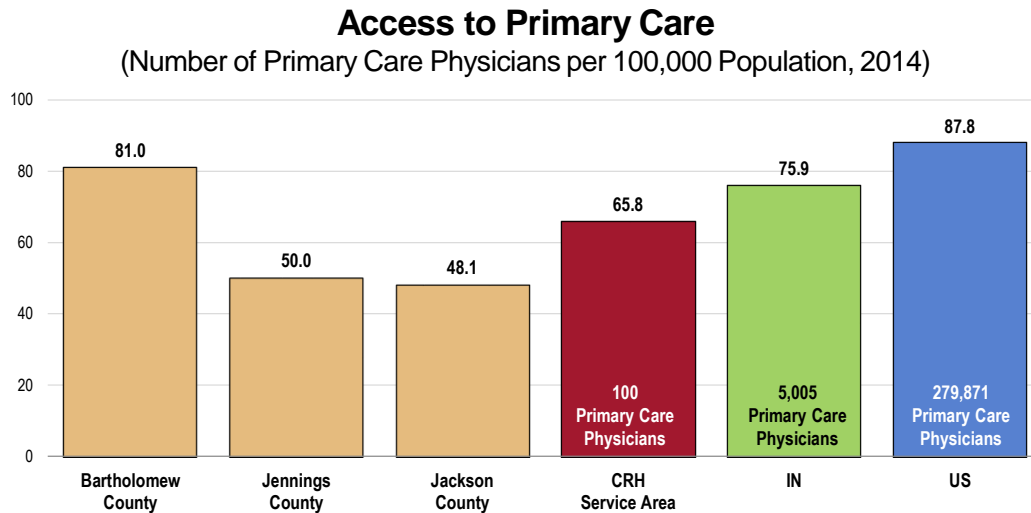
Improving healthcare services includes increasing access to and use of evidence-based preventive services. Clinical preventive services are services that: **prevent** illness by detecting early warning signs or symptoms before they develop into a disease (primary prevention); or **detect** a disease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

- Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

### Access to Primary Care

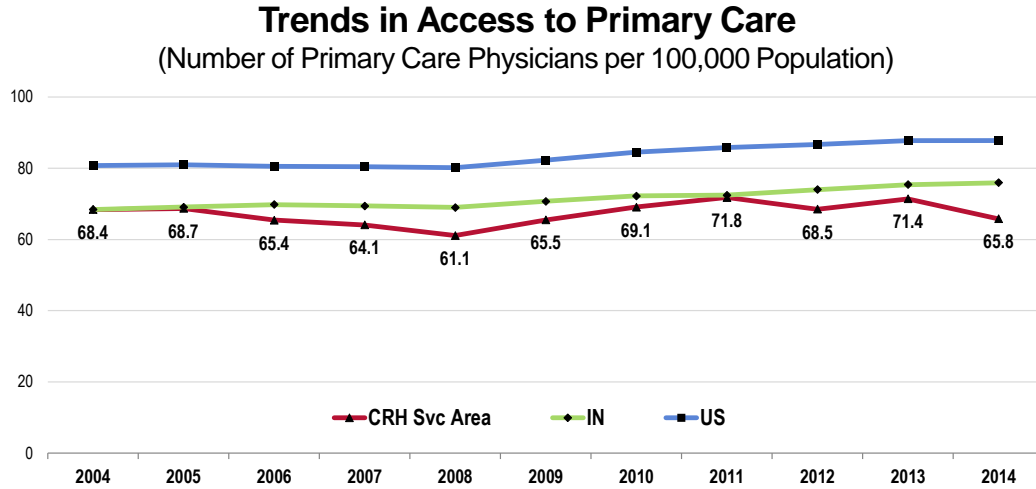
In the CRH Service Area in 2014, there were 100 primary care physicians, translating to a rate of 65.8 primary care physicians per 100,000 population.

- Well below what is found statewide and nationally.
- The ratio is considerably higher in Bartholomew County.



- Sources:
- US Department of Health & Human Services, Health Resources and Services Administration, Area Health Resource File.
  - Retrieved April 2018 from Community Commons at <http://www.chna.org>.
- Notes:
- This indicator is relevant because a shortage of health professionals contributes to access and health status issues.

- **TREND:** Access to primary care (in terms of the rate of primary care physicians to population) has fluctuated in the service area, showing no clear trend. Proportions have increased across Indiana and the US overall.



Sources:
 

- US Department of Health & Human Services, Health Resources and Services Administration, Area Health Resource File.
- Retrieved April 2018 from Community Commons at <http://www.chna.org>.

 Notes:
 

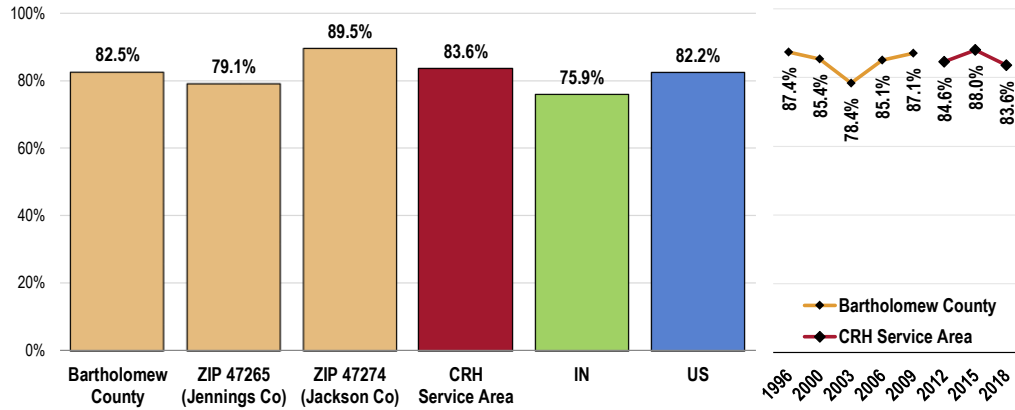
- This indicator is relevant because a shortage of health professionals contributes to access and health status issues.
- These figures represent all primary care physicians practicing patient care, including hospital residents. In counties with teaching hospitals, this figure may differ from the rate reported in the previous chart.

## Regular Physician or Clinic for Care

**A total of 75.8% of Columbus Regional Health Service Area adults have a regular physician or clinic where they go for their medical care.**

- More favorable than the state and US percentages.
- Favorably high in ZIP Code 47274.
- **TREND:** Similar to the 2012 service area response.

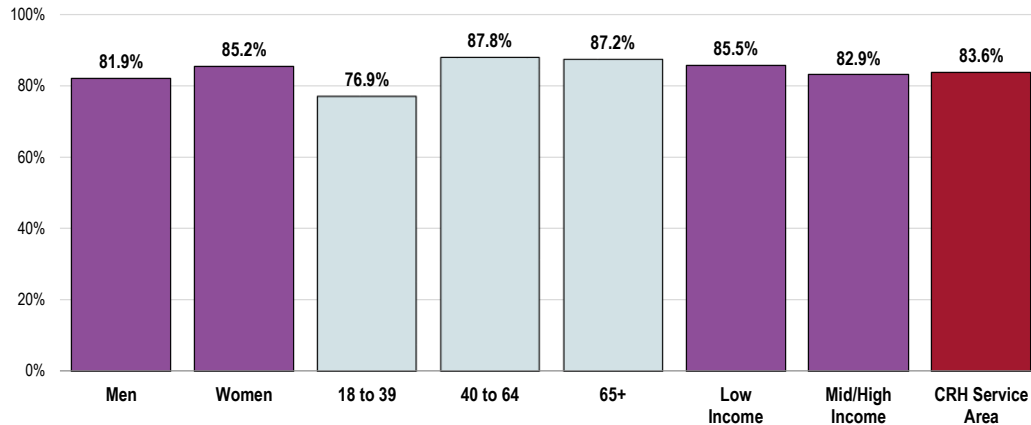
### Have a Regular Physician or Clinic for Medical Care



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 16]  
 • 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 Indiana data.  
 • 2017 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of all respondents.

- Service area adults under 40 are less likely to have a regular physician or clinic for their medical care.

### Have a Regular Physician or Clinic for Medical Care (CRH Service Area, 2018)



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 16]  
 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.

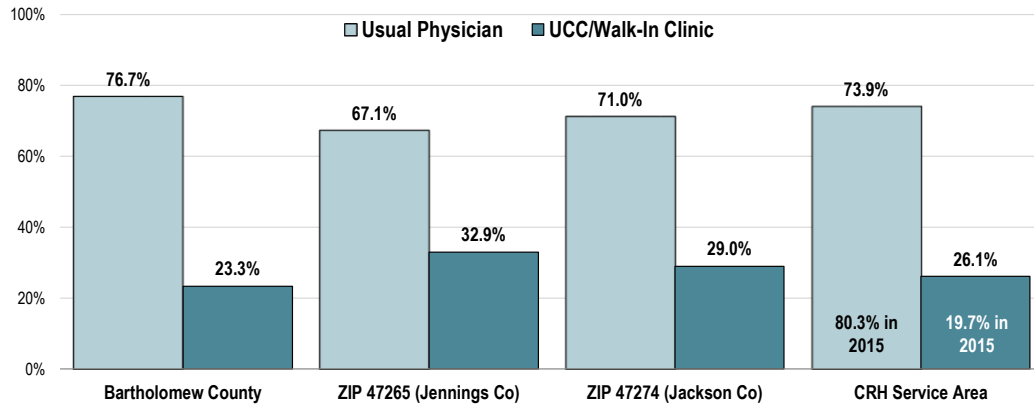
### Site Preferred for Care

When asked whether they prefer to see their usual physician who knows their medical history or to utilize a walk-in or urgent-care clinic for their medical care, most service area adults (73.9%) would prefer their usual physician.

- On the other hand, 26.1% would prefer to use an urgent-care center or walk-in clinic.

- Preference for routine medical care does not vary by area for either site.
- TREND: Over time, respondents appear to be more likely to prefer using an urgent-care or walk-in clinic.

### Site Preferred for Routine Medical Care (CRH Service Area, 2018)

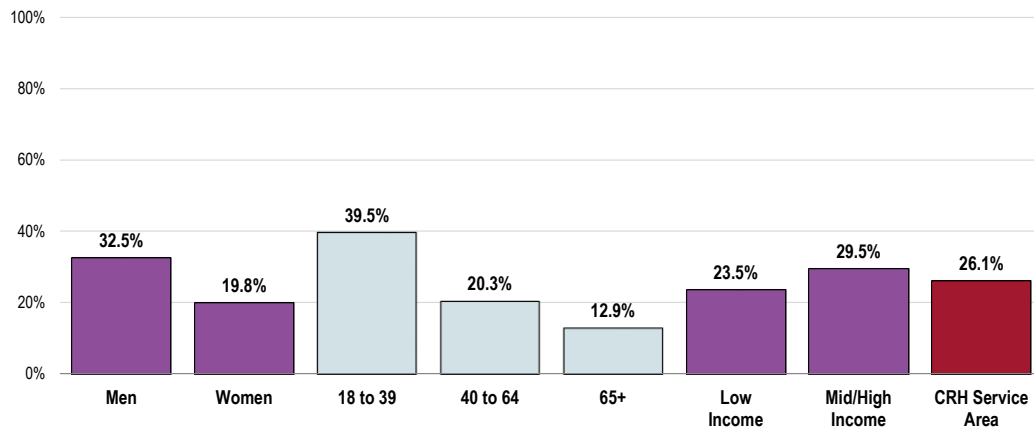


Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 305]  
 Notes: • Asked of all respondents.

When viewed by demographic characteristics, these adults prefer to use an urgent care or walk-in clinic:

- Men.
- Adults under age 40.

### Prefer an Urgent-Care or Walk-In Clinic for Routine Medical Care (CRH Service Area, 2018)



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 305]  
 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.

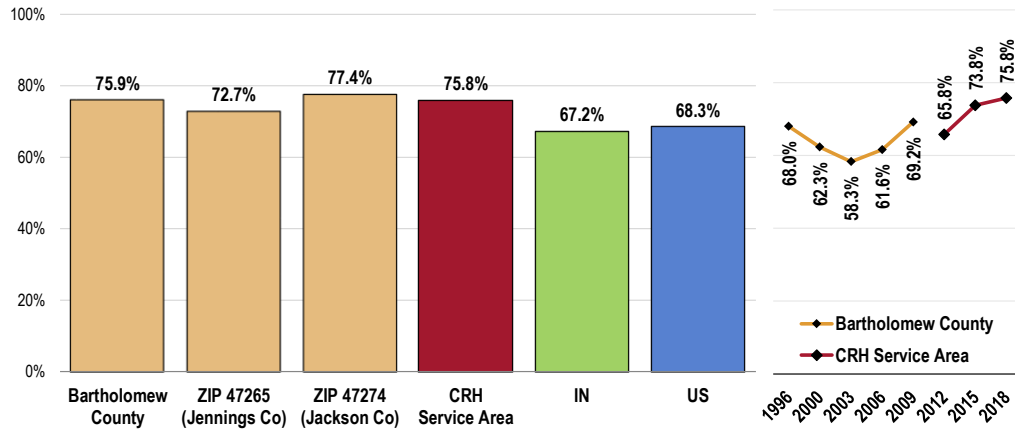
## Utilization of Primary Care Services

### Adults

Three-fourths of adults (75.8%) visited a physician for a routine checkup in the past year.

- Higher than state or US findings.
- Comparable by area.
- TREND: Denotes a statistically significant increase over time.

### Have Visited a Physician for a Checkup in the Past Year



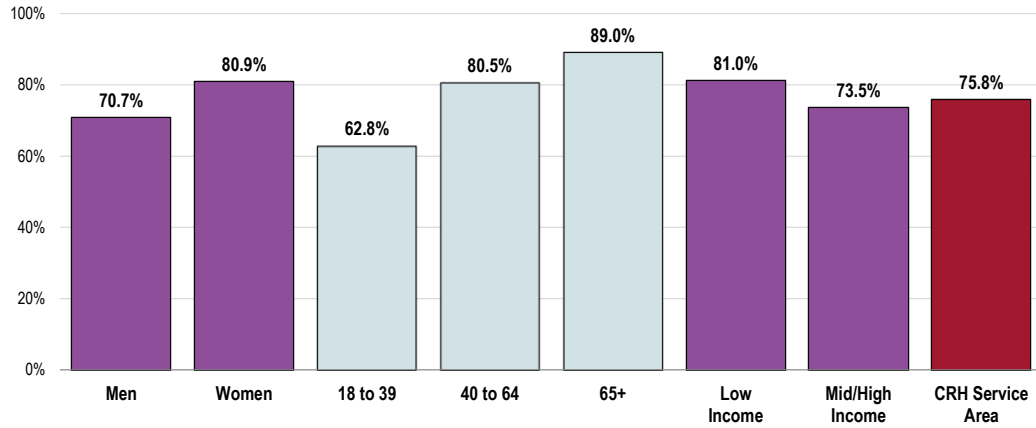
Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 18]  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2016 Indiana data.  
 • 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: • Asked of all respondents.

- Men and young adults are less likely to have received routine care in the past year (note the positive correlation with age).



### Have Visited a Physician for a Checkup in the Past Year (CRH Service Area, 2018)



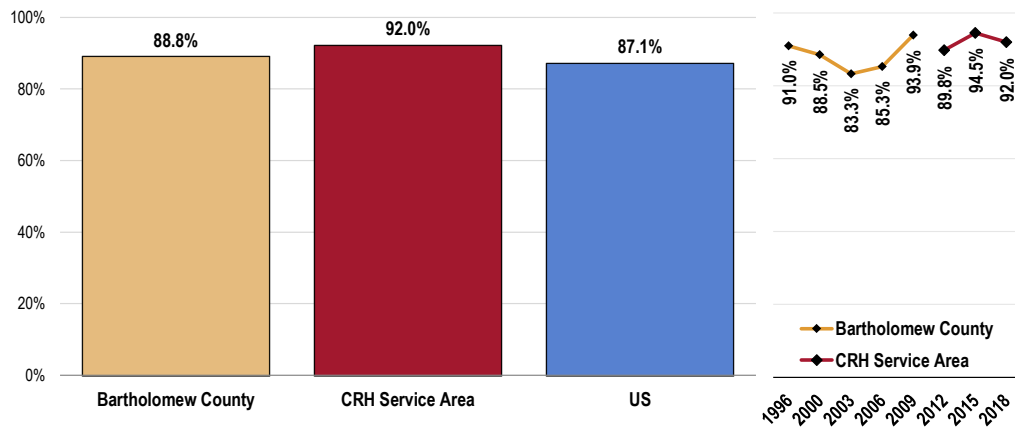
Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 18]  
 Notes: • Asked of all respondents.  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with 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.

### Children

Among surveyed parents, 92.0% report that their child has had a routine checkup in the past year.

- Similar to the US figure.
- The Bartholomew County percentage is 88.8%.
- TREND: Statistically similar to 2012 findings.

### Child Has Visited a Physician for a Routine Checkup in the Past Year (Among Parents of Children 0-17)



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 120]  
 • 2017 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of all respondents with children 0 to 17 in the household.

## 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](http://www.healthypeople.gov))

## Dental Care

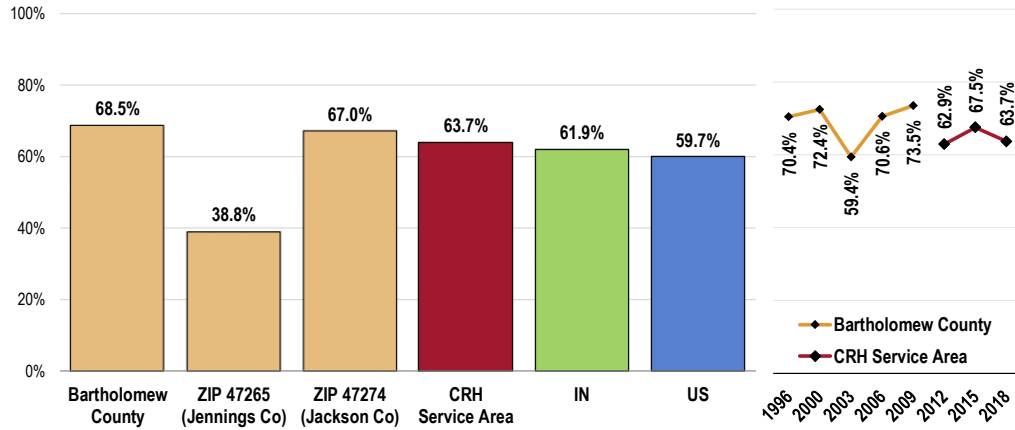
### Adults

**A total of 63.7% of Columbus Regional Health Service Area adults have visited a dentist or dental clinic (for any reason) in the past year.**

- Similar to state and US findings.
- Satisfies the Healthy People 2020 target (49% or higher).
- Notably lower in ZIP Code 47265; highest in Bartholomew County.
- TREND: Statistically unchanged from 2012 survey findings.

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

Healthy People 2020 Target = 49.0% or Higher



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, 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 Indiana data.  
 • 2017 PRC National Health Survey, Professional Research Consultants, Inc.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective OH-7]

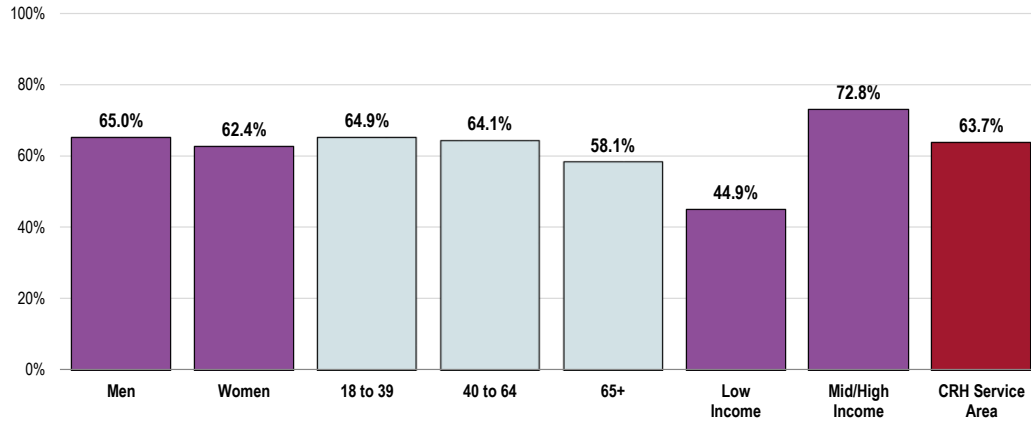
Notes: • Asked of all respondents.

- Persons living in the higher income categories report much higher utilization of oral health services (low-income adults fail to satisfy the Healthy People 2020 target).

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

(CRH Service Area, 2018)

Healthy People 2020 Target = 49.0% or Higher



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 20]  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective OH-7]

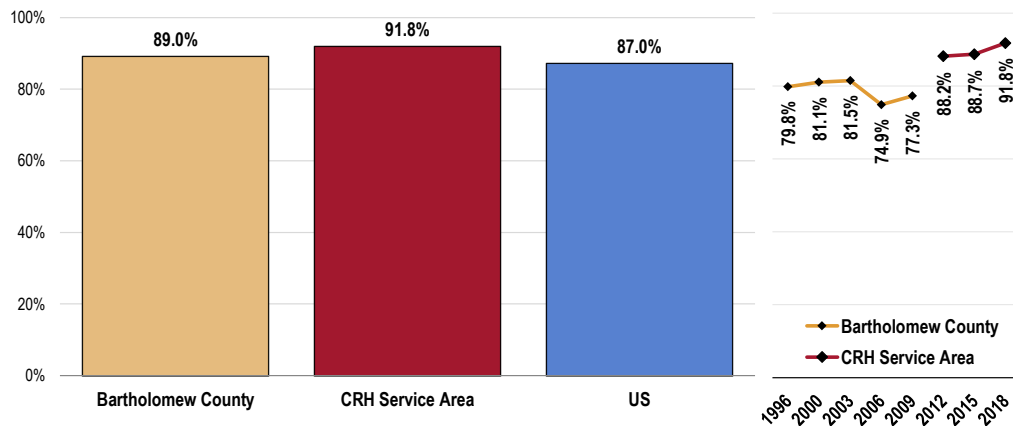
Notes: • Asked of all respondents.  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes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

## Children

A total of 91.8% of parents report that their child (age 2 to 17) has been to a dentist or dental clinic within the past year.

- Comparable to the US figure.
- Satisfies the Healthy People 2020 target (49% or higher).
- The Bartholomew County percentage is 89.0%.
- TREND: Statistically unchanged over time in the service area. Bartholomew County noted fluctuations in children’s dental care after 2003.

### Child Has Visited a Dentist or Dental Clinic Within the Past Year (Among Parents of Children Age 2-17) Healthy People 2020 Target = 49.0% or Higher

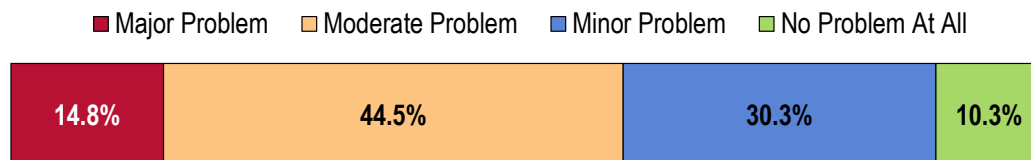


Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 123]  
 • 2017 PRC National Health Survey, Professional Research Consultants, Inc.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective OH-7]  
 Notes: • Asked of all respondents with children age 2 through 17.

## Key Informant Input: Oral Health

Key informants taking part in an online survey most often characterized *Oral Health* as a “moderate problem” in the community.

### Perceptions of Oral Health as a Problem in the Community (Key Informants, 2018)



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

## Top Concerns

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

### Affordable Care/Services

*Oral health is connected to many other aspects of health and disease such as cardiac disease, diabetes, substance abuse. It is often expensive and insurance coverage, if any is varied related to preventive care and restorative care. – Other Health Provider*

*There is very limited affordable, comprehensive insurance coverage for dental care. – Community /Business Leader*

*A lack of financial resources results in dental care not being priority. – Other Health Provider*

*Expensive. – Community/Business Leader*

*People can't afford dental care, leading to more serious issues. – Public Health Representative*

*Cost. I am aware of very little assistance for oral care in this community. Some for children, but nothing that I know of for adults. Unless a dentist steps forward. – Social Services Provider*

*The expense of dental care has risen dramatically. It may be difficult to get dentists to accept Medicaid and/or Medicare without the patient having high co-pays or needing credit options to get work done. I believe many adults are going without care. – Community/Business Leader*

### Access for Uninsured/Underinsured

*Oral health and dental care are way down on the list of basic needs, if on it at all, of the working poor. Benefits are not covered under Medicare and only limited services with Medicaid/HIP. Dental caries/infected teeth are dangerous if not corrected. – Other Health Provider*

*Lack of access especially for uninsured adults. – Public Health Representative*

*Lack of access for uninsured/underinsured population. – Other Health Provider*

*Lack of people with dental insurance. Drug abuse. – Public Health Representative*

*Many people do not have dental insurance. Dental care is expensive and preventive care is neglected. Most people go to the dentist when they have a painful crisis. – Public Health Representative*

*Many patients do not have dental insurance and/or the money to see a dentist for routine oral health care. – Other Health Provider*

*Few local dentists take Medicaid patients. – Physician*

### Children

*In the community, we see a large portion of kids having to go to the hospital to receive dental care due to extreme conditions. – Public Health Representative*

*Children's dental care, this is unique, not just adult dental care. There are only two pediatric dentists in town and they literally can take months to get into. – Community/Business Leader*

### Incidence/Prevalence

*This is evidenced by the hundreds of people I see with horrible mouth hygiene and rotten teeth, if they have teeth. – Other Health Provider*

### Substance Abuse/Use

*Use of certain drugs and failure to maintain good oral hygiene. – Community/Business Leader*

### Health Education/Awareness

*Provide more trainings to kids. – Community/Business Leader*

# Health Education & Outreach



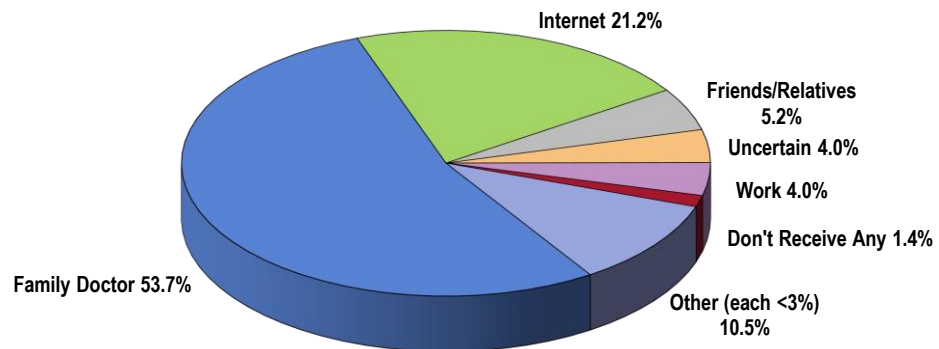
**Professional Research Consultants, Inc.**

## Healthcare Information Sources

**Family physicians and the Internet are residents' primary sources of healthcare information.**

- 53.7% of service area adults cited their **family physician** as their primary source of healthcare information.
- The **Internet** received 21.2% of responses.
- Other sources mentioned include **family/friends** and the **workplace**.

**Primary Source of Healthcare Information**  
(Columbus Regional Hospital Service Area, 2018)



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 345]  
Notes: • Asked of all respondents.

# Local Resources



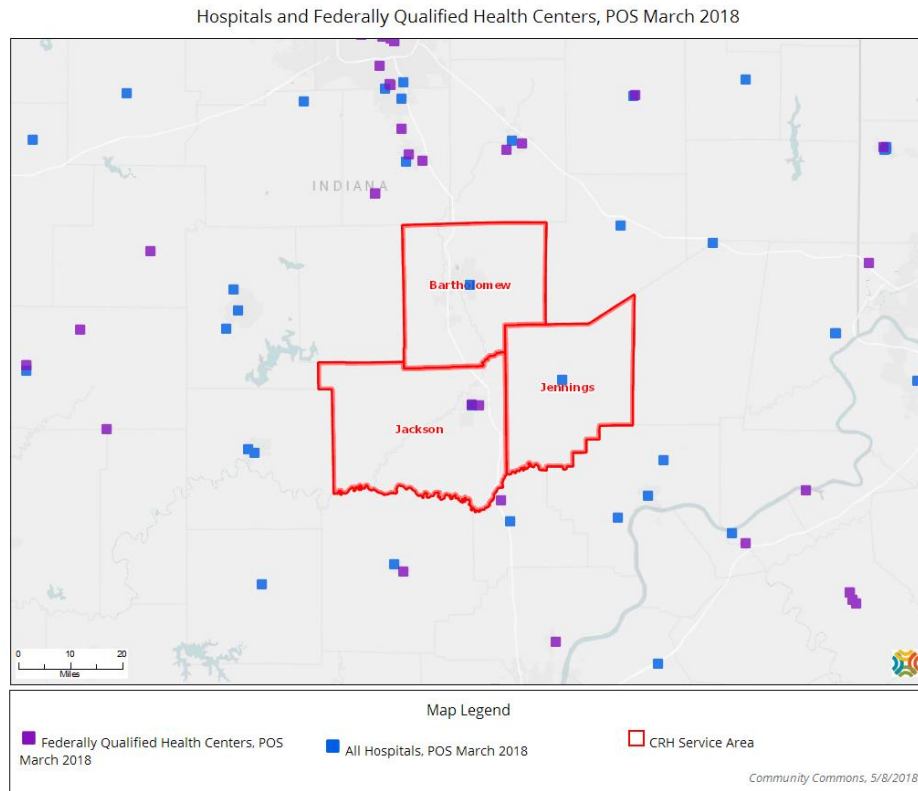
**Professional Research Consultants, Inc.**



## Healthcare Resources & Facilities

### Hospitals & Federally Qualified Health Centers (FQHCs)

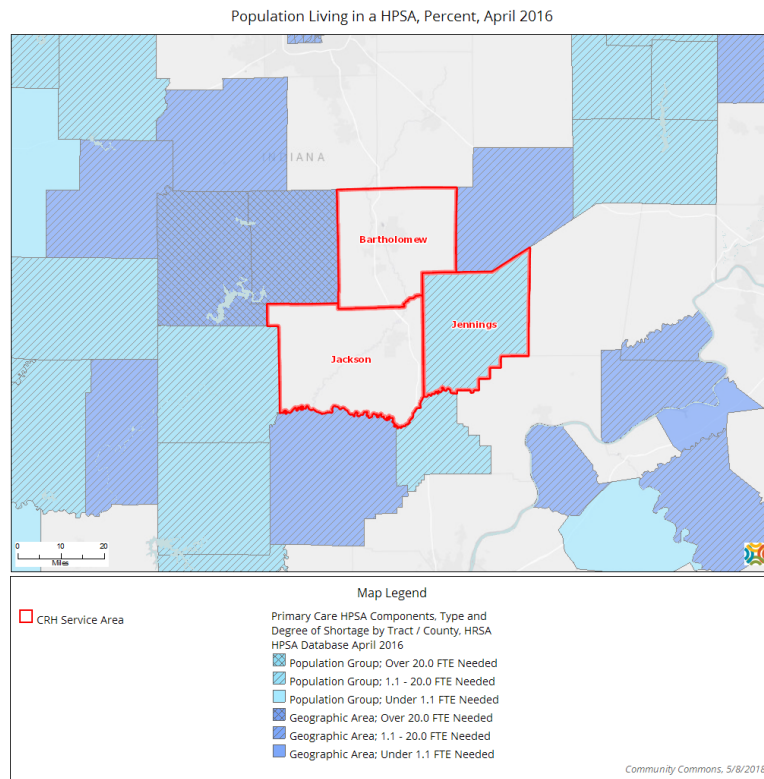
The following map details the hospitals and Federally Qualified Health Centers (FQHCs) within the Columbus Regional Health Service Area as of March 2018.



## Healthcare Resources & Facilities

### Health Professional Shortage Area (HPSA)

The following map details the hospitals and Federally Qualified Health Centers (FQHCs) within the Columbus Regional Health Service Area as of April 2016.

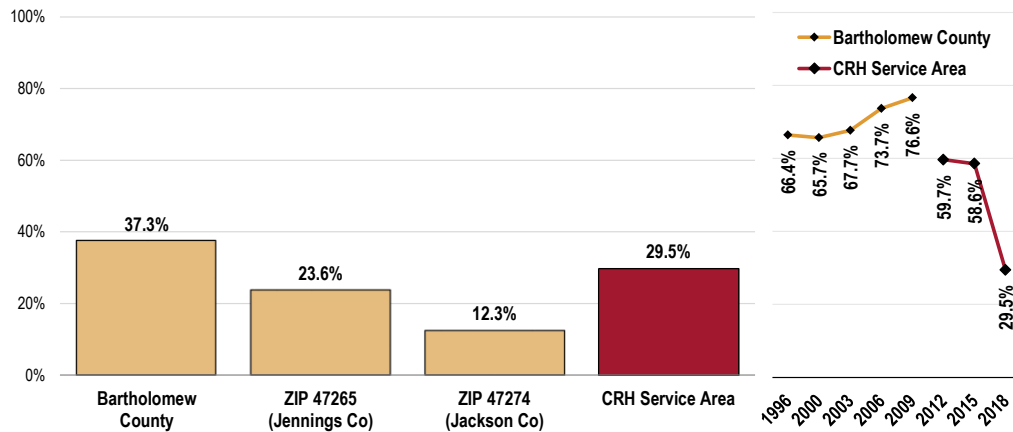


## Awareness of VIMCare Clinic

Nearly three in 10 survey respondents (29.5%) are aware of the VIMCare Clinic at Columbus Regional Hospital (formerly the Volunteers in Medicine Clinic).

- Awareness is highest in Bartholomew County and lowest in ZIP Code 47274.
- TREND: Marks a statistically significant decrease in awareness from previous survey results (note: the clinic is now under a different name).

### Aware of the VIMCare Clinic at Columbus Regional Hospital

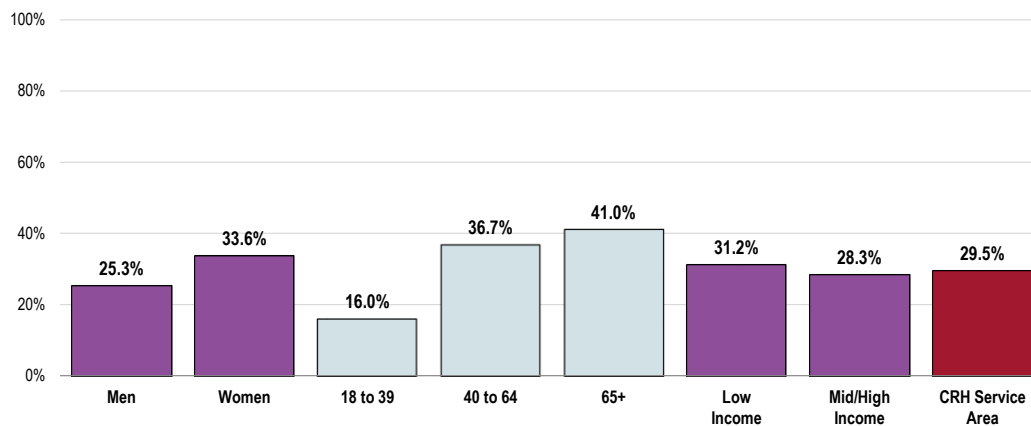


Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 346]  
 Notes: • Asked of all respondents.

Awareness of the clinic is lowest among these population segments in the service area:

- Men.
- Young adults.

### Aware of the VIMCare Clinic at Columbus Regional Hospital (CRH Service Area, 2018)



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 346]  
 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.

## 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

- Access-Ability*
- Adult and Child Health – Franklin*
- Affordable Healthcare Act*
- Alivio Clinic*
- ASAP*
- Bartholomew County Health Department*
- Bartholomew County Jail*
- Brighter Days*
- Centerstone*
- City of Columbus*
- Columbus Regional Health (CRH)*
- CRH Mental Health Unit*
- Community Health Ctr of Jackson County*
- Eskenaski Hospital*
- Family Service, Inc.*
- Health Department*
- Healthy Communities*
- Hope Family Health Center*
- Just Friends Adult Day Services*
- Medication Assistance Program*
- Methodist Hospital*
- Patient Financial Services*
- School System*
- Social Workers*
- St. Francis*
- St. Peter's Lutheran Church*
- St. Vincents*
- Su Casa Columbus*
- Thrive Alliance*
- Trafalgar Family Health Center*
- United Way*
- VIMCare Clinic*
- WellConnect*
- WIC*

### Arthritis/Osteoporosis/Back Conditions

- Columbus Regional Health*
- Doctor's Offices*
- Hospitals*
- Mill Race Center*
- Physical Therapy*

### Cancer

- American Cancer Society*
- Breast Health Center*
- Cancer Center*
- Claim Aid*
- Columbus Regional Health*
- CRH Cancer Center*
- Cure Starts Now*
- Family and Friends*
- Franciscan Health*
- Franciscan Physicians Oncology Center*
- Health Department*
- Healthy Communities*
- Hospice of South Central Indiana*
- IU Health*
- Lung Institute*
- Medication Assistance Program*
- Physical Therapy Survivorship*
- Public Health*
- Riley and Peyton Manning Hospitals*
- School System*
- Southern Indiana Surgery*
- St. Francis*
- Support Groups*
- Tobacco Awareness Action Team*

**Chronic Kidney Disease**

Columbus Regional Health  
 Fresenius Dialysis Center  
 Healthy Communities  
 National Kidney Institute

**Dementia/Alzheimer's Disease**

AARP  
 Adult Protective Service  
 Alzheimer's Association  
 Alzheimer's Support Group  
 Area Agency on Aging  
 Assisted Living Facilities  
 Churches  
 Columbus Regional Health  
 Columbus Senior Center  
 Comfort Keepers  
 Continuing Care Facilities  
 Doctor's Offices  
 Extended Care Facilities  
 Family and Friends  
 Four Seasons  
 Home Healthcare Services  
 Hospice  
 Hospitals  
 Just Friends Adult Day Services  
 Keepsake Village  
 Mill Race Center  
 Miller's Merry Manor  
 Nursing Homes  
 Senior Center  
 Silver Oaks

**Diabetes**

Bariatric Treatment Center  
 Bartholomew Consolidated School Corporation  
 Centerstone  
 Columbus Foot and Ankle  
 Columbus Parks and Recreation  
 Columbus Regional Health (CRH)  
 CRH Bariatric Center  
 CRH Diabetes Services  
 CRH Healthy Communities

CRH Wellness  
 Community Centers  
 Cummins Engine Company  
 Cummins LiveWell  
 Cummins Wellness Center  
 Diabetes Prevention Program  
 DM Education Center  
 Employers  
 Fitness Centers/Gyms  
 Foundation For Youth  
 Franciscan Health  
 Franciscan Physician Network  
 Home Healthcare Services  
 Just Friends Adult Day Services  
 Kroger Pharmacy  
 Love Chapel  
 Medicare  
 Medication Assistance Program  
 Mill Race Center  
 Nutrition Services  
 Parks and Recreation  
 Physical Activity Support Systems  
 Planet Fitness  
 Purdue Extension  
 School System  
 Scouting  
 Senior Center  
 Seymour  
 VIMCare Clinic  
 WellConnect  
 Wellness Programs

**Family Planning**

Bartholomew County Health Department  
 Clarion  
 Clarity Pregnancy Services  
 Department of Children and Family Services  
 Doctor's Offices  
 Family Service, Inc.  
 Foundation For Youth  
 Medication Assistance Program  
 Planned Parenthood

**Hearing and Vision Problems**

Columbus Regional Health  
Southern Indiana ENT

**Heart Disease and Stroke**

American Heart Association  
Cardiac Rehab  
Coaches  
Columbus Parks and Recreation  
Columbus Regional Health  
CRH Healthy Communities  
Doctor's Offices  
Employers  
Foundation For Youth  
Healthy Communities  
Indiana Heart  
Interventional Cardiology  
IU Health  
Mill Race Center  
Nutrition Services  
Parks and Recreation  
People Trails  
Pritikin Cardiac Rehab Program  
School System  
Senior Center  
Southern Indiana Heart and Vascular  
St. Francis

**Immunization/Infectious Disease**

Columbus Regional Health  
CVS Clinic  
Doctor's Offices  
Free Clinics  
Health Department  
Hospitals

**Infant and Child Health**

Bartholomew Consolidated School  
Corporation  
Bartholomew County Health Department  
Caring Parents  
Centerstone  
Child Abuse Council

Clarity Pregnancy Services  
Columbus Pediatrics  
Columbus Regional Health  
Columbus Regional Health Physicians  
County Welfare and Township Offices  
Department of Children and Family  
Services  
Division of Family Resources  
Doctor's Offices  
Family Service, Inc.  
First Steps  
Foster Care System  
Foundation For Youth  
Head Start  
Health Department  
Healthy Communities  
Healthy Families  
Hospitals  
La Leche League  
Northside Pediatrics  
Nurse Family Partnership  
Nurse n Chat  
Period of Purple Crying (website)  
Substance Abuse Programs for Pregnant  
Women  
VIMCare Clinic  
Volunteers of America Fresh Start  
Recovery

**Injury and Violence**

Advocates for Children  
ASAP  
Bartholomew County Youth Services  
Columbus Police Department  
Columbus Regional Health  
Court System  
Department of Children and Family  
Services  
Doctor's Offices  
Family Service, Inc.  
Hospitals  
Law Enforcement  
Minute Clinics  
Police Department  
School System

**Mental Health Issues**

211  
 AA/NA  
 Adult and Child CMHC  
 ASAP  
 Bartholomew Consolidated School Corporation  
 Bartholomew County Jail  
 Behavioral Health Center for Children  
 Brighter Days  
 Cecile Beavin Counseling Services  
 Centerstone  
 Churches  
 Claim Aid  
 Clarity  
 Columbus Behavioral Center  
 Columbus Community Church  
 Columbus Police Department  
 Columbus Regional Health  
 CRH Healthy Communities  
 CRH Mental Health Unit  
 Community Downtown  
 Community Youth Development  
 Doctor's Offices  
 EAP Providers  
 Education  
 Employers  
 Faith-Based Programs  
 Family Service, Inc.  
 First Church of the Nazarene  
 GoodWill  
 Health Department  
 Hope Squad at Ivy Tech and Flat Rock-Hawcreek Schools  
 Hospitals  
 Mental Health Action Team  
 Mental Health Services  
 Milestones Clinic  
 NAMI  
 Parks and Recreation  
 Rau Family Medicine  
 Sandcrest Family Medicine  
 School System  
 Stress Team  
 Tara Treatment Center  
 United Way  
 Valle Vista

VIMCare Clinic

**Nutrition, Physical Activity, and Weight**

Aldi  
 Anytime Fitness  
 Athletic Clubs  
 Bariatric Treatment Center  
 Bartholomew Consolidated School Corporation  
 Bartholomew Parks and Recreation  
 Boys and Girls Club  
 CHIP Program  
 City Engineering Department  
 City of Columbus-Bartholomew Co Planning Department  
 Columbus Bicycle Co-op  
 Columbus Farmer's Market  
 Columbus Housing Authority  
 Columbus Parks and Recreation  
 Columbus Planning Commission  
 Columbus Regional Health (CRH)  
 CRH Bariatric Center  
 CRH Diabetes Services  
 CRH Healthy Communities  
 CRH Wellness  
 Columbus Running Club  
 Columbus Senior Program  
 County Extension Office  
 Cummins LiveWell  
 Cummins Step Challenge  
 Dining With Diabetes  
 Doctor's Offices  
 Donner Center  
 Employers  
 Farmer's Market  
 Fitness Centers/Gyms  
 Food Pantries  
 Food Stamps  
 Foundation For Youth  
 Gleaners Mobile Food Banks  
 Grocery Stores  
 Hamilton Center  
 Health Department  
 Hoosier Mountain Bike Association  
 Hot Meals Sites  
 Hunger Coalition  
 Love Chapel

Mill Race Center  
 Overeaters Anonymous  
 Parks and Recreation  
 Physical Activity Resources  
 Pickle Ball League  
 Planet Fitness  
 Purdue Extension  
 Recreational Sports Teams  
 Sassafras Audubon Society  
 School System  
 Senior Center  
 SNAP Double Bucks  
 Sycamore Land Trust  
 Tipton Lakes Athletic Club  
 Total Fitness  
 VMICare Clinic  
 Virgin Pulse  
 Walk With Ease  
 Wellness Programs  
 WIC

#### Oral Health/Dental Care

Bartholomew Consolidated School Corporation  
 Bartholomew County Health Department  
 Columbus Pediatric Dentistry  
 Dentist's Offices  
 Doctor's Offices  
 Health Department  
 Healthy Communities  
 IU Dental School  
 Medicare  
 Public Health  
 School System  
 Steinmetz Pediatric Dentistry  
 Township Trustee System  
 Trustee for Emergency Dental Care  
 United Way

#### Respiratory Diseases

Center for Diagnostic Imaging  
 Columbus Regional Health (CRH)  
 Columbus Regional Health Cancer Center  
 Columbus Regional Health Physicians

Community Clinics  
 Community Support Groups  
 Durable Medical Equipment Vendors  
 Doctor's Offices  
 Healthy Communities  
 Hospitals  
 Lung Institute

#### Sexually Transmitted Diseases

Bartholomew County Health Department  
 Clarity  
 Columbus Regional Health  
 Doctor's Offices  
 Health Department  
 Hospitals  
 Planned Parenthood  
 Pregnancy Care Center

#### Substance Abuse

AA/NA  
 Addiction Recovery Center  
 Adult Childcare Program  
 Ambulance Service  
 ASAP  
 Bartholomew Consolidated School Corporation  
 Bartholomew County  
 Bartholomew County Works  
 bcsac.org  
 Behavioral Health  
 Celebrate Recovery Program  
 Centerstone  
 Churches  
 City of Columbus  
 Columbus Behavioral Center  
 Columbus Community Church  
 Columbus Regional Health  
 CRH Healthy Communities  
 CRH Mental Health Unit  
 Community Coalition  
 Community Downtown  
 Community North  
 Court System  
 Division of Family Resources  
 Doctor's Offices



Elmwood Gift/Heritage Fund  
 Existing Medical Systems  
 Faith-Based Programs  
 Family Service, Inc.  
 First Responders Trained on Narcan  
 Fresh Start  
 Groups Recover Together  
 Health Department  
 Hospitals  
 IOPs  
 LifeWorks  
 Mental Health Action Team  
 Mental Health Services  
 Ministry/Counseling Programs  
 Naloxone Programs  
 Parks and Recreation  
 Recovery Associates  
 Recovery Engagement Center  
 School System  
 St. Peter's Lutheran Church  
 Tara Treatment Center  
 The HUB  
 The Living Room  
 The Recovery Village  
 Thrive Alliance  
 Township Trustee System  
 United Way  
 Valle Vista  
 VIMCare Clinic  
 West Group

Incentives for Lower Cost of Insurance for Non-Smokers  
 Kick Butts Day/Great American Smoke Out  
 Medication Assistance Program  
 Quit Now  
 Quit Smoking Campaign  
 School System  
 Smoking Ban in Public Places  
 Smoking Cessation Programs  
 State Government  
 Tobacco Awareness Action Team  
 Tobacco Cessation Programs  
 VIMCare Clinic  
 WellConnect

### **Tobacco Use**

1-800-Quit-Now  
 American Cancer Society  
 American Lung Association  
 Bartholomew Consolidated School Corporation  
 Chamber of Commerce  
 City/County Government  
 Clarity  
 Columbus Regional Health  
 CRH Healthy Communities  
 Columbus Regional Health Physicians  
 Dentist's Offices  
 Doctor's Offices  
 Employers  
 Health Department  
 Healthy Communities

# Quality of Life in Bartholomew County



**Professional Research Consultants, Inc.**

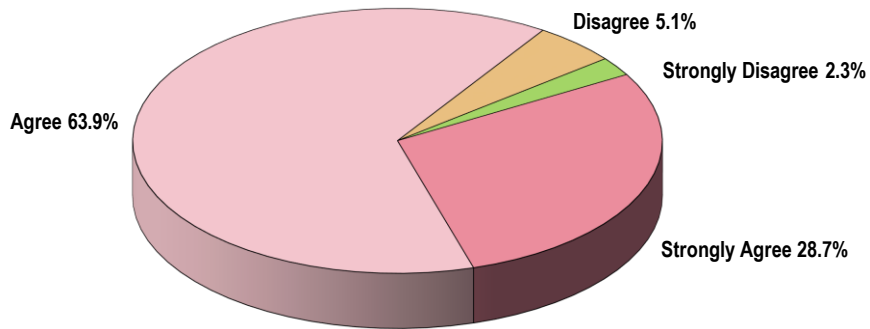
## Community Friendliness

*"Bartholomew County is generally a friendly community."*

Most Bartholomew County residents consider the county to be a friendly community (63.9% "agree" and 28.7% "strongly agree" responses).

- In contrast, 7.4% disagree with the statement.

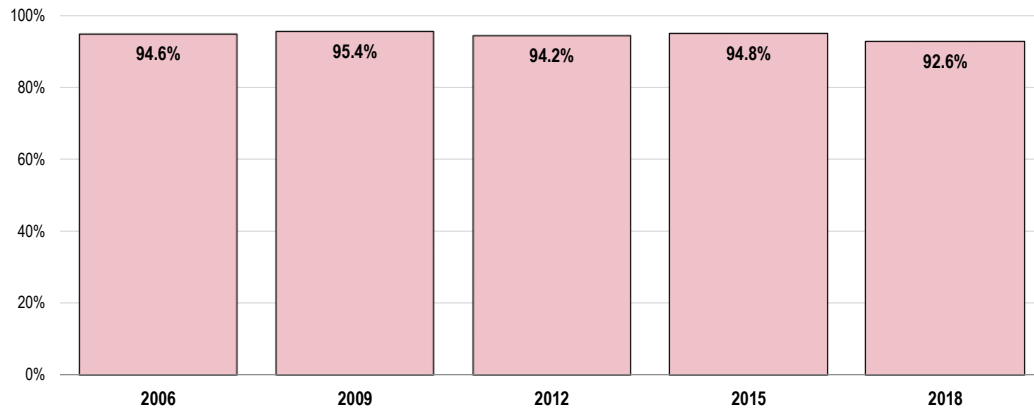
### Agree With the Statement "Bartholomew County is generally a friendly community." (Bartholomew County Residents, 2018)



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 322]  
Notes: • Asked of all respondents in Bartholomew County.

- TREND: Agreement that the county is a friendly community has not changed significantly over time.

### Agree That Bartholomew County is a Friendly Community (Bartholomew County Respondents)



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 322]  
Notes: • Asked of all respondents.  
• Percentages represent combined "agree" and "strongly agree" responses.

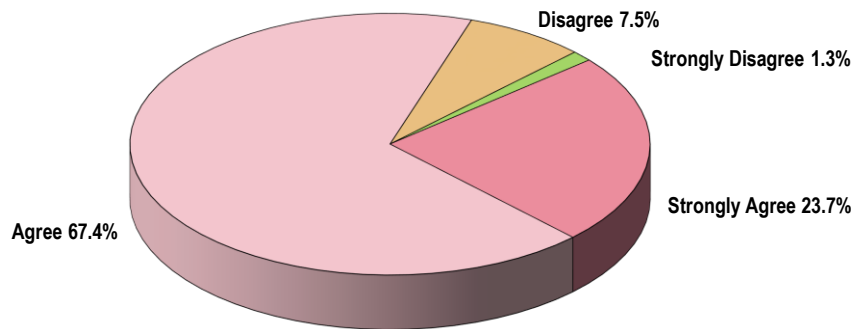
## Diversity in Bartholomew County

*"In Bartholomew County, diversity is generally welcomed and valued."*

More than 9 in 10 Bartholomew County respondents consider the county to welcome and value diversity (67.4% "agree" and 23.7% "strongly agree" statements).

- In contrast, 8.8% disagree with the statement.

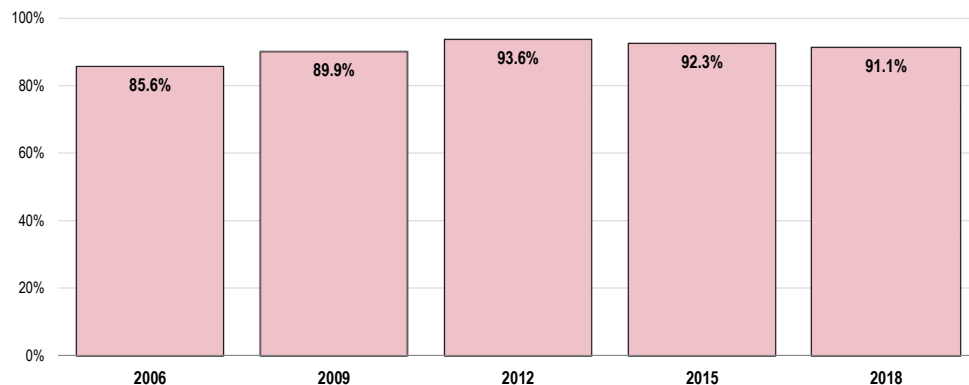
### Agree With the Statement *"In Bartholomew County, diversity is generally welcomed and valued."* (Bartholomew County Residents, 2018)



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 323]  
Notes: • Asked of all respondents.

- TREND: Agreement that the county welcomes and values diversity has increased significantly from 2006 survey findings (but is similar to all other years reported).

### Agree That Bartholomew County Welcomes and Values Diversity (Bartholomew County Respondents)



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 323]  
Notes: • Asked of all respondents.  
• Percentages represent combined "agree" and "strongly agree" responses.

# Appendix



**Professional Research Consultants, Inc.**

## Evaluation of Past Activities