

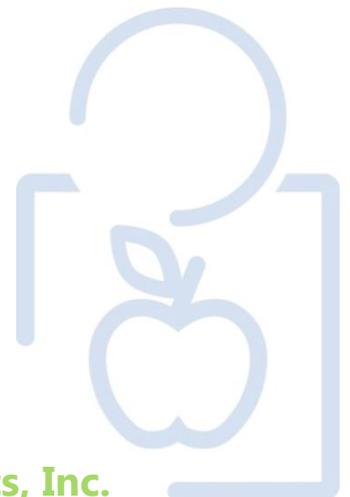
# 2012 Community Health Needs Assessment Report

Hamilton County, Indiana

Sponsored by



Prepared by  
**Professional Research Consultants, Inc.**



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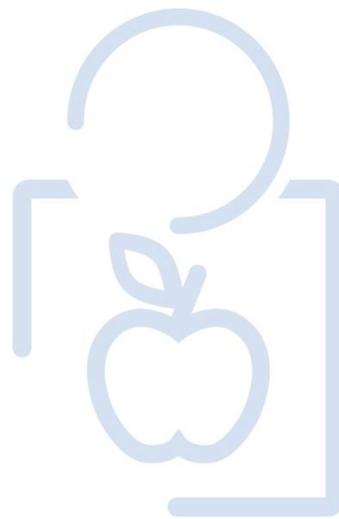
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# INTRODUCTION



# Project Overview

## Project Goals

This Community Health Needs Assessment is a systematic, data-driven approach to determining the health status, behaviors and needs of residents in Hamilton County. 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 which have historically 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 Riverview Hospital and Hamilton County Health Department by Professional Research Consultants, Inc. (PRC). PRC is a nationally-recognized healthcare consulting firm with extensive experience conducting Community Health Needs Assessments such as this 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 a focus group among key informants in the community.

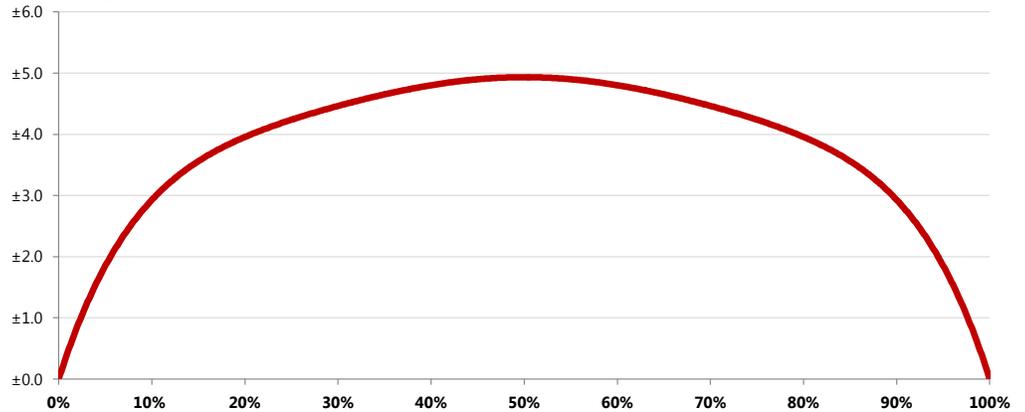


represent Hamilton County as a whole. All administration of the surveys, data collection and data analysis was conducted by Professional Research Consultants, Inc. (PRC).

### Sampling Error

For statistical purposes, the maximum rate of error associated with a sample size of 400 respondents is  $\pm 4.9\%$  at the 95 percent level of confidence.

## Expected Error Ranges for a Sample of 400 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 400 respondents answered a certain question with a "yes," it can be asserted that between 7.1% and 12.9% ( $10\% \pm 2.9\%$ ) 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 45.1% and 54.9% ( $50\% \pm 4.9\%$ ) of the total population would respond "yes" if asked this question.

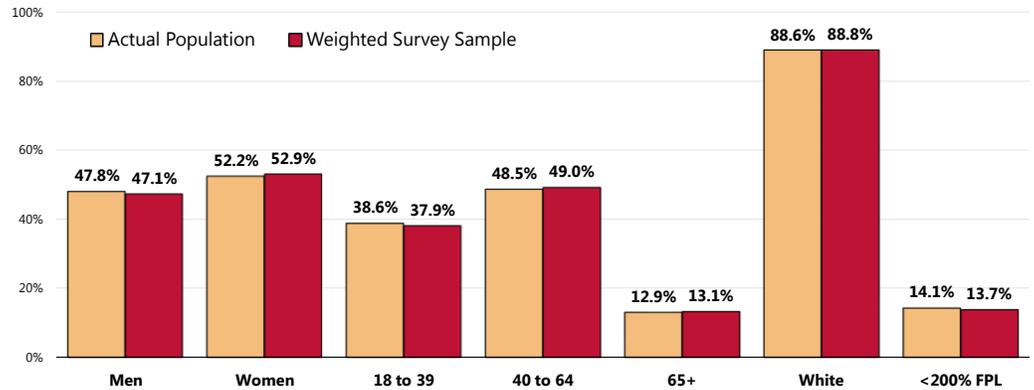
### Sample Characteristics

To accurately represent the population studied, PRC strives to minimize bias through application of a proven telephone methodology and random-selection techniques. And, 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 gender, 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 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 & Sample Characteristics

(Hamilton County, 2012)



Sources: 

- Census 2010, Summary File 3 (SF 3). U.S. Census Bureau.
- 2012 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 2012 guidelines place the poverty threshold for a family of four at \$23,050 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 the poverty threshold; **“mid/high income”** refers to those households living on incomes which are twice or more 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.

### Key Informant Focus Group

As part of the community health assessment, a focus group was held on July 25, 2012. The focus group participants included 10 key informants, including representatives from public health, physicians, other health professionals, social service providers, and other community leaders.

A list of recommended participants for the focus group was provided by the sponsors. 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. Participants included a representative of public health, as well as several individuals who work with low-income, minority or other medically underserved populations, and those who work with persons with chronic disease conditions.

Focus group candidates were first contacted by letter to request their participation. Follow-up phone calls were then made to ascertain whether or not they would be able to attend. Confirmation calls were placed the day before the group was scheduled to insure a reasonable turnout.

Audio from the focus group session was recorded, from which verbatim comments in this report are taken. There are no names connected with the comments, as participants were asked to speak candidly and assured of confidentiality.

*NOTE: These findings represent qualitative rather than quantitative data. The group was designed to gather input from participants regarding their opinions and perceptions of the health of the residents in the area. Thus, these findings are based on perceptions, not facts.*

## 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 Hamilton County were obtained from the following sources (specific citations are included with the graphs throughout this report):

- Centers for Disease Control & Prevention
- National Center for Health Statistics
- State of the Young Hoosier Child Reports
- Indiana State Department of Health
- US Census Bureau
- US Department of Health and Human Services
- US Department of Justice, Federal Bureau of Investigation

Note that secondary data reflect Hamilton County data only.

## Benchmark Data

### 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 are reported in the most recent *BRFSS (Behavioral Risk Factor Surveillance System) Prevalence and Trend Data* published by the Centers for Disease Control and Prevention and the US Department of Health & Human Services. 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 *2011 PRC National Health Survey*; the methodological approach for the national study is identical 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 provides science-based, 10-year national objectives for improving the health of all Americans. The Healthy People initiative is grounded in the principle that setting national objectives and monitoring progress can motivate action. For three decades, Healthy People has

established benchmarks and monitored progress over time in order to:

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

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

### 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 a great number of medical conditions that are not specifically addressed.

# Summary of Findings

## Areas of Opportunity for Community Health Improvement

The following “health priorities” represent recommended areas of intervention, 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 region with regard to the following health areas (see also the summary tables presented in the following section). In general, Hamilton County compares quite favorably to the state and nation for most health indicators included in this report; these areas of opportunity are largely based on improving health status indicators toward reaching established national health promotion and disease prevention goals, as well as on corroborative or expanded findings revealed through qualitative data.

Note that these areas of concern are subject to the discretion of area providers, the steering committee, or other local organizations and community leaders as to actionability and priority.

Areas of Opportunity Identified Through This Assessment	
<b>Access to Health Services</b>	<ul style="list-style-type: none"> <li>• Health Insurance Coverage (Uninsured/Underinsured)</li> <li>• Having a Medical Home</li> <li>• Transportation</li> <li>• Interpretive Services</li> </ul>
<b>Cancer</b>	<ul style="list-style-type: none"> <li>• Female Breast Cancer Deaths</li> <li>• Pap Smear Testing</li> </ul>
<b>Heart Disease &amp; Stroke</b>	<ul style="list-style-type: none"> <li>• Stroke Deaths</li> <li>• High Blood Cholesterol</li> </ul>
<b>Immunization &amp; Infectious Diseases</b>	<ul style="list-style-type: none"> <li>• Flu Shots (esp. High-Risk Adults 18-64)</li> <li>• Pneumonia Vaccinations</li> <li>• Pneumonia/Influenza Deaths</li> <li>• Hepatitis C Incidence</li> </ul>
<b>Mental Health &amp; Mental Disorders</b>	<ul style="list-style-type: none"> <li>• Inadequate Treatment Options (Providers/Facilities)</li> <li>• ADD/ADHD</li> </ul>
<b>Substance Abuse</b>	<ul style="list-style-type: none"> <li>• Alcohol Consumption</li> <li>• Illicit Drug Use</li> <li>• Inadequate Treatment Options (Providers/Facilities)</li> </ul>

## Top Community Health Concerns Among Community Key Informants

At the conclusion of the key informant focus group, participants were asked to write down what they individually perceive as the top five health priorities for the community, based on the group discussion as well as on their own experiences and perceptions. Their responses were collected, categorized and tallied to produce the top-ranked priorities as identified among key informants. These should be used to complement and corroborate findings that emerge from the quantitative dataset.

### 1. Access to Healthcare

Mentioned resources available to address this issue: Federally Qualified Health Centers; Community Clinics; Public Transportation; Good Samaritan Network of Hamilton County; Riverview Hospital; Heart and Soul Clinic; Trinity Free Clinic; Hope Family Care Center; Hamilton County Society for the Disabled; Shepherd's Center of Hamilton County; IndyGo

### 2. Mental Health

Mentioned resources available to address this issue: Emergency Rooms; Aspire; Hospitals; Promising Futures

### 3. Substance Abuse

Mentioned resources available to address this issue: Indiana Drug Task Force; Aspire; Hamilton County Health Department; Schools; Fairbanks Addiction Treatment Center; Hamilton County Council on Alcohol and Other Drugs

### 4. Health Education

Mentioned resources available to address this issue: Hamilton County Health Department; Schools; Media; Government; Employers; Physicians; Nurses; Faith-Based Organizations; Hospitals

### 5. Collaboration

Mentioned resources available to address this issue: Hospitals; Clinics; Local Government; Hamilton County Health Task Force; Good Samaritan Network of Hamilton County

## Summary Tables: Comparisons With Benchmark Data

The following tables provide an overview of indicators in Hamilton County, including comparisons among the individual communities. These data are grouped to correspond with the Focus Areas presented in Healthy People 2020.

### Reading the Summary Tables

- In the following charts, Hamilton County results are shown in the larger, blue column.
- The columns to the right of the Hamilton County column provide comparisons between Hamilton County and any available state and national findings, and Healthy People 2020 targets. Again, symbols indicate whether Hamilton County compares favorably (☀️), unfavorably (🌪️), or comparably (☁️) to these external data.

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

Access to Health Services	Hamilton County	Hamilton County vs. Benchmarks		
		vs. IN	vs. US	vs. HP2020
% [Age 18-64] Lack Health Insurance	5.3	 17.9	 14.9	 0.0
% [65+] With Medicare Supplement Insurance	85.7		 75.5	
% [Insured] Insurance Covers Prescriptions	96.1		 93.9	
% [Insured] Went Without Coverage in Past Year	4.0		 4.8	
% Difficulty Accessing Healthcare in Past Year (Composite)	27.0		 37.3	
% Inconvenient Hrs Prevented Dr Visit in Past Year	14.9		 14.3	
% Cost Prevented Getting Prescription in Past Year	6.2		 15.0	
% Cost Prevented Physician Visit in Past Year	7.0		 14.0	
% Difficulty Getting Appointment in Past Year	10.4		 16.5	
% Difficulty Finding Physician in Past Year	3.9		 10.7	
% Transportation Hindered Dr Visit in Past Year	3.2		 7.7	
% Skipped Prescription Doses to Save Costs	12.0		 14.8	
% Difficulty Getting Child's Healthcare in Past Year	4.1		 1.9	
% [Age 18+] Have a Specific Source of Ongoing Care	84.8		 76.3	 95.0
% Have Had Routine Checkup in Past Year	72.8		 67.3	
% Child Has Had Checkup in Past Year	94.1		 87.0	
% Two or More ER Visits in Past Year	4.0		 6.5	

Access to Health Services (continued)	Hamilton County	Hamilton County vs. Benchmarks		
		vs. IN	vs. US	vs. HP2020
% Rate Local Healthcare "Fair/Poor"	6.1		 15.3	
		 better	 similar	 worse

Arthritis, Osteoporosis & Chronic Back Conditions	Hamilton County	Hamilton County vs. Benchmarks		
		vs. IN	vs. US	vs. HP2020
% [50+] Arthritis/Rheumatism	31.5		 35.4	
% [50+] Osteoporosis	9.7		 11.4	 5.3
% Sciatica/Chronic Back Pain	15.0		 21.5	
% Migraine/Severe Headaches	14.6		 16.9	
% Chronic Neck Pain	5.8		 8.3	
		 better	 similar	 worse

Cancer	Hamilton County	Hamilton County vs. Benchmarks		
		vs. IN	vs. US	vs. HP2020
Cancer (Age-Adjusted Death Rate)	151.8	 192.9	 175.6	 160.6
Lung Cancer (Age-Adjusted Death Rate)	36.8	 60.9	 49.5	 45.5
Prostate Cancer (Age-Adjusted Death Rate)	21.4	 23.3	 22.6	 21.2
Female Breast Cancer (Age-Adjusted Death Rate)	22.4	 23.7	 22.6	 20.6
Colorectal Cancer (Age-Adjusted Death Rate)	10.1	 17.6	 16.4	 14.5

Cancer (continued)	Hamilton County	Hamilton County vs. Benchmarks		
		vs. IN	vs. US	vs. HP2020
% Skin Cancer	7.7		 8.1	
% Cancer (Other Than Skin)	3.5		 5.5	
% [Men 50+] Prostate Exam in Past 2 Years	85.0		 70.5	
% [Women 50-74] Mammogram in Past 2 Years	85.3	 74.7	 79.9	 81.1
% [Women 21-65] Pap Smear in Past 3 Years	84.9	 80.2	 84.7	 93.0
% [Age 50+] Sigmoid/Colonoscopy Ever	75.7	 62.8	 72.0	
% [Age 50+] Blood Stool Test in Past 2 Years	33.7	 15.8	 28.3	
% [Age 50-75] Colorectal Cancer Screening	74.9			 70.5
		 better	 similar	 worse

Chronic Kidney Disease	Hamilton County	Hamilton County vs. Benchmarks		
		vs. IN	vs. US	vs. HP2020
Kidney Disease (Age-Adjusted Death Rate)	15.3	 20.1	 14.7	
		 better	 similar	 worse

Diabetes	Hamilton County	Hamilton County vs. Benchmarks		
		vs. IN	vs. US	vs. HP2020
Diabetes Mellitus (Age-Adjusted Death Rate)	17.3	 24.1	 21.7	 19.6
% Diabetes/High Blood Sugar	7.7	 9.8	 10.1	
		 better	 similar	 worse

Dementias, Including Alzheimer's Disease	Hamilton County	Hamilton County vs. Benchmarks		
		vs. IN	vs. US	vs. HP2020
Alzheimer's Disease (Age-Adjusted Death Rate)	20.7	 26.4	 23.5	
		 better	 similar	 worse

Educational & Community-Based Programs	Hamilton County	Hamilton County vs. Benchmarks		
		vs. IN	vs. US	vs. HP2020
% Attended Health Event in Past Year	22.1		 22.2	
		 better	 similar	 worse

Family Planning	Hamilton County	Hamilton County vs. Benchmarks		
		vs. IN	vs. US	vs. HP2020
% of Births to Unwed Mothers	14.5	 39.8	 39.6	
% Births to Teenagers	4.2	 11.3	 10.4	
		 better	 similar	 worse

General Health Status	Hamilton County	Hamilton County vs. Benchmarks		
		vs. IN	vs. US	vs. HP2020
% "Fair/Poor" Physical Health	7.0	 16.5	 16.8	
% Activity Limitations	16.8	 22.0	 17.0	
		 better	 similar	 worse

Hearing & Other Sensory or Communication Disorders	Hamilton County	Hamilton County vs. Benchmarks		
		vs. IN	vs. US	vs. HP2020
% Deafness/Trouble Hearing	7.4		9.6	
		 better	 similar	 worse

Heart Disease & Stroke	Hamilton County	Hamilton County vs. Benchmarks		
		vs. IN	vs. US	vs. HP2020
Diseases of the Heart (Age-Adjusted Death Rate)	147.3	 198.8	 185.8	 152.7
Stroke (Age-Adjusted Death Rate)	42.2	 44.8	 40.6	 33.8
% Heart Disease (Heart Attack, Angina, Coronary Disease)	5.4		 6.1	
% Stroke	2.4	 2.9	 2.7	
% Blood Pressure Checked in Past 2 Years	98.4		 94.7	 94.9
% Told Have High Blood Pressure (Ever)	28.7	 31.3	 34.3	 26.9
% [HBP] Taking Action to Control High Blood Pressure	92.1		 89.1	
% Cholesterol Checked in Past 5 Years	95.8	 75.8	 90.7	 82.1
% Told Have High Cholesterol (Ever)	34.9	 39.9	 31.4	 13.5
% [HBC] Taking Action to Control High Blood Cholesterol	87.5		 89.1	
% 1+ Cardiovascular Risk Factor	77.6		 86.3	
		 better	 similar	 worse

HIV	Hamilton County	Hamilton County vs. Benchmarks		
		vs. IN	vs. US	vs. HP2020
% [Age 18-44] HIV Test in the Past Year	9.8		19.9	16.9
		 better	 similar	 worse

Immunization & Infectious Diseases	Hamilton County	Hamilton County vs. Benchmarks		
		vs. IN	vs. US	vs. HP2020
Hepatitis C, non-A non-B Incidence per 100,000	29.3	99.4		0.2
% [Age 65+] Flu Shot in Past Year	81.6	66.4	71.6	90.0
% [High-Risk 18-64] Flu Shot in Past Year	38.4		52.5	90.0
% [Age 65+] Pneumonia Vaccine Ever	71.8	68.8	68.1	90.0
% [High-Risk 18-64] Pneumonia Vaccine Ever	34.2		32.0	60.0
% Ever Vaccinated for Hepatitis B	43.5		38.4	
		 better	 similar	 worse

Injury & Violence Prevention	Hamilton County	Hamilton County vs. Benchmarks		
		vs. IN	vs. US	vs. HP2020
Unintentional Injury (Age-Adjusted Death Rate)	22.5	39.1	38.7	36.0
Motor Vehicle Crashes (Age-Adjusted Death Rate)	4.5	13.2	13.0	12.4
% "Always" Wear Seat Belt	91.2		85.3	92.4
% Child [Age 0-17] "Always" Uses Seat Belt/Car Seat	94.1		91.6	
% Child [Age 5-17] "Always" Wears Bicycle Helmet	38.6		35.3	

Injury & Violence Prevention	Hamilton County	Hamilton County vs. Benchmarks		
		vs. IN	vs. US	vs. HP2020
Firearm-Related Deaths (Age-Adjusted Death Rate)	4.8	 11.1	 10.2	 9.2
% Firearm in Home	29.2		 37.9	
% [Homes With Children] Firearm in Home	28.4		 34.4	
% [Homes With Firearms] Weapon(s) Unlocked & Loaded	17.5		 16.9	
Homicide (Age-Adjusted Death Rate)	1.2	 5.9	 6.1	 5.5
% Victim of Violent Crime in Past 5 Years	2.8		 1.6	
% Ever Threatened With Violence by Intimate Partner	5.3		 11.7	
% Victim of Domestic Violence (Ever)	5.3		 13.5	
Child Abuse Offenses per 1,000 Children	3.2	 13.7	 10.1	
		 better	 similar	 worse

Maternal, Infant & Child Health	Hamilton County	Hamilton County vs. Benchmarks		
		vs. IN	vs. US	vs. HP2020
% No Prenatal Care in First Trimester	16.1	 29.4		 22.1
% of Low Birthweight Births	7.1	 10.6	 8.2	 7.8
Infant Death Rate	4.5	 7.4	 6.5	 6.0
		 better	 similar	 worse

Mental Health & Mental Disorders	Hamilton County	Hamilton County vs. Benchmarks		
		vs. IN	vs. US	vs. HP2020
% "Fair/Poor" Mental Health	6.3		 11.7	
% Major Depression	8.3		 11.7	
% Symptoms of Chronic Depression (2+ Years)	17.6		 26.5	
Suicide (Age-Adjusted Death Rate)	8.9	 12.6	 11.6	 10.2
% Typical Day Is "Extremely/Very" Stressful	8.0		 11.5	
% Child [Age 5-17] Takes Prescription for ADD/ADHD	13.8		 6.5	
		 better	 similar	 worse

Nutrition & Weight Status	Hamilton County	Hamilton County vs. Benchmarks		
		vs. IN	vs. US	vs. HP2020
% Eat 5+ Servings of Fruit or Vegetables per Day	48.2		 48.8	
% Medical Advice on Nutrition in Past Year	42.1		 41.9	
% Healthy Weight (BMI 18.5-24.9)	36.1		 31.7	 33.9
% Overweight	61.5	 66.4	 66.9	
% Obese	22.1	 30.2	 28.5	 30.6
% Medical Advice on Weight in Past Year	25.8		 25.7	
% [Overweights] Counseled About Weight in Past Year	36.2		 30.9	
% [Obese Adults] Counseled About Weight in Past Year	53.6		 47.4	 31.8

Nutrition & Weight Status (continued)	Hamilton County	Hamilton County vs. Benchmarks		
		vs. IN	vs. US	vs. HP2020
% [Overweights] Trying to Lose Weight Both Diet/Exercise	44.5		 38.6	
% Children [Age 5-17] Overweight	16.3		 30.7	
% Children [Age 5-17] Obese	3.9		 18.9	 14.6
		 better	 similar	 worse

Oral Health	Hamilton County	Hamilton County vs. Benchmarks		
		vs. IN	vs. US	vs. HP2020
% [Age 18+] Dental Visit in Past Year	83.1	 68.8	 66.9	 49.0
% Child [Age 2-17] Dental Visit in Past Year	92.1		 79.2	 49.0
% Have Dental Insurance	78.6		 60.8	
		 better	 similar	 worse

Physical Activity	Hamilton County	Hamilton County vs. Benchmarks		
		vs. IN	vs. US	vs. HP2020
% [Employed] Job Entails Mostly Sitting/Standing	72.0		 63.2	
% No Leisure-Time Physical Activity	13.5	 26.5	 28.7	 32.6
% Meeting Physical Activity Guidelines	50.9	 48.0	 42.7	
% Moderate Physical Activity	28.7		 23.9	
% Vigorous Physical Activity	41.3	 28.2	 34.8	

Physical Activity (continued)	Hamilton County	Hamilton County vs. Benchmarks		
		vs. IN	vs. US	vs. HP2020
% Medical Advice on Physical Activity in Past Year	49.9		 47.8	
% Child [Age 5-17] Watches TV 3+ Hours per Day	11.1		 19.7	
% Child [Age 5-17] Uses Computer 3+ Hours per Day	15.9		 9.9	
% Child [Age 5-17] 3+ Hours per Day of Total Screen Time	40.4		 43.4	
		 better	 similar	 worse

Respiratory Diseases	Hamilton County	Hamilton County vs. Benchmarks		
		vs. IN	vs. US	vs. HP2020
CLRD (Age-Adjusted Death Rate)	29.7	 54.1	 42.4	
Pneumonia/Influenza (Age-Adjusted Death Rate)	22.8	 17.4	 16.4	
% Nasal/Hay Fever Allergies	31.1		 27.3	
% Sinusitis	20.9		 19.4	
% Chronic Lung Disease	7.5		 8.4	
% [Adult] Currently Has Asthma	8.6	 9.5	 7.5	
% [Child 0-17] Currently Has Asthma	5.9		 6.8	
		 better	 similar	 worse

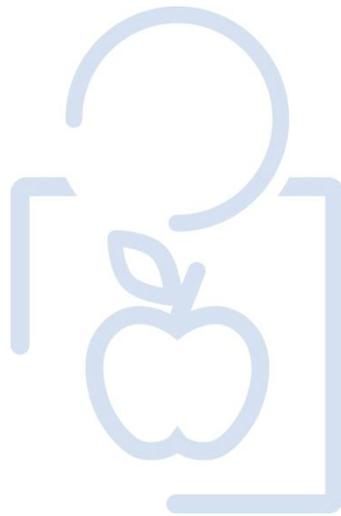
Sexually Transmitted Diseases	Hamilton County	Hamilton County vs. Benchmarks		
		vs. IN	vs. US	vs. HP2020
Gonorrhea Incidence per 100,000	22.5	 137.8	 116.1	
Primary & Secondary Syphilis Incidence per 100,000	0.8	 3.9	 3.8	
Chlamydia Incidence per 100,000	92.6	 328.8	 370.0	
% [Unmarried 18-64] 3+ Sexual Partners in Past Year	13.0		 7.1	
% [Unmarried 18-64] Using Condoms	50.1		 18.9	
		 better	 similar	 worse

Substance Abuse	Hamilton County	Hamilton County vs. Benchmarks		
		vs. IN	vs. US	vs. HP2020
Cirrhosis/Liver Disease (Age-Adjusted Death Rate)	4.3	 7.6	 9.2	 8.2
% Current Drinker	66.4	 47.2	 58.8	
% Chronic Drinker (Average 2+ Drinks/Day)	3.9	 3.9	 5.6	
% Binge Drinker (Single Occasion - 5+ Drinks Men, 4+ Women)	15.8	 13.5	 16.7	 24.3
% Drinking & Driving in Past Month	1.7		 3.5	
% Driving Drunk or Riding with Drunk Driver	3.2		 5.5	
Drug-Induced Deaths (Age-Adjusted Death Rate)	6.4	 13.8	 12.6	 11.3
% Illicit Drug Use in Past Month	3.5		 1.7	 7.1
% Ever Sought Help for Alcohol or Drug Problem	1.0		 3.9	
		 better	 similar	 worse

Tobacco Use	Hamilton County	Hamilton County vs. Benchmarks		
		vs. IN	vs. US	vs. HP2020
% Current Smoker	9.2	 21.3	 16.6	 12.0
% Someone Smokes at Home	7.6		 13.6	
% [Non-Smokers] Someone Smokes in the Home	4.6		 5.7	
% [Household With Children] Someone Smokes in the Home	6.7		 12.1	
% Smoke Cigars	3.0		 4.2	 0.2
% Use Smokeless Tobacco	0.6		 2.8	 0.3
		 better	 similar	 worse

Vision	Hamilton County	Hamilton County vs. Benchmarks		
		vs. IN	vs. US	vs. HP2020
% Blindness/Trouble Seeing	3.7		 6.9	
% Eye Exam in Past 2 Years	65.2		 57.5	
		 better	 similar	 worse

# GENERAL HEALTH STATUS



# Overall Health Status

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

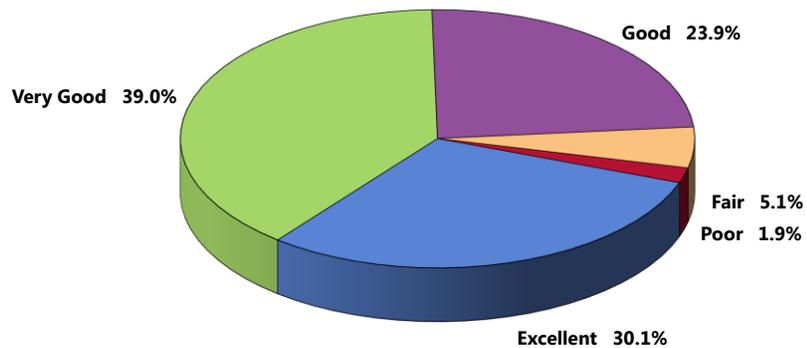
*"Would you say that in general your health is: excellent, very good, good, fair or poor?"*

## Self-Reported Health Status

**A total of 69.1% of Hamilton County adults rate their overall health as "excellent" or "very good."**

- Another 23.9% gave "good" ratings of their overall health.

**Self-Reported Health Status**  
(Hamilton County, 2012)

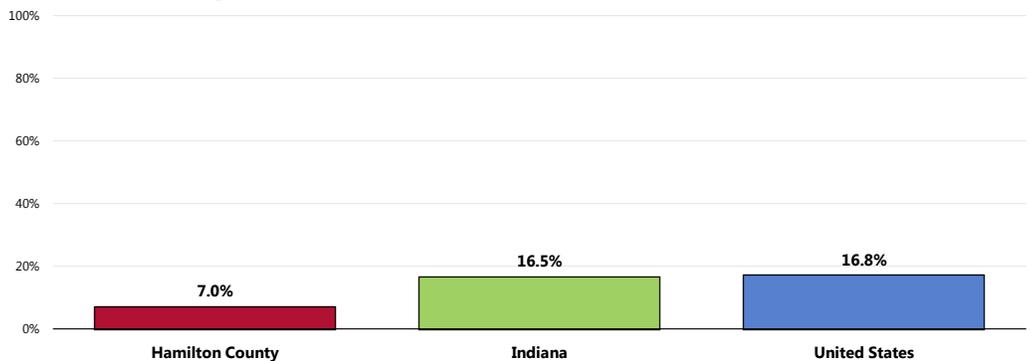


Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 5]  
Notes: • Asked of all respondents.

**However, 7.0% of Hamilton County adults believe that their overall health is "fair" or "poor."**

- Much better than statewide finding.
- Much better than the national percentage.

## Experience "Fair" or "Poor" Overall Health



Sources: • 2012 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); 2010 Indiana data.  
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
Notes: • Asked of all respondents.

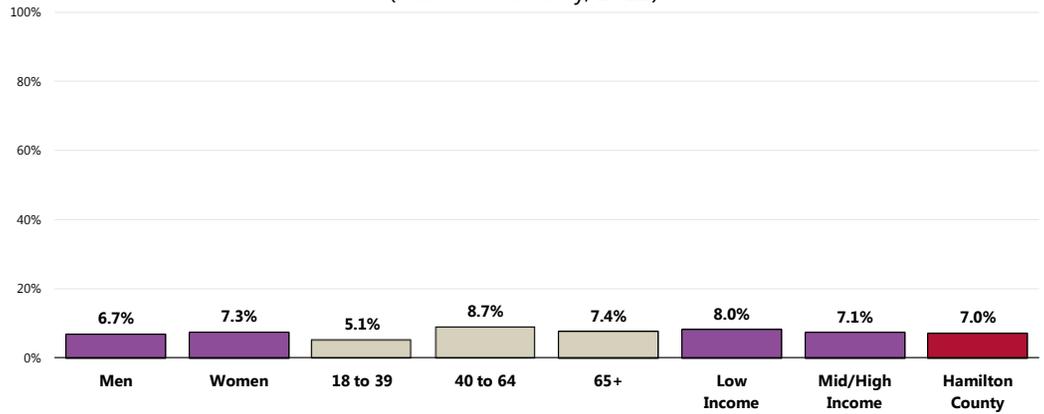
### NOTE:

- Differences noted in the text represent significant differences determined through statistical testing.

👥 Viewing low health ratings by the key demographic characteristics below, there are no significant differences to report in “fair/poor” responses.

Charts throughout this report (such as that here) detail survey findings among key demographic groups – namely by gender, age groupings, and income (based on poverty status).

### Experience “Fair” or “Poor” Overall Health (Hamilton County, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 5]

Notes: • Asked of all respondents.  
• Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., “White” reflects non-Hispanic White 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.

## Activity Limitations

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

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

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

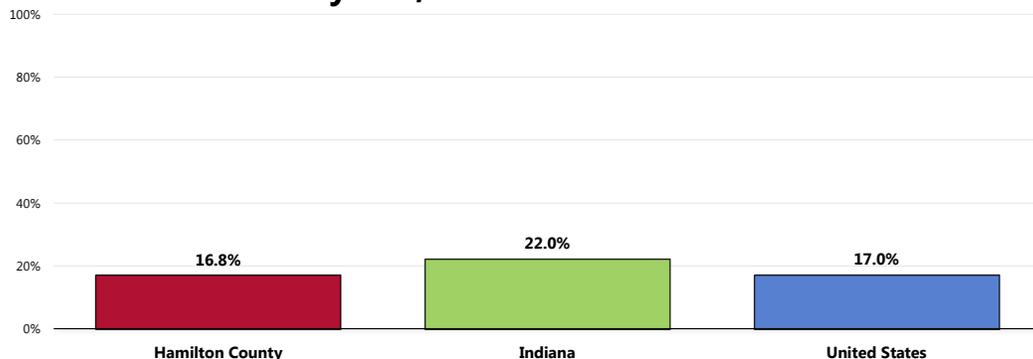
- **Improve the conditions of daily life** by: encouraging communities to be accessible so all can live in, move through, and interact with their environment; encouraging community living; and removing barriers in the environment using both physical universal design concepts and operational policy shifts.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

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

**A total of 16.8% of Hamilton County adults are limited in some way in some activities due to a physical, mental or emotional problem.**

- More favorable than the prevalence statewide.
- Similar to the national prevalence.

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



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 121]  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2010 Indiana data.  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.

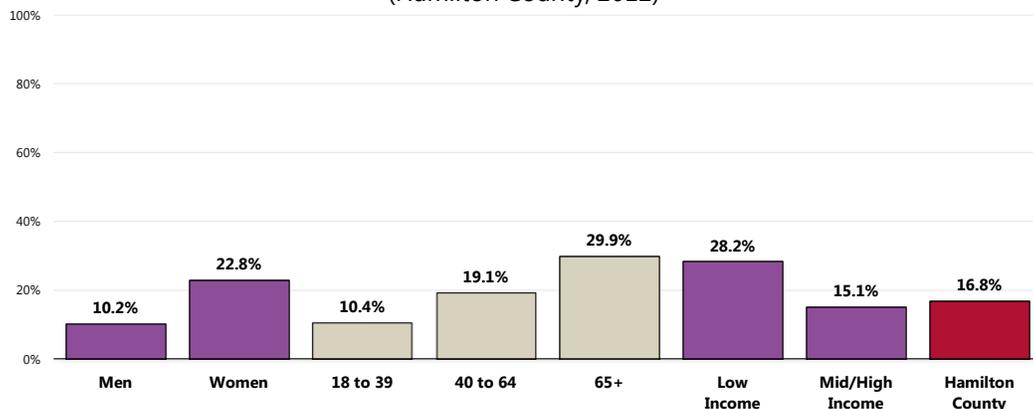
Notes: • Asked of all respondents.

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

In looking at responses by key demographic characteristics, note the following:

- 👥 Women are more likely than men to note some type of activity limitation.
- 👥 Adults age 40 and older are much more often limited in activities (note the positive correlation with age).
- 👥 Low-income adults more often experience some type of activity limitation than do those at higher incomes.

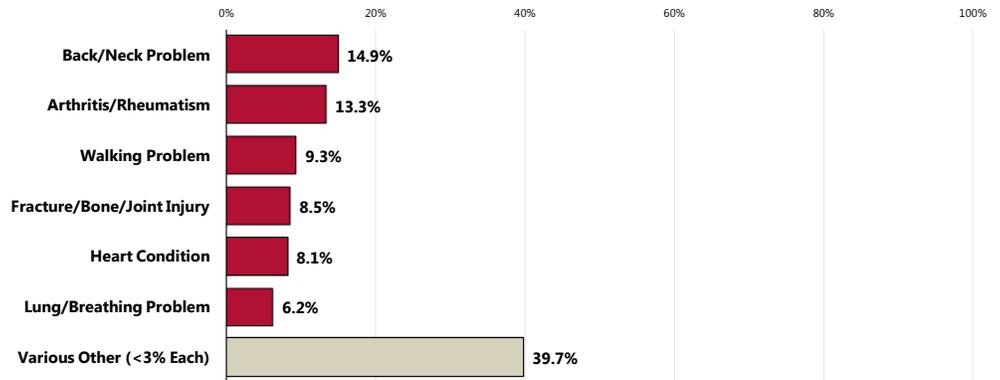
## Limited in Activities in Some Way Due to a Physical, Mental or Emotional Problem (Hamilton County, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 121]  
 • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White 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 persons reporting activity limitations, these are most often attributed to musculoskeletal issues, such as back/neck problems, arthritis/rheumatism, difficulty walking, or fractures or bone/joint injuries.

**Type of Problem That Limits Activities**  
(Among Those Reporting Activity Limitations; Hamilton County, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 122]  
Notes: • Asked of those respondents reporting activity limitations.

# 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. According to the national Institute of Mental Health (NIMH), in any given year, an estimated 13 million American adults (approximately 1 in 17) have a seriously debilitating mental illness. Mental health disorders are the leading cause of disability in the United States and Canada, accounting for 25% of all years of life lost to disability and premature mortality. Moreover, suicide is the 11<sup>th</sup> leading cause of death in the United States, accounting for the deaths of approximately 30,000 Americans each year.

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 understanding of how the brain functions under normal conditions and in response to stressors, combined with knowledge of how the brain develops over time, has been essential to that progress. 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 among 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.

## Mental Health Status

### Self-Reported Mental Health Status

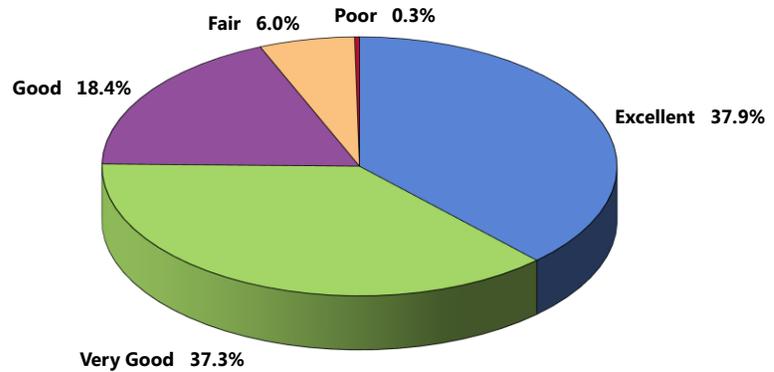
*"Now thinking about your mental health, which includes stress, depression and problems with emotions, would you say that, in general, your mental health is: excellent, very good, good, fair or poor?"*

**Three-fourths (75.2%) of Hamilton County adults rate their overall mental health as "excellent" or "very good."**

- Another 18.4% gave "good" ratings of their own mental health status.

### Self-Reported Mental Health Status

(Hamilton County, 2012)

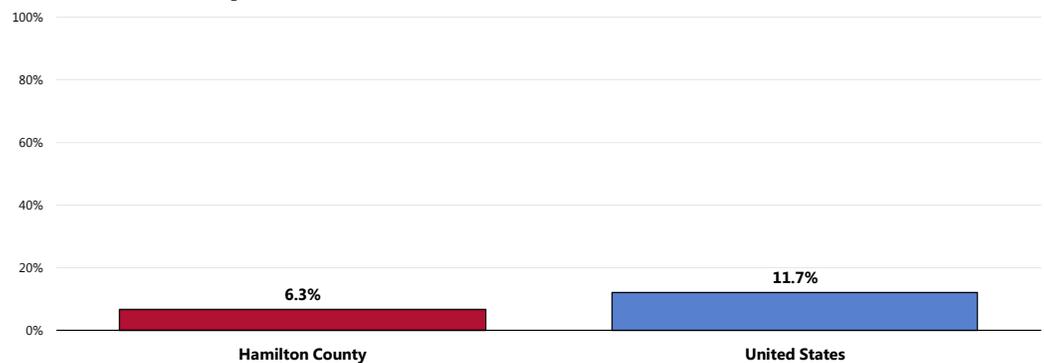


Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 117]  
Notes: • Asked of all respondents.

**A total of 6.3% of Hamilton County adults, however, believe that their overall mental health is "fair" or "poor."**

- Much lower than the "fair/poor" response reported nationally.

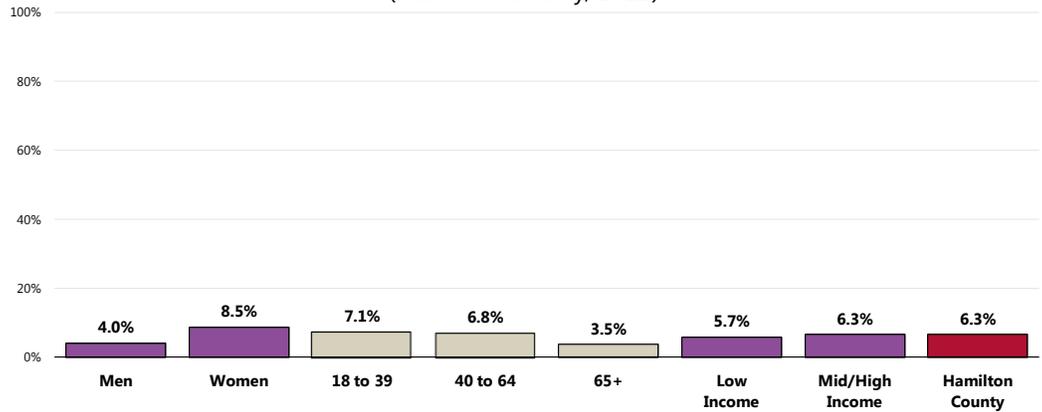
### Experience "Fair" or "Poor" Mental Health



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 117]  
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
Notes: • Asked of all respondents.

👤 No statistical difference to report when viewed by gender, race or income level.

## Experience "Fair" or "Poor" Mental Health (Hamilton County, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 117]

Notes: • Asked of all respondents.

• Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White 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.

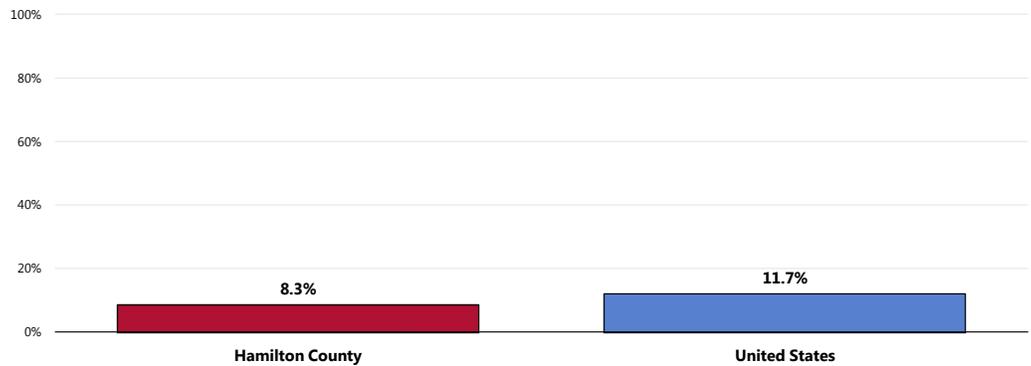
## Depression

### Major Depression

**A total of 8.3% of Hamilton County adults have been diagnosed with major depression by a physician.**

- Better than the national finding.

## Have Been Diagnosed With Major Depression



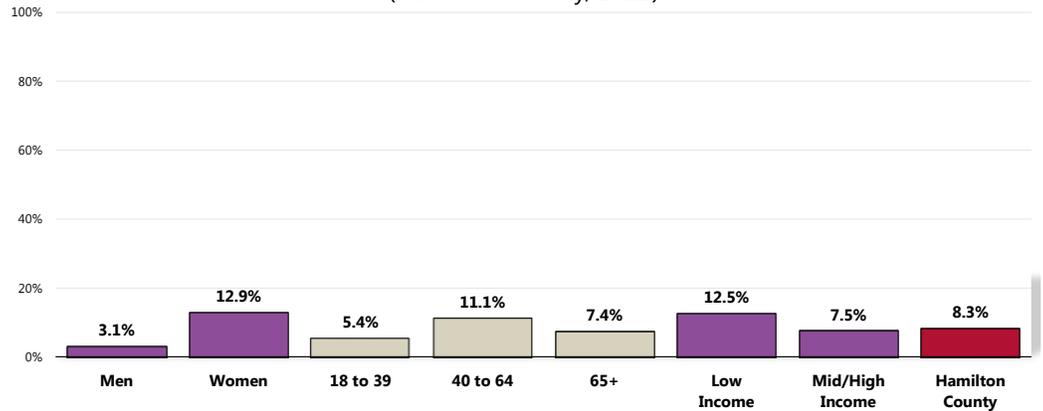
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 33]

• 2011 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: • Asked of all respondents.

👥 The local prevalence of major depression is notably higher among Hamilton County women.

### Have Been Diagnosed With Major Depression (Hamilton County, 2012)



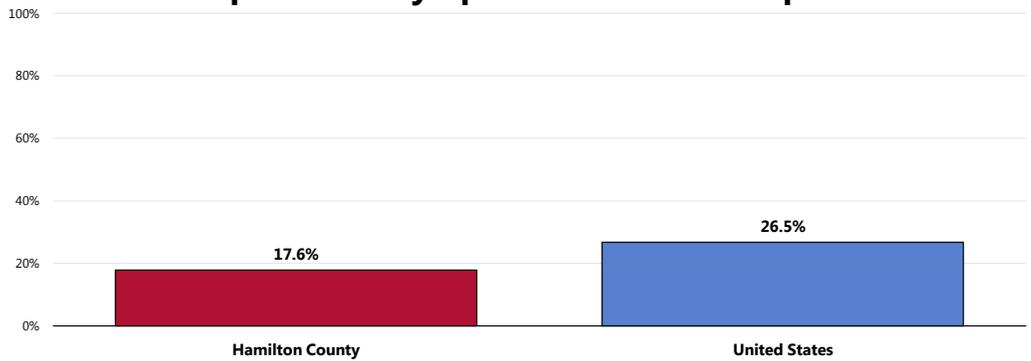
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 33]  
Notes: • Asked of all respondents.  
• Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
• Income categories reflect 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.

### Symptoms of Chronic Depression

**A total of 17.6% of Hamilton County adults have had two or more years in their lives when they felt depressed or sad on most days, although they may have felt okay sometimes (symptoms of chronic depression).**

- More favorable than national findings.

### Have Experienced Symptoms of Chronic Depression

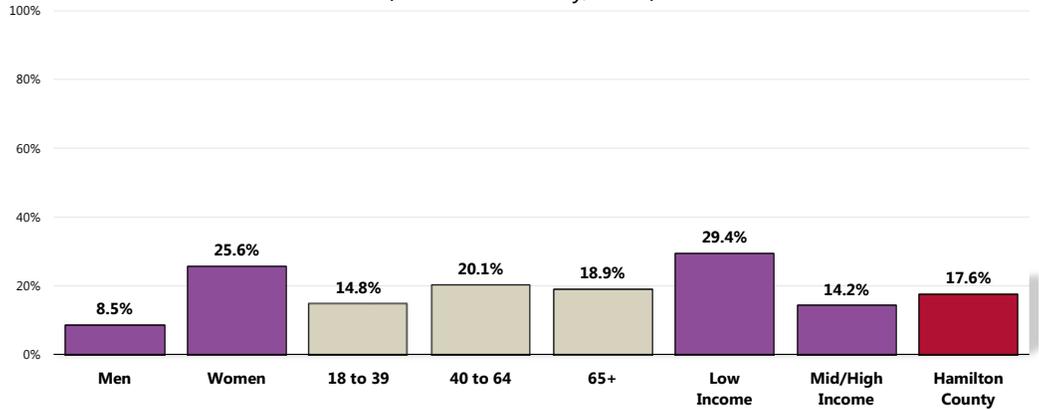


Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 118]  
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
Notes: • Asked of all respondents.

Note that the prevalence of chronic depression is notably higher among:

-  Women.
-  Adults with lower incomes.

### Have Experienced Symptoms of Chronic Depression (Hamilton County, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 118]  
 Notes: • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White 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.

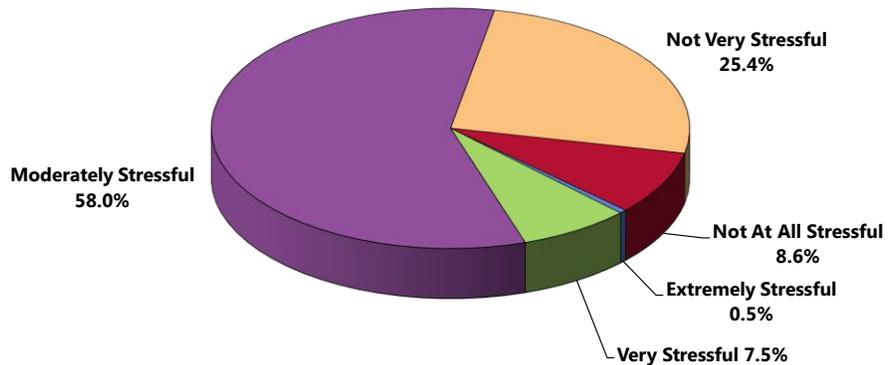
## Stress

RELATED ISSUE:  
 See also *Substance Abuse* in  
 the **Modifiable  
 Health Risks** section  
 of this report.

**More than one-third of Hamilton County adults consider their typical day to be "not very stressful" (25.4%) or "not at all stressful" (8.6%).**

- Another 58.0% of survey respondents characterize their typical day as "moderately stressful."

### Perceived Level of Stress On a Typical Day (Hamilton County, 2012)

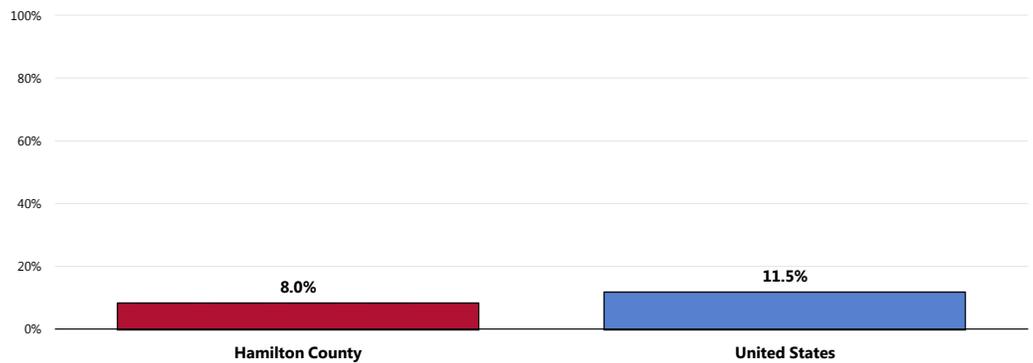


Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 119]  
 Notes: • Asked of all respondents.

In contrast, 8.0% of Hamilton County adults experience “very” or “extremely” stressful days on a regular basis.

- More favorable than national findings.

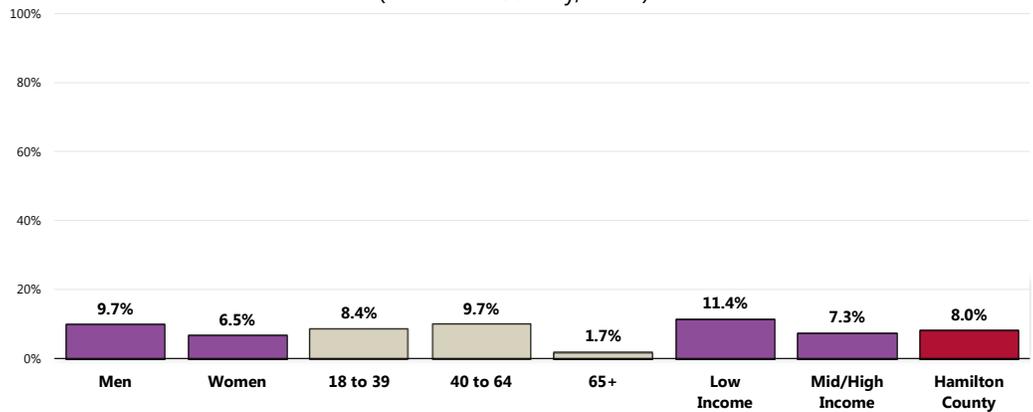
### Perceive Most Days As “Extremely” or “Very” Stressful



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 119]  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of all respondents.

👥 Note that high stress levels are more prevalent among county residents under 65.

### Perceive Most Days as “Extremely” or “Very” Stressful (Hamilton County, 2012)



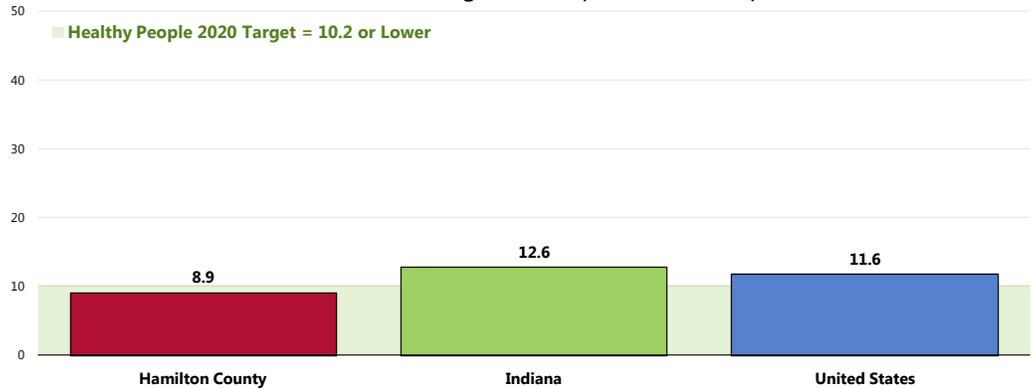
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 119]  
 Notes: • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., “White” reflects non-Hispanic White respondents).  
 • Income categories 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 2007 and 2009, there was an annual average age-adjusted suicide rate of 8.9 deaths per 100,000 population in Hamilton County.

- Better than the statewide rate.
- Better than the national rate.
- Satisfies the Healthy People 2020 target of 10.2 or lower.

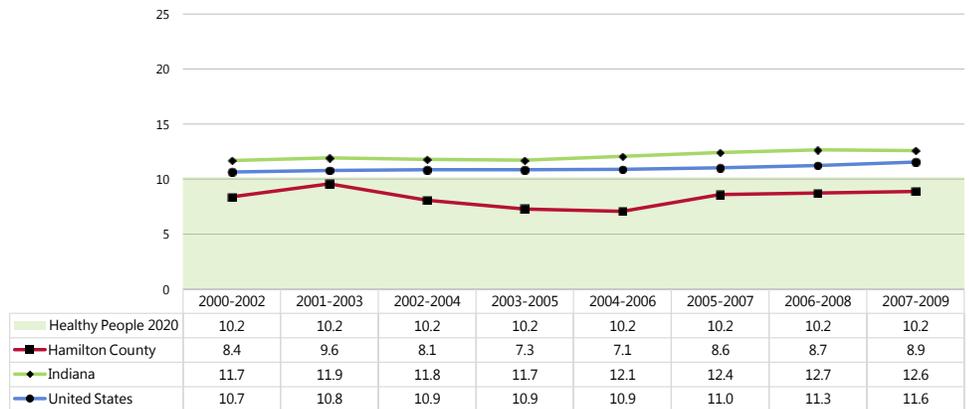
**Suicide: Age-Adjusted Mortality**  
(2007-2009 Annual Average Deaths per 100,000 Population)



Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted July 2012.  
 • 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 U.S. Standard Population.  
 • Local, state and national data are simple three-year averages.

No clear trend is apparent in the Hamilton County suicide rate.

**Suicide: 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 July 2012.  
 • 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 U.S. Standard Population.  
 • Local, state and national data are simple three-year averages.

## Mental Health Treatment

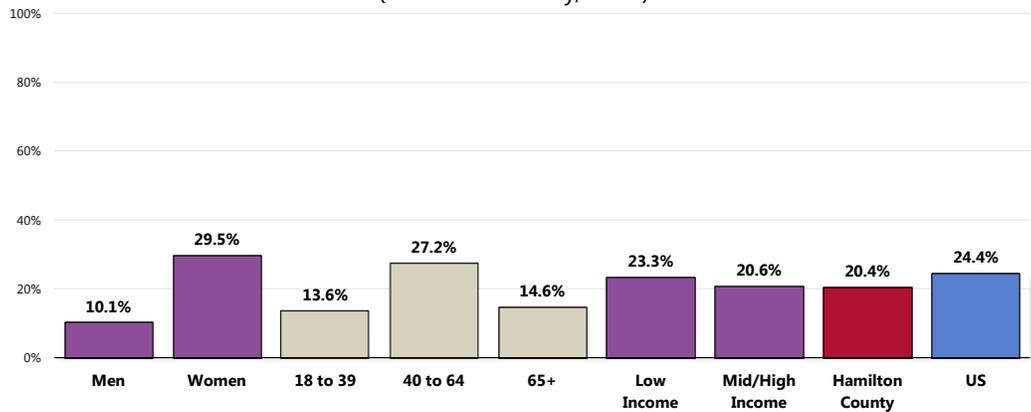
Among the total sample of respondents, 20.4% acknowledge that they have sought professional help for a mental or emotional problem.

- Statistically similar to national findings.

👤 Residents less likely to have sought professional help include men, adults under 40 and seniors (age 65+).

### Have Sought Professional Help for a Mental or Emotional Problem

(Hamilton County, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 120]

• 2011 PRC National Health Survey, Professional Research Consultants, Inc.

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 & ADD/ADHD

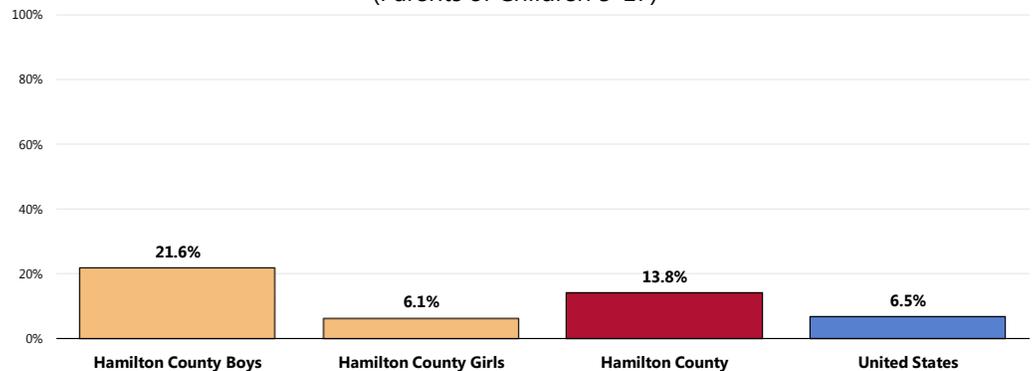
Among Hamilton County adults with children age 5 to 17, 13.8% report that their child takes medication for ADD/ADHD.

- More than twice the national prevalence.

👤 Much higher among boys in this age group than among girls.

### Child Takes Medication for ADD/ADHD

(Parents of Children 5-17)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 136]

• 2011 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: • Asked of all respondents with children aged 5-17 at home.

## Related Focus Group Findings: Mental Health

Many focus group participants discussed mental health in the community, with primary concerns including:

- Inadequate number of psychiatrists and inpatient facilities
- State budget cuts
- Aspire and Promising Futures
- 

During the focus groups, issues surrounding mental health coverage arose several times. Participants agree that residents suffer due to an **inadequate number of psychiatrists and inpatient facilities** as well as the closing of the state hospitals. The remaining clinics are overwhelmed and have wait lists; Wishard Hospital (Marion County) and St. Vincent's are the only hospitals accepting psychiatric patients on an immediate basis. Many residents must remain in the community, or in an emergency room, before an inpatient bed becomes available. One paramedic describes a typical behavioral health situation:

*"They (Community Hospital) are busy and there are times when they're on diversion and we can't take them there, so we're kind of left circling around. Okay, where do we go now? We will go down to St. Vincent's 86<sup>th</sup> Street because they do at least have the resources to deal with it."*  
— Focus Group Participant

Recent **state budget cuts** and staff reductions have put additional pressures on local facilities to provide the same services with less funding. A participant explains their community mental health center:

*"We take care of the clients that used to go to the state hospitals that closed down and send them back to the community with no money. You guys know the deal. It started back in '63 and continues today and we have gotten cut drastically by Medicaid. Somewhere around 20 percent of our resources are no longer available. We have offices in Northern Marion, Boone, Hamilton, and Madison counties and we serve about 5,000 people."* — Focus Group Participant

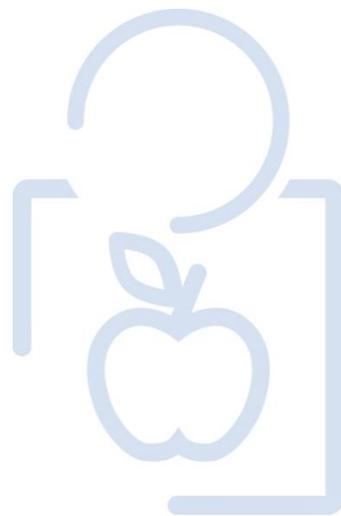
**Aspire** is another local community mental health center, which serves the Seriously Mentally Ill (SMI) population, but they have a wait list for therapy. **Promising Futures** conducts counseling for Medicaid recipients, but the low reimbursement rates complicate the future of the program, as one participant describes:

*"We'll do the therapy piece to it, but I'm starting to revisit it because the reimbursement rate is so low that to hire a competent, qualified, quality therapist at the reimbursement rate as well as keep my overhead and lights on at the Medicaid reimbursed rate is challenging."* — Focus Group Participant

Overall, participants worry that many members of the community do not receive adequate mental care because of limited insurance coverage, lack of insurance or the overall cost to receive behavioral health services:

*"There's a big population there that is not having their mental health addressed at all ... I'm not talking about medical mental health, but with just therapy because they can't afford it. They can't sacrifice food or gas to pay for it and they can't afford their medicine."* — Focus Group Participant

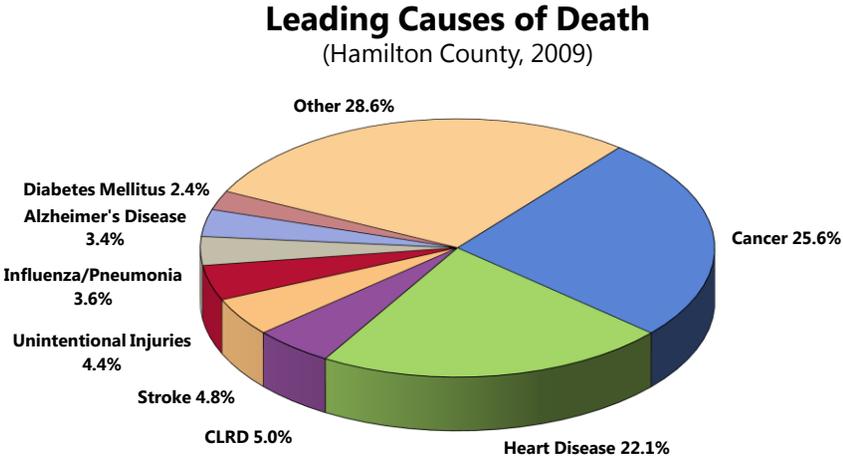
# DEATH, DISEASE & CHRONIC CONDITIONS



# Leading Causes of Death

## Distribution of Deaths by Cause

Together, cardiovascular disease (heart disease and stroke) and cancers accounted for more than one-half of all deaths in Hamilton County in 2009.



Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted July 2012.  
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 2007-2009 annual average age-adjusted death rates per 100,000 population for selected causes of death in Hamilton County.

For infant mortality data, see "Birth Outcomes & Risks" in the **Births** section of this report.

**Age-adjusted mortality rates in Hamilton County are better than or comparable to national rates for each cause of death listed below, with the exception of pneumonia/influenza (for which the county's rate exceeds the national rate).**

Of the causes outlined in the following chart for which Healthy People 2020 objectives have been established, Hamilton County rates satisfy or are comparable to each of the related goals listed below, with the exception of stroke deaths.

### Age-Adjusted Death Rates for Selected Causes (2007-2009 Deaths per 100,000)

	Hamilton County	Indiana	US	HP2020
<b>Malignant Neoplasms (Cancers)</b>	151.8	192.9	175.6	160.6
<b>Diseases of the Heart</b>	147.3	198.8	185.8	152.7*
<b>Cerebrovascular Disease (Stroke)</b>	42.2	44.8	40.6	33.8
<b>Chronic Lower Respiratory Disease (CLRD)</b>	29.7	54.1	42.4	n/a
<b>Pneumonia/Influenza</b>	22.8	17.4	16.4	n/a
<b>Unintentional Injuries</b>	22.5	39.1	38.7	36
<b>Alzheimer's Disease</b>	20.7	26.4	23.5	n/a
<b>Diabetes Mellitus</b>	17.3	24.1	21.7	19.6*
<b>Kidney Diseases</b>	15.3	20.1	14.7	n/a
<b>Intentional Self-Harm (Suicide)</b>	8.9	12.6	11.6	10.2
<b>Drug-Induced</b>	6.4	13.8	12.6	11.3
<b>Firearm-Related</b>	4.8	11.1	10.2	9.2
<b>Motor Vehicle Deaths</b>	4.5	13.2	13.0	12.4
<b>Cirrhosis/Liver Disease</b>	4.3	7.6	9.2	8.2
<b>Homicide/Legal Intervention</b>	1.2	5.9	6.1	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 July 2012.
  - 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.
  - Local, state and national data are simple three-year averages.

# Cardiovascular Disease

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))

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

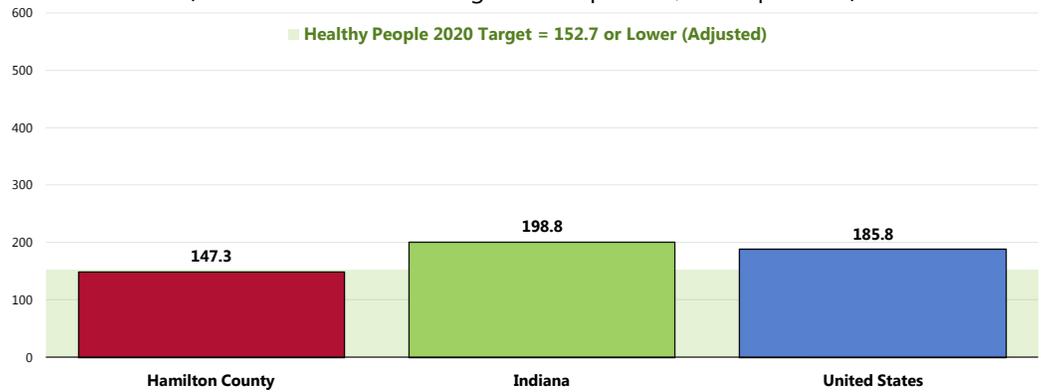
## Age-Adjusted Heart Disease & Stroke Deaths

### Heart Disease Deaths

**Between 2007 and 2009 there was an annual average age-adjusted heart disease mortality rate of 147.3 deaths per 100,000 population in Hamilton County.**

- Lower than the statewide rate.
- Lower than the national rate.
- Comparable to the Healthy People 2020 target (as adjusted to account for all diseases of the heart).

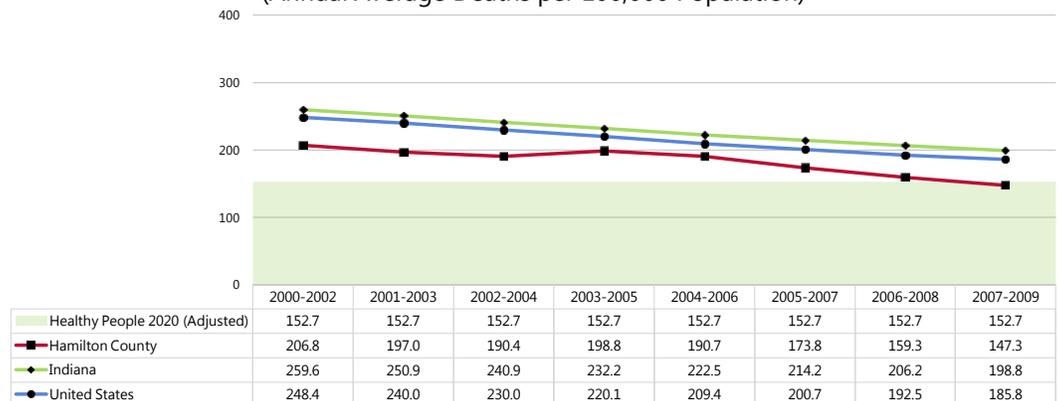
## Heart Disease: Age-Adjusted Mortality (2007-2009 Annual Average Deaths per 100,000 Population)



- Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted July 2012.
  - 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 U.S. Standard Population.
  - Local, state and national data are simple three-year averages.
  - The Healthy People 2020 Heart Disease target is adjusted to account for all diseases of the heart.

The heart disease mortality rate has decreased in Hamilton County during the past decade, echoing the decreasing trends across Indiana and the US overall.

## Heart 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 July 2012.
  - 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 U.S. Standard Population.
  - Local, state and national data are simple three-year averages.
  - The Healthy People 2020 Heart Disease target is adjusted to account for all diseases of the heart.

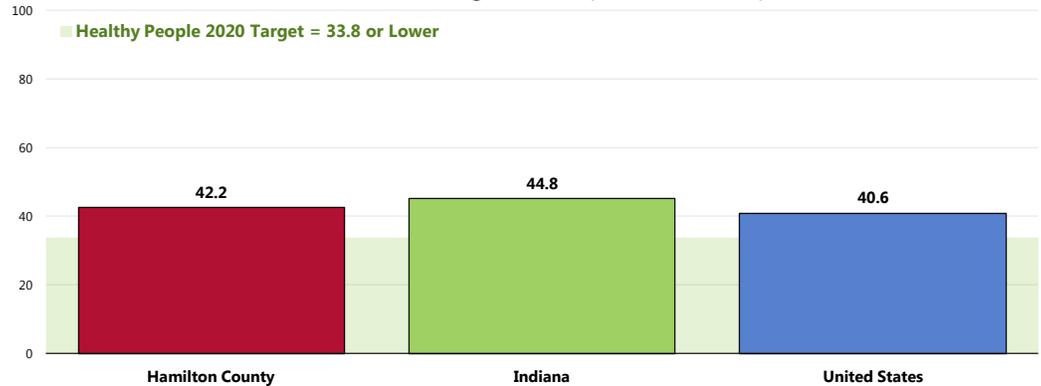
## Stroke Deaths

Between 2007 and 2009, there was an annual average age-adjusted stroke mortality rate of 42.2 deaths per 100,000 population in Hamilton County.

- More favorable than the Indiana rate.
- Similar to the national rate.
- Fails to satisfy the Healthy People 2020 target of 33.8 or lower.

### Stroke: Age-Adjusted Mortality

(2007-2009 Annual Average Deaths per 100,000 Population)

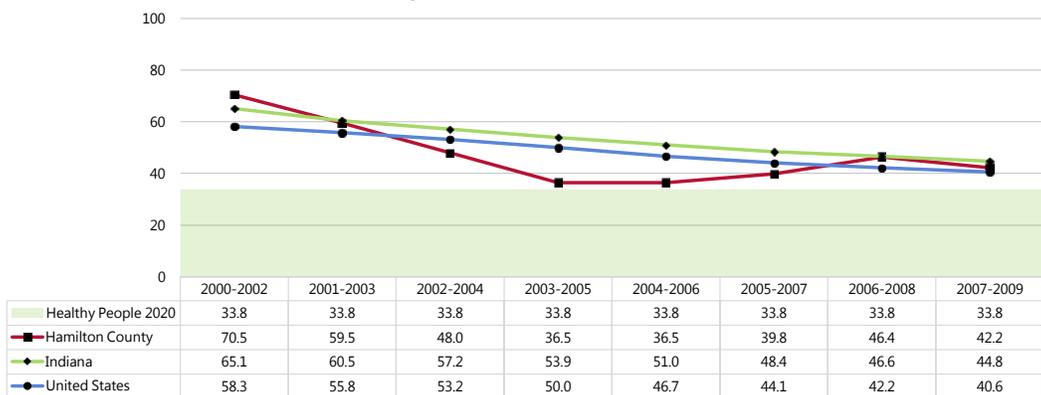


Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted July 2012.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [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 U.S. Standard Population.  
 • Local, state and national data are simple three-year averages.

☒ The stroke rate has declined in recent years, echoing the trends reported across Indiana and the US overall.

### Stroke: 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 July 2012.  
 • 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 U.S. Standard Population.  
 • Local, state and national data are simple three-year averages.

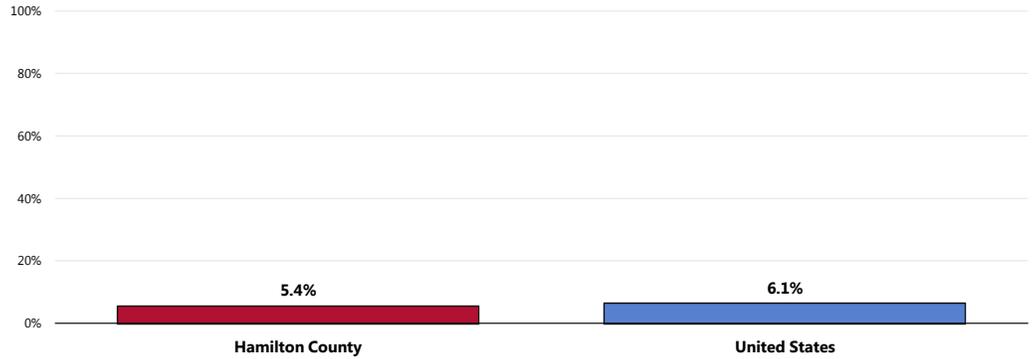
# Prevalence of Heart Disease & Stroke

## Prevalence of Heart Disease

A total of 5.4% of surveyed adults report that they suffer from or have been diagnosed with heart disease, such as coronary heart disease, angina or heart attack.

- Similar to the national prevalence.

### Prevalence of Heart Disease



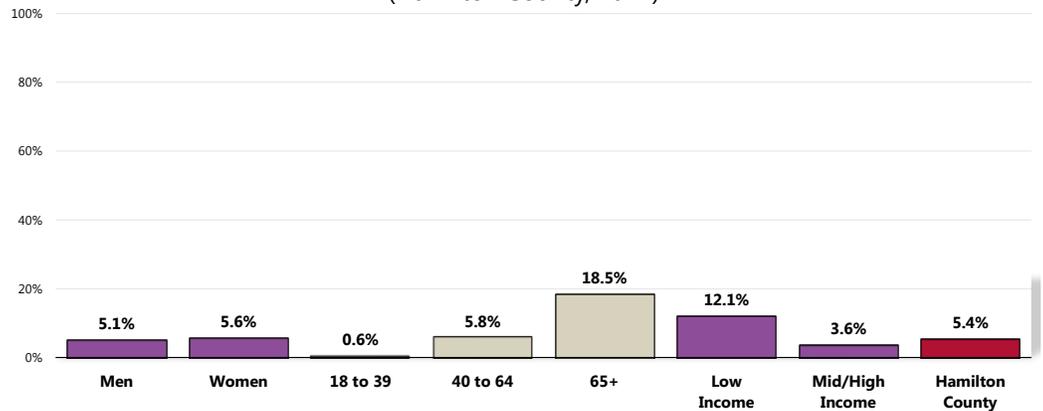
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 146]  
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: • Asked of all respondents.

- Seniors (age 65+) are more likely to have been diagnosed with chronic heart disease.

### Prevalence of Heart Disease

(Hamilton County, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 146]

Notes: • Asked of all respondents.

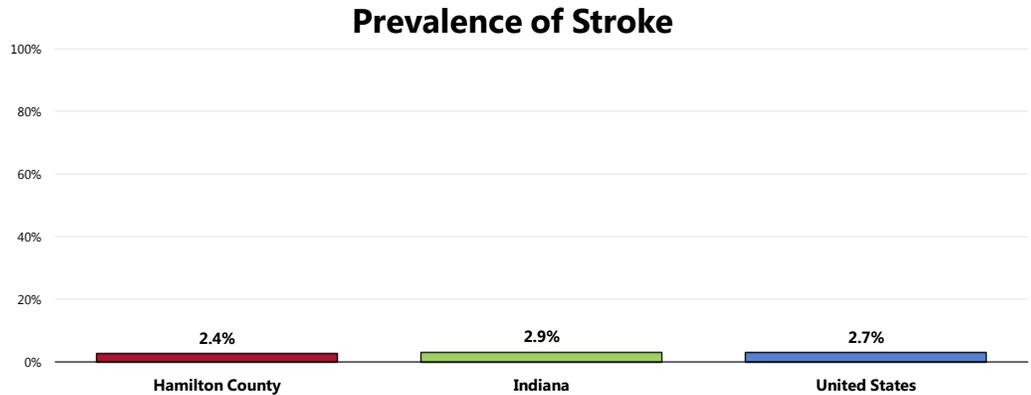
• Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).

• 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.

## Prevalence of Stroke

**A total of 2.4% of surveyed adults report that they suffer from or have been diagnosed with cerebrovascular disease (a stroke).**

- Similar to statewide findings.
- Similar to national findings.



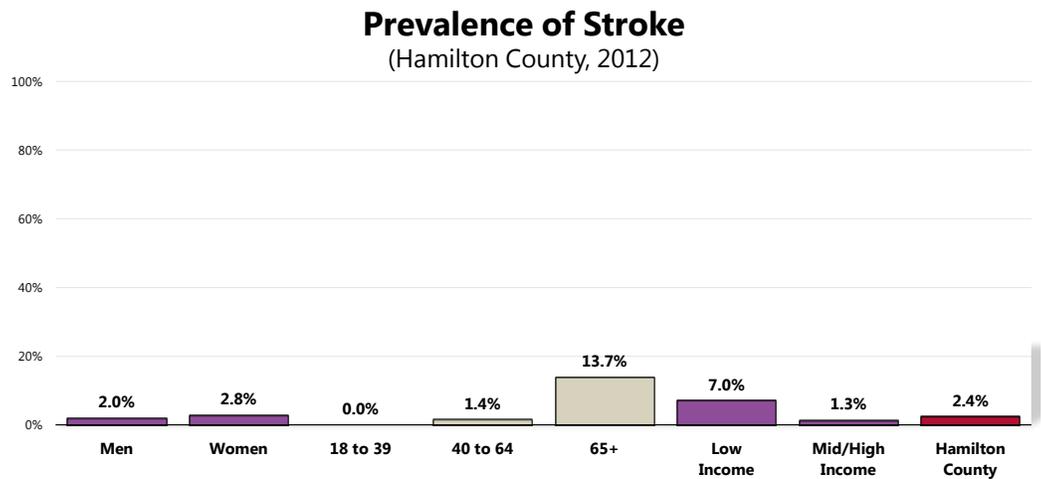
Sources:
 

- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 40]
- 2011 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); 2010 Indiana data.

 Notes:
 

- Asked of all respondents.

Seniors in the county are more likely to have been diagnosed with stroke.



Sources:
 

- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 40]

 Notes:
 

- Asked of all respondents.
- Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White 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.

## Cardiovascular Risk Factors

### Hypertension (High Blood Pressure)

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.

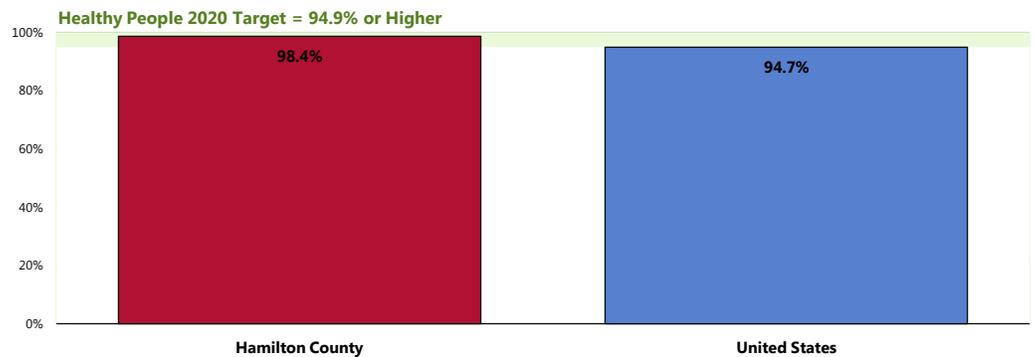
– Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

#### High Blood Pressure Testing

**A total of 98.4% of Hamilton County adults have had their blood pressure tested within the past two years.**

- Better than national findings.
- Satisfies the Healthy People 2020 target (94.9% or higher).

#### Have Had Blood Pressure Checked in the Past Two Years



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 49]  
• 2011 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-4]

Notes: • Asked of all respondents.

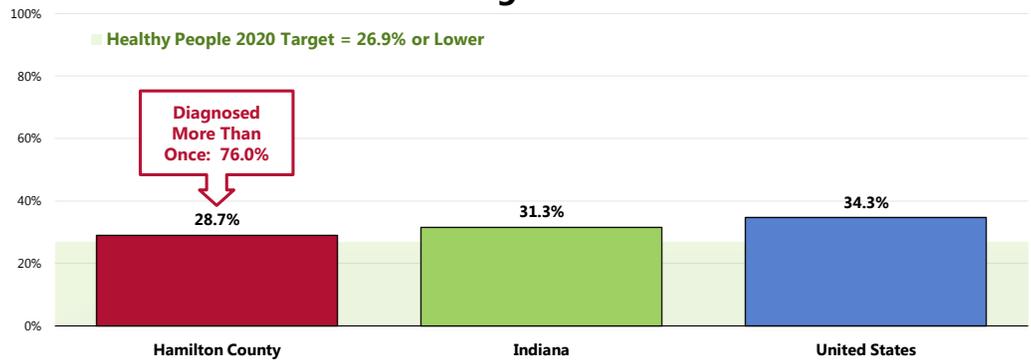
#### Prevalence of Hypertension

**A total of 28.7% of adults have been told at some point that their blood pressure was high.**

- Comparable to the Indiana prevalence.
- Better than the national prevalence.
- Comparable to the Healthy People 2020 target (26.9% or lower).

 Among hypertensive adults, 76.0% have been diagnosed with high blood pressure more than once.

## Prevalence of High Blood Pressure

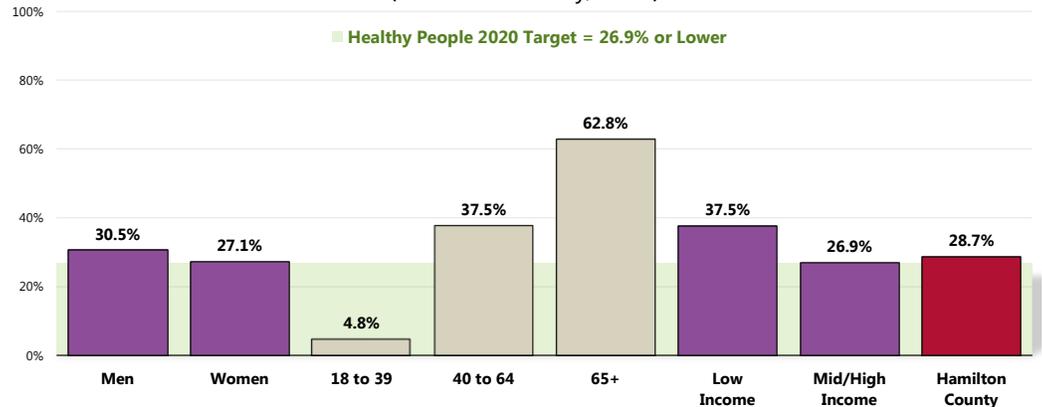


- Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 47, 147]
  - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2009 Indiana data.
  - 2011 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.

Hypertension diagnoses are higher among:

- Adults age 40 and older, and especially those age 65+ (note the positive correlation between age and hypertension in the county).

## Prevalence of High Blood Pressure (Hamilton County, 2012)



- Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 147]
  - 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.
  - Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White 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.

## Hypertension Management

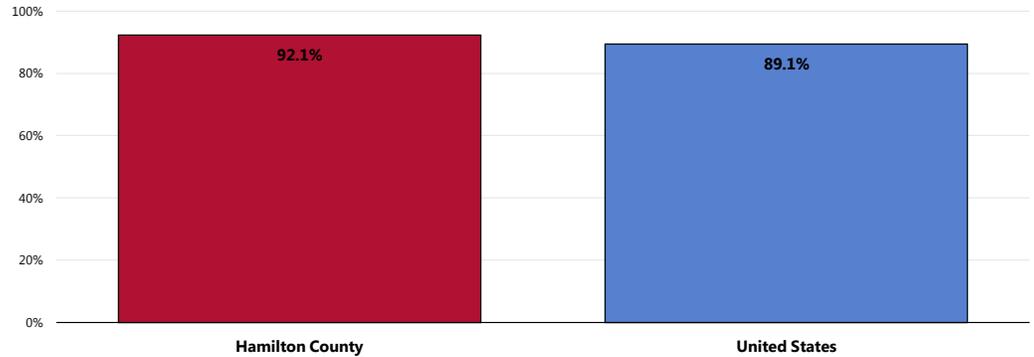
Respondents reporting high blood pressure were further asked:

*"Are you currently taking any action to help control your high blood pressure, such as taking medication, changing your diet, or exercising?"*

**Among respondents who have been told that their blood pressure was high, 92.1% report that they are currently taking actions to control their condition.**

- Similar to national findings.

### Taking Action to Control Hypertension (Among Adults With High Blood Pressure)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 48]  
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
Notes: • Asked of all respondents who have been diagnosed with high blood pressure.  
• In this case, the term "action" refers to medication, change in diet, and/or exercise.

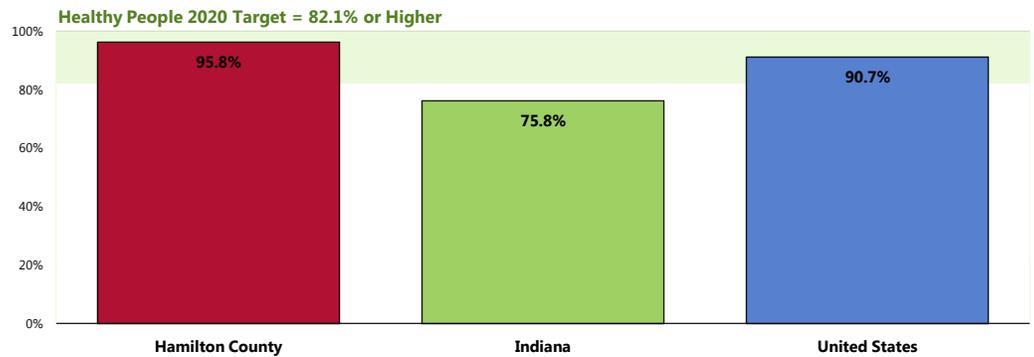
## High Blood Cholesterol

### Blood Cholesterol Testing

**A total of 95.8% of Hamilton County adults have had their blood cholesterol checked within the past five years.**

- More favorable than Indiana findings.
- More favorable than the national findings.
- Satisfies the Healthy People 2020 target (82.1% or higher).

### Have Had Blood Cholesterol Levels Checked in the Past Five Years

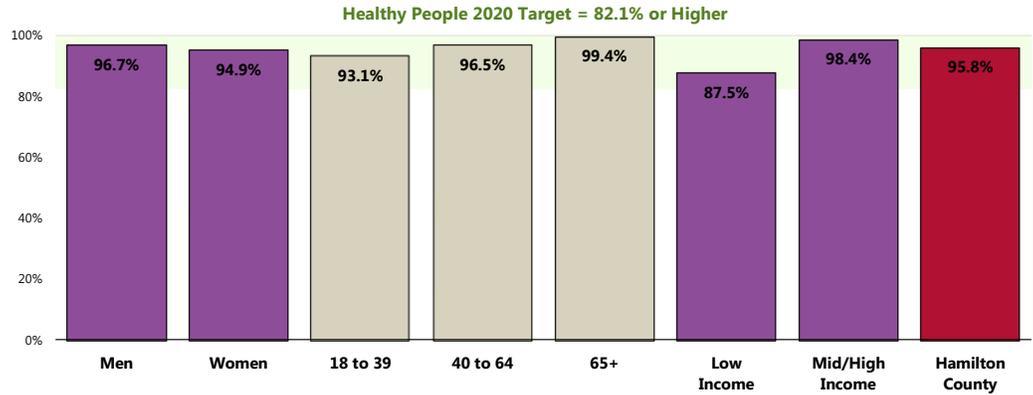


Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 52]  
• Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC). 2009 Indiana data.  
• 2011 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-6]  
Notes: • Asked of all respondents.

The following demographic segments report lower screening levels:

- 👤 Adults under age 40 (note the positive correlation with age).
- 👤 Residents with lower incomes.

### Have Had Blood Cholesterol Levels Checked in the Past Five Years (Hamilton County, 2012)



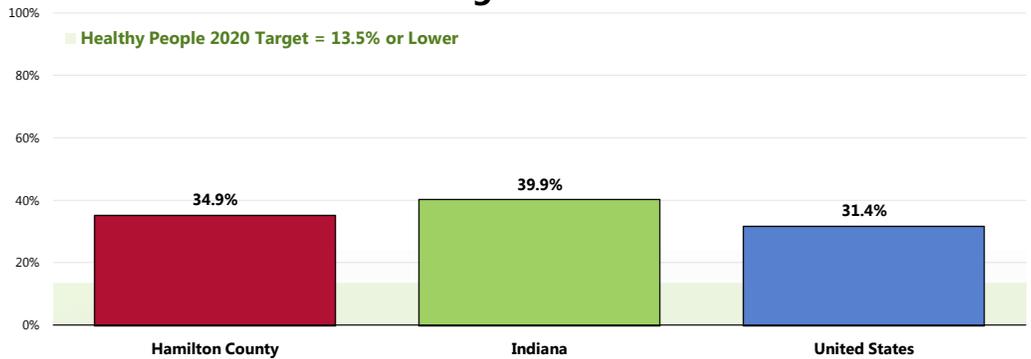
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 52]  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective HDS-6]  
 Notes: • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g. "White" reflects non-Hispanic White 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.

### Self-Reported High Blood Cholesterol

**A total of 34.9% of adults have been told by a health professional that their cholesterol level was high.**

- More favorable than the Indiana findings.
- Similar to the national prevalence.
- More than twice the Healthy People 2020 target (13.5% or lower).

### Prevalence of High Blood Cholesterol



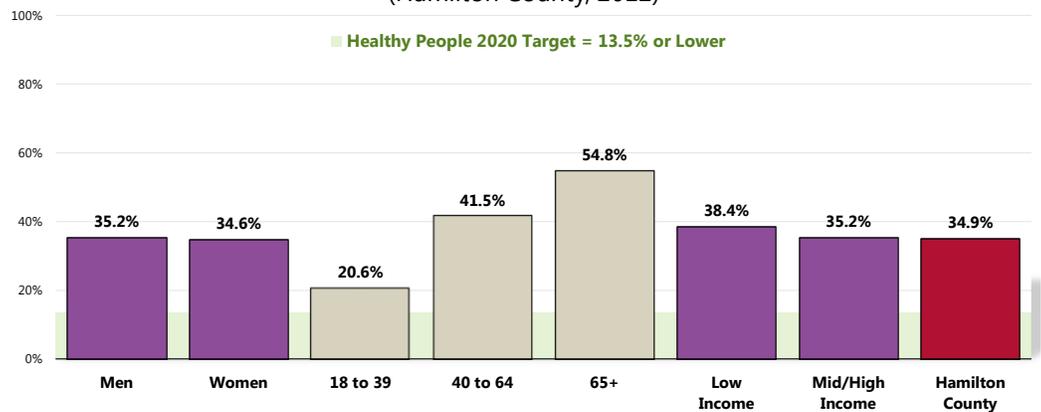
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 148]  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2009 Indiana data.  
 • 2011 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.  
 • \*The Indiana data reflects those adults who have been tested for high cholesterol and who have been diagnosed with it.

Note that 10.2% of Hamilton County adults report not having high blood cholesterol, but: 1) have never had their blood cholesterol levels tested; 2) have not been screened in the past 5 years; or 3) do not recall when their last screening was. For these individuals, current prevalence is unknown.

👤 Note the positive correlation between age and high blood cholesterol.

👤 Keep in mind that “unknowns” are relatively high in women, young adults and lower-income residents.

### Prevalence of High Blood Cholesterol (Hamilton County, 2012)



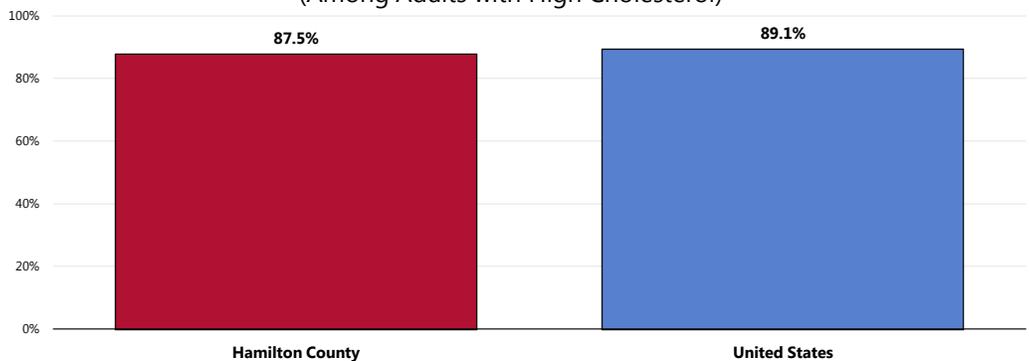
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 148]  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective HDS-7]  
 Notes: • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., “White” reflects non-Hispanic White 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 Cholesterol Management

**Among adults who have been told that their blood cholesterol was high, 87.5% report that they are currently taking actions to control their cholesterol levels.**

- Statistically similar to the prevalence found nationwide.

### Taking Action to Control High Blood Cholesterol Levels (Among Adults with High Cholesterol)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 51]  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of all respondents who have been diagnosed with high blood cholesterol levels.  
 • In this case, the term “action” refers to medication, change in diet, and/or exercise.

Respondents reporting high cholesterol were further asked:

*“Are you currently taking any action to help control your high cholesterol, such as taking medication, changing your diet, or exercising?”*

## Total 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.

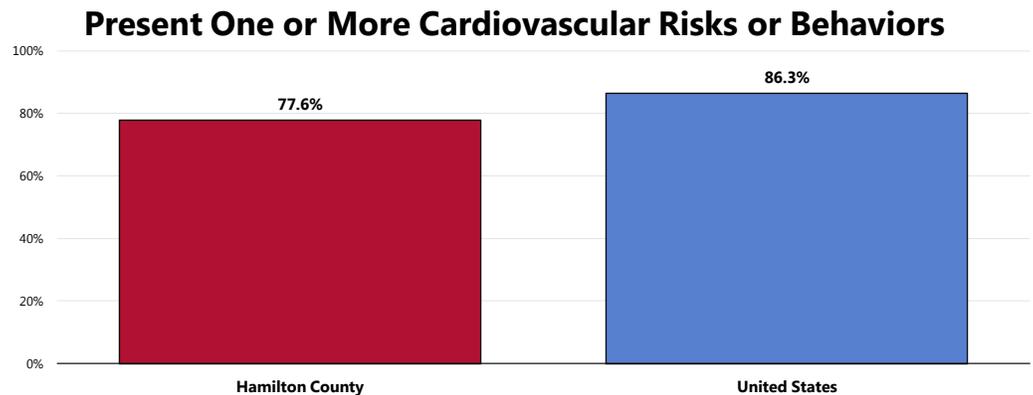
**Tobacco use.** Smokers have twice the risk for heart attack of nonsmokers. Nearly one-fifth of all deaths from cardiovascular disease, or about 190,000 deaths a year nationally, are smoking-related. Every day, more than 3,000 young people become daily smokers in the US

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

**A total of 77.6% of Hamilton County adults report one or more cardiovascular risk factors, such as being overweight, smoking cigarettes, being physically inactive, or having high blood pressure or cholesterol.**

- Notably lower than national findings.



Sources: ● 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 149]

● 2011 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: ● Asked of all respondents.

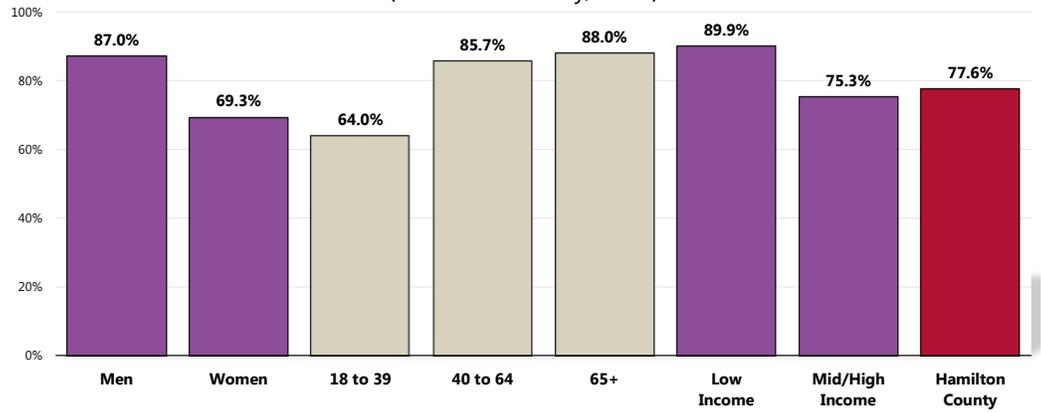
● Cardiovascular risk is defined as exhibiting one or more of the following: 1) no leisure-time physical activity; 2) regular/occasional cigarette smoking; 3) hypertension; 4) high blood cholesterol; and/or 5) being overweight/obese.

RELATED ISSUE:  
See also  
*Nutrition & Overweight,*  
*Physical Activity & Fitness*  
and *Tobacco Use* in the  
**Modifiable Health Risk**  
section of this report.

Adults more likely to exhibit cardiovascular risk factors include:

- Men.
- Adults age 40 and older, and especially seniors.
- Lower-income residents.

### Present One or More Cardiovascular Risks or Behaviors (Hamilton County, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 149]  
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.  
• Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White 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.

# 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

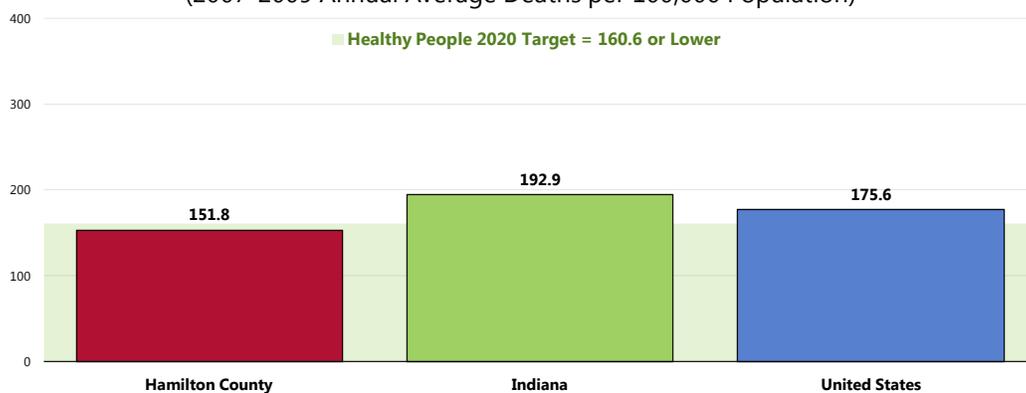
### All Cancer Deaths

**Between 2007 and 2009, there was an annual average age-adjusted cancer mortality rate of 151.8 deaths per 100,000 population in Hamilton County.**

- More favorable than the statewide rate.
- More favorable than the national rate.
- Satisfies the Healthy People 2020 target of 160.6 or lower.

### Cancer: Age-Adjusted Mortality

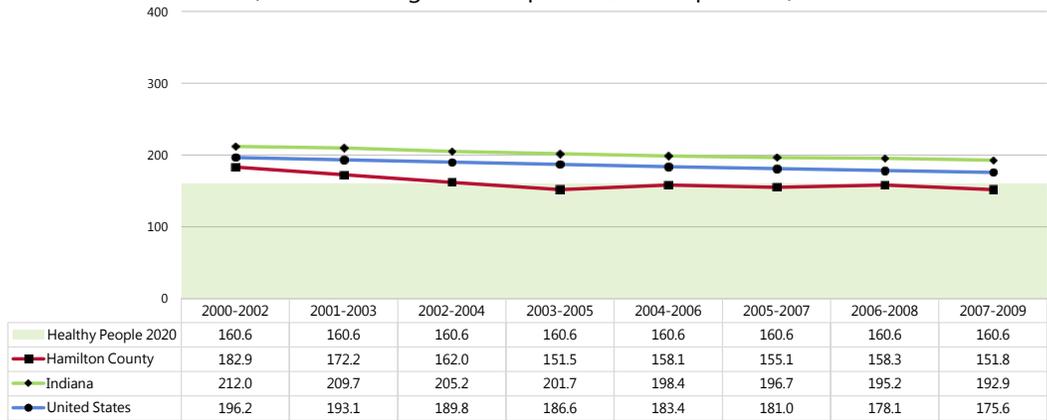
(2007-2009 Annual Average Deaths per 100,000 Population)



Sources: ● CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted July 2012.  
● 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 U.S. Standard Population.  
● Local, state and national data are simple three-year averages.

- ☒ Cancer mortality has decreased over the past decade in Hamilton County; the same trend is apparent both statewide and nationwide.

### Cancer: 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 July 2012.
- 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 U.S. Standard Population.
- State and national data are simple three-year averages.

### Cancer Deaths by Site

**Lung cancer is by far the leading cause of cancer deaths in Hamilton County.**

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

As can be seen in the following chart (referencing 2007-2009 annual average age-adjusted death rates):

- The Hamilton County **lung cancer** death rate is more favorable than the state and national rates.
- The Hamilton County **female breast cancer** death rate is more favorable than the Indiana rate and similar to the US rate.
- The Hamilton County **prostate cancer** death rate is more favorable than both the state and national rates.
- The Hamilton County **colorectal cancer** death rate is more favorable than both the state and national rates.

Note that the Hamilton County lung and colorectal cancer death rates also satisfy the related Healthy People 2020 targets; the prostate cancer death rate is comparable to the 2020 goal, while the county breast cancer rate fails to satisfy the related goal.

## Age-Adjusted Cancer Death Rates by Site

(2007-2009 Annual Average Deaths per 100,000 Population)

	Hamilton County	Indiana	US	HP2020
<b>Lung Cancer</b>	<b>36.8</b>	<b>60.9</b>	<b>49.5</b>	<b>45.5</b>
<b>Female Breast Cancer</b>	<b>22.4</b>	<b>23.7</b>	<b>22.6</b>	<b>20.6</b>
<b>Prostate Cancer</b>	<b>21.4</b>	<b>23.3</b>	<b>22.6</b>	<b>21.2</b>
<b>Colorectal Cancer</b>	<b>10.1</b>	<b>17.6</b>	<b>16.4</b>	<b>14.5</b>

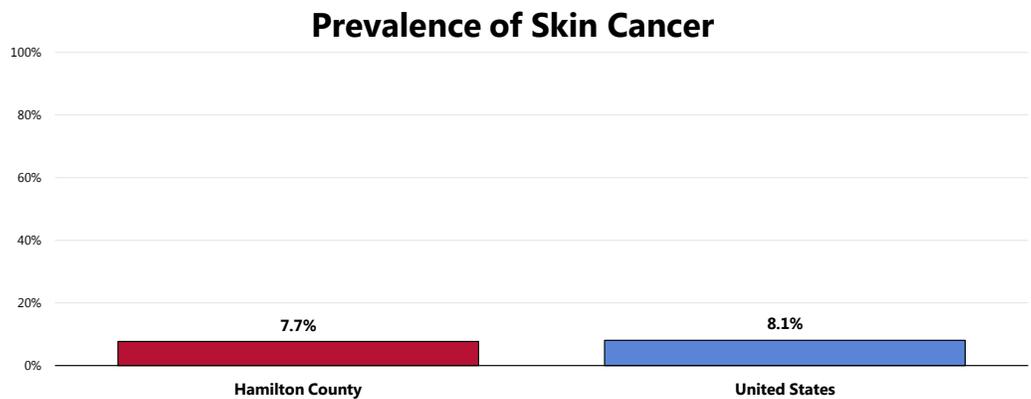
Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted July 2012.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov>

## Prevalence of Cancer

### Skin Cancer

**A total of 7.7% of surveyed Hamilton County adults report having been diagnosed with skin cancer.**

- Similar to the national average.



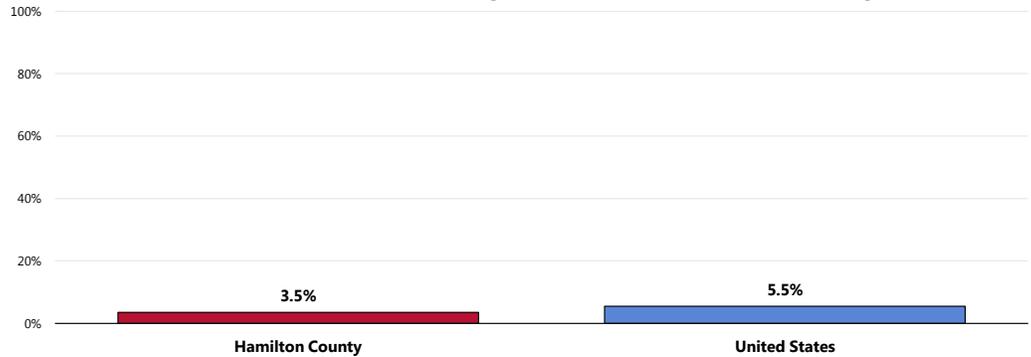
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 31]  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of all respondents.

## Other Cancer

**A total of 3.5% of respondents have been diagnosed with some type of (non-skin) cancer.**

- Similar to the national prevalence.

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



Sources: ● 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 30]  
● 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
Notes: ● Asked of all respondents.

## 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 four cancer sites: prostate cancer (prostate-specific antigen testing and digital rectal examination); female breast cancer (mammography); cervical cancer (Pap smear testing); and colorectal cancer (sigmoidoscopy and fecal occult blood testing).

RELATED ISSUE:  
See also  
*Nutrition & Overweight,  
Physical Activity &  
Fitness and Tobacco Use*  
in the **Modifiable  
Health Risk** section of  
this report.

## Prostate Cancer Screenings

**The US Preventive Services Task Force (USPSTF) concludes that the current evidence is insufficient to assess the balance of benefits and harms of prostate cancer screening in men younger than age 75 years.**

Rationale: Prostate cancer is the most common nonskin cancer and the second-leading cause of cancer death in men in the United States. The USPSTF found convincing evidence that prostate-specific antigen (PSA) screening can detect some cases of prostate cancer.

In men younger than age 75 years, the USPSTF found inadequate evidence to determine whether treatment for prostate cancer detected by screening improves health outcomes compared with treatment after clinical detection.

The USPSTF found convincing evidence that treatment for prostate cancer detected by screening causes moderate-to-substantial harms, such as erectile dysfunction, urinary incontinence, bowel dysfunction, and death. These harms are especially important because some men with prostate cancer who are treated would never have developed symptoms related to cancer during their lifetime.

There is also adequate evidence that the screening process produces at least small harms, including pain and discomfort associated with prostate biopsy and psychological effects of false-positive test results.

**The USPSTF recommends against screening for prostate cancer in men age 75 years or older.**

Rationale: In men age 75 years or older, the USPSTF found adequate evidence that the incremental benefits of treatment for prostate cancer detected by screening are small to none.

Given the uncertainties and controversy surrounding prostate cancer screening in men younger than age 75 years, a clinician should not order the PSA test without first discussing with the patient the potential but uncertain benefits and the known harms of prostate cancer screening and treatment. Men should be informed of the gaps in the evidence and should be assisted in considering their personal preferences before deciding whether to be tested.

– 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.

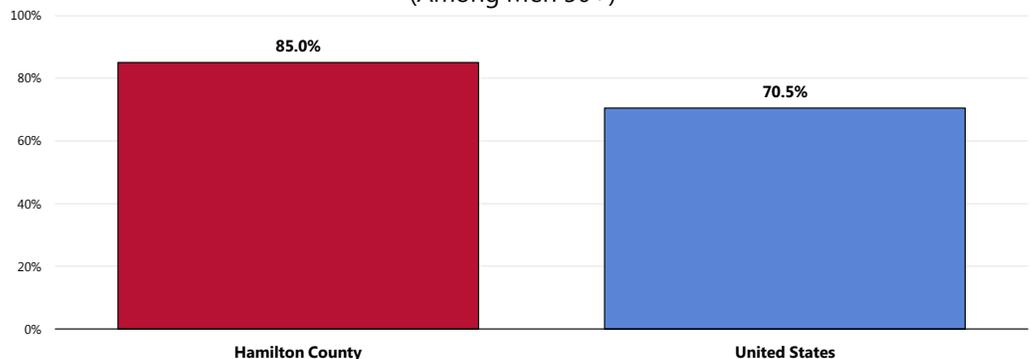
Note: Due to recent (2008) changes in clinical recommendations against routine PSA testing, it is anticipated that testing levels will begin to decline.

### PSA Testing and/or Digital Rectal Examination

**Among men age 50 and older, most (85.0%) have had a PSA (prostate-specific antigen) test and/or a digital rectal examination for prostate problems within the past two years.**

- More favorable than national findings.

### Have Had a Prostate Screening in the Past Two Years (Among Men 50+)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 153]  
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: • Asked of all male respondents 50 and older.

## Female Breast Cancer Screening

**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.

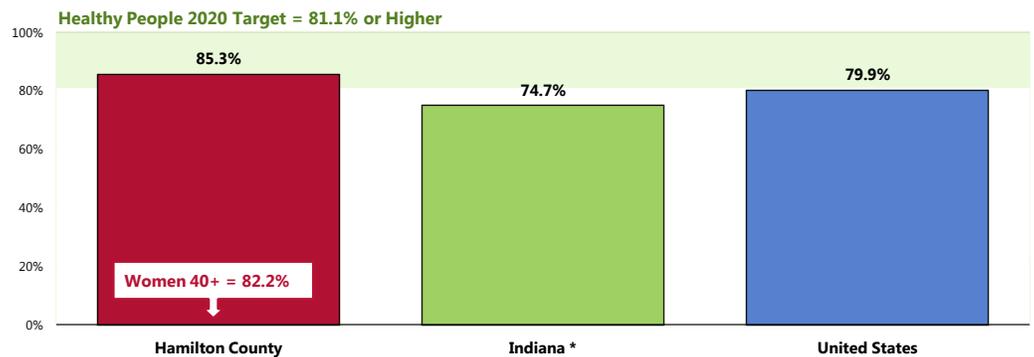
### Mammography

**Among women age 50-74, 85.3% had a mammogram within the past two years.**

- Better than statewide findings (which represent all women 50+).
- Similar to national findings.
- Similar to the Healthy People 2020 target (81.1% or higher).

 Among women 40+, 82.2% had a mammogram in the past two years.

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



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 150-151]  
• Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2010 Indiana data.  
• 2011 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 to 74.  
• \*Note that state data reflects all women 50 and older (vs. women 50-74 in local, US and Healthy People data).

## Cervical Cancer Screenings

**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.

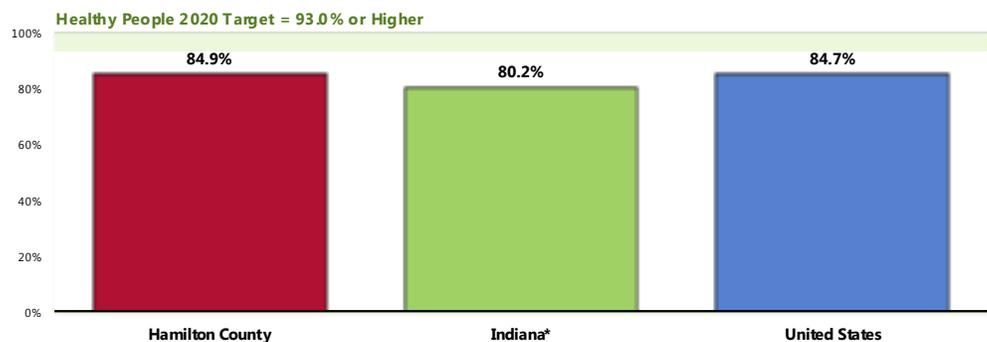
Note that other organizations (e.g., American Cancer Society, American Academy of Family Physicians, American College of Physicians, National Cancer Institute) may have slightly different screening guidelines.

### Pap Smear Testing

**Among women age 21 to 65, 84.9% had a Pap smear within the past three years.**

- Comparable to the Indiana percentage (which represents all women 18+).
- Comparable to national findings.
- Fails to satisfy the Healthy People 2020 target (93% or higher).

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



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item152]  
• Behavioral Risk Factor Surveillance System Survey Data, Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2010 Indiana data.  
• 2011 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 21-65.  
• \*Note that the Indiana percentage represents all women 18 and older.

## Colorectal Cancer Screenings

**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 (FOBT, 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, 74.9% have had an appropriate colorectal cancer screening (fecal occult blood testing within the past year and/or sigmoidoscopy/colonoscopy [lower endoscopy] within the past 10 years).**

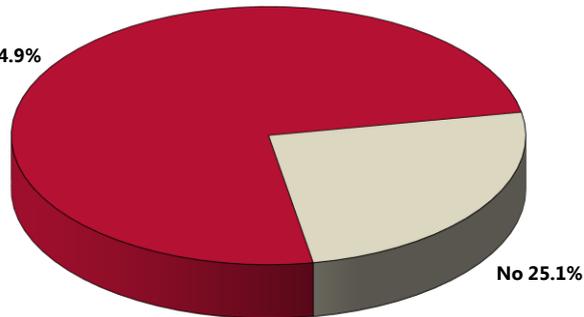
- Statistically comparable to the Healthy People 2020 target (70.5% or higher).

### Have Had a Colorectal Cancer Screening

(Among Hamilton County Adults 50-75, 2011)

Healthy People 2020 Target =  
70.5% or Higher

Yes 74.9%



No 25.1%

Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 156]

• 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.

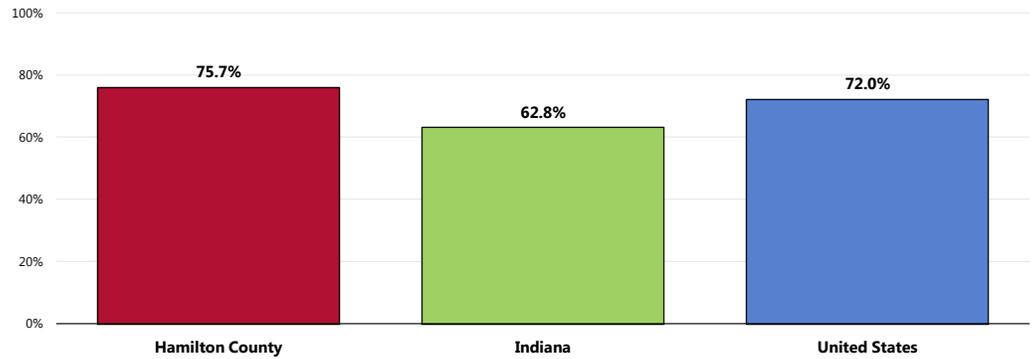
• In this case, the term "colorectal screening" refers to adults age 50-75 receiving a FOBT (fecal occult blood test) in the past year and/or a lower endoscopy (sigmoidoscopy/colonoscopy) in the past 10 years.

## Lower Endoscopy

**Among adults age 50 and older, 75.7% have had a lower endoscopy (sigmoidoscopy or colonoscopy) at some point in their lives.**

- More favorable than Indiana findings.
- Similar to national findings.

### Have Ever Had a Lower Endoscopy Exam (Among Adults 50+)



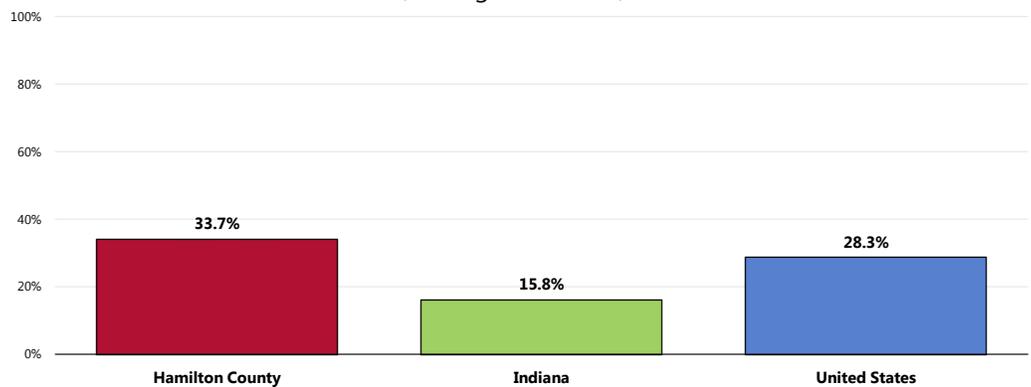
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 154]  
• Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2010 Indiana data.  
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
Notes: • Asked of all respondents 50+.  
• Lower endoscopy includes either sigmoidoscopy or colonoscopy.

## Blood Stool Testing

**Among adults age 50 and older, 33.7% have had a blood stool test (aka "fecal occult blood test") within the past two years.**

- Better than Indiana findings.
- Similar to national findings.

### Have Had a Blood Stool Test in the Past Two Years (Among Adults 50+)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 155]  
• Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2010 Indiana data.  
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
Notes: • Asked of all respondents 50+.

# Respiratory Disease

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.

Several additional respiratory conditions and respiratory hazards, including infectious agents and occupational and environmental exposures, are covered in other areas of Healthy People 2020. Examples include tuberculosis, lung cancer, acquired immunodeficiency syndrome (AIDS), pneumonia, occupational lung disease, and smoking. Sleep Health is now a separate topic area of Healthy People 2020.

Currently in the United States, more than 23 million people have asthma. Approximately 13.6 million adults have been diagnosed with COPD, and an approximately equal number have not yet been diagnosed. 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

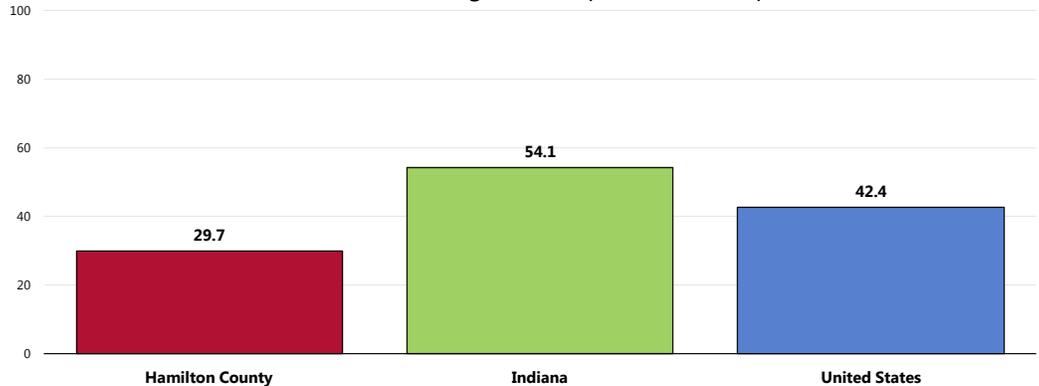
## Chronic Lower Respiratory Disease Deaths (CLRD)

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.

Between 2007 and 2009, there was an annual average age-adjusted CLRD mortality rate of 29.7 deaths per 100,000 population in Hamilton County.

- Lower than found statewide.
- Lower than the national rate.

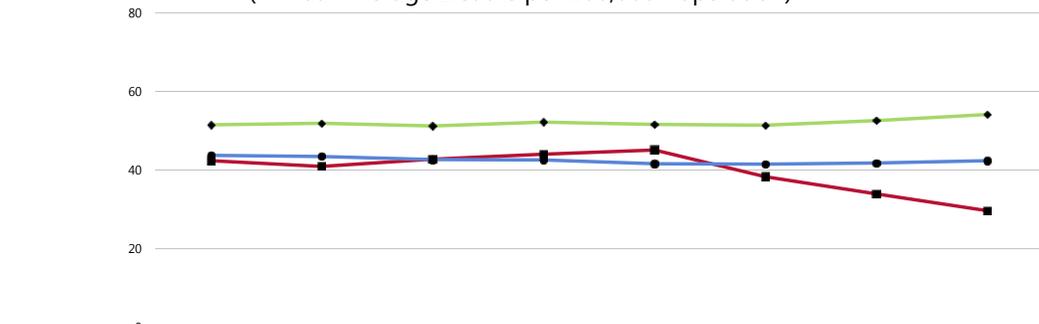
**CLRD: Age-Adjusted Mortality**  
(2007-2009 Annual Average Deaths per 100,000 Population)



Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted July 2012.  
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 U.S. Standard Population.  
• Local, state and national data are simple three-year averages.  
• CLRD is chronic lower respiratory disease.

CLRD mortality in Hamilton County has decreased in recent years, in contrast to the increasing statewide 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 July 2012.  
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 U.S. Standard Population.  
• State and national data are simple three-year averages.  
• CLRD is chronic lower respiratory disease.

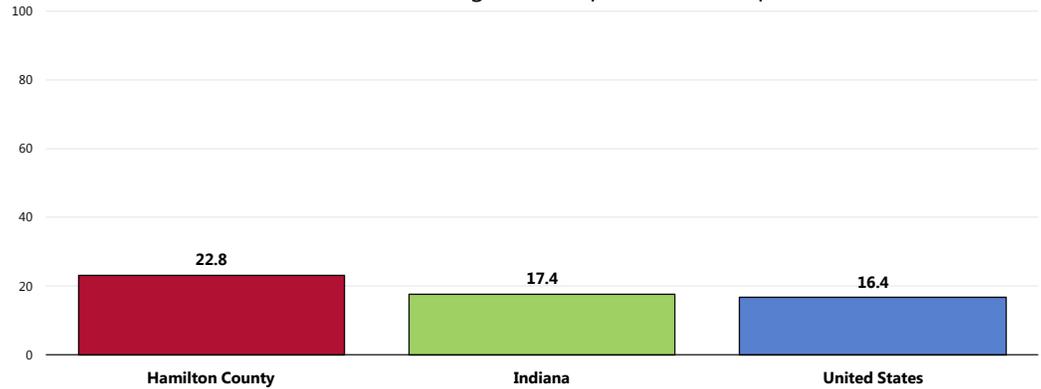
## Pneumonia/Influenza Deaths

For prevalence of vaccinations for pneumonia and influenza, see also "Immunization & Infectious Disease."

Between 2007 and 2009, there was an annual average age-adjusted pneumonia influenza mortality rate of 22.8 deaths per 100,000 population in Hamilton County.

- Less favorable than found statewide.
- Less favorable than the national rate.

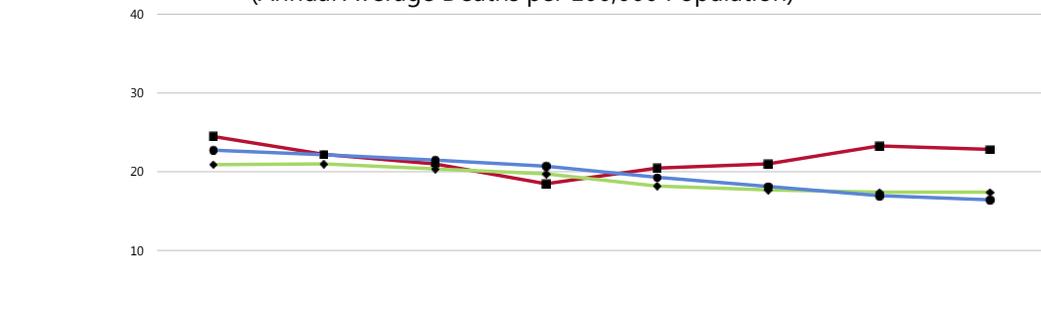
### Pneumonia/Influenza: Age-Adjusted Mortality (2007-2009 Annual Average Deaths per 100,000 Population)



- Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted July 2012.
- 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 U.S. Standard Population.  
• Local, state and national data are simple three-year averages.

Despite declines in the early 2000s, the Hamilton County pneumonia/influenza mortality rate has increased in recent years. Across Indiana and the US overall, rates decreased steadily over the past decade.

### 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 July 2012.
- 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 U.S. Standard Population.  
• State and national data are simple three-year averages.

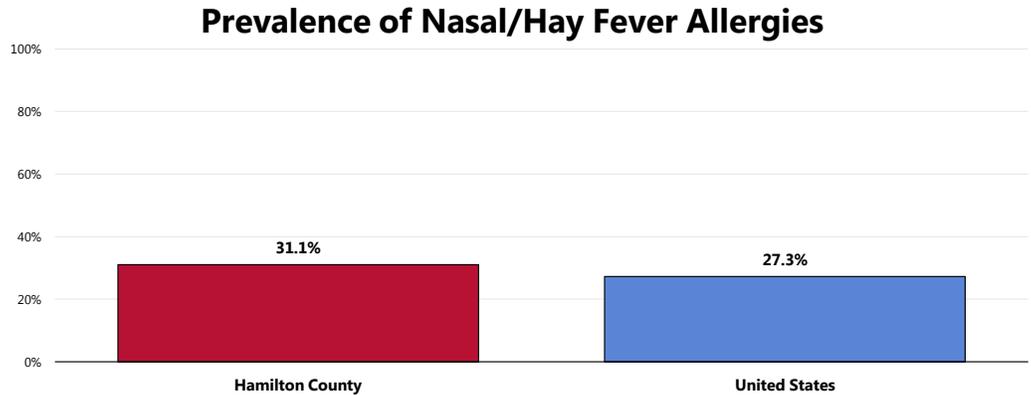
## Prevalence of Respiratory Conditions

### Nasal/Hay Fever Allergies

Survey respondents were next asked to indicate whether they suffer from or have been diagnosed with various respiratory conditions, including asthma, nasal/hay fever allergies, sinusitis, and/or chronic lung disease.

**A total of 31.1% of Hamilton County adults currently suffer from or have been diagnosed with nasal/hay fever allergies.**

- Similar to the national prevalence.



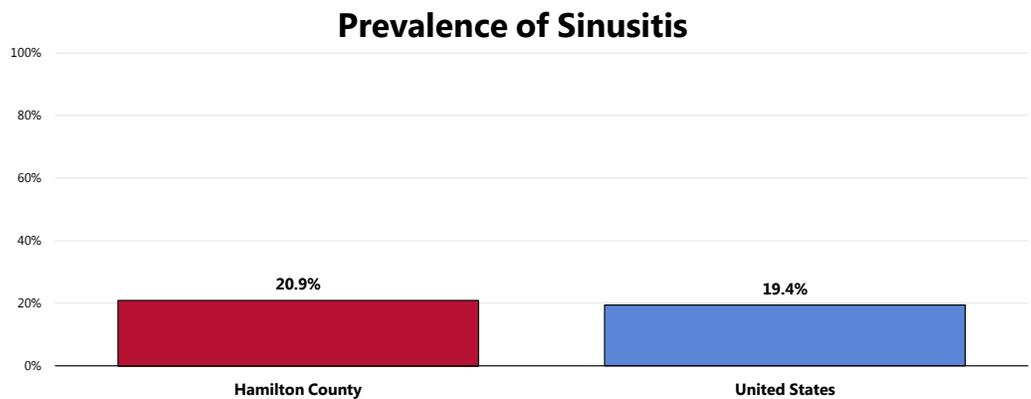
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 35]  
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: • Asked of all respondents.

### Sinusitis

**A total of 20.9% of Hamilton County adults suffer from sinusitis.**

- Similar to the national prevalence.



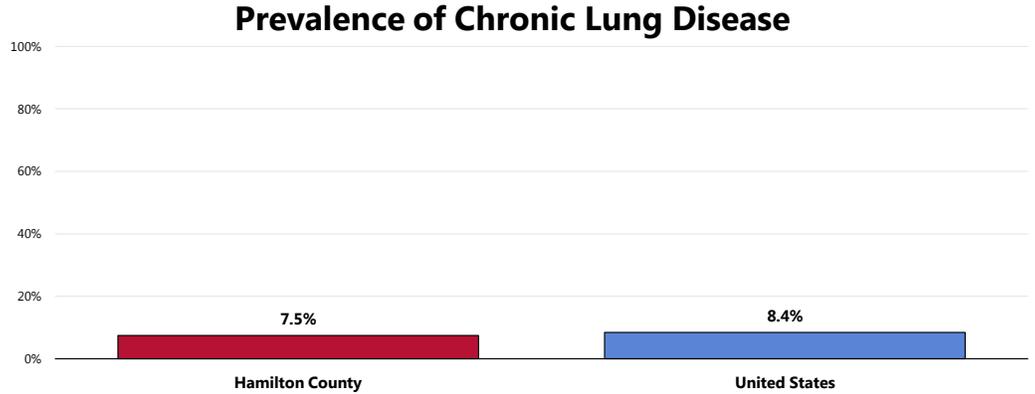
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 34]  
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: • Asked of all respondents.

## Chronic Lung Disease

**A total of 7.5% of Hamilton County adults suffer from chronic lung disease.**

- Comparable to the national chronic lung disease prevalence.



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 25]  
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.

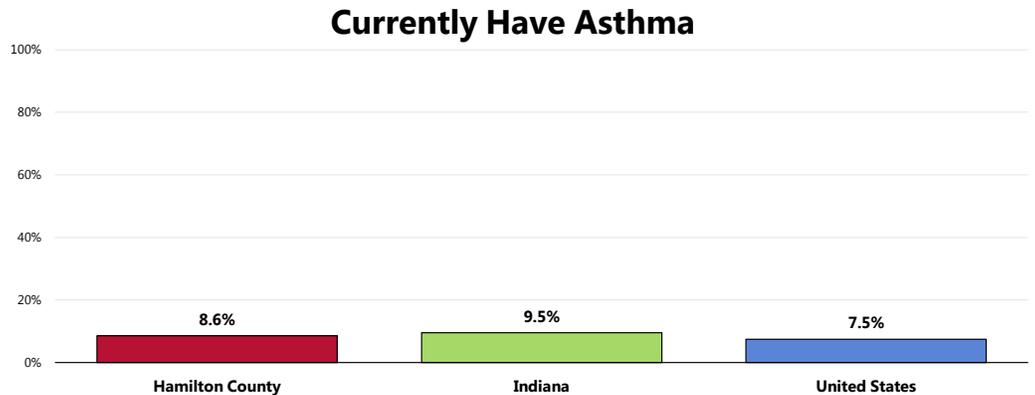
Notes: • Asked of all respondents.

## Asthma

Adults

**A total of 8.6% of Hamilton County adults currently suffer from asthma.**

- Similar to the statewide prevalence.
- Similar to the national prevalence.

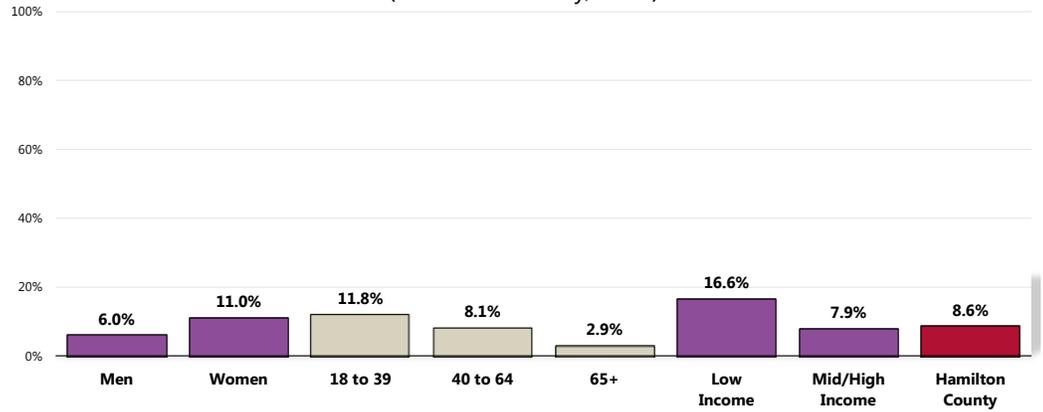


Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 157]  
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
• Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2010 Indiana data.

Notes: • Asked of all respondents.

👤 Young adults (those under 40) are more likely to suffer from asthma.

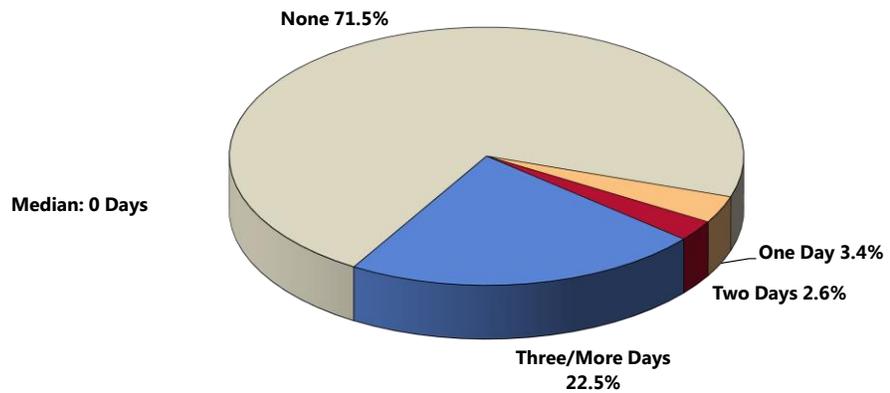
### Currently Have Asthma (Hamilton County, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 157]  
 Notes: • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White 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.

While most (71.5%) respondents with asthma do not report having any days in the past year on which they were unable to work or carry out their usual activities because of their asthma, a total of 22.5% of asthmatics in Hamilton County had 3+ days in the past year on which their activities were affected by their asthma.

### Number of Days in Past Year on Which Asthma Interfered With Work or Usual Activities (Among Hamilton County Adults w/Asthma, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 43]  
 Notes: • Asked of all respondents with asthma.

Children

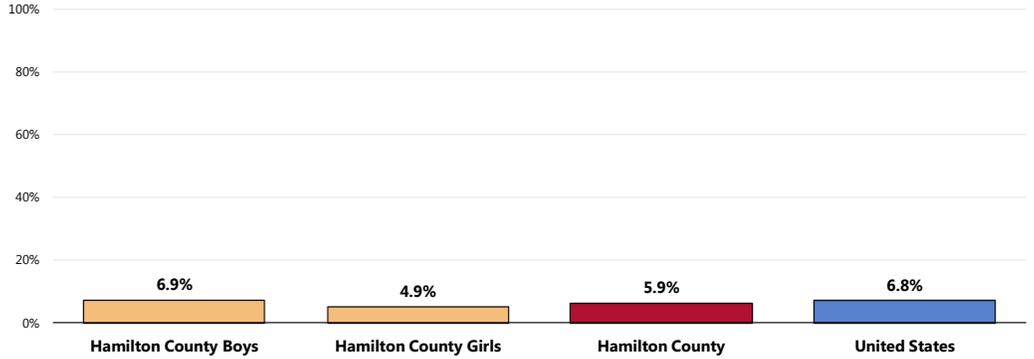
**Among Hamilton County children under age 18, 5.9% currently have asthma.**

- Comparable to the national prevalence.

Viewed by gender, the difference in asthma prevalence is not statistically significant.

**Child Currently Has Asthma**

(Among Parents of Children Age 0-17)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 158]  
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: • Asked of all respondents with children 0 to 17 in the household.

# 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

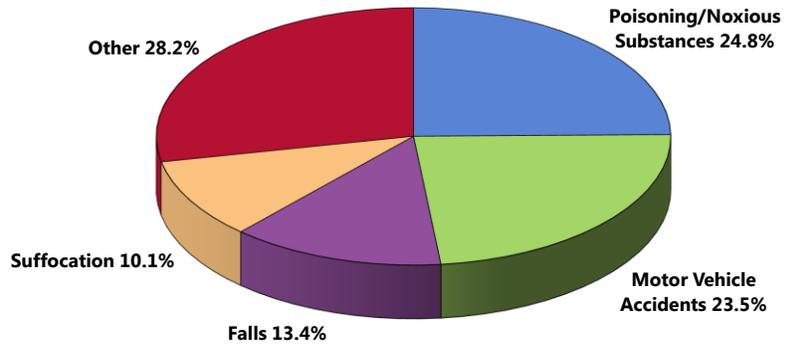
– Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

## Leading Causes of Accidental Death

Poisoning accounted for nearly one in four accidental deaths in Hamilton County between 2007-2009, as did motor vehicle accidents.

### Leading Causes of Accidental Death

(Hamilton County, 2007-2009)



Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted July 2012.

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

## Unintentional Injury

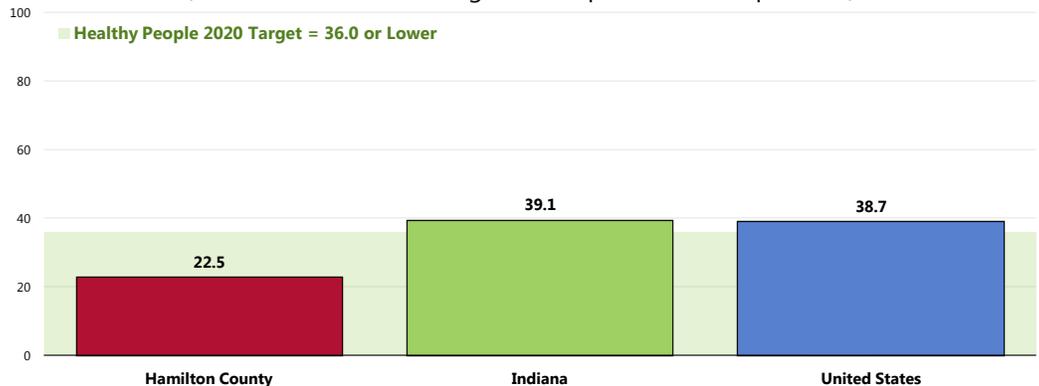
### Age-Adjusted Unintentional Injury Deaths

Between 2007 and 2009, there was an annual average age-adjusted unintentional injury mortality rate of 22.5 deaths per 100,000 population in Hamilton County.

- More favorable than the Indiana rate.
- More favorable than the national rate.
- Satisfies the Healthy People 2020 target (36.0 or lower).

### Unintentional Injuries: Age-Adjusted Mortality

(2007-2009 Annual Average Deaths per 100,000 Population)

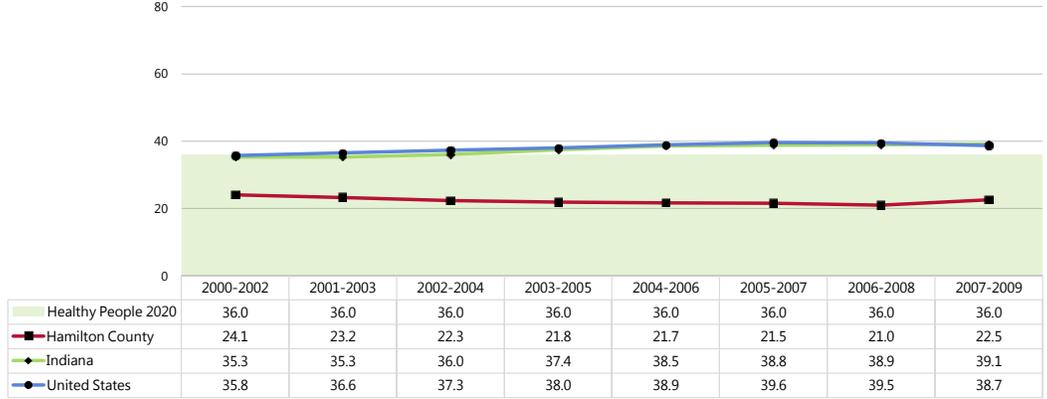


Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted July 2012.

Notes: • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective IVP-11]  
 • Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).  
 • Rates are per 100,000 population, age-adjusted to the 2000 U.S. Standard Population.  
 • Local, state and national data are simple three-year averages.

There is an overall downward trend in the unintentional injury mortality rate in Hamilton County, in contrast to the increasing trends reported in the Indiana and the US overall.

### Unintentional Injuries: 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 July 2012.  
 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 U.S. Standard Population.  
 Local, state and national data are simple three-year averages.

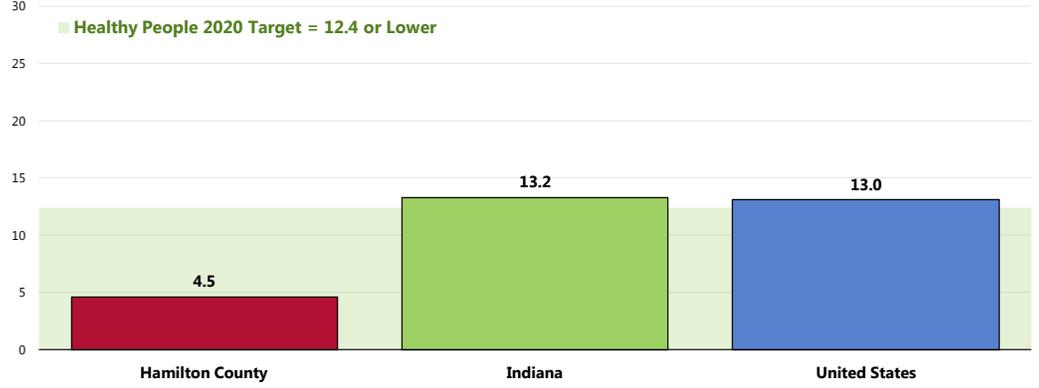
### Motor Vehicle Safety

#### Age-Adjusted Motor-Vehicle Related Deaths

Between 2007 and 2009, there was an annual average age-adjusted motor vehicle crash mortality rate of 4.5 deaths per 100,000 population in Hamilton County.

- Lower than found statewide.
- Lower than found nationally.
- Satisfies the Healthy People 2020 target (12.4 or lower).

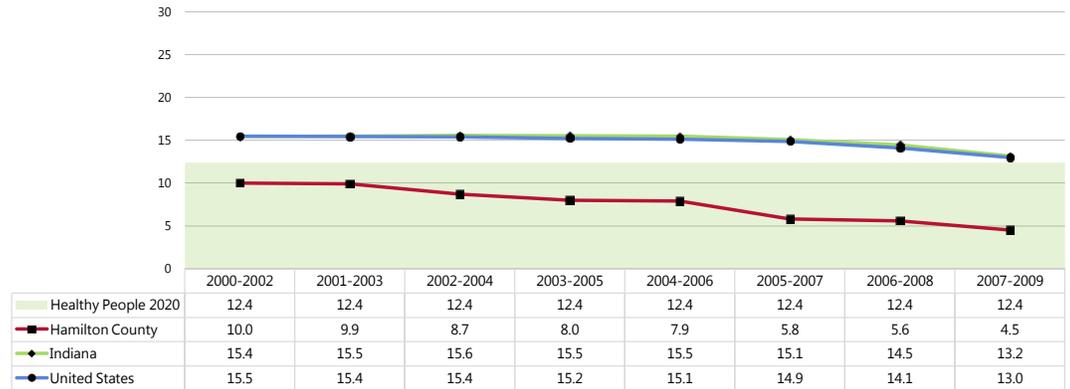
### Motor Vehicle Crashes: Age-Adjusted Mortality (2007-2009 Annual Average Deaths per 100,000 Population)



Sources: CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted July 2012.  
 US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective IVP-13.1]  
 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 U.S. Standard Population.  
 Local, state and national data are simple three-year averages.

 The mortality rate in Hamilton County has decreased over the past decade, echoing the state and US trends.

## Motor Vehicle Crashes: 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 July 2012.
- US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective IVP-13.1]

Notes: 

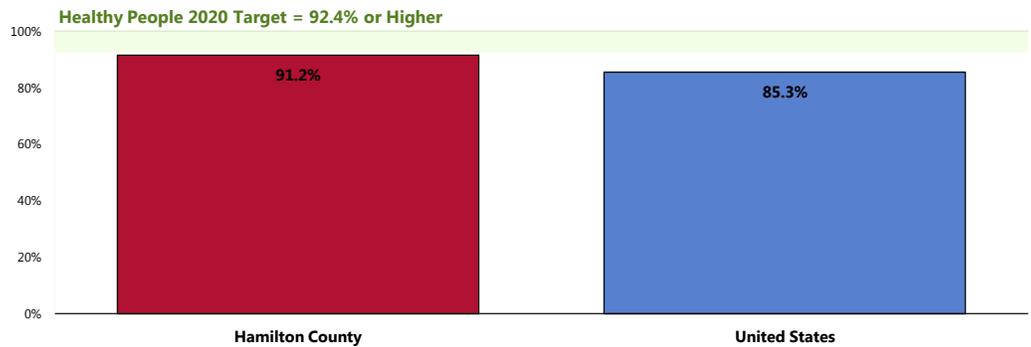
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
- Rates are per 100,000 population, age-adjusted to the 2000 U.S. Standard Population.
- Local, state and national data are simple three-year averages.

### Seat Belt Usage - Adults

**Most Hamilton County adults (91.2%) report “always” wearing a seat belt when driving or riding in a vehicle.**

- More favorable than the percentage found nationally.
- Similar to the Healthy People 2020 target of 92.4% or higher.

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



Sources: 

- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 53]
- 2011 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 IPV-15]

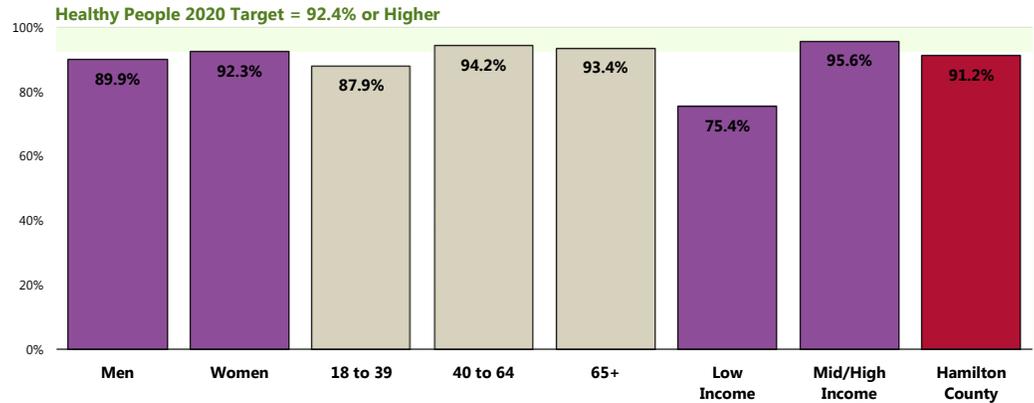
Notes: 

- Asked of all respondents.

👤 The lower-income population segment is much less likely to report consistent seat belt usage.

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

(Hamilton County, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 53]  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective IPV-15]

Notes: • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White 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.

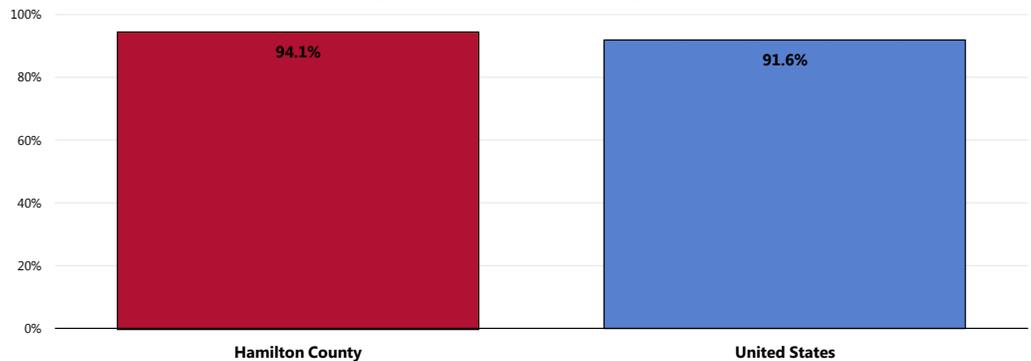
### Seat Belt Usage - Children

**A full 94.1% of Hamilton County parents report that their child (age 0 to 17) “always” wears a seat belt (or appropriate car seat for younger children) when riding in a vehicle.**

- Statistically similar to what is found nationally.

## Child “Always” Wears a Seat Belt or Appropriate Restraint When Riding in a Vehicle

(Among Parents of Children Age 0-17)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 137, 161-162]  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.

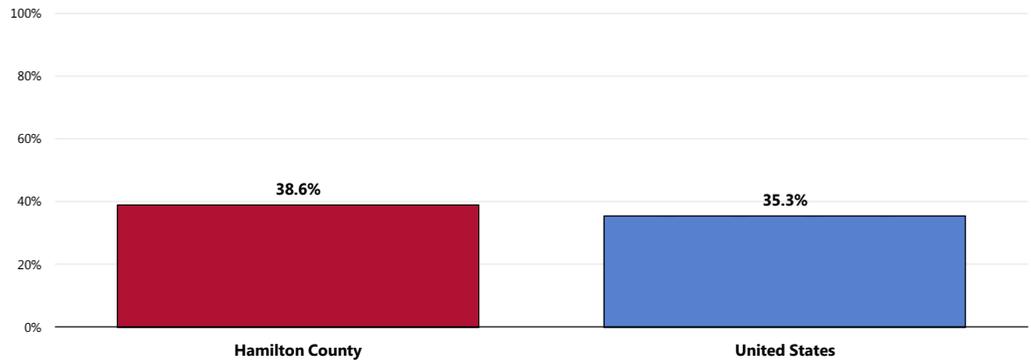
Notes: • Asked of all respondents with children 0 to 17 in the household.

## Bicycle Safety

Nearly 4 in 10 Hamilton County children age 5 to 17 (38.6%) are reported to “always” wear a helmet when riding a bicycle.

- Comparable to the national prevalence.

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



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 142]  
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: • Asked of all respondents with children age 5 to 17 at home.

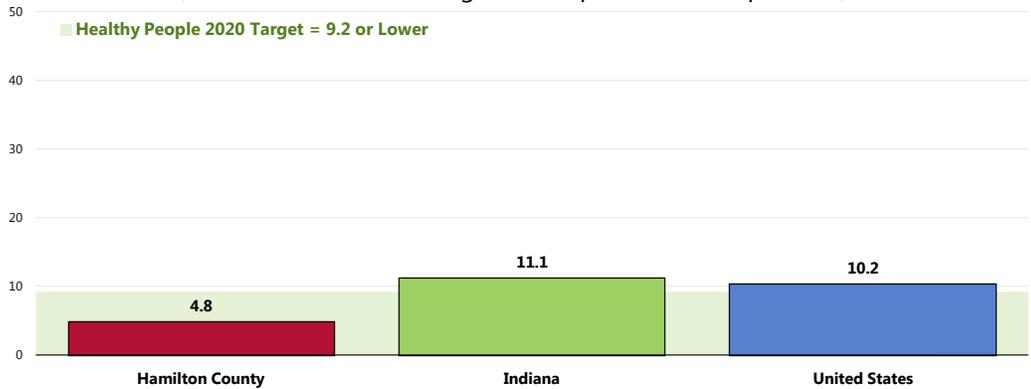
## Firearm Safety

### Age-Adjusted Firearm-Related Deaths

Between 2007 and 2009, there was an annual average age-adjusted rate of 4.8 deaths per 100,000 population due to firearms in Hamilton County.

- Much lower than found statewide.
- Much lower than found nationally.
- Satisfies the Healthy People 2020 objective (9.2 or lower).

### Firearms-Related Deaths: Age-Adjusted Mortality (2007-2009 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 July 2012.

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

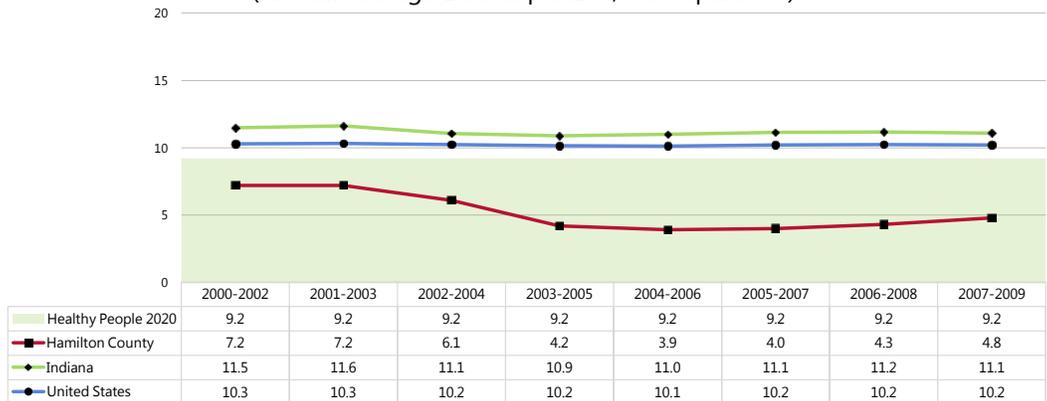
Notes: • Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).

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

• Local, state and national data are simple three-year averages.

- ☒ The mortality rate in Hamilton County decreased in the past decade, while state and national rates were more static.

### Firearms-Related Deaths: 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 July 2012.
- 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.
- Local, state and national data are simple three-year averages.

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

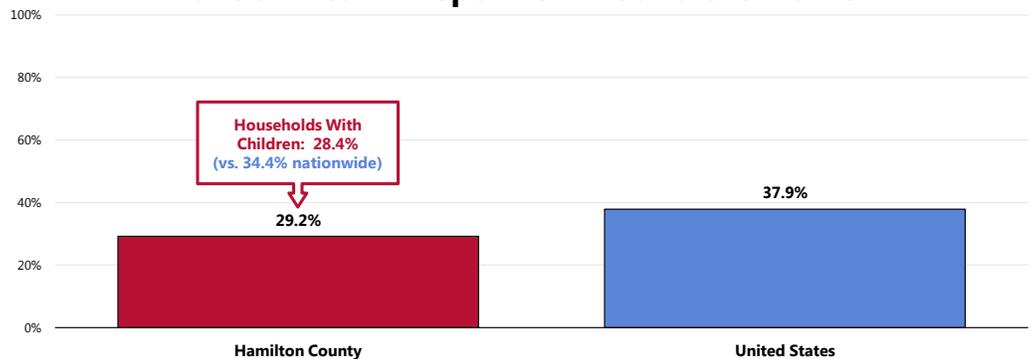
*“Are there any firearms now kept in or around your home, including those kept in a garage, outdoor storage area, truck, or car? For the purposes of this inquiry, ‘firearms’ include pistols, shotguns, rifles, and other types of guns, but do NOT include starter pistols, BB guns, or guns that cannot fire.”*

#### Presence of Firearms in Homes

**Overall, 29.2% of county residents have a firearm kept in or around their home.**

- Lower than the national prevalence.
- ☒ Among Hamilton County households with children, 28.4% have a firearm kept in or around the house (similar to that reported nationally).

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



Sources:
 

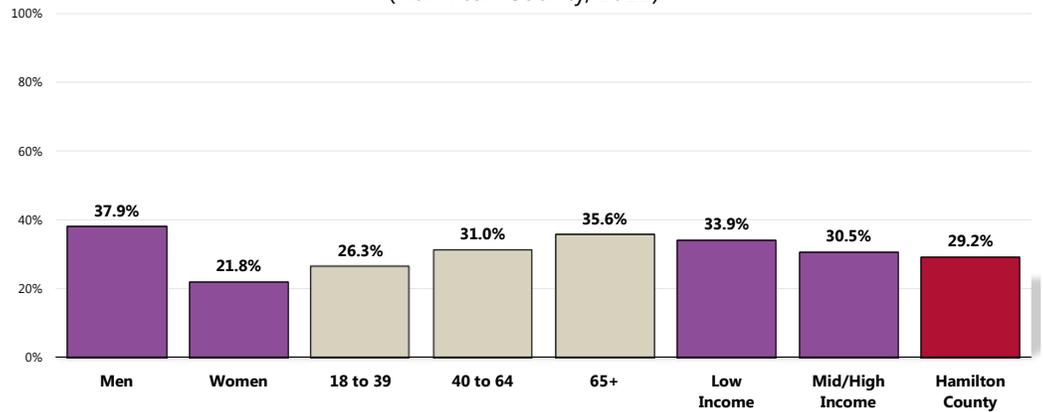
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 57, 159]
- 2011 PRC National Health Survey, Professional Research Consultants, Inc.

 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.

👤 Reports of firearms in or around the home are more prevalent among men.

### Have a Firearm Kept in or Around the House (Hamilton County, 2012)

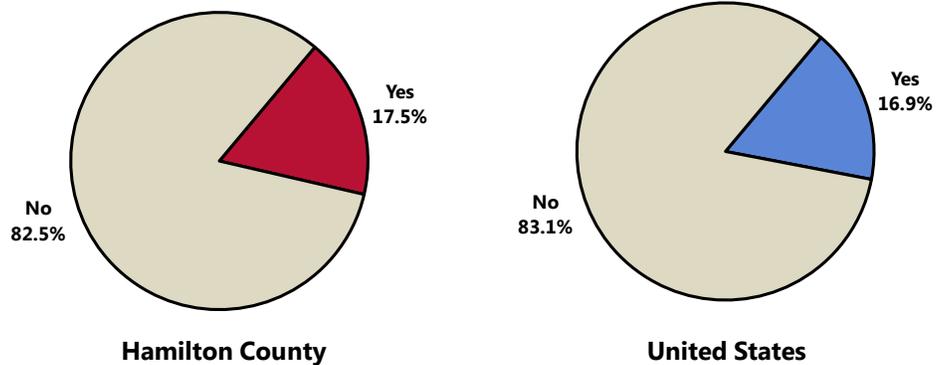


Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 57]  
 Notes: • Asked of all respondents.  
 • In this case, firearms include pistols, shotguns, rifles, and other types of guns; this does not include starter pistols, BB guns, or guns that cannot fire.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White 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 Hamilton County households with firearms, 17.5% report that there is at least one weapon that is kept unlocked and loaded.

- Statistically similar to that found nationally.

### Household Has An Unlocked, Loaded Firearm (Among Respondents Reporting a Firearm in or Around the Home)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 160]  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of all respondents with a firearm in or around the home.  
 • 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.

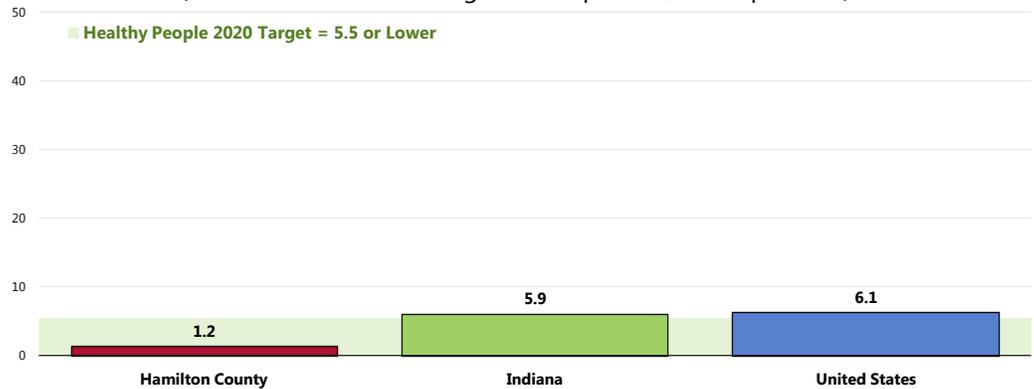
## Intentional Injury (Violence)

### Age-Adjusted Homicide Deaths

Between 2007 and 2009, there was an annual average age-adjusted homicide rate of 1.2 deaths per 100,000 population in Hamilton County.

- Much more favorable than the rate found statewide.
- Much more favorable than the national rate.
- Satisfies the Healthy People 2020 target of 5.5 or lower.

### Homicide: Age-Adjusted Mortality (2007-2009 Annual Average Deaths per 100,000 Population)



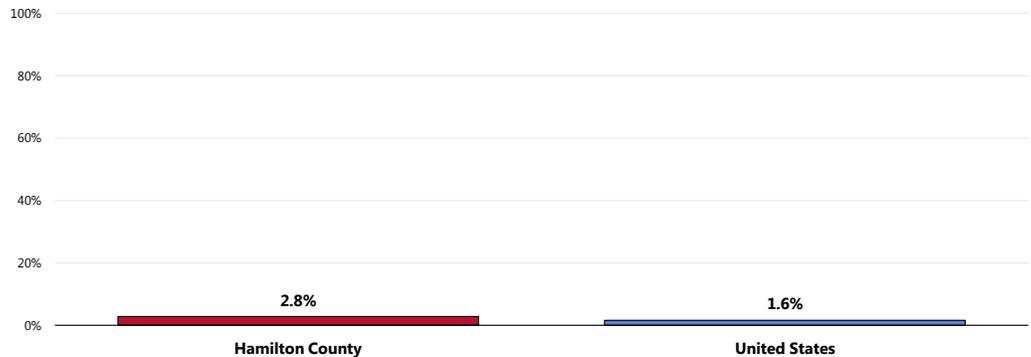
Sources: ● CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted July 2012.  
● US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective IPV-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 U.S. Standard Population.  
● Local, state and national data are simple three-year averages.

### Self-Reported Violence

A total of 2.8% of Hamilton County adults acknowledge being the victim of a violent crime in the past five years.

- Statistically similar to national findings.

### Victim of a Violent Crime in the Past Five Years

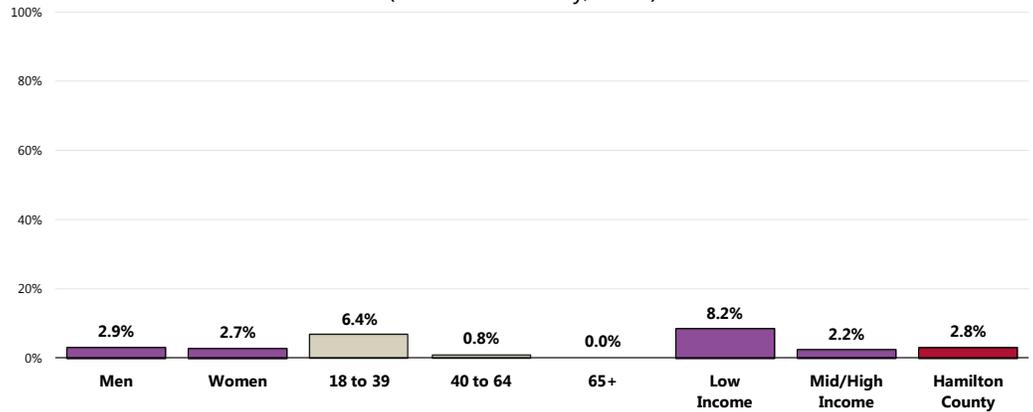


Sources: ● 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 54]  
● 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
Notes: ● Asked of all respondents.

RELATED ISSUE:  
See also *Suicide* in the **Mental Health & Mental Disorders** section of this report.

👥 No statistical difference when viewed by demographic characteristics.

## Victim of a Violent Crime in the Past Five Years (Hamilton County, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 54]

Notes: • Asked of all respondents.

• Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White 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.

## Self-Reported Family Violence

Respondents were told:

*"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."*

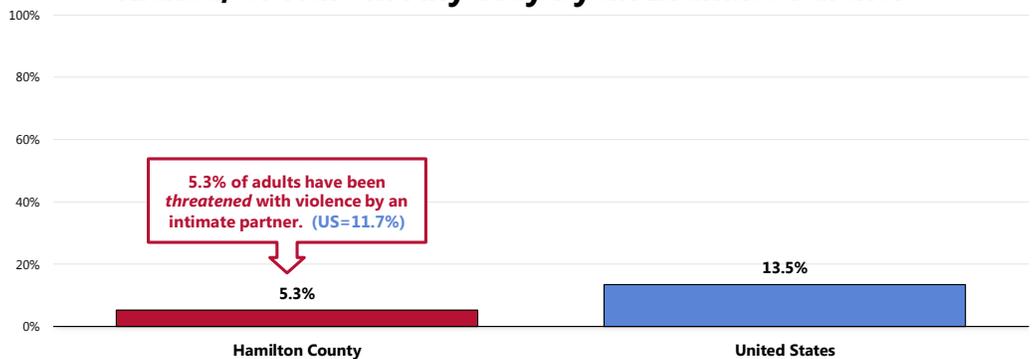
**A total of 5.3% of Hamilton County adults report that they have ever been threatened with physical violence by an intimate partner.**

- More favorable than that reported nationally.

**A total of 5.3% of respondents acknowledge that they have ever been hit, slapped, pushed, kicked, or otherwise hurt by an intimate partner.**

- More favorable than national findings.

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



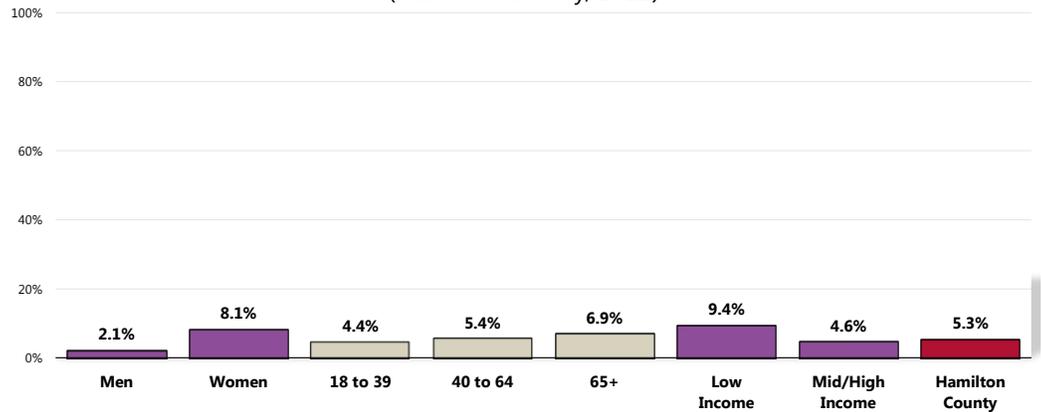
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 55-56]

• 2011 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: • Asked of all respondents.

👥 Reports of domestic violence are also notably higher among women.

## Have Ever Been Hit, Slapped, Pushed, Kicked, or Hurt in Any Way by an Intimate Partner (Hamilton County, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 55]  
 Notes: • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White 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.

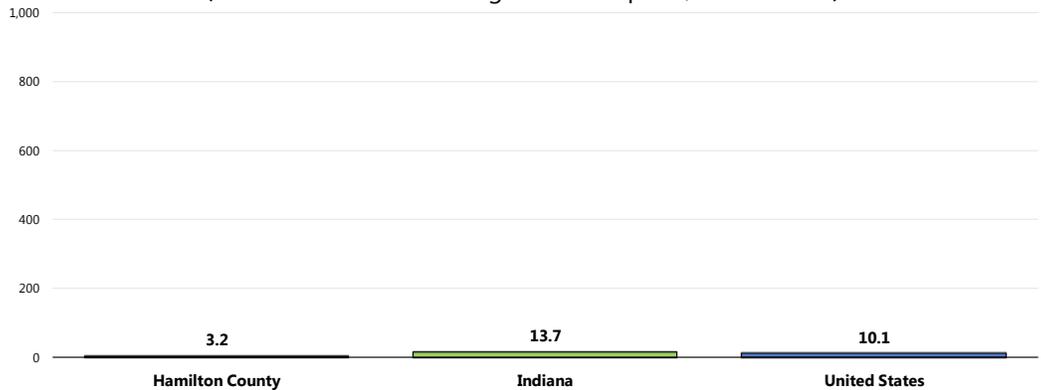
### Child Abuse Rates

**Between 2008 and 2010, there was an annual average child abuse offense rate of 3.2 offenses per 1,000 children in Hamilton County.**

- Lower than the Indiana rate for the same period.
- Lower than the national rate for the same period.

### Reported Child Abuse Rates

(2008-2010 Annual Average Offenses per 1,000 Children)

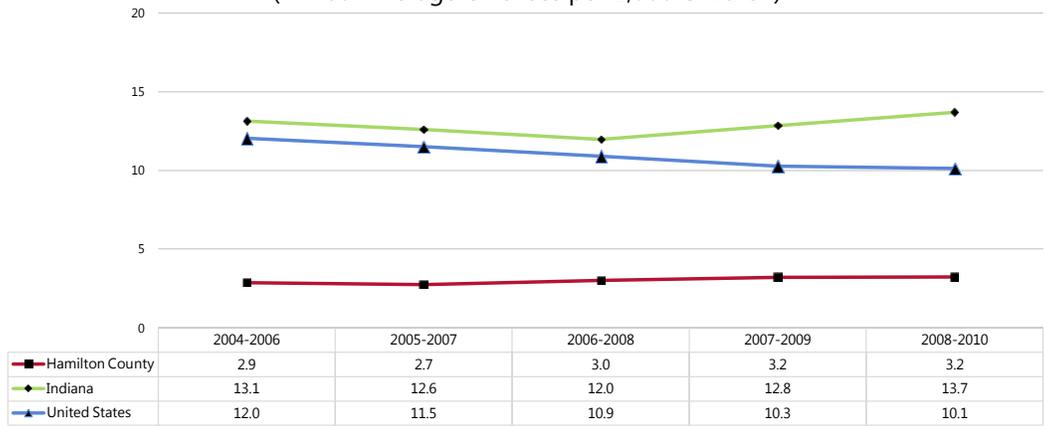


Sources: • State of the Young Hoosier Child reports.  
 • Administration for Children and Families, National Child Abuse and Neglect Data System.  
 Notes: • Rates are reports of child abuse per 1,000 children.

Keep in mind that these data only reflect those incidents reported to law enforcement.

- ☒ The reported child abuse rate has increased over time, but has been consistently below state and national rates.

### Reported Child Abuse Rates (Annual Average Offenses per 1,000 Children)



Sources: • State of the Young Hoosier Child reports.  
Notes: • Rates are reports of child abuse per 1,000 children.

### Related Focus Group Findings: Violence

The subject of violence in the community arose during the focus group discussion, with primary concerns including:

- Domestic violence and sexual assault
- Mental and physical health impact
- Prevention messaging

Participants expressed concern about the level of **domestic violence and sexual assault** occurring in the community, with a limited number of domestic violence shelters existing in Hamilton County. In a positive note, attendees perceive there to be a conversation (education) occurring about domestic violence within the community. On the other hand, the community does not have many resources or prevention messaging in place for the problem of sexual assault, as a participant describes:

*“It (domestic violence) is happening in our neighborhoods. It’s our friends. It’s our neighbors. With the resources available, at least it is being talked about more. Sexual assault is a whole other issue. The population is much larger than what we’re serving. It’s in their households. It’s their own family. It’s there, so I believe that our resources need to become larger and we need to really collaborate in serving. It’s a vicious cycle, and really, it’s an epidemic, and it’s a health issue.” — Focus Group Participant*

Focus group members agree that violence **impacts both mental and physical health**. The mental health repercussions of trauma are countless and can wreak havoc on families. In addition, participants believe that trauma can manifest as an illness or act as a contributor to future chronic disease. Practitioners need to ask every patient if they have ever experienced trauma, and to follow up accordingly. One participant explains that individuals may struggle to address the issue without prompting from a professional:

*"If you don't ask, you don't find out, and it's important that physicians, nurse practitioners, whoever is taking care of individuals, need to ask questions. A woman comes into the emergency room with heart palpitations, maybe no bruises, no external bruises, but there could have been an event, and if she's not asked, she's not going to tell."— Focus Group Participant*

- Attendees believe that agencies need to work on breaking the cycle of violence that occurs in the community. **Prevention messaging** can begin to alter the cycle, but must begin early and take place in schools for both youth and parents. Focus group members recognize that many things can act as barriers to receiving this education, including transportation, time, and the stigma surrounding violence or trauma.

# 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. However, almost 25% of Americans with diabetes mellitus are undiagnosed, and another 57 million Americans have blood glucose levels that greatly increase their risk of developing diabetes mellitus in the next several years. Few people receive effective preventative care, which makes diabetes mellitus an immense and complex public health challenge.

Diabetes mellitus affects an estimated 23.6 million people in the United States and is the 7th leading cause of death. 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.

In addition to these human costs, the estimated total financial cost of diabetes mellitus in the US in 2007 was \$174 billion, which includes the costs of medical care, disability, and premature death.

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.

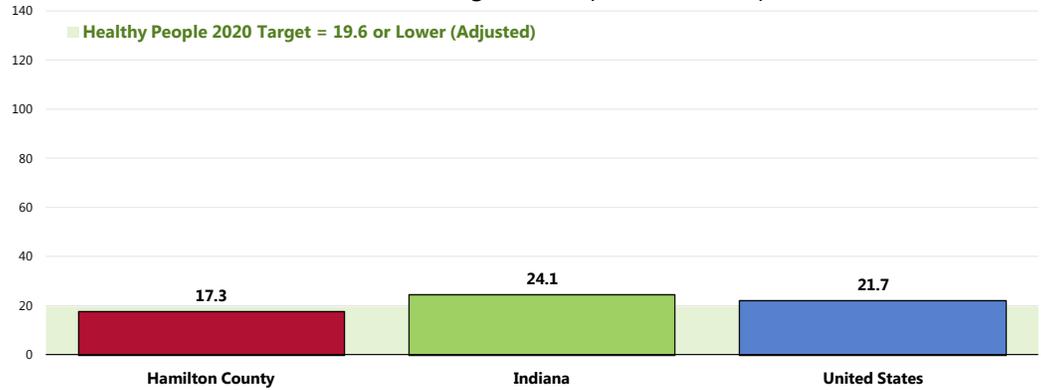
– Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

## Age-Adjusted Diabetes Deaths

**Between 2007 and 2009, there was an annual average age-adjusted diabetes mortality rate of 17.3 deaths per 100,000 population in Hamilton County.**

- More favorable than that found statewide.
- More favorable than the national rate.
- Satisfies the Healthy People 2020 target (19.6 or lower).

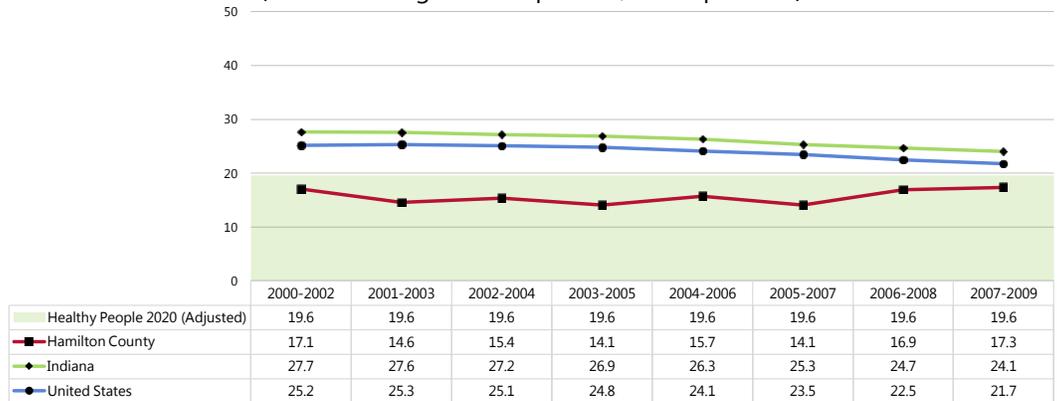
## Diabetes: Age-Adjusted Mortality (2007-2009 Annual Average Deaths per 100,000 Population)



- Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted July 2012.
  - 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 U.S. Standard Population.
  - Local, state and national data are simple three-year averages.
  - The Healthy People 2020 target for Diabetes is adjusted to account for only diabetes mellitus coded deaths.

☒ No clear diabetes mortality trend is apparent in Hamilton County. Across Indiana and the US overall, death rates have decreased during the past decade.

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



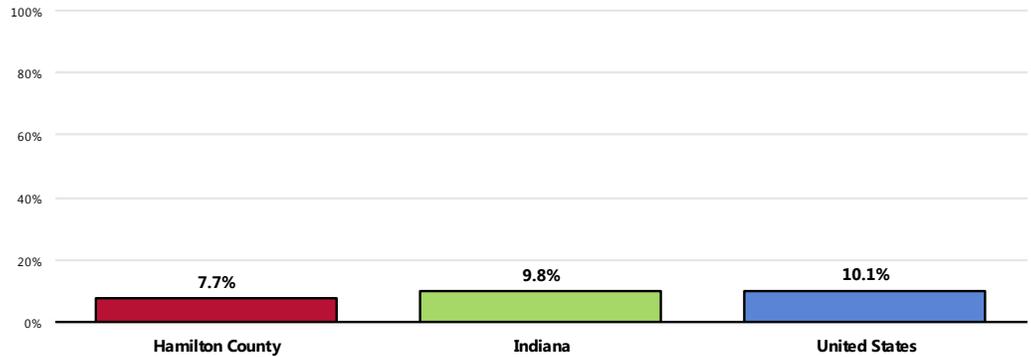
- Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted July 2012.
  - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [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 U.S. Standard Population.
  - Local, state and national data are simple three-year averages.
  - The Healthy People 2020 target for Diabetes is adjusted to account for only diabetes mellitus coded deaths.

## Prevalence of Diabetes

**A total of 7.7% of Hamilton County adults report having been diagnosed with diabetes.**

- Similar to the proportion statewide.
- Similar to the national proportion.

### Prevalence of Diabetes



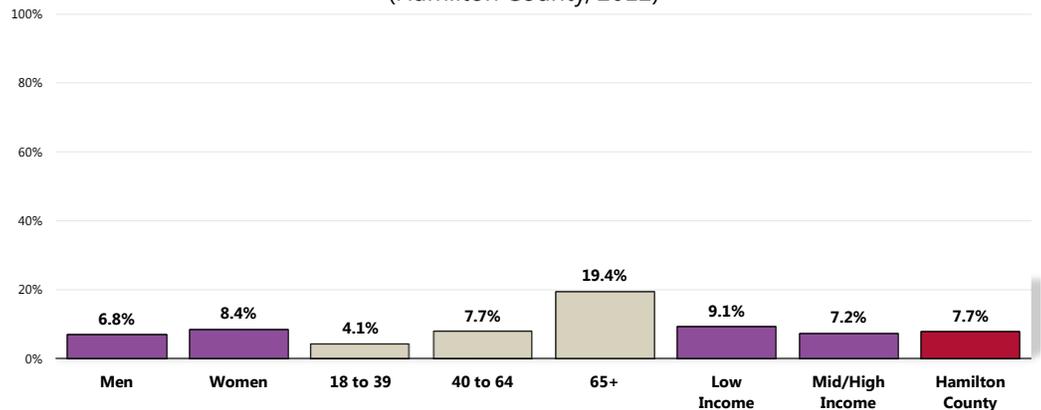
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 44]  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
 • Behavioral Risk Factor Surveillance System Survey Data, Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC):2010 Indiana data.

Notes: • Asked of all respondents.  
 • Local and national data exclude gestation diabetes (occurring only during pregnancy).

Note the positive correlation between diabetes and age in the county, with 19.4% of seniors with diabetes.

### Prevalence of Diabetes

(Hamilton County, 2012)

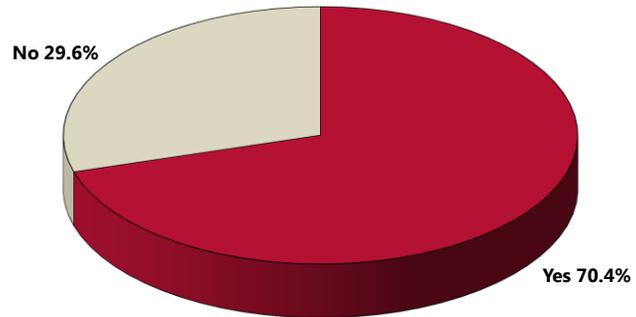


Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 44]  
 Notes: • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
 • Income categories 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 gestation diabetes (occurring only during pregnancy).

## Diabetes Treatment

Among adults with diabetes, most (70.4%) are currently taking insulin or some type of medication to manage their condition.

### Taking Insulin or Other Medication for Diabetes (Among Hamilton County Diabetics)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 45]  
Notes: • Asked of all diabetic respondents.

# Alzheimer's Disease

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.

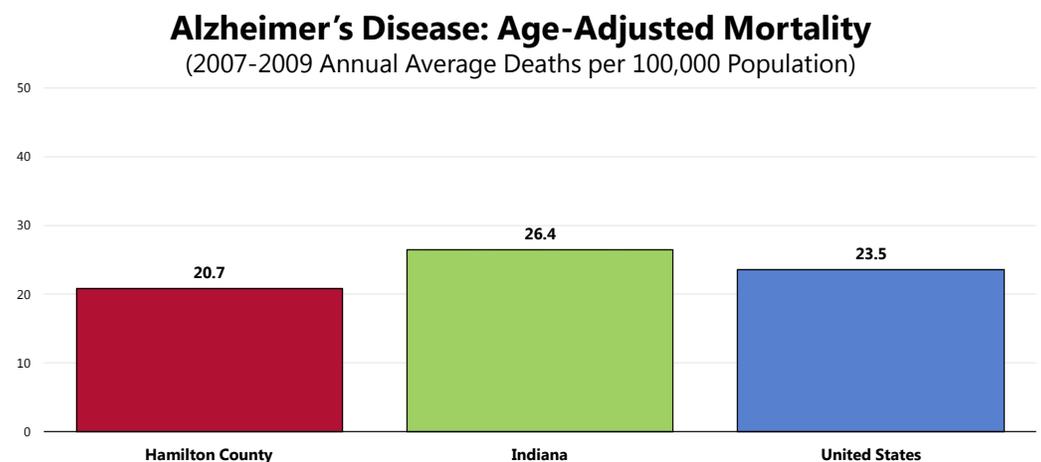
Alzheimer's disease is the 6<sup>th</sup> leading cause of death among adults age 18 years and older. Estimates vary, but experts suggest that up to 5.1 million Americans age 65 years and older have Alzheimer's disease. These numbers are predicted to more than double by 2050 unless more effective ways 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 2007 and 2009, there was an annual average age-adjusted Alzheimer's disease mortality rate of 20.7 deaths per 100,000 population in Hamilton County.**

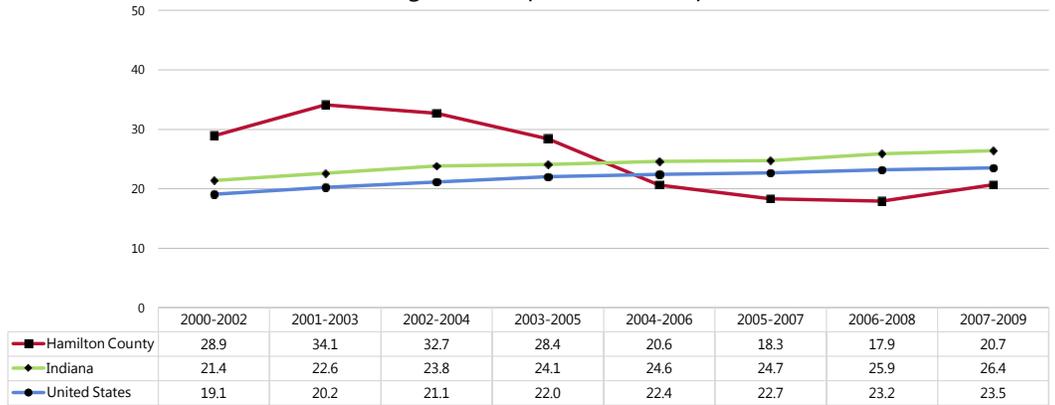
- More favorable than the statewide rate.
- More favorable than the national rate.



- Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted July 2012.
- 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 U.S. Standard Population.
  - Local, state and national data are simple three-year averages.

Alzheimer's mortality has decreased in Hamilton County over the past decade. In contrast, rates have increased steadily across Indiana and the US overall.

### 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 July 2012.

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 U.S. Standard Population.

# 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.

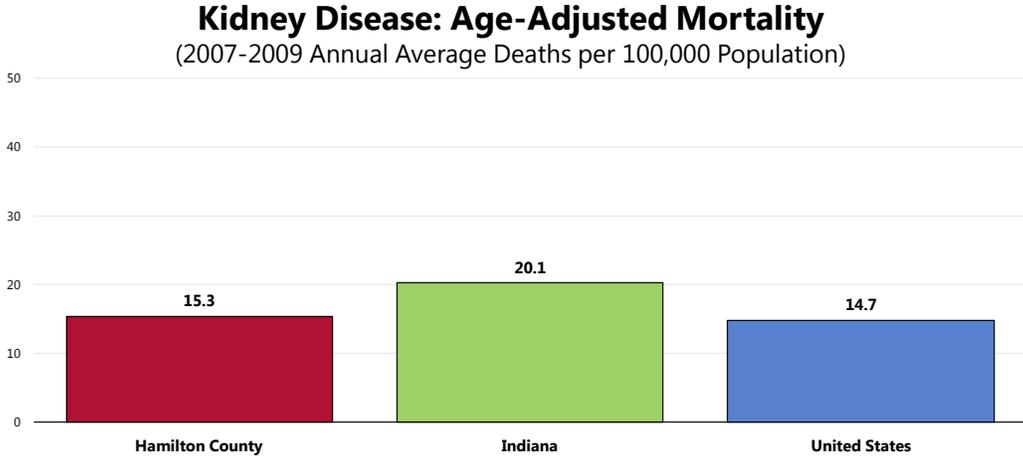
Diabetes is the most common cause of kidney failure. The results of the Diabetes Prevention Program (DPP) funded by the national Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) show that moderate exercise, a healthier diet, and weight reduction can prevent development of type 2 diabetes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

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

## Age-Adjusted Kidney Disease Deaths

**Between 2007 and 2009 there was an annual average age-adjusted kidney disease mortality rate of 15.3 deaths per 100,000 population in Hamilton County.**

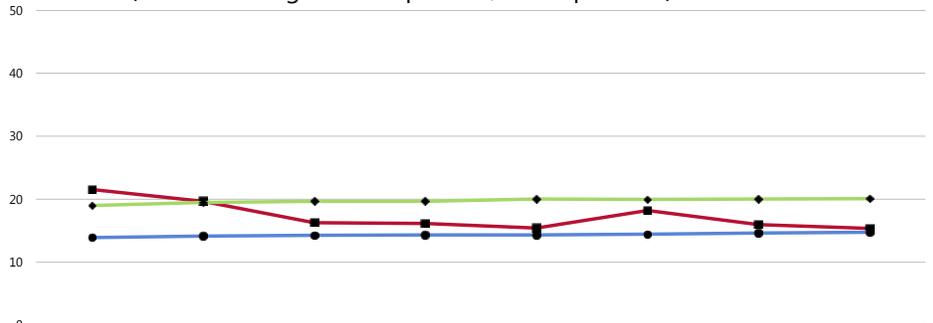
- Lower than the rate found statewide.
- Comparable to the national rate.



Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted July 2012.  
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 U.S. Standard Population.  
• Local, state and national data are simple three-year averages.

- ☒ Kidney disease mortality has generally decreased in Hamilton County over the past decade; across Indiana and the US, mortality increased slightly during this time.

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



	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009
■ Hamilton County	21.5	19.7	16.2	16.2	15.4	18.2	15.9	15.3
◆ Indiana	19.0	19.5	19.6	19.6	20.0	20.0	20.0	20.1
● United States	13.9	14.2	14.3	14.3	14.3	14.4	14.6	14.7

- Sources: ● CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted July 2012.
- 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 U.S. Standard Population.  
 ● State and national data are simple three-year averages.

# Potentially Disabling 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))

## RELATED ISSUE:

See also *Activity Limitations* in the **General Health Status** section of this report.

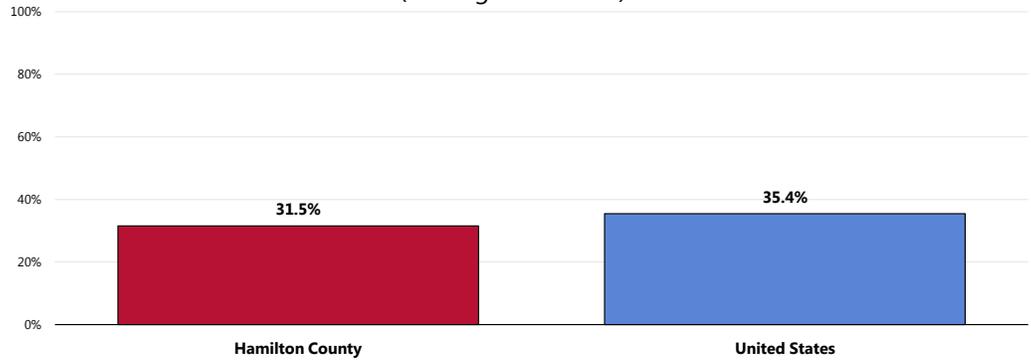
## Arthritis, Osteoporosis, & Chronic Pain

### Prevalence of Arthritis/Rheumatism

**More than 3 in 10 Hamilton County adults age 50 and older (31.5%) report suffering from arthritis or rheumatism.**

- Comparable to that found nationwide.

## Prevalence of Arthritis/Rheumatism (Among Adults 50+)



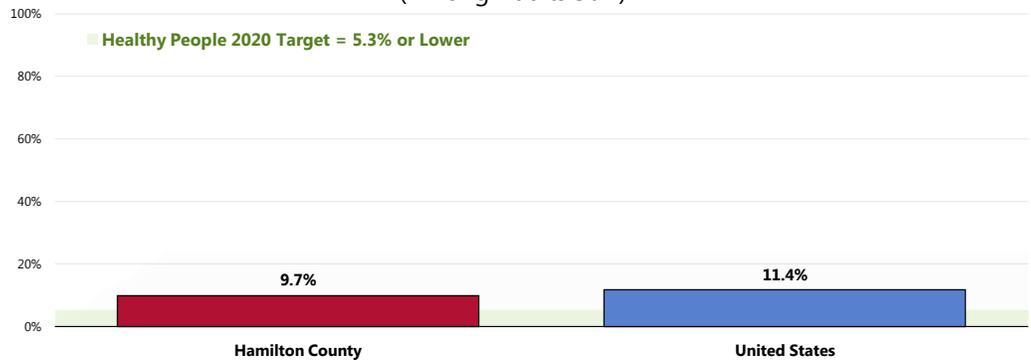
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 163]  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Reflects respondents 50 and older.

## Prevalence of Osteoporosis

**A total of 9.7% of survey respondents age 50 and older have osteoporosis.**

- Similar to that found nationwide.
- Fails to satisfy the Healthy People 2020 target of 5.3% or lower.

## Prevalence of Osteoporosis (Among Adults 50+)

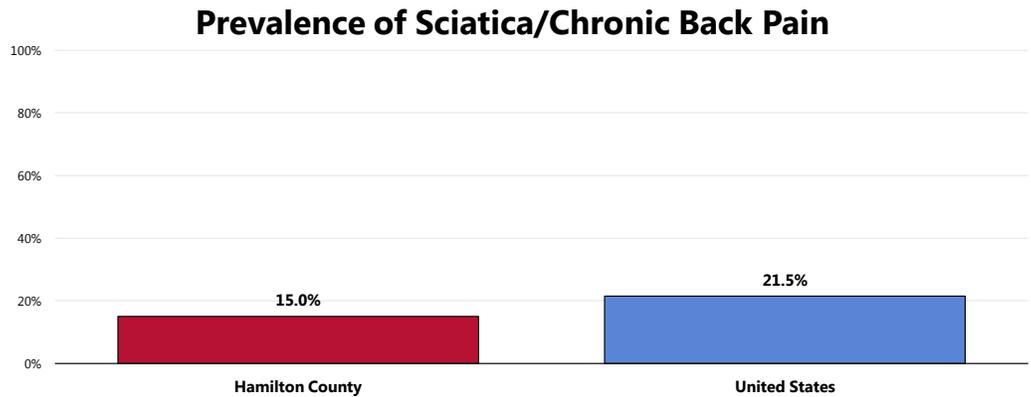


Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 164]  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective AOCBC-10]  
 Notes: • Reflects respondents 50 and older.

## Prevalence of Sciatica/Chronic Back Pain

**A total of 15.0% of survey respondents suffer from chronic back pain or sciatica.**

- More favorable than that found nationwide.

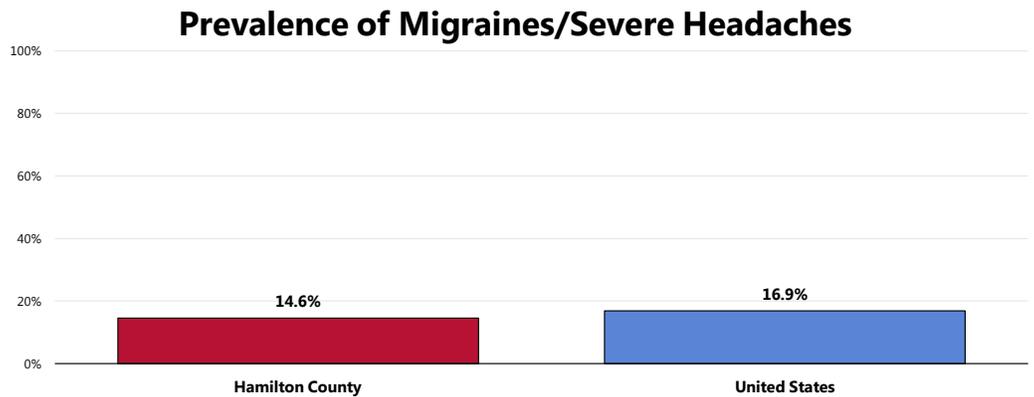


Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 29]  
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
Notes: • Asked of all respondents.

## Prevalence of Migraines/Severe Headaches

**A total of 14.6% of survey respondents report suffering from migraines or severe headaches.**

- Similar to that found nationwide.

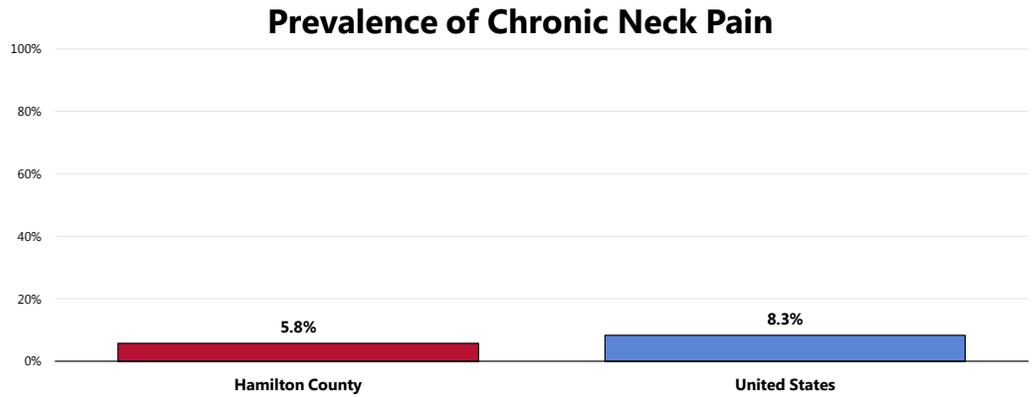


Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 36]  
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
Notes: • Asked of all respondents.

## Prevalence of Chronic Neck Pain

**A total of 5.8% of survey respondents currently suffer from chronic neck pain.**

- Comparable to the national prevalence of chronic neck pain.



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 37]  
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: • Asked of all respondents.

## Vision & Hearing Impairment

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.

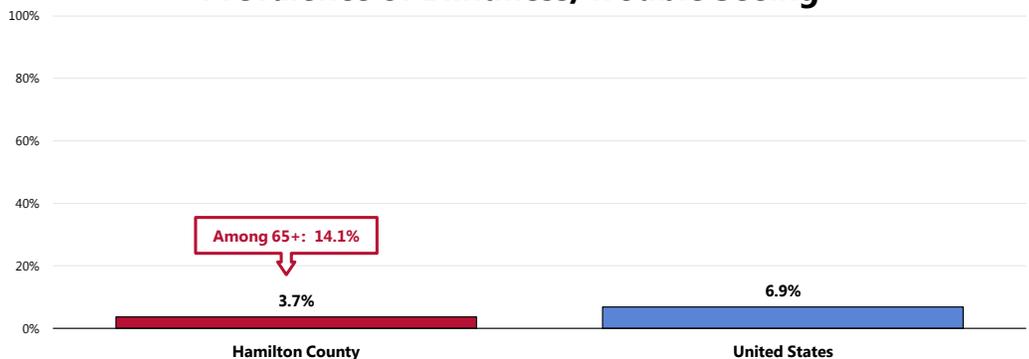
– Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

### Vision Trouble

**A total of 3.7% of Hamilton County adults are blind, or have trouble seeing even when wearing corrective lenses.**

- More favorable than found nationwide.
- 👥 Among Hamilton County adults age 65 and older, 14.1% have vision trouble.

### Prevalence of Blindness/Trouble Seeing



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 26]  
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: • Asked of all respondents.

RELATED ISSUE:  
See also *Vision Care* in  
the **Access to Health  
Services** section of this  
report.

## Hearing Trouble

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.

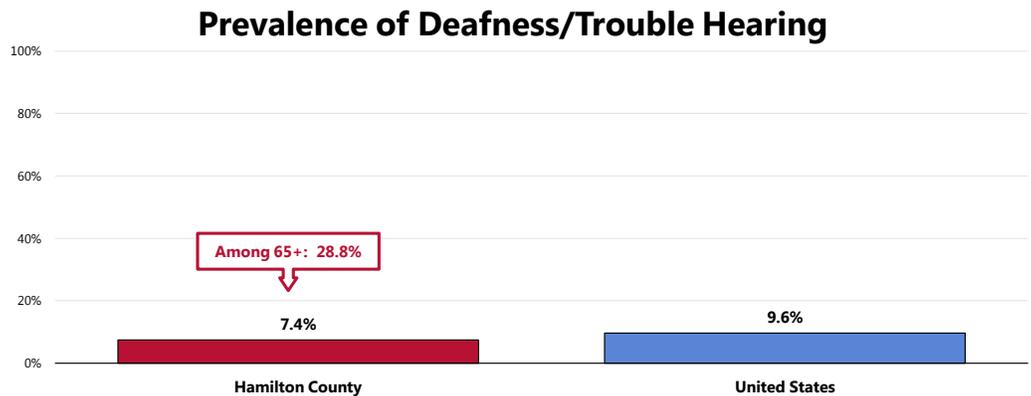
Many factors influence the numbers of Americans who are diagnosed and treated for hearing and other sensory or communication disorders, such as social determinants (social and economic standings, age of diagnosis, cost and stigma of wearing a hearing aid, and unhealthy lifestyle choices). In addition, 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))

### In all, 7.4% of Hamilton County adults report being deaf or having difficulty hearing.

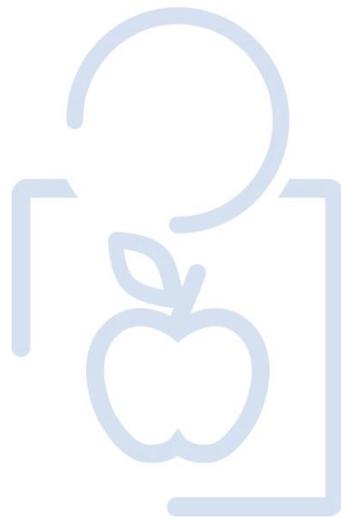
- Similar to that found nationwide.
- 👥 Among Hamilton County adults age 65 and older, 28.8% have partial or complete hearing loss.



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 27]  
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: • Asked of all respondents.

# INFECTIOUS DISEASE



# Hepatitis C

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

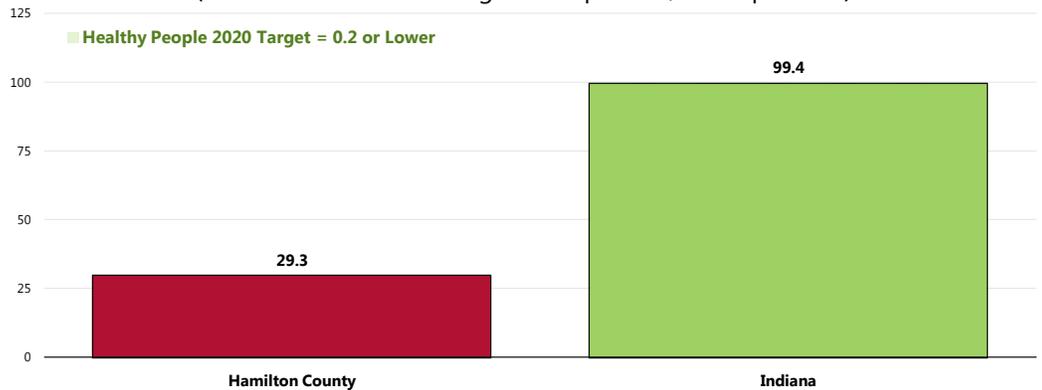
It is usually expressed as cases per 100,000 population per year.

## Acute Hepatitis C

**Hamilton County experienced an incidence rate 29.3 cases of hepatitis C (both acute and chronic) per 100,000 population between 2008 and 2010.**

- Much lower than the statewide rate.
- Far from satisfying the Healthy People 2020 target of 0.2 or lower.

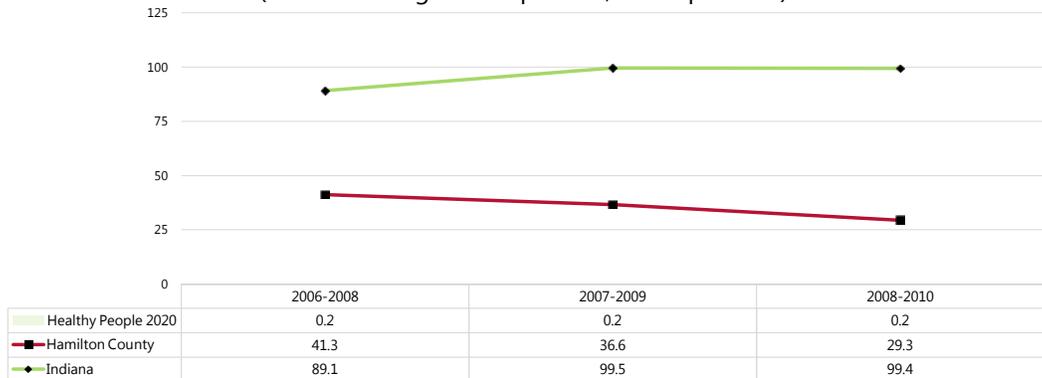
### Hepatitis C (Acute + Chronic) Incidence (2008-2010 Annual Average Cases per 100,000 Population)



Sources: • Indiana State Department of Health.  
• US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective IID-26]  
Notes: • Rates are annual average new cases per 100,000 population.  
• Includes all cases (acute and chronic) that are suspected, probable or confirmed.

☒ Incidence has decreased in Hamilton County in recent years.

### Hepatitis C (Acute + Chronic) Incidence (Annual Average Cases per 100,000 Population)



Sources: • Indiana State Department of Health.  
• US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective IID-26]  
Notes: • Rates are annual average new cases per 100,000 population.  
• Includes all cases (acute and chronic) that are suspected, probable or confirmed.

# Influenza & Pneumonia Vaccination

Acute respiratory infections, including pneumonia and influenza, are the 8th leading cause of death in the nation, accounting for 56,000 deaths annually. Pneumonia mortality in children fell by 97% in the last century, but respiratory infectious diseases continue to be leading causes of pediatric hospitalization and outpatient visits in the US. On average, influenza leads to more than 200,000 hospitalizations and 36,000 deaths each year. The 2009 H1N1 influenza pandemic caused an estimated 270,000 hospitalizations and 12,270 deaths (1,270 of which were of people younger than age 18) between April 2009 and March 2010.

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

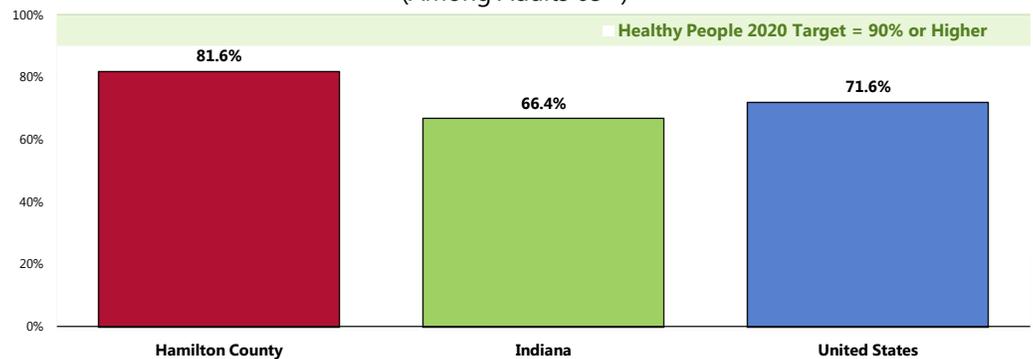
## Flu Vaccinations

FluMist® is a vaccine that is sprayed into the nose to help protect against influenza; it is an alternative to traditional flu shots.

**Among Hamilton County seniors, 81.6% received a flu shot (or FluMist®) within the past year.**

- More favorable than the Indiana finding.
- Statistically similar to the national finding.
- Similar to the Healthy People 2020 target (90% or higher).

### Have Had a Flu Vaccination in the Past Year (Among Adults 65+)



- Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 165]
  - 2011 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): 2010 Indiana data.
  - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective IID-12.7]
- Notes:
- Reflects respondents 65 and older.
  - Includes FluMist as a form of vaccination.

## High-Risk Adults

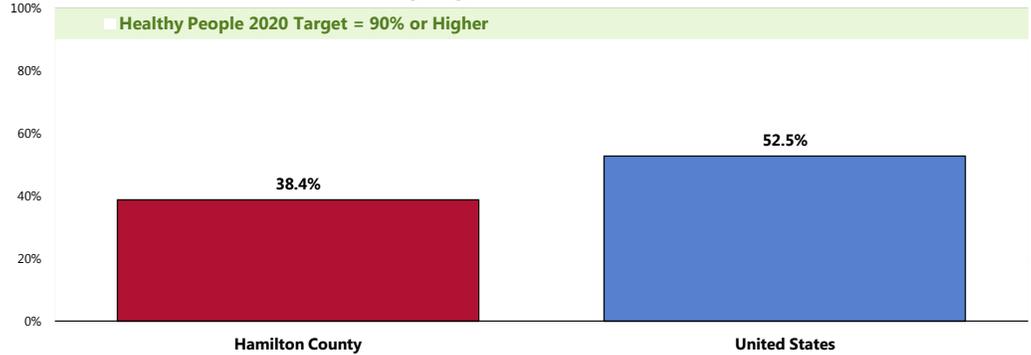
“High-risk” includes adults who report having been diagnosed with heart disease, diabetes or respiratory disease.

**A total of 38.4% of high-risk adults age 18 to 64 received a flu vaccination (flu shot or FluMist®) within the past year.**

- Much lower than national findings.
- Far from satisfying the Healthy People 2020 target (90% or higher).

### Have Had a Flu Vaccination in the Past Year

(Among High-Risk Adults 18-64)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 166]  
• 2011 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 IID-12.6]  
Notes: • Reflects high-risk respondents age 18-64.  
• Includes FluMist as a form of vaccination.

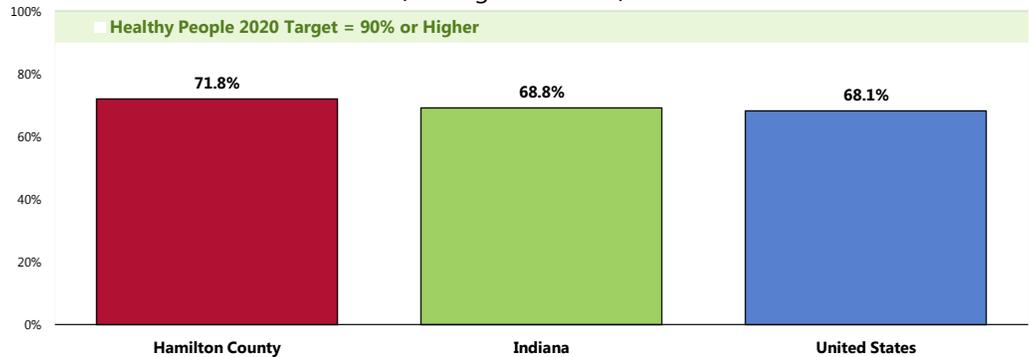
## Pneumonia Vaccination

**Among adults age 65 and older, 71.8% have received a pneumonia vaccination at some point in their lives.**

- Similar to the Indiana finding.
- Similar to the national finding.
- Fails to satisfy the Healthy People 2020 target of 90% or higher.

### Have Ever Had a Pneumonia Vaccine

(Among Adults 65+)



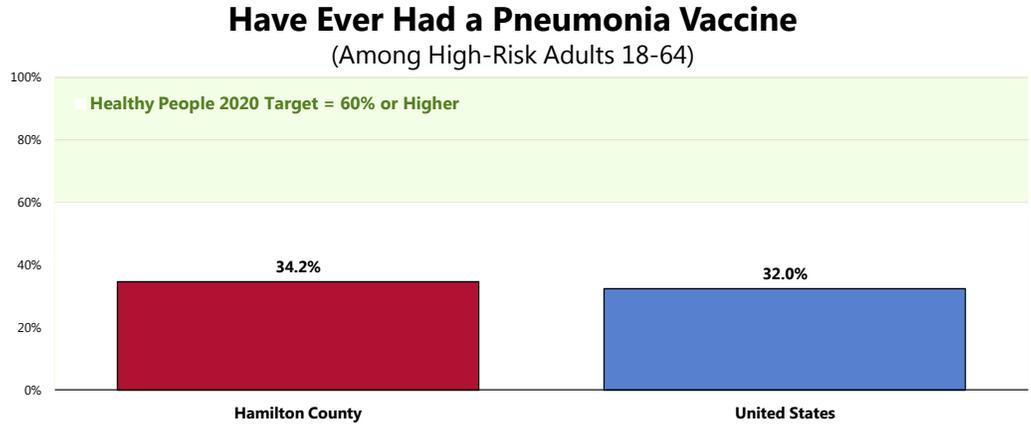
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 167]  
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
• Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2010 Indiana data.  
• US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective IID-13.1]  
Notes: • Reflects respondents 65 and older.

## High-Risk Adults

“High-risk” includes adults who report having been diagnosed with heart disease, diabetes or respiratory disease.

**A total of 34.2% of high-risk adults age 18 to 64 have ever received a pneumonia vaccination.**

- Similar to the national percentage.
- Fails to satisfy the Healthy People 2020 target (60% or higher).



- Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 168]
  - 2011 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 IID-13.2]
- Notes:
- Asked of all high-risk respondents under 65.
  - “High-Risk” includes adults age 18 to 64 who have been diagnosed with heart disease, diabetes or respiratory disease.

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.

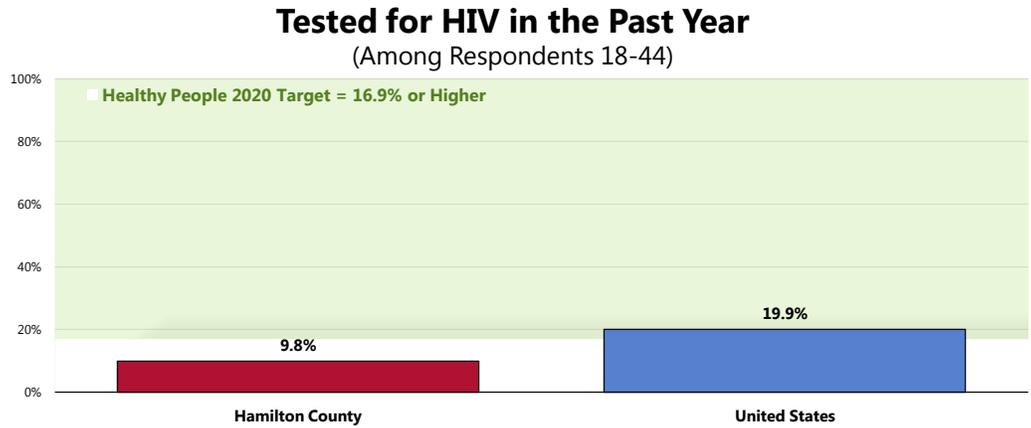
Public perception in the US about the seriousness of the HIV epidemic has declined in recent years. There is evidence that risky behaviors may be increasing among uninfected people, especially gay and bisexual men. Ongoing media and social campaigns for the general public and HIV prevention interventions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

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

## HIV Testing

**Among Hamilton County adults age 18-44, 9.8% report that they have been tested for human immunodeficiency virus (HIV) in the past year.**

- Half the proportion found nationwide.
- Fails to satisfy the Healthy People 2020 target of 16.9% or higher.



- Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 171]
  - 2011 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 HIV-14.1]
- Notes:
- Reflects respondents age 18 to 44.
  - Note that the Healthy People 2020 objective is for ages 15-44.

# Sexually Transmitted Diseases

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

The Centers for Disease Control and Prevention (CDC) estimates that there are approximately 19 million new STD infections each year—almost half of them among young people ages 15 to 24. 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. CDC estimates that undiagnosed and untreated STDs cause at least 24,000 women in the United States each year to become infertile. 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 the influence of these factors. Social, economic, and behavioral factors that affect the spread of STDs include:

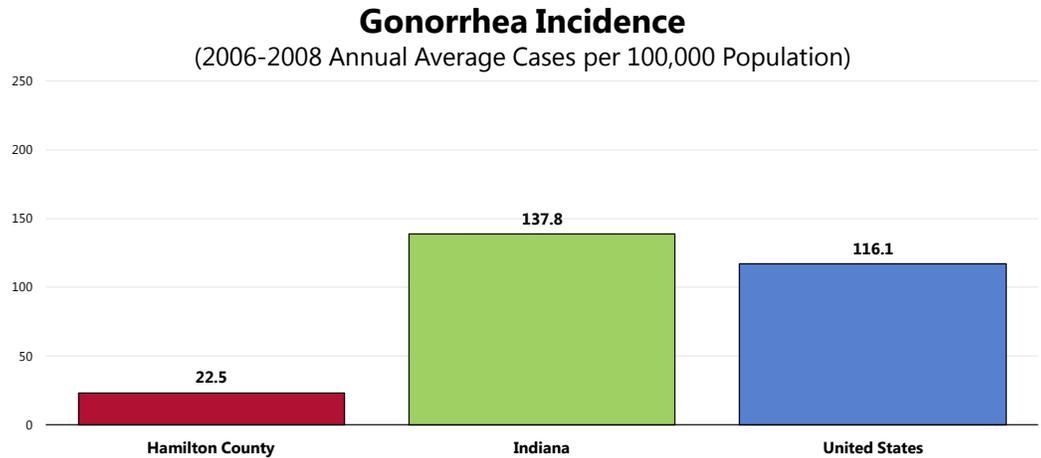
- **Racial and ethnic disparities.** Certain racial and ethnic groups (mainly African American, Hispanic, and American Indian/Alaska Native populations) have high rates of STDs, compared with rates for whites.
- **Poverty and marginalization.** STDs disproportionately affect disenfranchised people and people in social networks where high-risk sexual behavior is common, and either access to care or health-seeking behavior is compromised.
- **Access to health care.** Access to high-quality health care is essential for early detection, treatment, and behavior-change counseling for STDs. Groups with the highest rates of STDs are often the same groups for whom access to or use of health services is most limited.
- **Substance abuse.** Many studies document the association of substance abuse with STDs. The introduction of new illicit substances into communities often can alter sexual behavior drastically in high-risk sexual networks, leading to the epidemic spread of STDs.
- **Sexuality and secrecy.** Perhaps the most important social factors contributing to the spread of STDs in the United States are the stigma associated with STDs and the general discomfort of discussing intimate aspects of life, especially those related to sex. These social factors separate the United States from industrialized countries with low rates of STDs.
- **Sexual networks.** Sexual networks refer to groups of people who can be considered “linked” by sequential or concurrent sexual partners. A person may have only 1 sex partner, but if that partner is a member of a risky sexual network, then the person is at higher risk for STDs than a similar individual from a nonrisky network.

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

## Gonorrhea

Between 2006 and 2008, the annual average gonorrhea incidence rate was 22.5 cases per 100,000 population in Hamilton County.

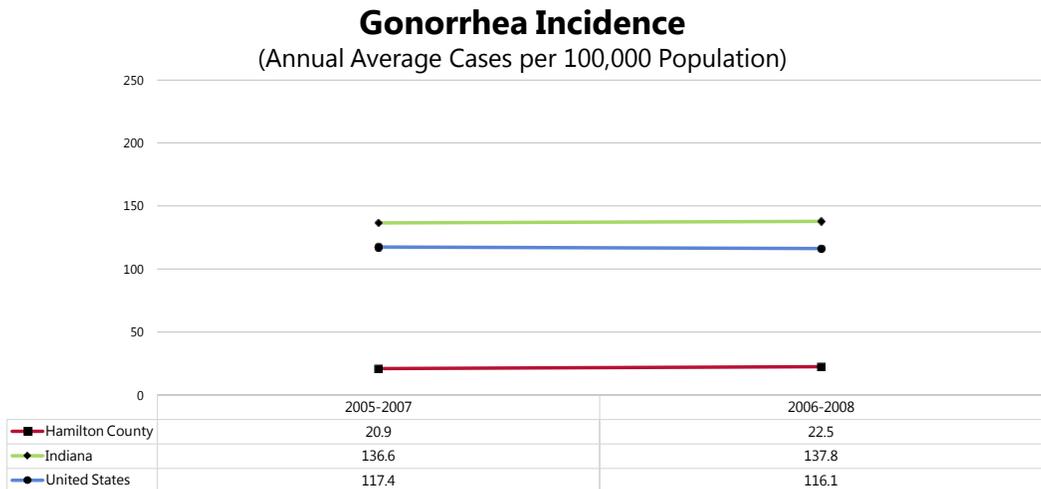
- Notably lower than the Indiana incidence rate.
- Notably lower than the national incidence rate.



Sources: ● Indiana State Department of Health.  
● Centers for Disease Control and Prevention, National Center for Health Statistics.

Notes: ● Rates are annual average new cases per 100,000 population.

- ☒ The county's gonorrhea rate increased slightly between the 2005-2007 and 2006-2008 reporting periods in Hamilton County.



Sources: ● Indiana State Department of Health.  
● Centers for Disease Control and Prevention, National Center for Health Statistics.

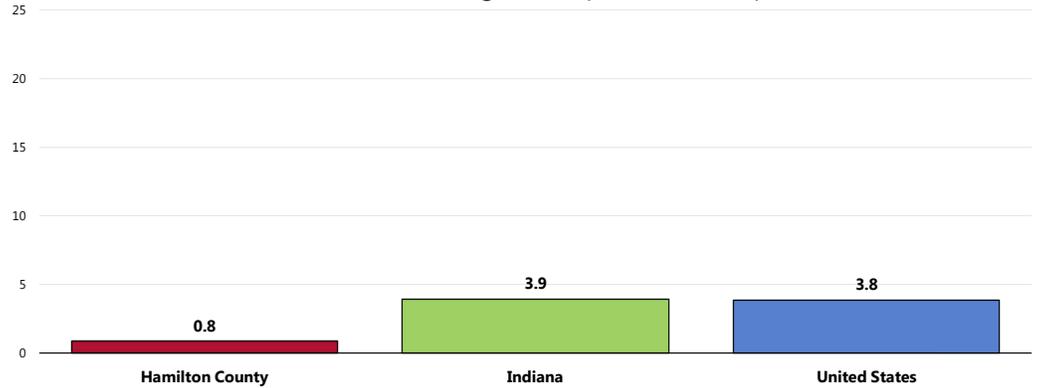
Notes: ● Rates are annual average new cases per 100,000 population.

# Syphilis

Between 2006 and 2008, the annual average primary/secondary syphilis incidence rate was 0.8 cases per 100,000 population in Hamilton County.

- Better than the Indiana incidence rate.
- Better than the national incidence rate.

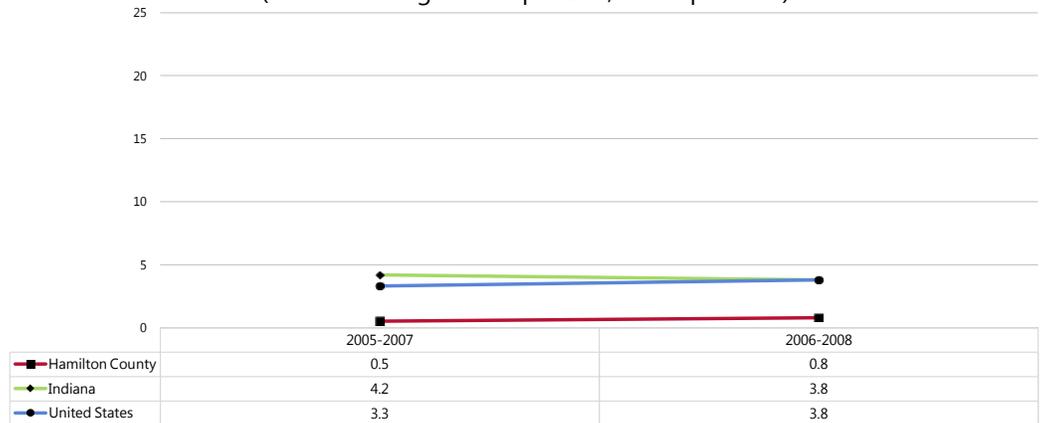
## Primary/Secondary Syphilis Incidence (2006-2008 Annual Average Cases per 100,000 Population)



Sources: • Indiana State Department of Health.  
• Centers for Disease Control and Prevention, National Center for Health Statistics.  
Notes: • Rates are annual average new cases per 100,000 population.

☒ Syphilis incidence increased slightly in Hamilton County between the 2005-2007 and 2006-2008 reporting periods.

## Primary/Secondary Syphilis Incidence (Annual Average Cases per 100,000 Population)

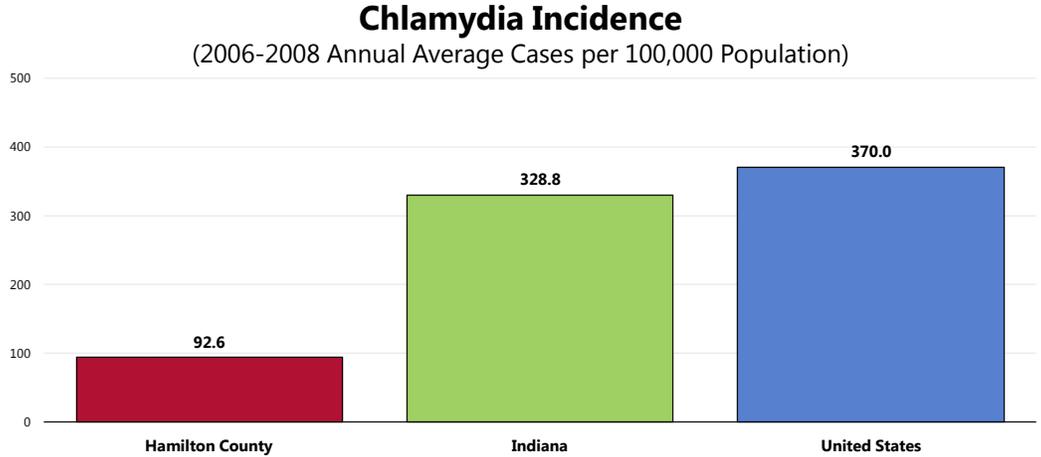


Sources: • Indiana State Department of Health.  
• Centers for Disease Control and Prevention, National Center for Health Statistics.  
Notes: • Rates are annual average new cases per 100,000 population.

# Chlamydia

Between 2006 and 2008, the annual average chlamydia incidence rate was 92.6 cases per 100,000 population in Hamilton County.

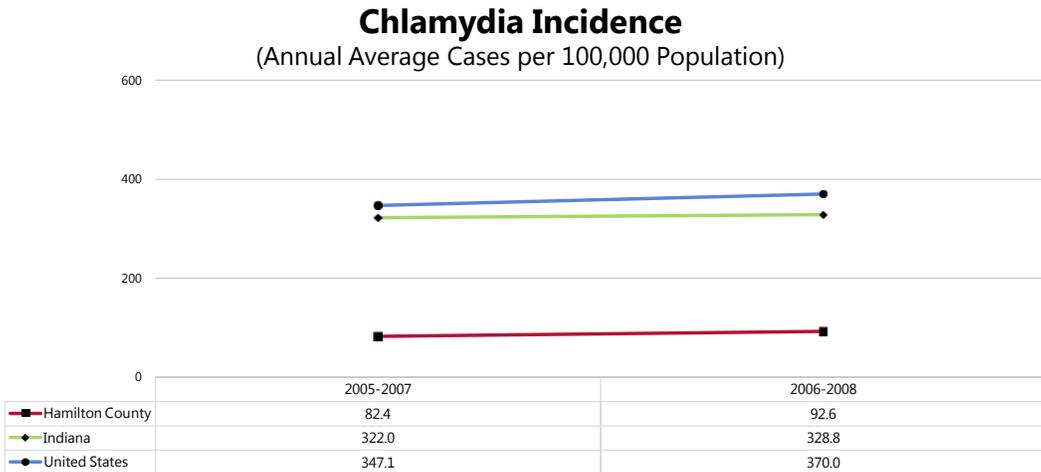
- Well below the Indiana incidence rate.
- Well below the national incidence rate.



Sources: • Indiana State Department of Health.  
 • Centers for Disease Control and Prevention, National Center for Health Statistics.

Notes: • Rates are annual average new cases per 100,000 population.

☒ Chlamydia incidence increased between the 2005-2007 and 2006-2008 reporting periods in Hamilton County, as did the state and national incidence rates.



Sources: • Indiana State Department of Health.  
 • Centers for Disease Control and Prevention, National Center for Health Statistics.

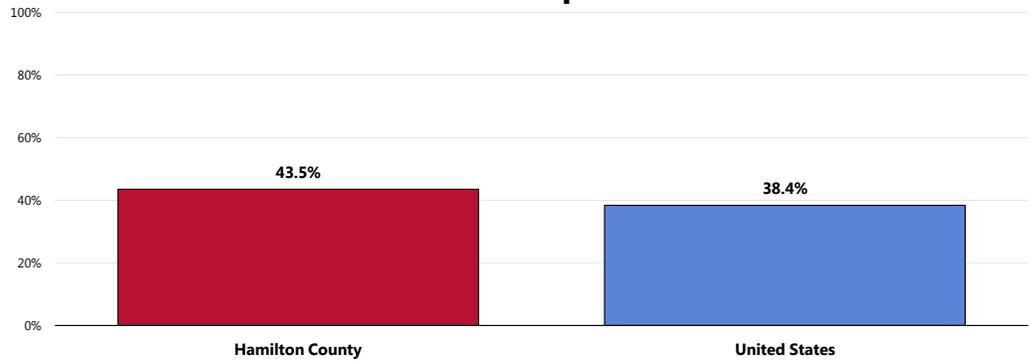
Notes: • Rates are annual average new cases per 100,000 population.

## Hepatitis B Vaccination

Based on survey data, a total of 43.5% of residents report having received the hepatitis B vaccine.

- Similar to what is reported nationwide.

### Have Ever Received the Hepatitis B Vaccination

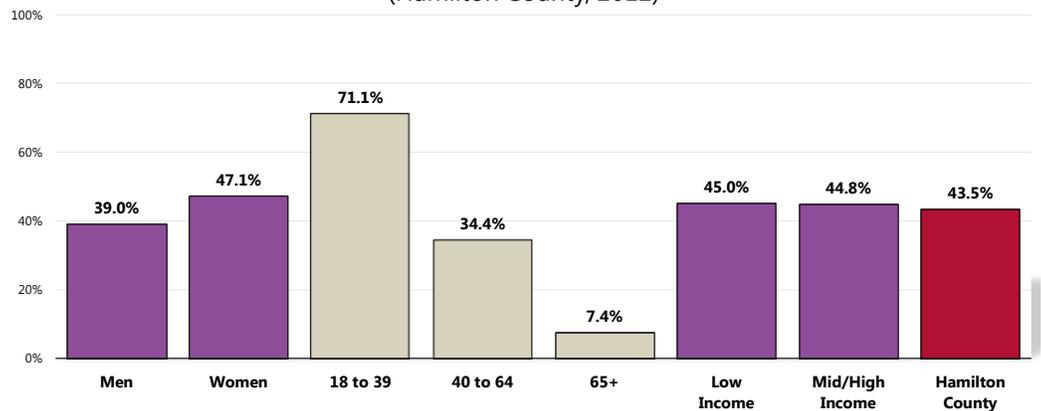


Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 77]  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: • Asked of all respondents.

Note the negative correlation between age and hepatitis B vaccination.

### Have Ever Received the Hepatitis B Vaccination (Hamilton County, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 77]  
 • Asked of all respondents.

Notes: • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White 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.

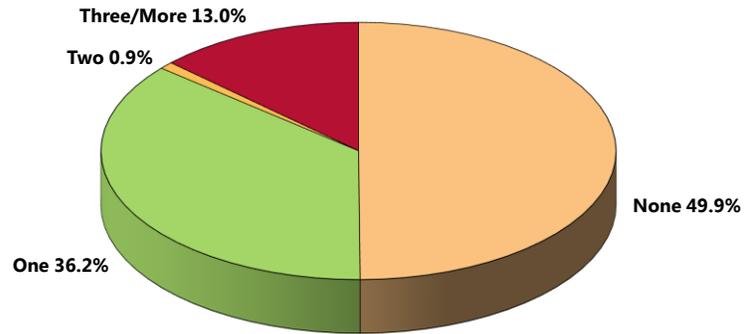
## Safe Sexual Practices

### Sexual Partners

Among unmarried Hamilton County adults under 65, the vast majority cites having one (36.2%) or no (49.9%) sexual partners in the past 12 months.

#### Number of Sexual Partners in Past 12 Months

(Among Unmarried Adults 18-64; Hamilton County, 2012)



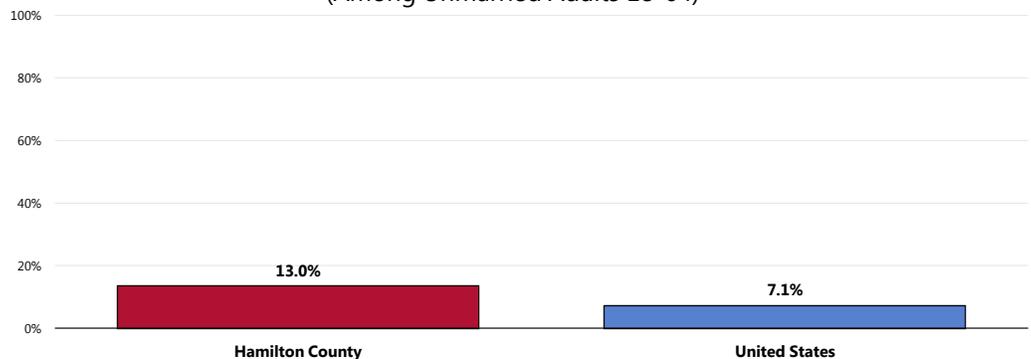
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 102]  
Notes: • Asked of all unmarried respondents under the age of 65.

However, 13.0% of unmarried county residents under 65 report three or more sexual partners in the past year.

- Statistically comparable to that reported nationally.

#### Had Three or More Sexual Partners in the Past Year

(Among Unmarried Adults 18-64)



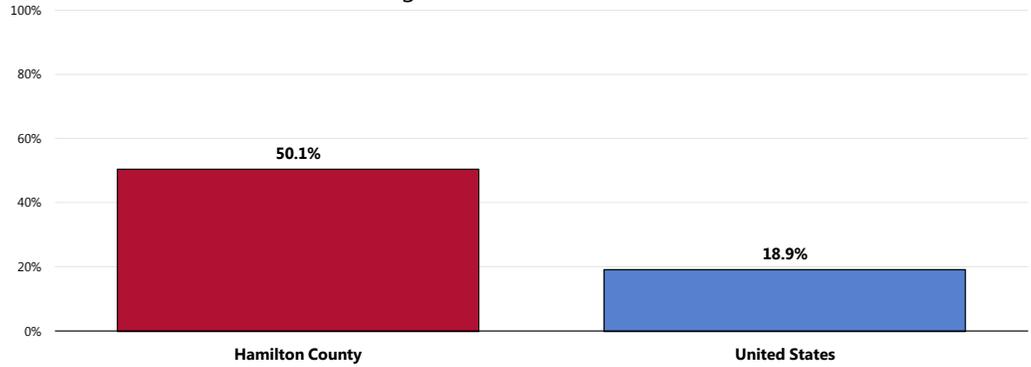
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 102]  
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
Notes: • Asked of all unmarried respondents under the age of 65.

## Condom Use

Among Hamilton County adults who are under age 65 and unmarried, 50.1% report that a condom was used during their last sexual intercourse.

- Statistically higher than the national percentage.

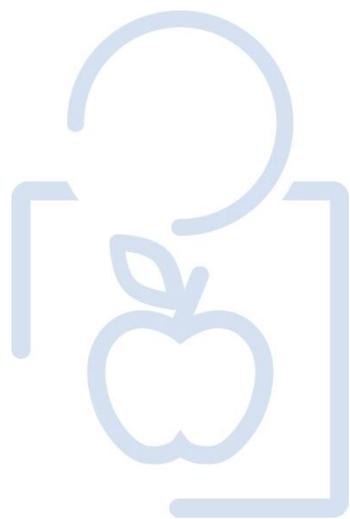
### Condom Was Used During Last Sexual Intercourse (Among Unmarried Adults 18-64)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 103]  
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.

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

# BIRTHS



# Prenatal Care

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

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

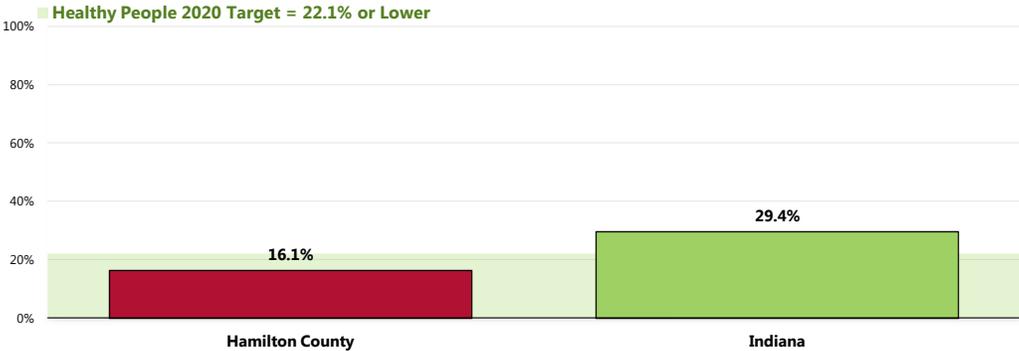
– Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

Early and continuous prenatal care is the best assurance of infant health.

## Between 2006 and 2008, 16.1% of all Hamilton County births did not receive prenatal care in the first trimester of pregnancy.

- More favorable than the Indiana proportion.
- Satisfies the Healthy People 2020 target (22.1% or lower).

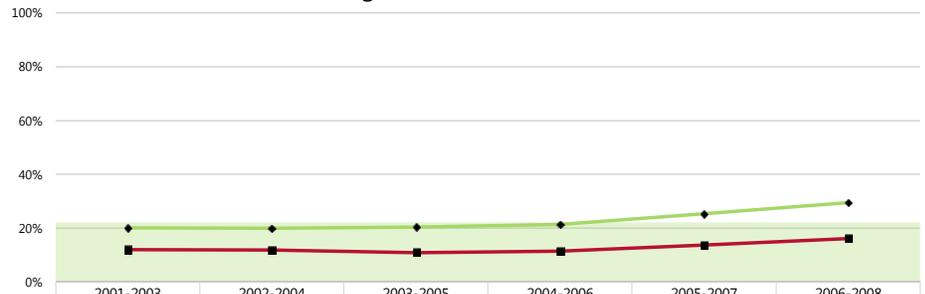
### Lack of Prenatal Care in the First Trimester (Percentage of Live Births, 2006-2008)



Sources: • Indiana State Department of Health.  
• US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective MICH-10.1]  
Note: • Numbers are a percentage of all live births within each population.

⊠ However, receipt of prenatal care has worsened overall in Hamilton County, echoing the Indiana trend.

### Lack of Prenatal Care in the First Trimester (Percentage of Live Births)



	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008
Healthy People 2020	22.1%	22.1%	22.1%	22.1%	22.1%	22.1%
Hamilton County	12.0%	11.8%	10.9%	11.3%	13.7%	16.1%
Indiana	20.0%	19.9%	20.4%	21.4%	25.3%	29.4%

Sources: ● Indiana State Department of Health.  
 ● US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective MICH-10.1]  
 Note: ● Numbers are a percentage of all live births within each population.

# Birth Outcomes & Risks

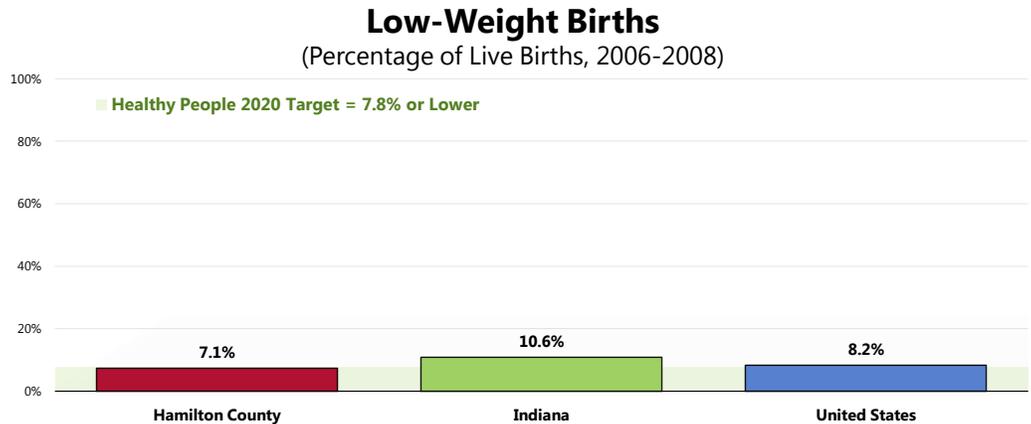
## Low-Weight Births

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.

**A total of 7.1% of 2007-2009 Hamilton County births were low-weight.**

- Better than the Indiana proportion.
- Better than the national proportion.
- Satisfies the Healthy People 2020 target (7.8% or lower).



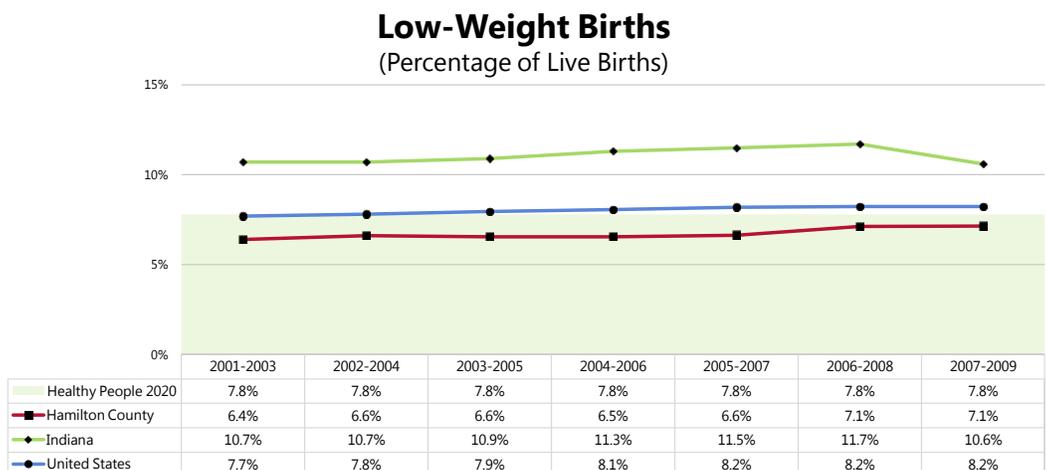
Sources:
 

- Indiana State Department of Health.
- Centers for Disease Control and Prevention, National Vital Statistics System.
- US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective MICH-8.1]

 Note:
 

- Numbers are a percentage of all live births within each population.
- Defined as an infant born weighing less than 5.5 pounds (2,500 grams) regardless of gestational age.

☒ The proportion of low-weight births has trended upward slightly in Hamilton County in recent years; the same can be said for the US and for Indiana (with the exception of the most recent reporting period).



Sources:
 

- Indiana State Department of Health.
- Centers for Disease Control and Prevention, National Vital Statistics System.
- US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective MICH-8.1]

 Note:
 

- Numbers are a percentage of all live births within each population.
- Defined as an infant born weighing less than 5.5 pounds (2,500 grams) regardless of gestational age.

## Infant Mortality

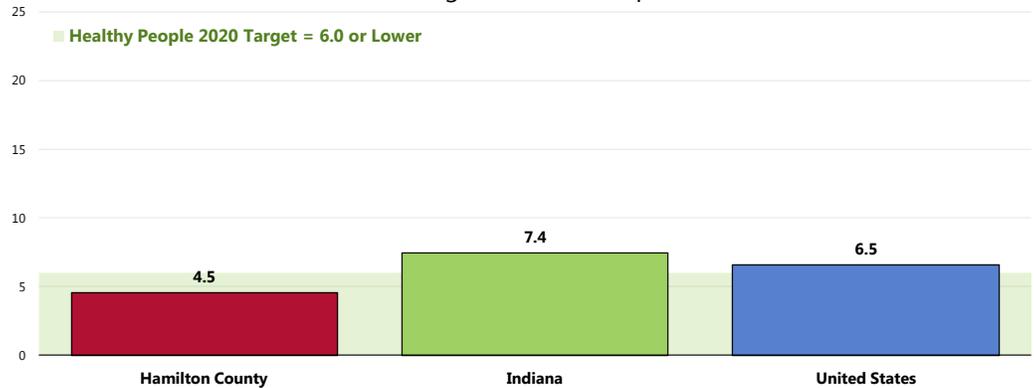
Infant mortality rates reflect deaths of children less than one year old per 1,000 live births.

**Between 2007 and 2009, there was an annual average of 4.5 infant deaths per 1,000 live births.**

- More favorable than the Indiana rate.
- More favorable than the national rate.
- Satisfies the Healthy People 2020 target of 6.0 per 1,000 live births.

### Infant Mortality Rate

(2007-2009 Annual Average Infant Deaths per 1,000 Live Births)

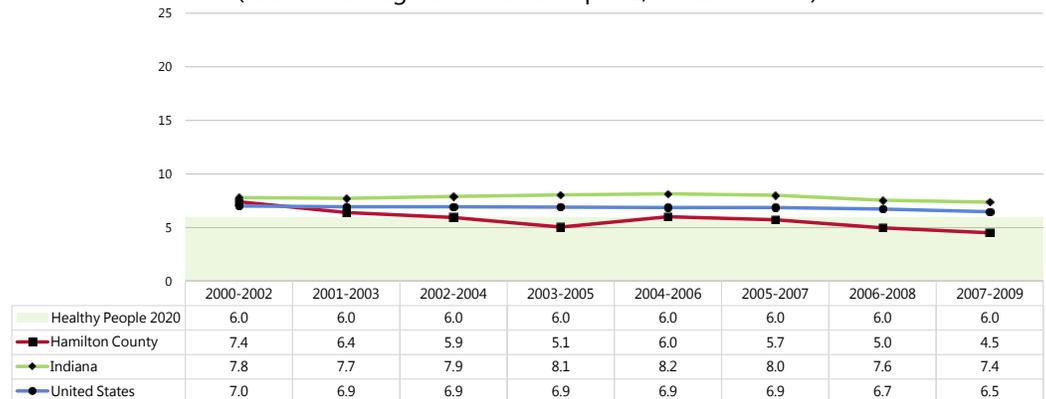


Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted July 2012.  
 • Centers for Disease Control and Prevention, National Center for Health Statistics.  
 • US Department 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.

☒ The county's infant mortality rate has decreased in recent years, echoing the trends reported for Indiana and the US overall.

### Infant Mortality Rate

(Annual Average Infant Deaths per 1,000 Live Births)



Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted July 2012.  
 • 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.

# Family Planning

Family planning is one of the 10 great public health achievements of the 20<sup>th</sup> century. The availability of family planning services allows individuals to achieve desired birth spacing and family size and contributes to improved health outcomes for infants, children, and women. Family planning services include contraceptive and broader reproductive health services (patient education and counseling), breast and pelvic examinations, breast and cervical cancer screening, sexually transmitted infection (STI) and HIV prevention education/counseling/testing/referral, and pregnancy diagnosis and counseling. For many women, a family planning clinic is their entry point into the healthcare system and is considered to be their usual source of care. This is especially true for women with incomes below the poverty level, women who are uninsured, Hispanic women, and Black women.

Unintended pregnancies (those reported by women as being mistimed or unwanted) are associated with many negative health and economic outcomes. In 2001, almost one-half of all pregnancies in the US were unintended. For women, negative outcomes associated with unintended pregnancy include:

- Delays in initiating prenatal care
- Reduced likelihood of breastfeeding
- Poor maternal mental health
- Lower mother-child relationship quality
- Increased risk of physical violence during pregnancy

Children born as a result of an unintended pregnancy are more likely to experience poor mental and physical health during childhood and poor educational and behavioral outcomes.

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

## Births to Unwed Mothers

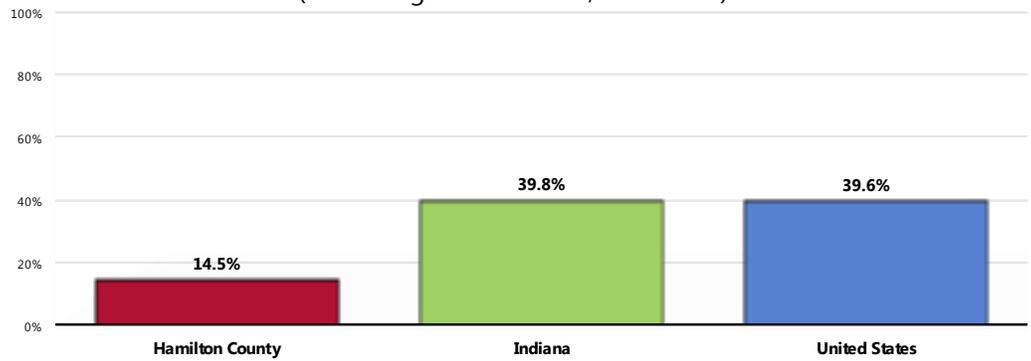
According to the CDC, an unintended pregnancy is a pregnancy that is either mistimed or unwanted at the time of conception. It is a core concept in understanding the fertility of populations and the unmet need for contraception. Unintended pregnancy is associated with an increased risk of morbidity for women, and with health behaviors during pregnancy that are associated with adverse effects. For example, women with an unintended pregnancy may delay prenatal care, which may affect the health of the infant. Women of all ages may have unintended pregnancies, but some groups, such as teens, are at a higher risk.

Because it is impossible to measure the true incidence of unintended pregnancy in the US, the following indicator looks at births occurring among unmarried mothers as a proxy measure for pregnancies that are not intended (knowing that this is not always the case).

### **A total of 14.5% of 2006-2008 births were to unwed mothers.**

- Much lower than the percentage reported statewide.
- Much lower than reported nationally.

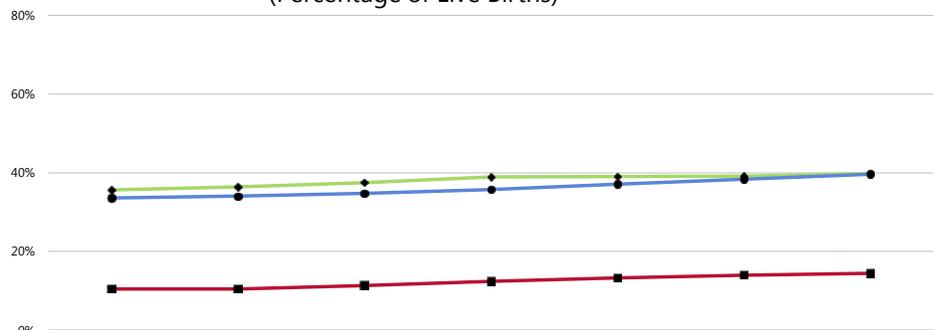
## Births to Unwed Mothers (Percentage of Live Births, 2006-2008)



Sources: • Indiana State Department of Health.  
• Centers for Disease Control and Prevention, National Vital Statistics System.  
Note: • Numbers are a percentage of all live births within each population.

☒ The percentage of births to unwed mothers in Hamilton County increased during the past decade, echoing, but remaining well below, state and national trends.

## Births to Unwed Mothers (Percentage of Live Births)



	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008
■ Hamilton County	10.5%	10.5%	11.4%	12.4%	13.3%	14.0%	14.5%
◆ Indiana	35.6%	36.4%	37.5%	38.9%	39.0%	39.1%	39.8%
● United States	33.6%	34.0%	34.8%	35.8%	37.1%	38.4%	39.6%

Sources: • Indiana State Department of Health.  
• Centers for Disease Control and Prevention, National Vital Statistics System.  
Note: • Numbers are a percentage of all live births within each population.

## Births to Teen Mothers

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.

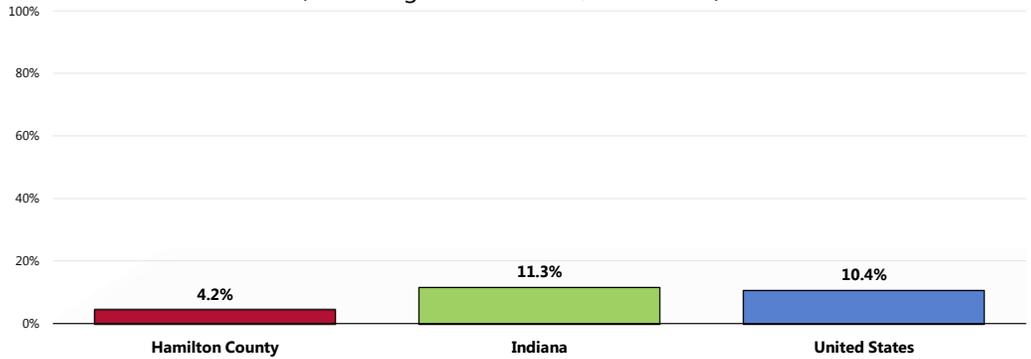
– Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

**A total of 4.2% of 2006-2008 Hamilton County births were to teenage mothers under the age of 20.**

- Lower than the Indiana proportion.
- Lower than the national proportion.

**Births to Teen Mothers (Under 20)**

(Percentage of Live Births, 2006-2008)

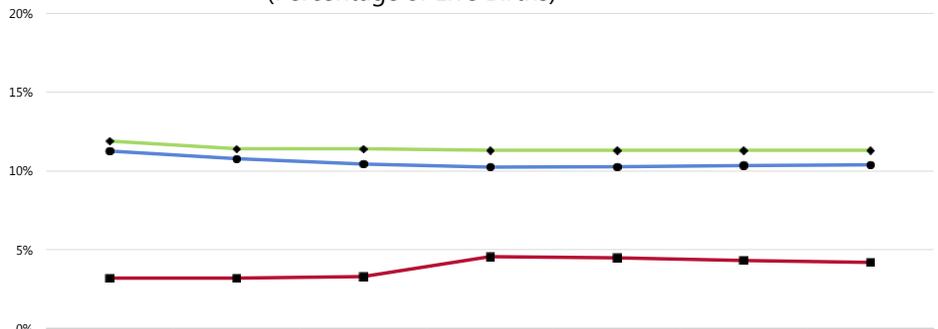


Sources: • Indiana State Department of Health.  
 • Centers for Disease Control and Prevention, National Vital Statistics System.  
 Note: • Numbers are a percentage of all live births within each population.

☒ The Hamilton County proportion of teen births increased over the past decade, while decreasing trends were noted both statewide and nationwide.

**Births to Teen Mothers**

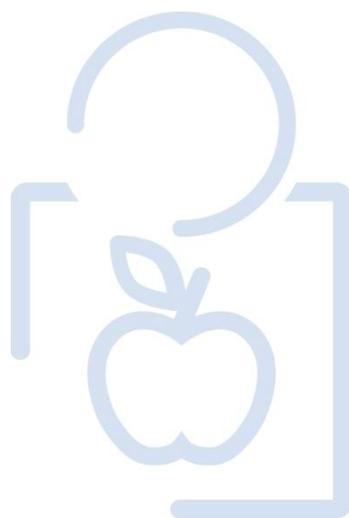
(Percentage of Live Births)



	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008
■ Hamilton County	3.2%	3.2%	3.3%	4.6%	4.5%	4.3%	4.2%
◆ Indiana	11.9%	11.4%	11.4%	11.3%	11.3%	11.3%	11.3%
● United States	11.3%	10.8%	10.4%	10.2%	10.3%	10.3%	10.4%

Sources: • Indiana State Department of Health.  
 • Centers for Disease Control and Prevention, National Vital Statistics System.  
 Note: • Numbers are a percentage of all live births within each population.

# MODIFIABLE HEALTH RISKS



# Actual Causes Of Death

A 1999 study (an update to a landmark 1993 study), estimated that as many as 40% of premature deaths in the United States are attributed to behavioral factors. This study found that behavior patterns represent the single-most prominent domain of influence over health prospects in the United States. The daily choices we make with respect to diet, physical activity, and sex; the substance abuse and addictions to which we fall prey; our approach to safety; and our coping strategies in confronting stress are all important determinants of health.

The most prominent contributors to mortality in the United States in 2000 were tobacco (an estimated 435,000 deaths), diet and activity patterns (400,000), alcohol (85,000), microbial agents (75,000), toxic agents (55,000), motor vehicles (43,000), firearms (29,000), sexual behavior (20,000), and illicit use of drugs (17,000). Socioeconomic status and access to medical care are also important contributors, but difficult to quantify independent of the other factors cited. Because the studies reviewed used different approaches to derive estimates, the stated numbers should be viewed as first approximations.

These analyses show that smoking remains the leading cause of mortality. However, poor diet and physical inactivity may soon overtake tobacco as the leading cause of death. These findings, along with escalating healthcare costs and aging population, argue persuasively that the need to establish a more preventive orientation in the US healthcare and public health systems has become more urgent.

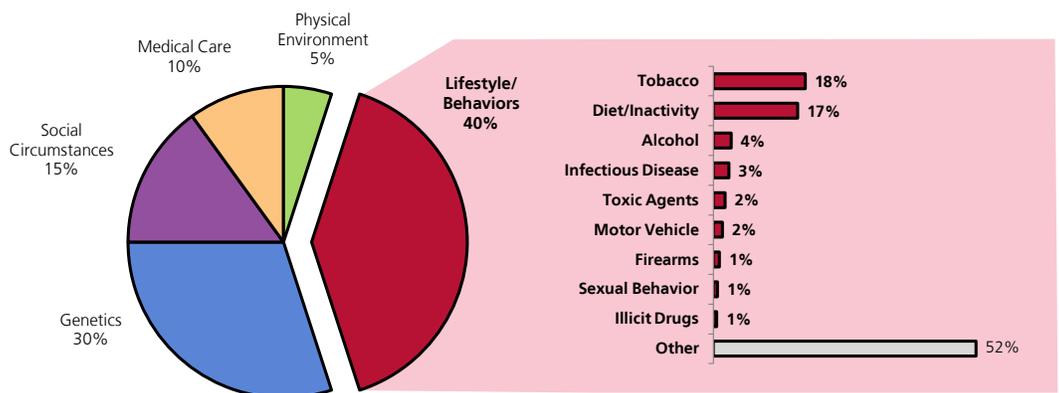
– Ali H. Mokdad, PhD; James S. Marks, MD, MPH; Donna F. Stroup, PhD, MSc; Julie L. Gerberding, MD, MPH. "Actual Causes of Death in the United States." JAMA, 291(2004):1238-1245.

While causes of death are typically described as the diseases or injuries immediately precipitating the end of life, a few important studies have shown that the actual causes of premature death (reflecting underlying risk factors) are often preventable.

Leading Causes of Death	Underlying Risk Factors (Actual Causes of Death)	
Cardiovascular disease	Tobacco use Elevated serum cholesterol High blood pressure	Obesity Diabetes Sedentary lifestyle
Cancer	Tobacco use Improper diet	Alcohol Occupational/environmental exposures
Cerebrovascular disease	High blood pressure Tobacco use	Elevated serum cholesterol
Accidental injuries	Safety belt noncompliance Alcohol/substance abuse Reckless driving	Occupational hazards Stress/fatigue
Chronic lung disease	Tobacco use	Occupational/environmental exposures

Source: National Center for Health Statistics/US Department of Health and Human Services, Health United States: 1987. DHHS Pub. No. (PHS) 88-1232.

## Factors Contributing to Premature Deaths in the United States



Sources: "The Case For More Active Policy Attention to Health Promotion"; (McGinnis, Williams-Russo, Knickman) Health Affairs, Vol. 21, No. 2, March/April 2002. "Actual Causes of Death in the United States"; (Ali H. Mokdad, PhD; James S. Marks, MD, MPH; Donna F. Stroup, PhD, MSc; Julie L. Gerberding, MD, MPH) JAMA, 291(2000):1238-1245.

# Nutrition

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))

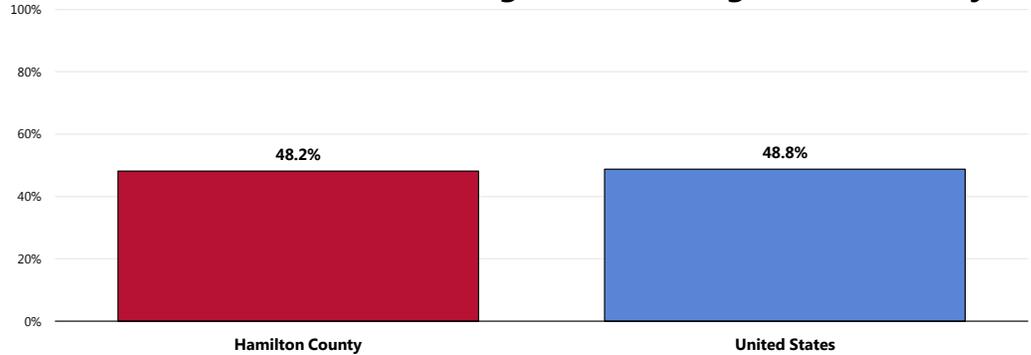
## Daily Recommendation of Fruits/Vegetables

**A total of 48.2% of Hamilton County adults report eating five or more servings of fruits and/or vegetables per day.**

- Similar to national findings.

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

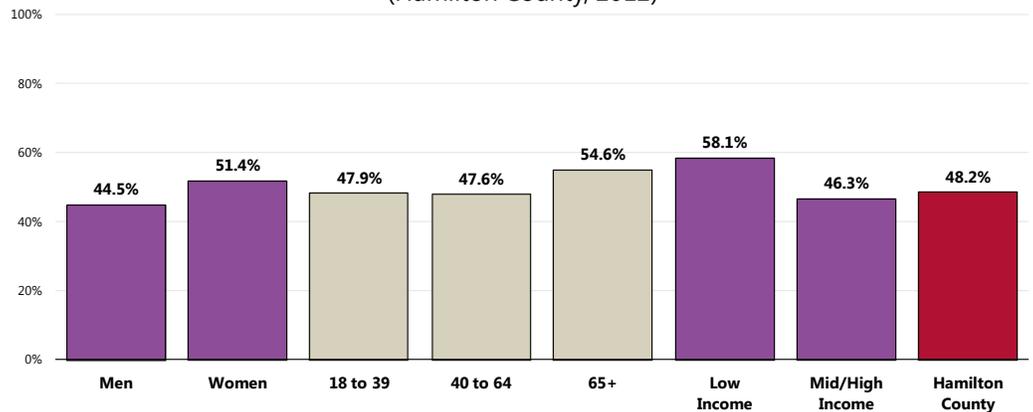
### Consume Five or More Servings of Fruits/Vegetables Per Day



- Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 173]
  - 2011 PRC National Health Survey, Professional Research Consultants, Inc.
- Notes:
- Asked of all respondents.
  - For this issue, respondents were asked to recall their food intake on the previous day.

 No significant difference in consumption of fruits/vegetables when viewed by gender, age and income.

### Consume Five or More Servings of Fruits/Vegetables Per Day (Hamilton County, 2012)



- Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 173]
- Notes:
- Asked of all respondents.
  - Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White 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.

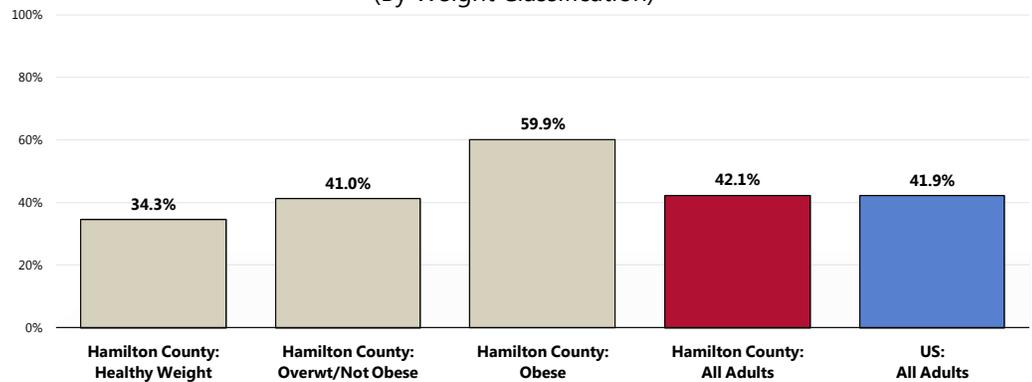
## Health Advice About Diet & Nutrition

**A total of 42.1% of survey respondents acknowledge that a physician counseled them about diet and nutrition in the past year.**

- Nearly identical to national findings.

 Note: Among **obese** respondents, 59.9% report receiving diet/nutrition advice (meaning that 4 in 10 did not).

### Have Received Advice About Diet and Nutrition in the Past Year From a Physician, Nurse, or Other Health Professional (By Weight Classification)



Sources: ● 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 18]  
● 2011 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: ● Asked of all respondents.

### Related Focus Group Findings: Nutrition

Many focus group participants discussed nutrition, with primary concerns including:

- Poor eating habits
- Convenient option
- Cost
- Cooking education
- Hunger
- 

Many residents living in Hamilton County possess the **poor eating habits** which can lead to a high incidence of overweight and obese residents. Focus group participants agree that the majority of fast food, microwavable meals, and pre-packaged foods has limited nutritional value but represents a **convenient option** for working families. The vast prevalence of fast food establishments also creates ample accessibility for residents.

Participants worry about the high **cost** of fresh produce, meats and poultry, which inhibits some families from accessing these foods. Low income residents can stretch their money further with certain types of packaged food, as one participant explains:

*“Well, and if you’re stretching your dollars, a pound of spaghetti is a lot cheaper than a pound of ground beef, for instance. Not that ground beef is that much healthier for you at all, but when you weigh if you wanted to buy a couple of chicken breasts, you’re still going to take that package of pasta because you’re going to be able to feed everybody sitting at the table.”*  
— Focus Group Participant

Participants agree that schools and other local businesses work diligently to offer more nutritious options for the community. The school districts continue to improve school lunches and introduce healthy options for their students. In addition, local agencies have tried to make healthy foods available, but residents still make poor food choices.

*“People who are eating out of vending machines only are getting all the processed foods and when they go to the grocery store, they have the same options. They can go to Walgreens and get fresh fruits and vegetables now. They’ve tried to make it easier for the common, everyday person who doesn’t have great transportation to still be able to get to where fresh food is, but that doesn’t mean that’s what they’ll choose.”* — Focus Group Participant

Focus group attendees believe that **cooking education** does not occur regularly in the community and that many households lack the knowledge to prepare healthy meals. Participants believe this type of education is critical in empowering residents to both purchase and prepare better food for their families. An attendee describes how the current youth lack any type of formal cooking skills:

*“My job was eliminated at the middle school, and I taught home economics/family and consumer sciences because our educational system does not see that as a value. Parents don’t realize it should be a value for their children. We’re going to have a whole set of generations here who can’t fix anything unless they watched it on the Food Channel.”* — Focus Group Participant

Participants also express concern about the level of **hunger** in Hamilton County. Attendees describe how local food pantries have run out of food for recipients, which they attribute to an increase in need. To combat malnutrition, several faith-based organizations provide free meals and schools offer a backpack program for their students. The backpacks are given out on Friday, so children will have food over the weekend.

# 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 and older 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)
- 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)
- 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))

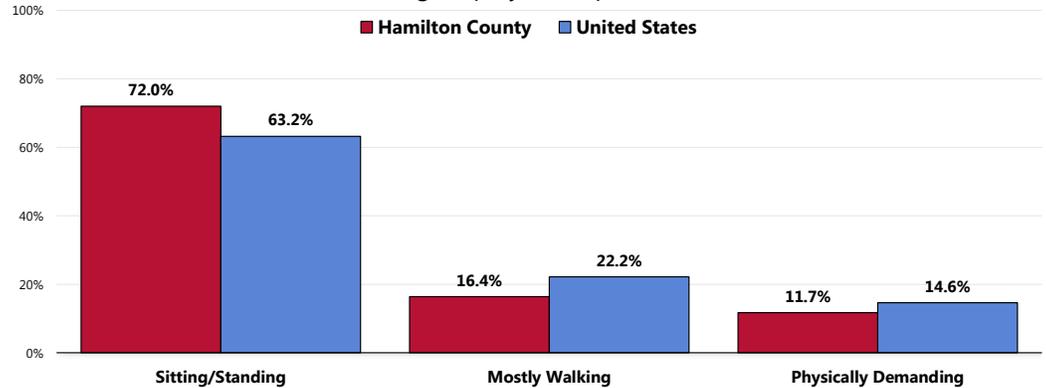
Leisure-time physical activity includes any physical activities or exercises (such as running, calisthenics, golf, gardening, walking, etc.) which take place outside of one's line of work.

## Level of Activity at Work

### A majority of employed respondents reports low levels of physical activity at work.

- Just over 7 in 10 employed respondents (72.0%) report that their job entails mostly sitting or standing, higher than the US figure.
- 16.4% report that their job entails mostly walking (similar to that reported nationally).
- 11.7% report that their work is physically demanding (similar to that reported nationally).

### Primary Level of Physical Activity At Work (Among Employed Respondents)



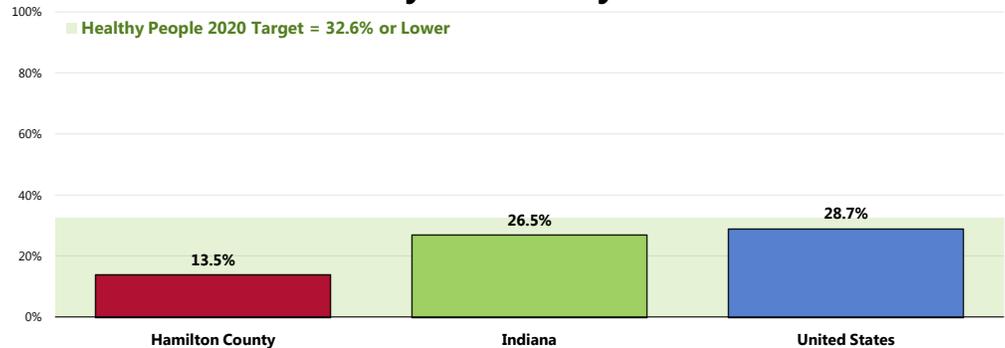
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 108]  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of those respondents who are employed for wages.

## Leisure-Time Physical Activity

### A total of 13.5% of adults report no leisure-time physical activity in the past month.

- More favorable than statewide findings.
- More favorable than national findings.
- Satisfies the Healthy People 2020 target (32.6% or lower).

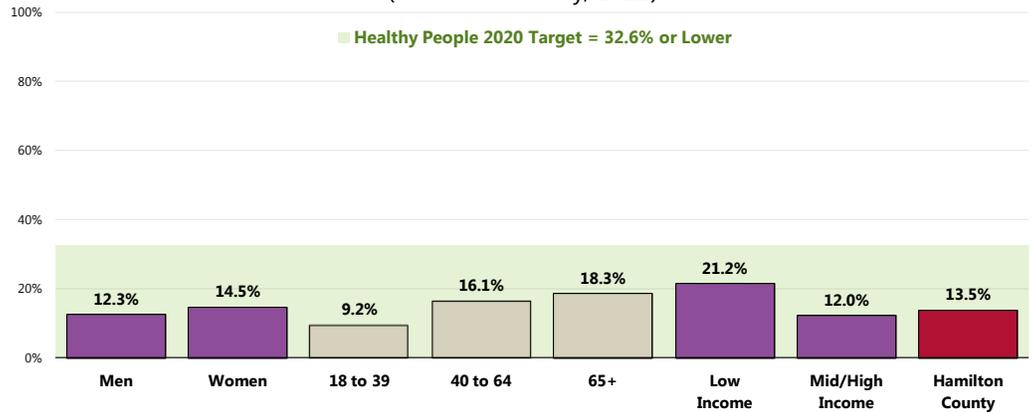
### No Leisure-Time Physical Activity in the Past Month



Sources: • 2012 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): 2010 Indiana data.  
 • 2011 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.

👥 No statistical difference in lack of leisure-time physical activity when viewed by key demographic characteristics.

## No Leisure-Time Physical Activity in the Past Month (Hamilton County, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 109]  
• US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective PA-1]

Notes: • Asked of all respondents.  
• Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White 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.

## Activity Levels

Adults (age 18–64) should do 2 hours and 30 minutes a week of moderate-intensity, or 1 hour and 15 minutes (75 minutes) a week of vigorous-intensity aerobic physical activity, or an equivalent combination of moderate- and vigorous-intensity aerobic physical activity. Aerobic activity should be performed in episodes of at least 10 minutes, preferably spread throughout the week.

Additional health benefits are provided by increasing to 5 hours (300 minutes) a week of moderate-intensity aerobic physical activity, or 2 hours and 30 minutes a week of vigorous-intensity physical activity, or an equivalent combination of both.

Older adults (age 65 and older) should follow the adult guidelines. If this is not possible due to limiting chronic conditions, older adults should be as physically active as their abilities allow. They should avoid inactivity. Older adults should do exercises that maintain or improve balance if they are at risk of falling.

For all individuals, some activity is better than none. Physical activity is safe for almost everyone, and the health benefits of physical activity far outweigh the risks.

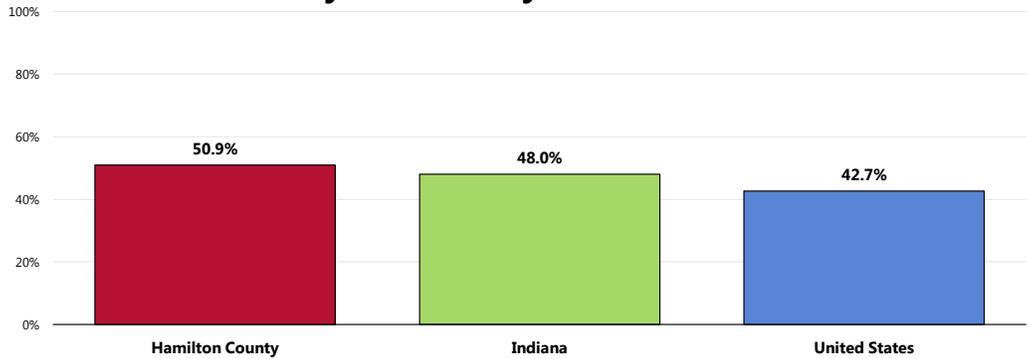
– 2008 Physical Activity Guidelines for Americans, U.S. Department of Health and Human Services. [www.health.gov/PAGuidelines](http://www.health.gov/PAGuidelines)

## Recommended Levels of Physical Activity

**One-half (50.9%) of Hamilton County adults participates in regular, sustained moderate or vigorous physical activity (meeting physical activity recommendations).**

- Comparable to statewide findings.
- More favorable than national findings.

## Meets Physical Activity Recommendations

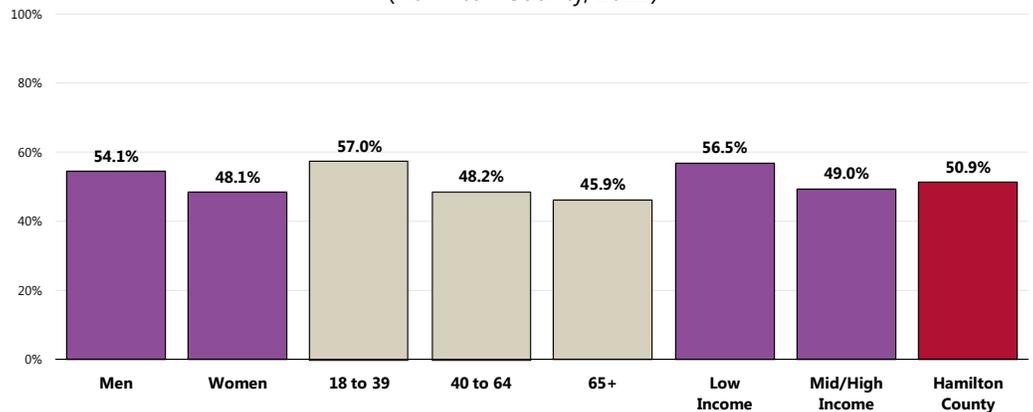


- Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 176]
  - 2011 PRC National Health Survey, Professional Research Consultants, Inc.
  - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2009 Indiana data.
- Notes:
- Asked of all respondents.
  - In this case the term "meets physical activity recommendations" refers to participation in moderate physical activity (exercise that produces only light sweating or a slight to moderate increase in breathing or heart rate) at least 5 times a week for 30 minutes at a time, and/or vigorous physical activity (activities that cause heavy sweating or large increases in breathing or heart rate) at least 3 times a week for 20 minutes at a time.

 No statistical difference to report when viewed by demographic characteristics.

## Meets Physical Activity Recommendations

(Hamilton County, 2012)



- Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 176]
- Notes:
- Asked of all respondents.
  - Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).
  - Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.
  - In this case the term "meets physical activity recommendations" refers to participation in moderate physical activity (exercise that produces only light sweating or a slight to moderate increase in breathing or heart rate) at least 5 times a week for 30 minutes at a time, and/or vigorous physical activity (activities that cause heavy sweating or large increases in breathing or heart rate) at least 3 times a week for 20 minutes at a time.

The individual indicators of moderate and vigorous physical activity are shown here.

## Moderate & Vigorous Physical Activity

In the past month:

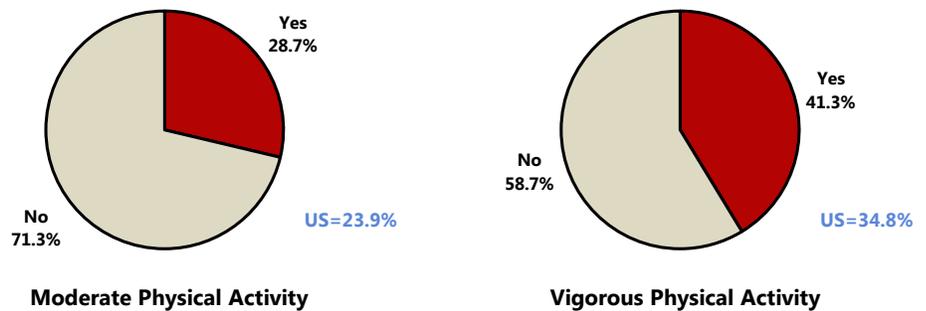
**A total of 28.7% of adults participated in moderate physical activity (5 times a week, 30 minutes at a time).**

- Similar to the national level.

**A total of 41.3% participated in vigorous physical activity (3 times a week, 20 minutes at a time).**

- More favorable than statewide figure (not shown).
- More favorable than the nationwide figure.

### Moderate & Vigorous Physical Activity (Hamilton County, 2012)



- Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 178-179]
  - 2011 PRC National Health Survey, Professional Research Consultants, Inc.
- Notes:
- Asked of all respondents.
  - Moderate Physical Activity: Takes part in exercise that produces only light sweating or a slight to moderate increase in breathing or heart rate at least 5 times per week for at least 30 minutes per time.
  - Vigorous Physical Activity: Takes part in activities that cause heavy sweating or large increases in breathing or heart rate at least 3 times per week for at least 20 minutes per time.

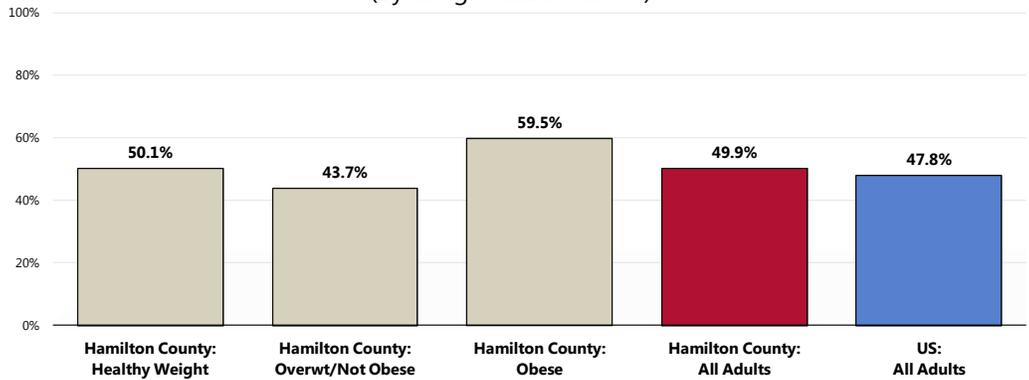
## Health Advice About Physical Activity & Exercise

**A total of 49.9% of Hamilton County adults report that their physician has asked about or given advice to them about physical activity in the past year.**

- Similar to the national average.

 Note: 59.5% of **obese** Hamilton County respondents say that they have talked with their doctor about physical activity/exercise in the past year.

## Have Received Advice About Exercise in the Past Year From a Physician, Nurse, or Other Health Professional (By Weight Classification)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 19]  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of all respondents.

## Children's Screen Time

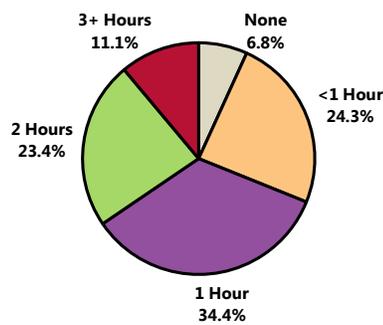
### Television Watching & Other Screen Time

Among children aged 5 through 17, 11.1% are reported to watch three or more hours of television per day; 15.9% are reported to spend three or more hours on other types of screen time for entertainment (video games, Internet, etc.).

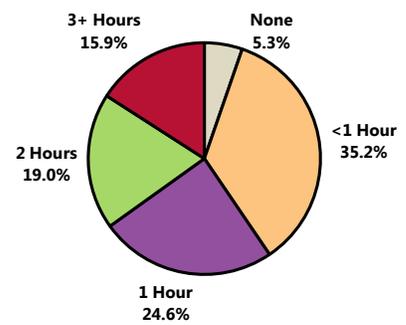
- The prevalence of television watching is more favorable than that reported across the US; with regard to computer screen time, the proportions are similar.

### Children's Screen Time

(Among Parents of Children Ages 5-17; Hamilton County, 2012)



**Hours per Day of Television**



**Hours per Day of Other Screen Time**  
(i.e., video games, computer/Internet entertainment)

Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 143-144, 180-181]  
 Notes: • Asked of respondents with a child aged 5 to 17 in the household.

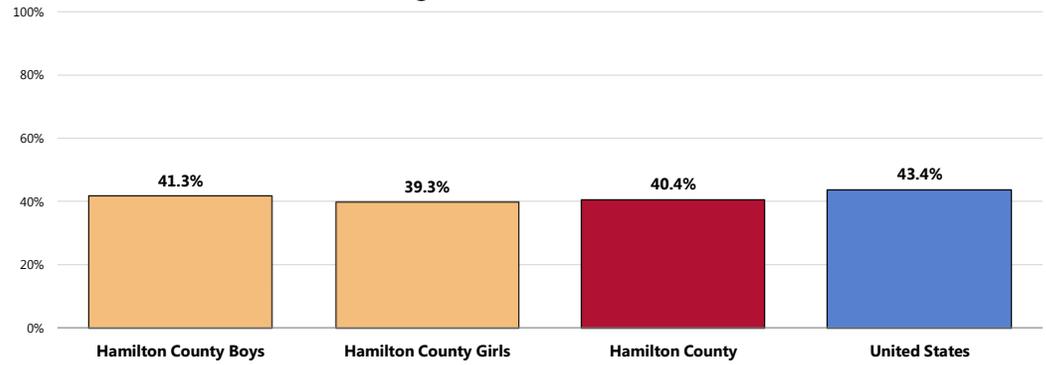
### Total Screen Time

When combined, 40.4% of county children aged 5 to 17 spend 3+ hours on screen time (whether television or computer, Internet, video games, etc.) per day.

- Similar to that found nationally.

 No statistical difference by gender.

### Children With Three or More Hours per School Day of Total Screen Time [TV, Computer, Video Games, Etc. for Entertainment] (Among Parents of Children 5-17)



Sources: • 2012 Professional Research Consultants, Inc. PRC Community Health Survey. [Item 182]

Notes: • Asked of all respondents with children 5-17 at home.

- For this issue, respondents with children who are not in school were asked about "weekdays," while parents of children in school were asked about typical "school days."
- "Three or more hours" includes reported screen time of 180 minutes or more per day.

# Weight Status

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.

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.

## Adult Weight Status

### Healthy Weight

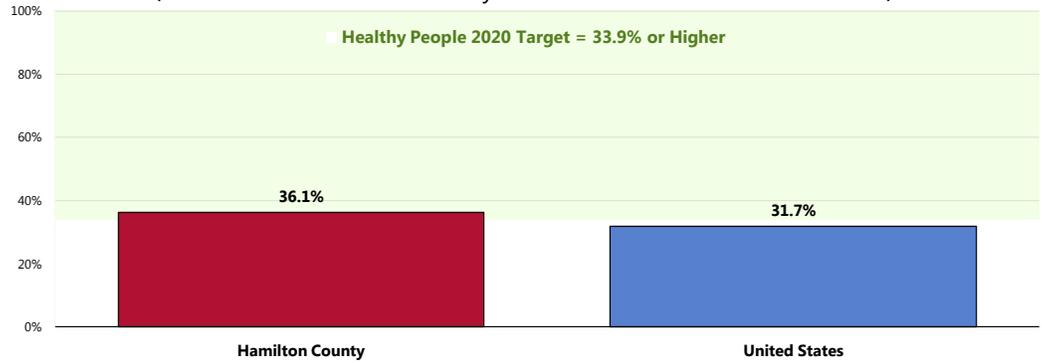
“Healthy weight” means neither underweight, nor overweight (BMI = 18.5-24.9).

**Based on self-reported heights and weights, 36.1% of Hamilton County adults are at a healthy weight.**

- Similar to national findings.
- Similar to the Healthy People 2020 target (33.9% or higher).

## Healthy Weight

(Percent of Adults With a Body Mass Index Between 18.5 and 24.9)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 184]  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Based on reported heights and weights, asked of all respondents.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective NWS-8]  
 • The definition of healthy weight is having a body mass index (BMI), a ratio of weight to height (kilograms divided by meters squared), between 18.5 and 24.9.

## Overweight Status

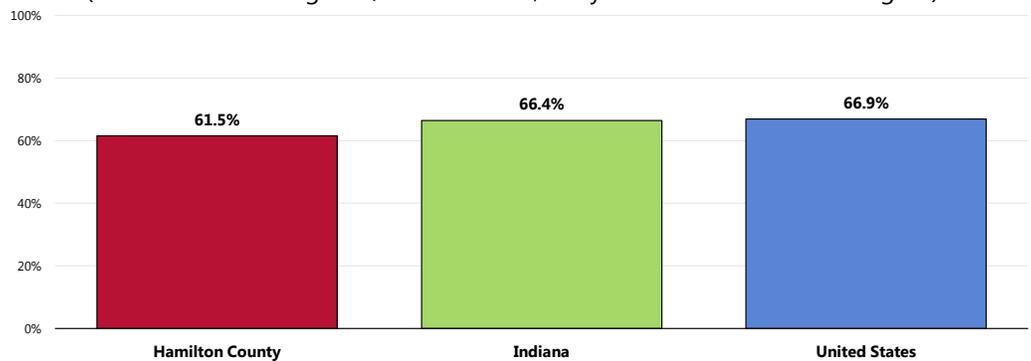
Here, "overweight" includes those respondents with a BMI value  $\geq 25$ .

**More than 6 in 10 Hamilton County adults (61.5%) are overweight.**

- Statistically better than the Indiana prevalence.
- Statistically similar to the US overweight prevalence.

## Prevalence of Total Overweight

(Percent of Overweight or/Obese Adults; Body Mass Index of 25.0 or Higher)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 184]  
 • 2011 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). 2010 Indiana data.  
 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.

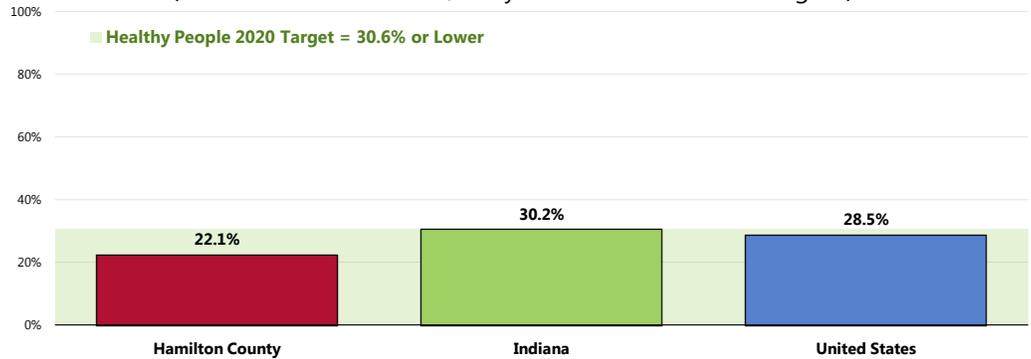
**Further, 22.1% of Hamilton County adults are obese.**

- More favorable than Indiana findings.
- More favorable than US findings.
- Satisfies the Healthy People 2020 target (30.6% or lower).

"Obese" (also included in overweight prevalence discussed previously) includes respondents with a BMI value  $\geq 30$ .

## Prevalence of Obesity

(Percent of Obese Adults; Body Mass Index of 30.0 or Higher)



- Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 184]
  - 2011 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]
  - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2010 Indiana data.
- 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 residents between the ages of 40 and 64.

## Prevalence of Obesity

(Percent of Obese Adults; Body Mass Index of 30.0 or Higher; Hamilton County, 2012)



- Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 184]
  - 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.
  - Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White 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.

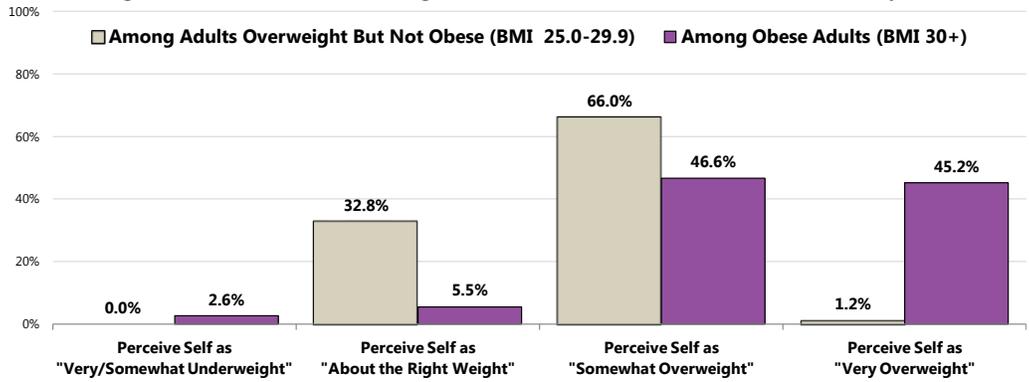
## Actual vs. Perceived Body Weight

**A total of 5.5% of obese adults and 32.8% of overweight (but not obese) adults feel that their current weight is "about right."**

- 66.0% of overweight (but not obese) adults see themselves as "somewhat overweight."
- 45.2% of obese adults see themselves as "very overweight."

## Actual vs. Perceived Weight Status

(Among Adults Who Are Overweight/Obese Based on BMI; Hamilton County, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 116]  
 Notes: • BMI is 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.

## Relationship of Overweight With Other Health Issues

**Overweight (and especially obese) adults are more likely to report a number of adverse health conditions.**

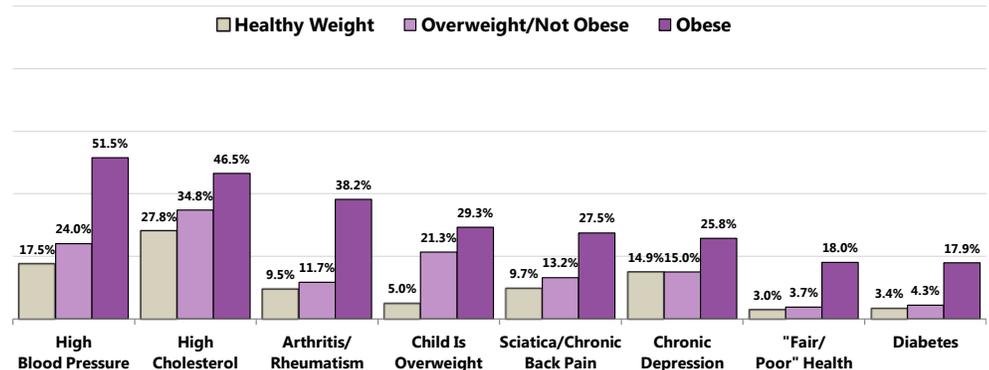
Among these are:

- Hypertension (high blood pressure).
- High cholesterol.
- Arthritis/rheumatism.
- Sciatica/chronic back pain.
- Chronic depression.
- "Fair" or "poor" overall health.
- Diabetes.

Overweight/obese residents are also more likely to have overweight children.

## Relationship of Overweight With Other Health Issues

(By Weight Classification; Hamilton County, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 5, 28, 29, 44, 118, 147, 148, 188]  
 Notes: • Based on reported heights and weights, asked of all respondents.

The correlation between overweight and various health issues cannot be disputed.

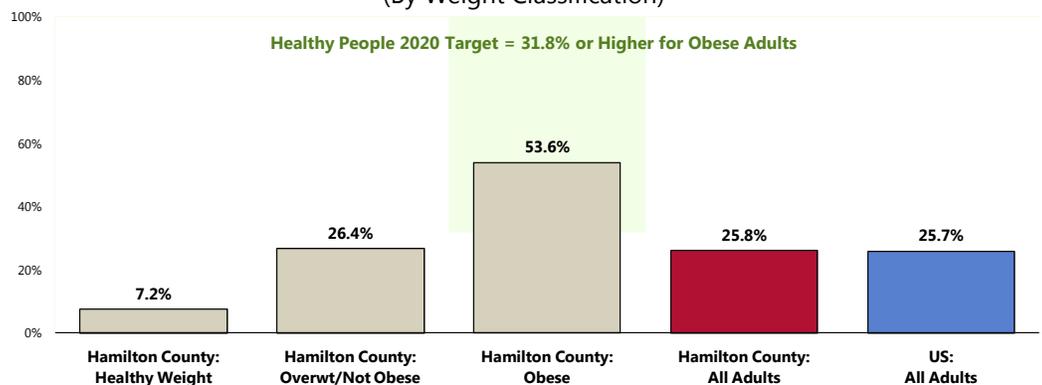
## Weight Management

### Health Advice

**A total of 25.8% of adults have been given advice about their weight by a doctor, nurse or other health professional in the past year.**

- Almost identical to the national findings.
- 👥 Note that 53.6% of obese adults have been given advice about their weight by a health professional in the past year (while nearly one-half has not).
  - This proportion satisfies the Healthy People 2020 target of 31.8% or higher.

### Have Received Advice About Weight in the Past Year From a Physician, Nurse, or Other Health Professional (By Weight Classification)



Sources: ● 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 115, 186-187]  
● 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
Notes: ● Asked of all respondents.

### Weight Control

Individuals who are at a healthy weight are less likely to:

- Develop chronic disease risk factors, such as high blood pressure and dyslipidemia.
- Develop chronic diseases, such as type 2 diabetes, heart disease, osteoarthritis, and some cancers.
- Experience complications during pregnancy.
- Die at an earlier age.

All Americans should avoid unhealthy weight gain, and those whose weight is too high may also need to lose weight.

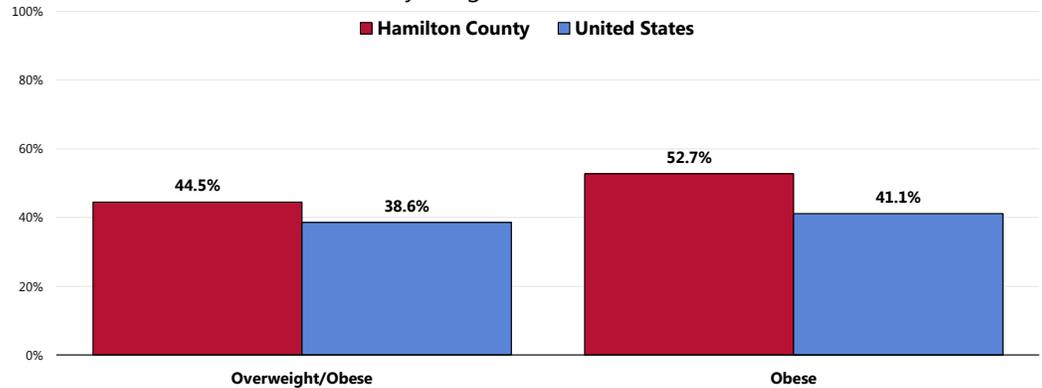
- Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

**A total of 44.5% of Hamilton County adults who are overweight say that they are both modifying their diet and increasing their physical activity to try to lose weight.**

- Similar to national findings.
- 👥 Note: 52.7% of obese Hamilton County adults report that they are trying to lose weight through a combination of diet and exercise, better than what is found nationally.

## Trying to Lose Weight by Both Modifying Diet and Increasing Physical Activity

(By Weight Classification)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 185]  
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
Notes: • Based on reported heights and weights, asked of all respondents.

## Childhood Overweight & Obesity

In children and teens, body mass index (BMI) is used to assess weight status – underweight, healthy weight, overweight, or obese. After BMI is calculated for children and teens, the BMI number is plotted on the CDC BMI-for-age growth charts (for either girls or boys) to obtain a percentile ranking. Percentiles are the most commonly used indicator to assess the size and growth patterns of individual children in the United States. The percentile indicates the relative position of the child's BMI number among children of the same sex and age.

BMI-for-age weight status categories and the corresponding percentiles are shown below:

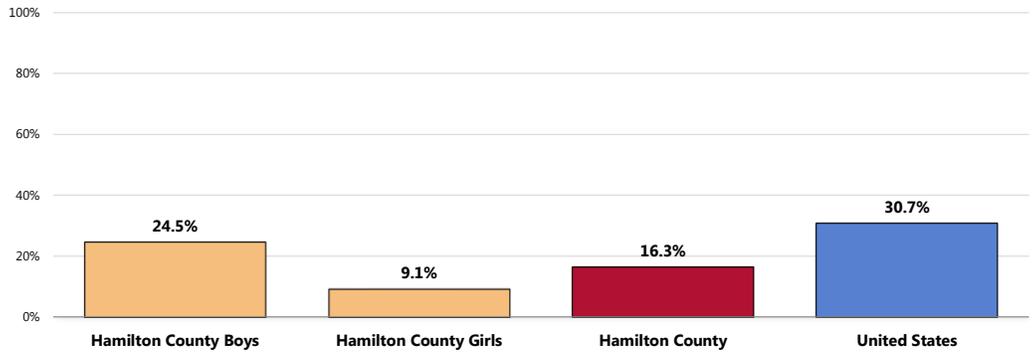
- Underweight..... <5th percentile
- Healthy Weight..... ≥5th and <85th percentile
- Overweight..... ≥85th and <95th percentile
- Obese..... ≥95th percentile

– Centers for Disease Control and Prevention.

**Based on the heights/weights reported by surveyed parents, 16.3% of Hamilton County children age 5 to 17 are overweight or obese (≥85th percentile).**

- Much lower than found nationally.
- 👤 Statistically higher among county boys.

## Child Total Overweight Prevalence (Among Children 5-17; BMI in the 85th Percentile or Higher)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 188]  
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: • Asked of all respondents with children age 5-17 at home.  
• Overweight among children is estimated based on children's Body Mass Index status at or above the 85<sup>th</sup> percentile of US growth charts by gender and age.

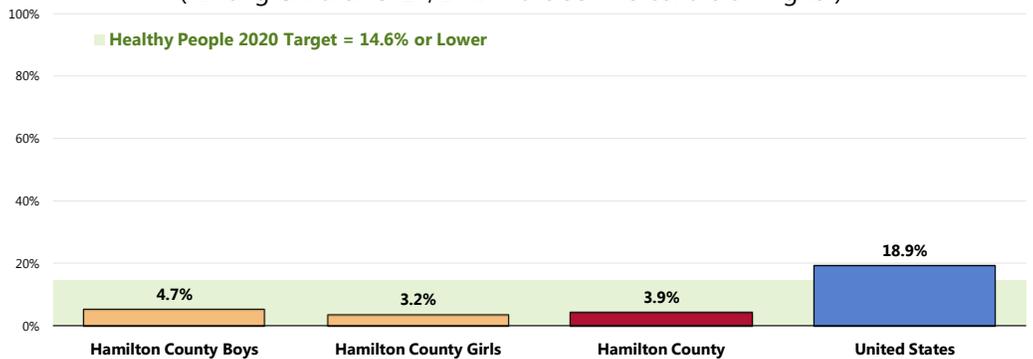
### Further, just 3.9% of Hamilton County children age 5 to 17 are obese (≥95th percentile).

- Much lower than the national percentage.
- Easily satisfies the Healthy People 2020 target (14.6% or lower for children age 2-19).

👤 Statistically similar by child's gender.

## Child Obesity Prevalence

(Among Children 5-17; BMI in the 95<sup>th</sup> Percentile or Higher)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 188]  
• 2011 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-10.4]

Notes: • Asked of all respondents with children age 5-17 at home.  
• Obesity among children is determined by children's Body Mass Index status equal to or above the 95<sup>th</sup> percentile of US growth charts by gender and age.

# Substance Abuse

In 2005, an estimated 22 million Americans struggled with a drug or alcohol problem. Almost 95% of people with substance use problems are considered unaware of their problem. Of those who recognize their problem, 273,000 have made an unsuccessful effort to obtain treatment. These estimates highlight the importance of increasing prevention efforts and improving access to treatment for substance abuse and co-occurring disorders.

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

The field has made progress in addressing substance abuse, particularly among youth. According to data from the national Institute of Drug Abuse (NIDA) Monitoring the Future (MTF) survey, which is an ongoing study of the behaviors and values of America's youth between 2004 and 2009, a drop in drug use (including amphetamines, methamphetamine, cocaine, hallucinogens, and LSD) was reported among students in 8th, 10th, and 12th grades. Note that, despite a decreasing trend in marijuana use which began in the mid-1990s, the trend has stalled in recent years among these youth. Use of alcohol among students in these three grades also decreased during this time.

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.

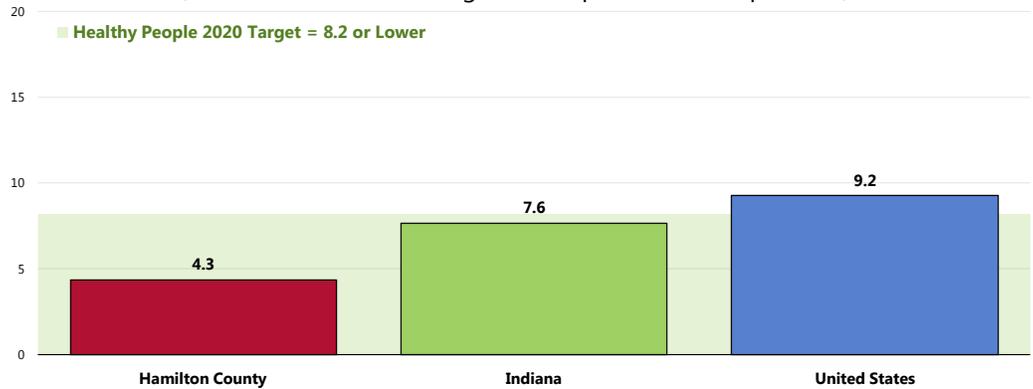
– Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

## Age-Adjusted Cirrhosis/Liver Disease Deaths

Between 2007 and 2009, there was an annual average age-adjusted cirrhosis/liver disease mortality rate of 4.3 deaths per 100,000 population in Hamilton County.

- Better than the statewide rate.
- Better than the national rate.
- Satisfies the Healthy People 2020 target (8.2 or lower).

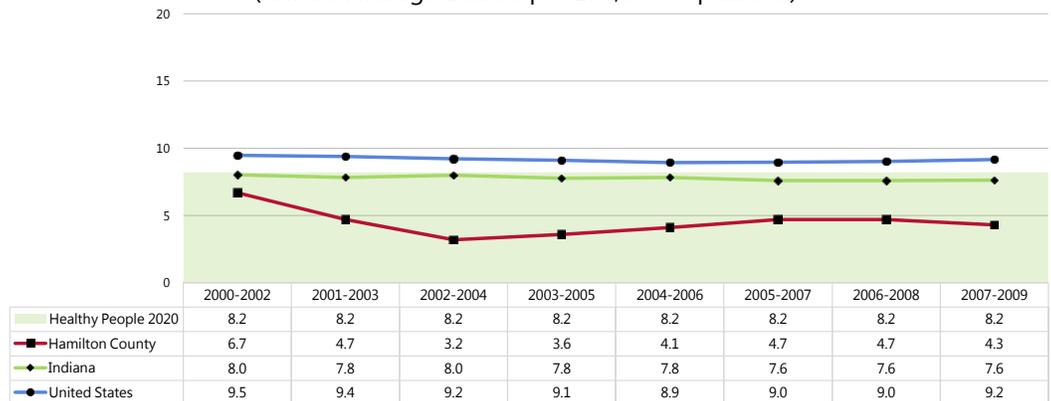
### Cirrhosis/Liver Disease: Age-Adjusted Mortality (2007-2009 Annual Average Deaths per 100,000 Population)



- Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted July 2012.
  - 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 U.S. Standard Population.
  - Local, state and national data are simple three-year averages.

- ☒ The mortality rate decreased in the county in the early 2000s, but has since increased. Statewide and nationwide, rates have decreased.

### Cirrhosis/Liver 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 July 2012.
  - 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 U.S. Standard Population.
  - State and national data are simple three-year averages.

# High-Risk Alcohol Use

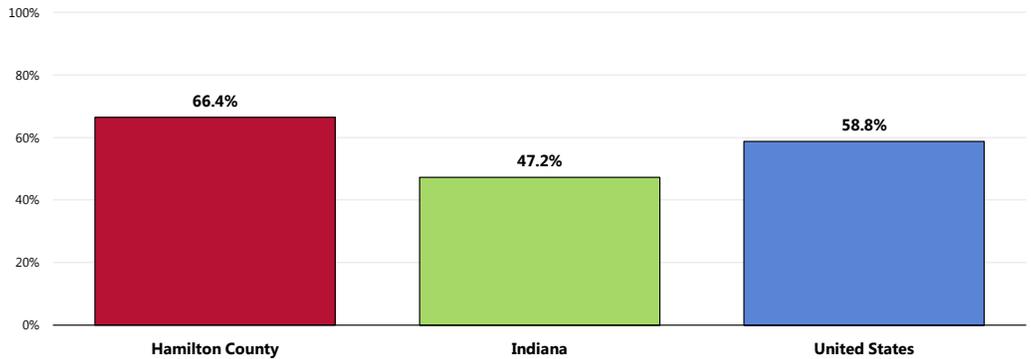
## Current Drinking

“Current drinkers” include survey respondents who had at least one drink of alcohol in the month preceding the interview. For the purposes of this study, a “drink” is considered one can or bottle of beer, one glass of wine, one can or bottle of wine cooler, one cocktail, or one shot of liquor.

**Two in three area adults (66.4%) had at least one drink of alcohol in the past month (current drinkers).**

- Less favorable than the statewide proportion.
- Less favorable than the national proportion.

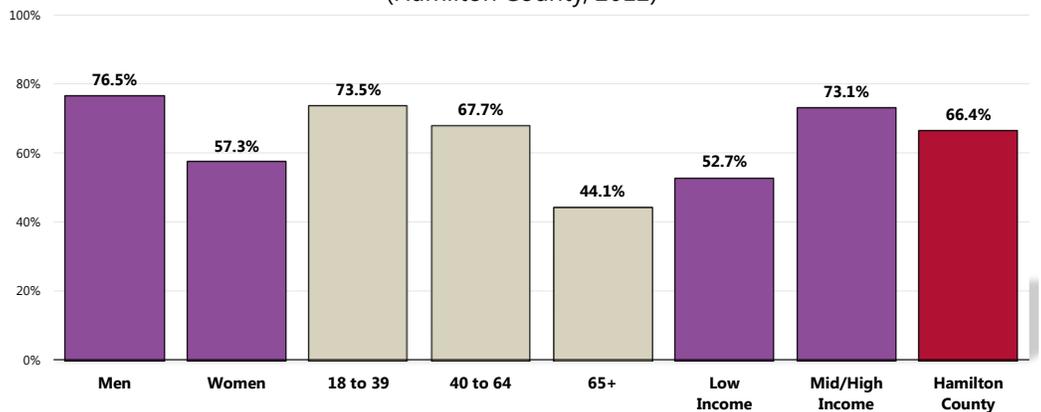
### Current Drinkers



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 193]  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2010 Indiana data.  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of all respondents.  
 • Current drinkers had at least one alcoholic drink in the past month.

👤 Current drinking is more prevalent among men, adults under 65, and higher income residents.

### Current Drinkers (Hamilton County, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 193]  
 Notes: • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., “White” reflects non-Hispanic White 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.  
 • Current drinkers had at least one alcoholic drink in the past month.

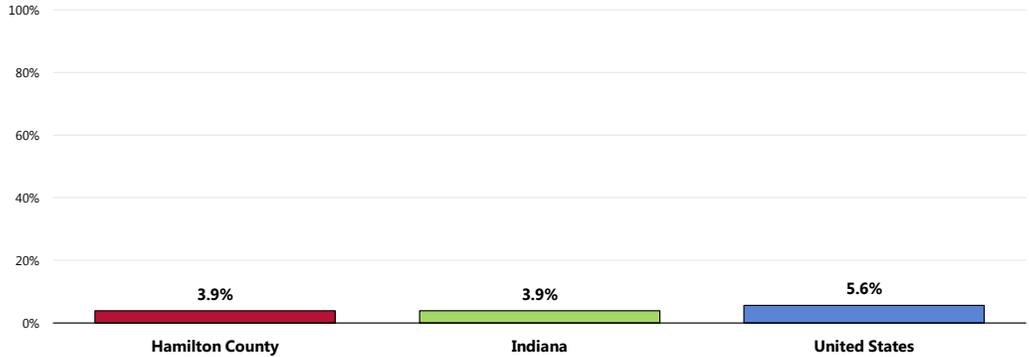
## Chronic Drinking

“Chronic drinkers” include survey respondents reporting 60 or more drinks of alcohol in the month preceding the interview.

**A total of 3.9% of area adults averaged two or more drinks of alcohol per day in the past month (chronic drinkers).**

- Identical to the statewide proportion.
- Statistically similar to the national proportion.

### Chronic Drinkers

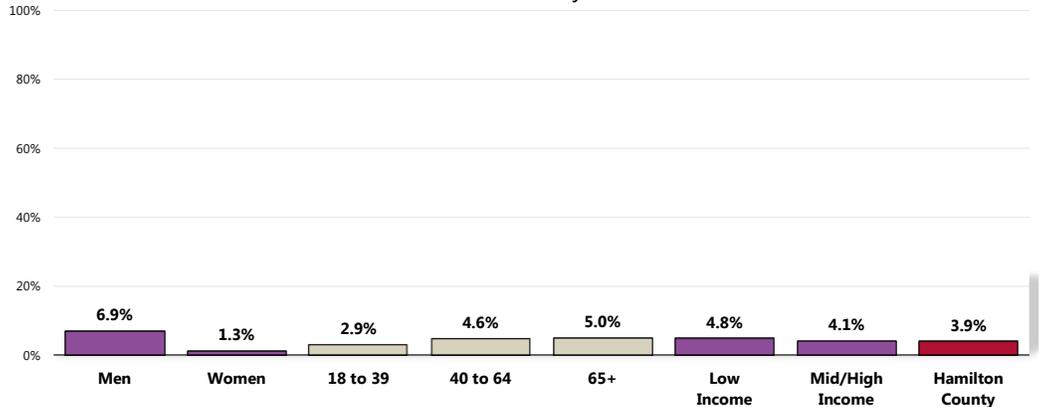


- Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 194]
  - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2010 Indiana data.
  - 2011 PRC National Health Survey, Professional Research Consultants, Inc.
- Notes:
- Asked of all respondents.
  - Chronic drinkers are defined as having 60+ alcoholic drinks in the past month.
  - \*The state definition for chronic drinkers is males consuming 2+ drinks per day and females consuming 1+ drink per day.



Chronic drinking is statistically high among men in the county.

### Chronic Drinkers (Hamilton County, 2012)



- Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 194]
  - Asked of all respondents.
  - Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., “White” reflects non-Hispanic White 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.
  - Chronic drinkers are defined as those having 60+ alcoholic drinks in the past month.

RELATED ISSUE:  
See also *Stress* in the **Mental Health & Mental Disorders** section of this report.

## Binge Drinking

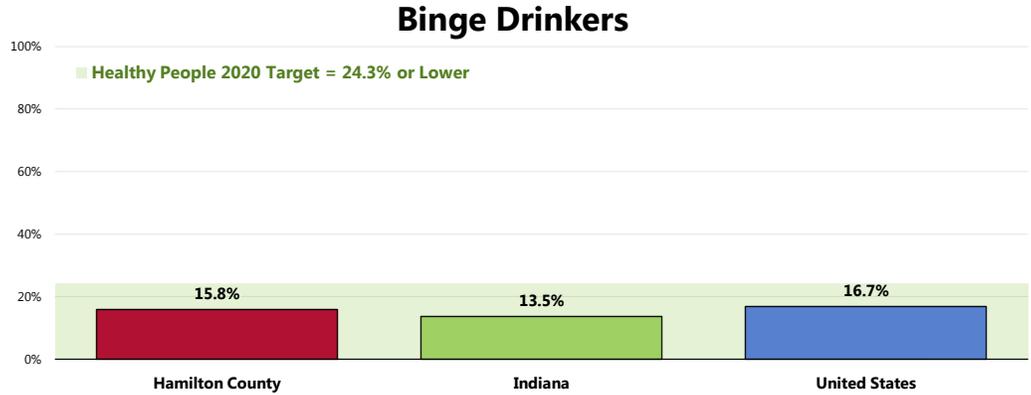
"Binge drinkers" include:

1) MEN who report drinking 5 or more alcoholic drinks on any single occasion during the past month; and

2) WOMEN who report drinking 4 or more alcoholic drinks on any single occasion during the past month.

### A total of 15.8% of Hamilton County adults are binge drinkers.

- Similar to Indiana findings.
- Similar to national findings.
- Satisfies the Healthy People 2020 target (24.3% or lower).



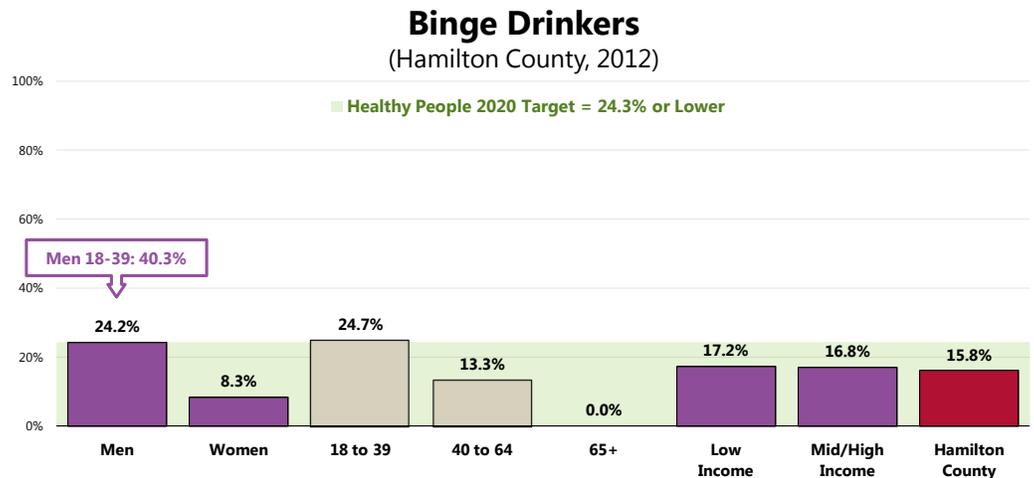
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 195]  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2010 Indiana data.  
 • 2011 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-14.3]

Notes: • Asked of all respondents.  
 • Binge drinkers are defined as men having 5+ alcoholic drinks on any one occasion or women consuming 4+ drinks on any one occasion.

Binge drinking is more prevalent among:

👤 Men (note the 40.3% prevalence among those under age 40).

👤 Young adults.



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 195]  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective SA-14.3]

Notes: • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White 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.  
 • Binge drinkers are defined as men having 5+ alcoholic drinks on any one occasion or women consuming 4+ drinks on any one occasion

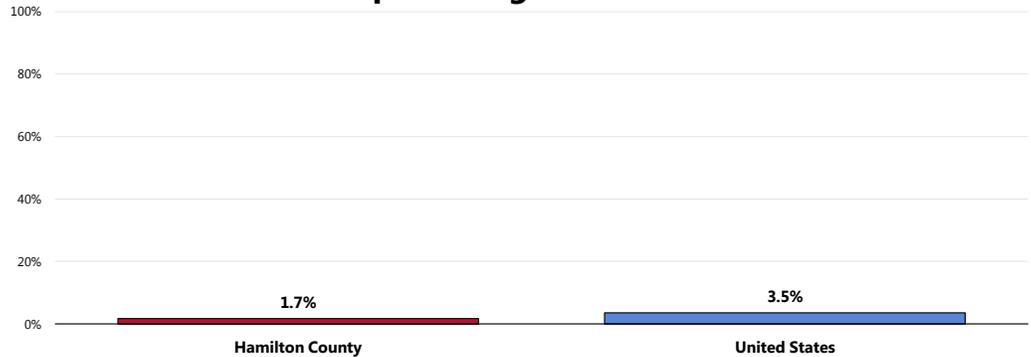
## Drinking & Driving

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 the actual incidence of drinking and driving in the community is likely higher.

**A total of 1.7% of Hamilton County adults acknowledge having driven a vehicle in the past month after they had perhaps too much to drink.**

- Lower than the national findings.

### Have Driven in the Past Month After Perhaps Having Too Much to Drink



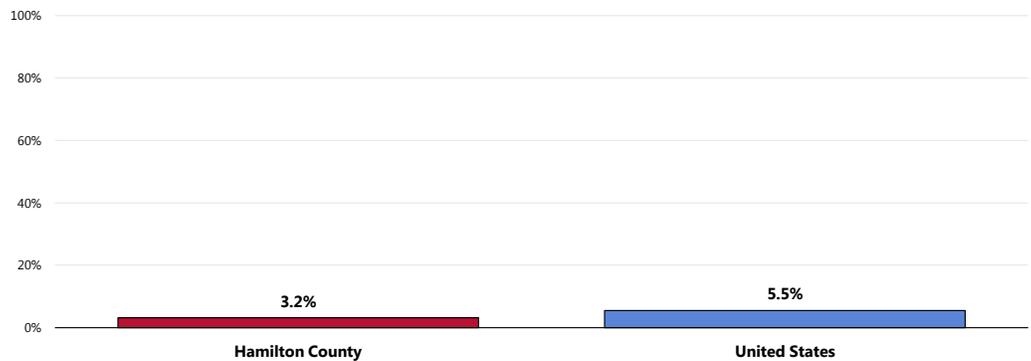
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 70]  
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: • Asked of all respondents.

**A total of 3.2% of Hamilton County adults acknowledge either drinking and driving or riding with a drunk driver in the past month.**

- More favorable than the national findings.

### Have Driven Drunk OR Ridden With a Driver in the Past Month Who Had Too Much to Drink



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 196]  
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.

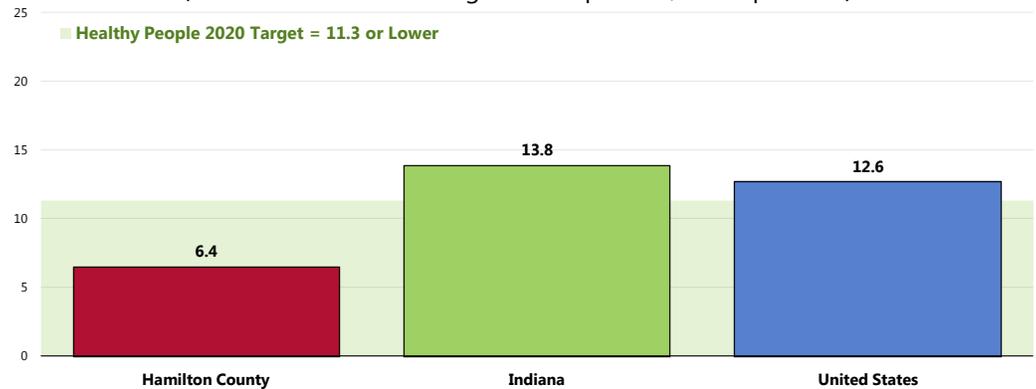
Notes: • Asked of all respondents.

## Age-Adjusted Drug-Induced Deaths

Between 2007 and 2009, there was an annual average age-adjusted drug-induced mortality rate of 6.4 deaths per 100,000 population in Hamilton County.

- Lower than the statewide rate.
- Lower than the national rate.
- Satisfies the Healthy People 2020 target (11.3 or lower).

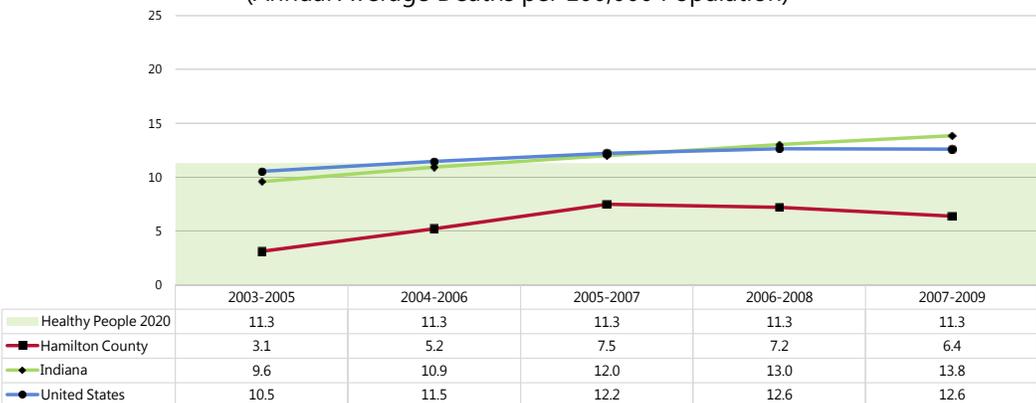
### Drug-Induced Deaths: Age-Adjusted Mortality (2007-2009 Annual Average Deaths per 100,000 Population)



Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted July 2012.  
 • 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.  
 • Local, state and national data are simple three-year averages.

☒ The county mortality rate has risen and fallen over time.

### Drug-Induced Deaths: 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 July 2012.  
 • 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.  
 • County, state and national data are simple three-year averages.

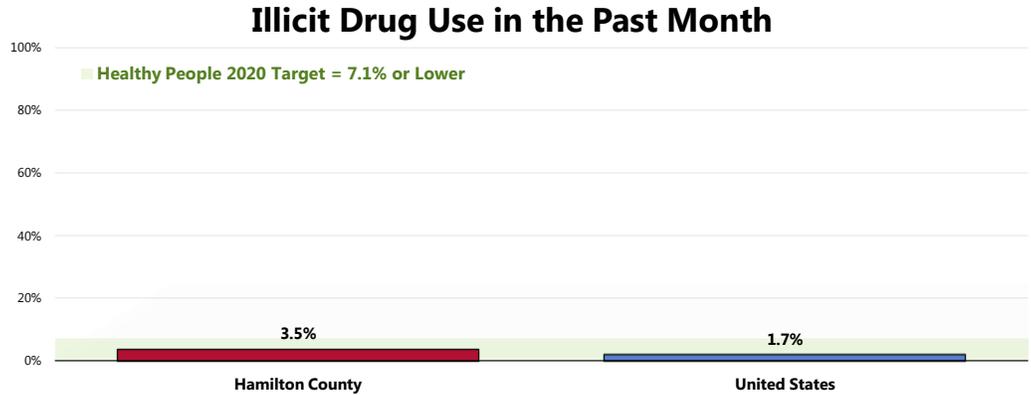
## Illicit Drug Use

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 3.5% of Hamilton County adults acknowledge using an illicit drug in the past month.**

- Similar to the proportion found nationally.
- Satisfies the Healthy People 2020 target of 7.1% or lower.

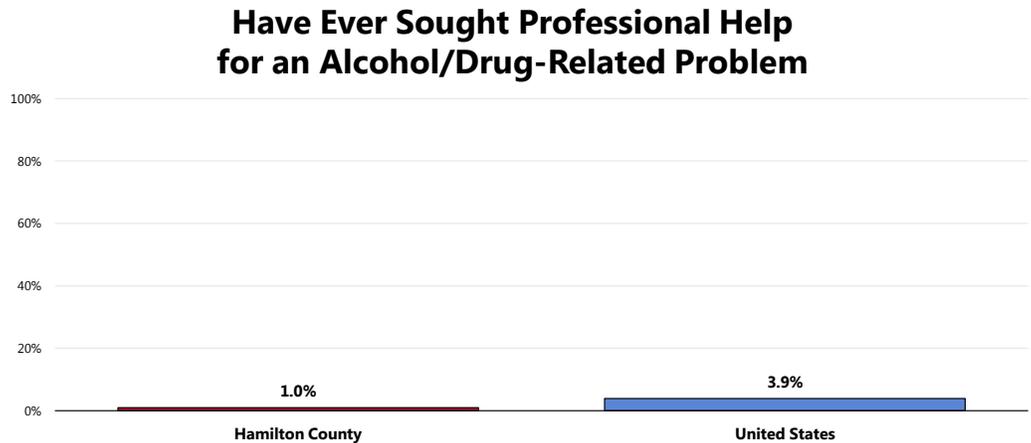


Sources: ● 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 72]  
● 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
● US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective SA-13.3]  
Notes: ● Asked of all respondents.

## Alcohol & Drug Treatment

**Just 1.0% of Hamilton County adults reports seeking professional help for an alcohol or drug problem at some point in their lives.**

- Lower than national findings.



Sources: ● 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 73]  
● 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
Notes: ● Asked of all respondents.

## Related Focus Group Findings: Substance Abuse

Focus group participants are concerned with substance abuse in the community, discussing issues such as:

- Prevalence of drug use
- Limited treatment facilities
- Adolescent use
- Self-medicate
- Parental knowledge or lack thereof
- Prevention

A number of focus group participants express concern about the **prevalence of drug use** in the community, especially alcohol, marijuana, methamphetamines, bath salts, heroin and prescription drugs. Focus group attendees worry about **limited treatment facilities** and lack of capacity to handle substance abuse referrals within Hamilton County. Fairbanks Addiction Treatment Center represents the closest inpatient unit for county residents, and Aspire provides counseling services for addiction. However, these two agencies cannot fulfill the overall needs of the community and little support exists for youth suffering from substance dependence.

Substance use and abuse affects all demographics. **Substance use can begin early in adolescence**, and participants worry that the age of first use continues to lower. Many attendees agree that the community pretends the level of use among adolescents is low and keeps the conversations muted, as a participant recalls:

*“It’s a very uncomfortable problem in our community. I heard through the rumor mill that Westfield schools had one of the biggest drug busts on April 20<sup>th</sup>, which is pot day. All the kids were arrested in elementary, middle, and high school for having drugs. They brought in the drug dogs and nobody heard about it ... My opinion is the community and schools don’t want it to be known because then that affects their school rating and reputation.” — Focus Group Participant*

Participants believe that some residents **self-medicate** with drugs or alcohol, using the substance as a coping mechanism. Youth may use drugs to deal with the challenges of adolescence or a rocky home life; in addition, individuals who have experienced trauma represent a population where self-medication occurs more frequently. One focus group attendee describes the importance of support groups for trauma victims as a way of lowering the probability of substance use:

*“Support groups are something that is really lacking because when you look at the population walking through our doors, going through the trauma that they’re going through, they turn to that fix, that drug and alcohol. That’s a Band-Aid, so it just adds levels of more trauma in their life and it is something that we’re missing.”— Focus Group Participant*

Another component of the pervasive use of illegal substances among youth is **parental knowledge, or lack thereof**. Focus group members worry that youth have easy access to prescription drugs in the family medicine cabinet, so prevention programs need to educate parents about securing medication and/or alcohol in the home. A participant describes how some adults even allow the behavior under certain conditions:



*"In some of the areas, there have been parents who have been arrested for serving alcohol to minors even though they confiscated their car keys, and they didn't see anything wrong with what they were doing because they were protecting the kids by taking their car keys." — Focus Group Participant*

Participants stress the importance of **prevention** and note that the Hamilton County Health Department conducts substance abuse education, with health educators working closely with the schools.

# Tobacco Use

Tobacco use is the single most preventable cause of death and disease in the United States. Each year, approximately 443,000 Americans die from tobacco-related illnesses. For every person who dies from tobacco use, 20 more people suffer with at least one serious tobacco-related illness. In addition, tobacco use costs the US \$193 billion annually in direct medical expenses and lost productivity.

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.

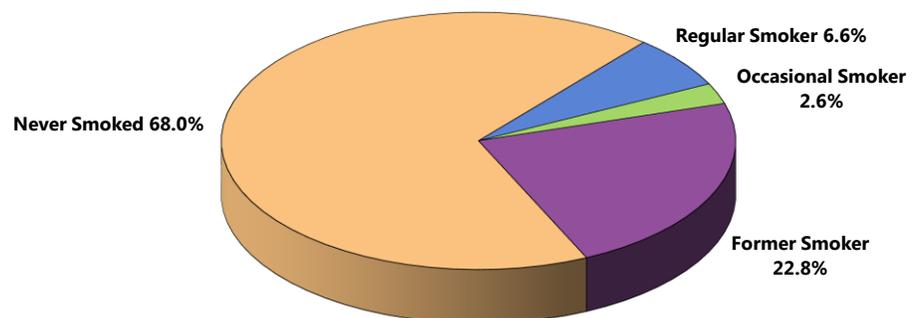
– Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

## Cigarette Smoking

### Cigarette Smoking Prevalence

**A total of 9.2% of Hamilton County adults currently smoke cigarettes, either regularly (6.6% every day) or occasionally (2.6% on some days).**

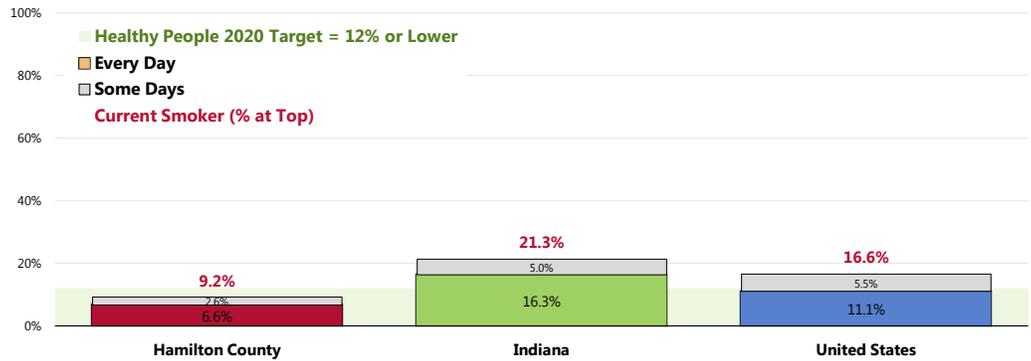
**Cigarette Smoking Prevalence**  
(Hamilton County, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 189]  
Notes: • Asked of all respondents.

- Much lower than statewide findings.
- Much lower than national findings.
- Similar to the Healthy People 2020 target (12% or lower).

## Current Smokers

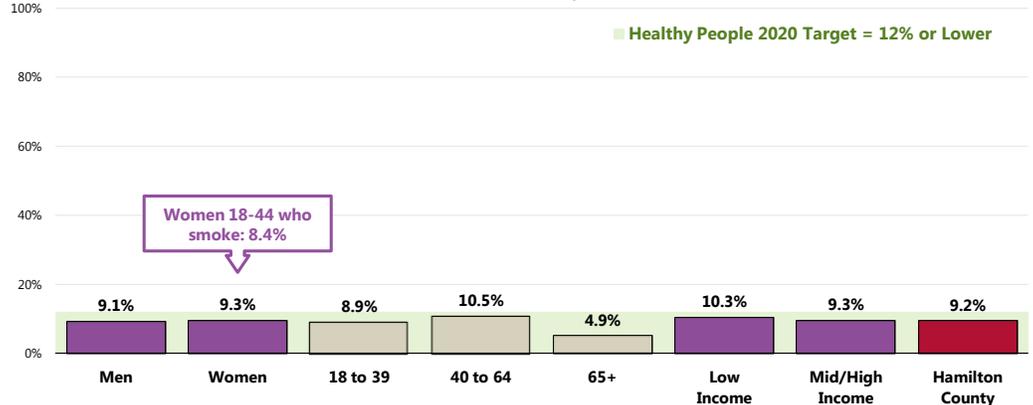


- Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 189]
  - 2011 PRC National Health Survey, Professional Research Consultants, Inc.
  - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2010 Indiana data.
  - 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 (everyday and some days).

👤 Cigarette smoking does not vary significantly by demographic characteristics in Hamilton County.

👤 Note that 8.4% of women of child-bearing age (ages 18 to 44) currently smoke. This is notable given that tobacco use increases the risk of infertility, as well as the risks for miscarriage, stillbirth and low birthweight for women who smoke during pregnancy.

## Current Smokers (Hamilton County, 2012)



- Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 189-190]
  - 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.
  - Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White 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 (everyday and some days).

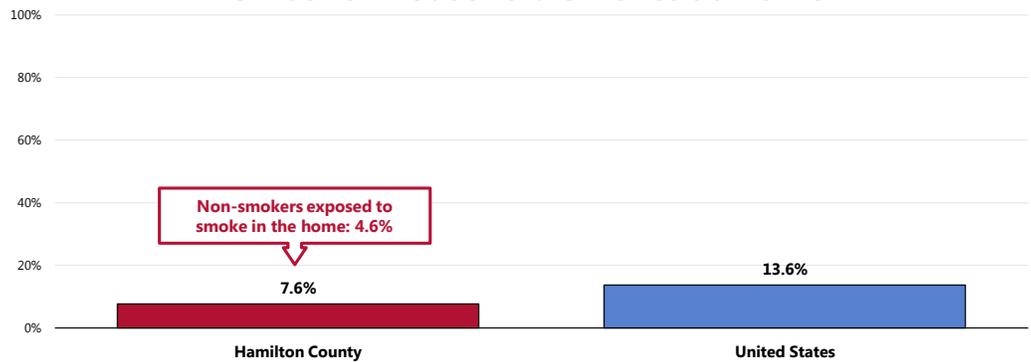
## Environmental Tobacco Smoke

**A total of 7.6% of Hamilton County adults (including smokers and non-smokers) report that a member of their household has smoked cigarettes in the home an average of four or more times per week over the past month.**

- More favorable than national findings.

 Note that 4.6% of Hamilton County non-smokers are exposed to cigarette smoke at home, similar to the national prevalence (not shown).

### Member of Household Smokes at Home

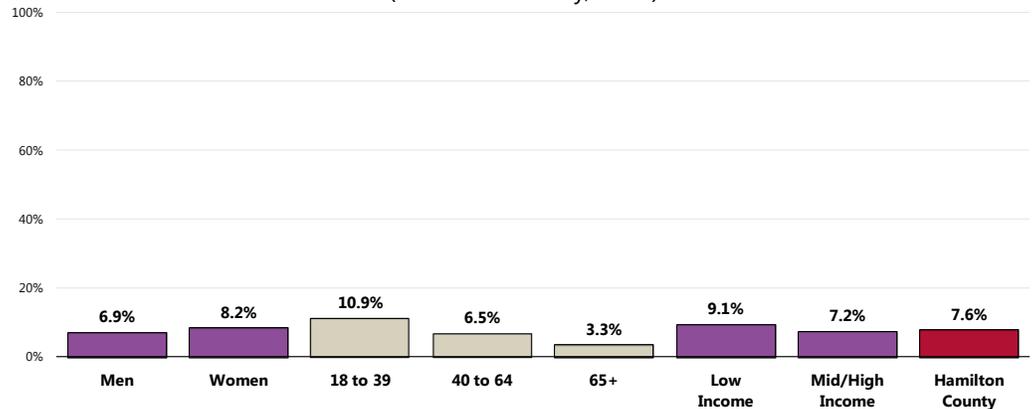


Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 64, 191]  
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.

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.

 No statistical difference by gender, age or income level.

### Member of Household Smokes At Home (Hamilton County, 2012)



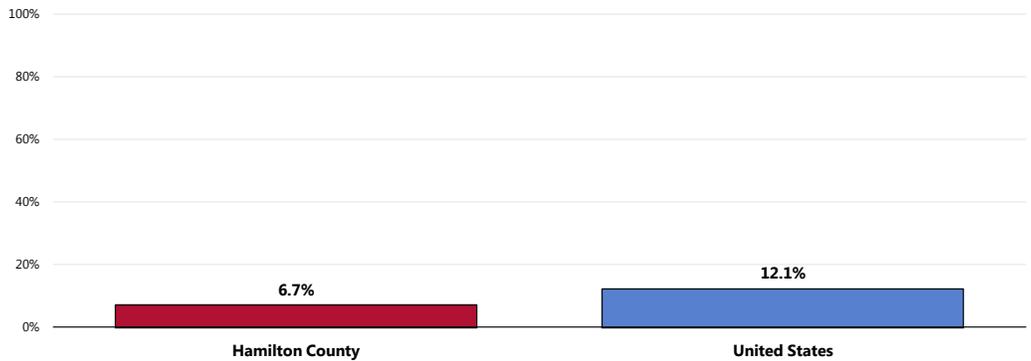
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 64]

Notes: • Asked of all respondents.  
• Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White 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.

**Among households with children, 6.7% have someone who smokes cigarettes in the home.**

- More favorable than national findings.

### Percentage of Households With Children In Which Someone Smokes in the Home



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 192]  
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
Notes: • Asked among parents of children age 0-17.  
• "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.

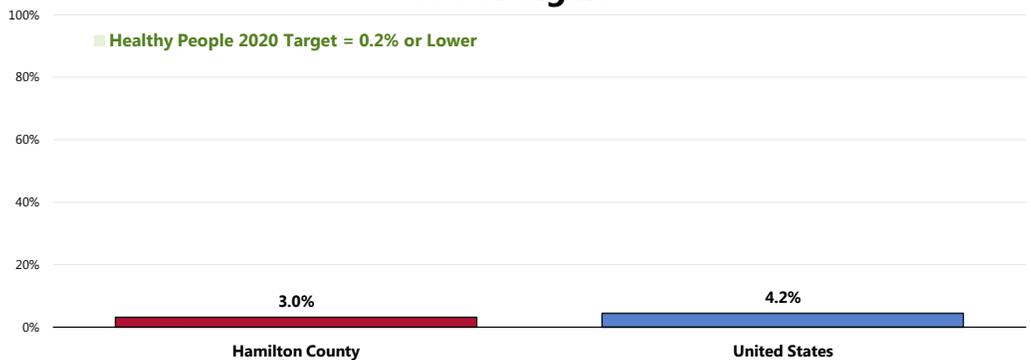
## Other Tobacco Use

### Cigars

**A total of 3.0% of Hamilton County adults use cigars every day or on some days.**

- Similar to the national percentage.
- Fails to satisfy the Healthy People 2020 target (0.2% or lower).

### Use of Cigars



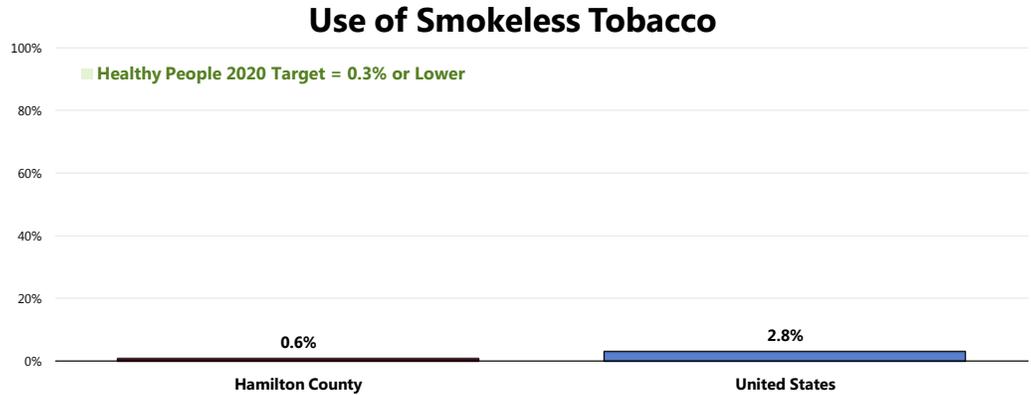
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 66]  
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
• US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective TU-1.3]  
Notes: • Asked of all respondents.

Examples of smokeless tobacco include chewing tobacco, snuff, or “snus.”

## Smokeless Tobacco

**A total of 0.6% of Hamilton County adults uses some type of smokeless tobacco every day or on some days.**

- Better than the national percentage.
- Comparable to the Healthy People 2020 target (0.3% or lower).



Sources: ● 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 65]  
● 2011 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-1.2]  
Notes: ● Asked of all respondents.  
● Smokeless tobacco includes chewing tobacco or snuff.

## Related Focus Group Findings: Tobacco

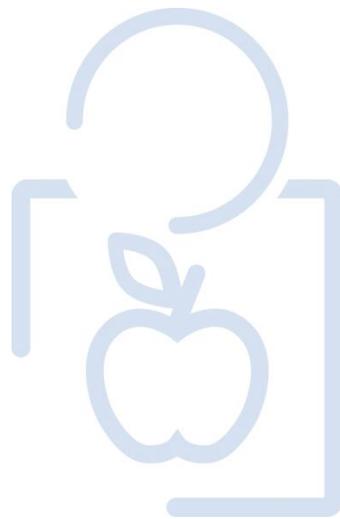
Many focus group participants are concerned with tobacco use in the community, worrying about populations such as:

- Youth
- Immigrants

Focus group participants agree that cigarette smoking and smokeless tobacco represent a major concern for the community, and attendees worry about tobacco use in **youth and immigrant populations**. During discussion, participants agreed that residents continue to smoke regardless of the health effects:

*“I think we have a lot of immigrants who use tobacco, but we also have a number of patients take that last puff before they come in to see the dentist. Turn their oxygen off while they take a puff.” — Focus Group Participant*

# ACCESS TO HEALTH SERVICES



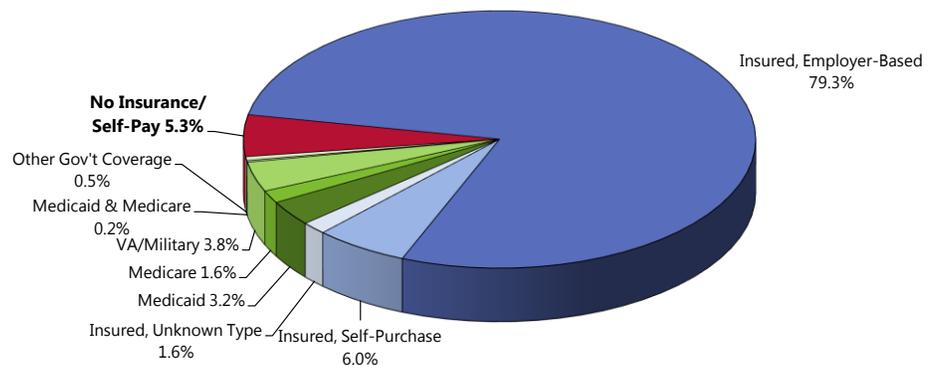
# Health Insurance Coverage

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

## Type of Healthcare Coverage

**A total of 86.9% of Hamilton County adults age 18 to 64 report having healthcare coverage through private insurance. Another 9.3% report coverage through a government-sponsored program (e.g., Medicaid, Medicare, military benefits).**

**Healthcare Insurance Coverage**  
(Among Adults 18-64; Hamilton County, 2012)



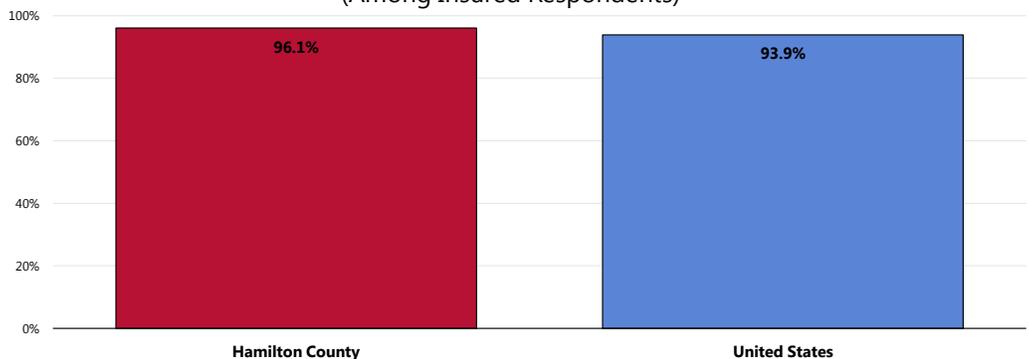
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 197]  
Notes: • Reflects respondents age 18 to 64.

## Prescription Drug Coverage

**Among insured adults, 96.1% report having prescription coverage as part of their insurance plan.**

- Comparable to the national prevalence.

**Health Insurance Covers Prescriptions at Least in Part**  
(Among Insured Respondents)



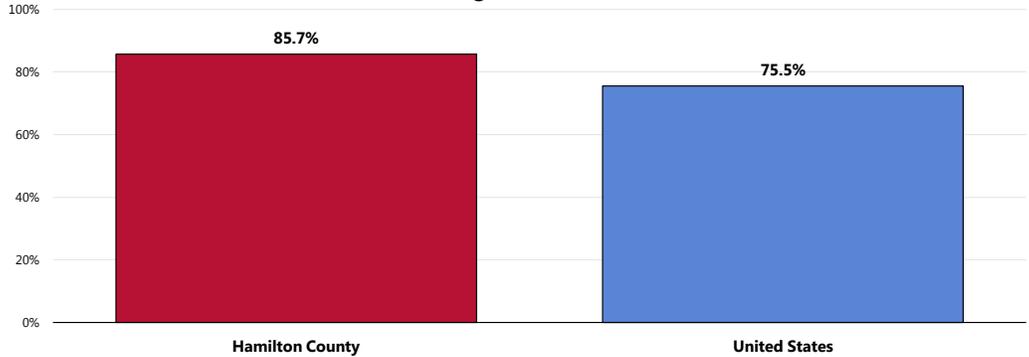
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 87]  
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
Notes: • Asked of all respondents with healthcare insurance coverage.

## Supplemental Coverage

**Among Medicare recipients, the majority (85.7%) has additional, supplemental healthcare coverage.**

- More favorable than that reported among Medicare recipients nationwide.

### Have Supplemental Coverage in Addition to Medicare (Among Adults 65+)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 86]  
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: • Asked of respondents age 65+.

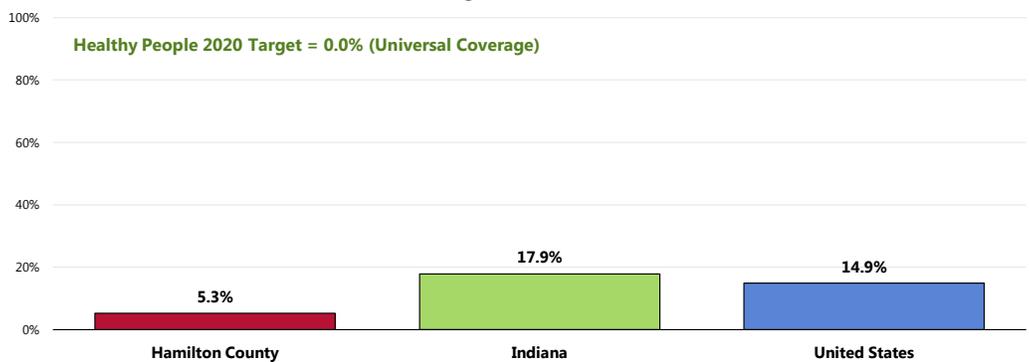
## Lack of Health Insurance Coverage

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).

**Among adults age 18 to 64, 5.3% report having no insurance coverage for healthcare expenses.**

- Much lower than the state finding.
- Much lower than the national finding.
- The Healthy People 2020 target is universal coverage (0% uninsured).

### Lack of Healthcare Insurance Coverage (Among Adults 18-64)



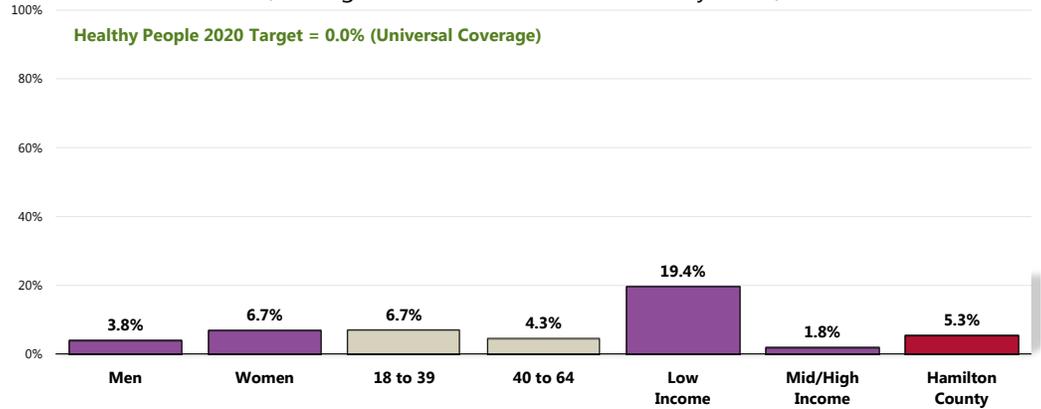
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 197]  
• Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2010 Indiana data.  
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.

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

👥 Residents living at lower incomes are more likely to be without healthcare insurance coverage (note the 19.4% uninsured prevalence among low-income adults).

## Lack of Healthcare Insurance Coverage

(Among Adults 18-64; Hamilton County, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 197]  
 • 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.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White 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.

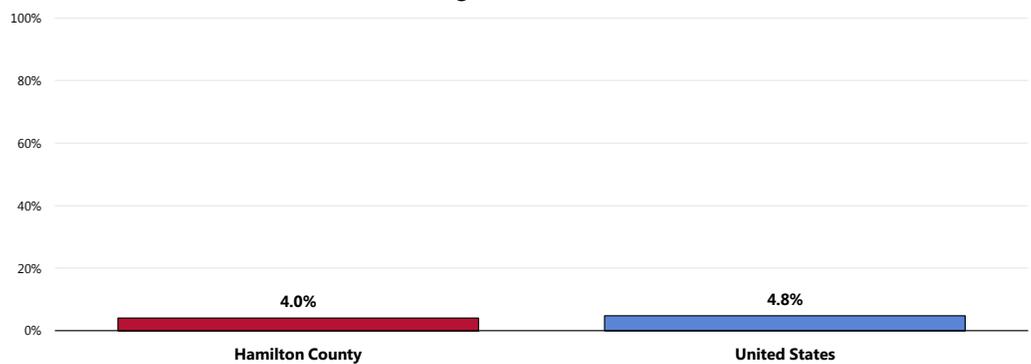
### Recent Lack of Coverage (Insurance Instability)

Among currently insured adults in Hamilton County, 4.0% report that they were without healthcare coverage at some point in the past year.

- Similar to US findings.

## Went Without Healthcare Insurance Coverage At Some Point in the Past Year

(Among Insured Adults)



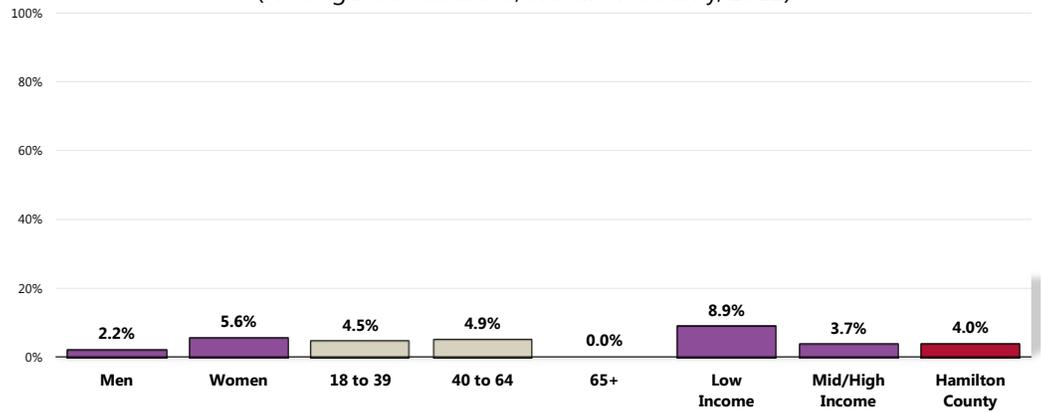
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 88]  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: • Asked of all insured respondents.

As might be expected, recent lack of coverage is really only an issue among adults under age 65 (non-Medicare).

While the difference by income below appears notable, it is not statistically significant:

### Went Without Healthcare Insurance Coverage At Some Point in the Past Year (Among Insured Adults; Hamilton County, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 88]  
Notes: • Asked of all insured respondents.  
• Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White 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.

# Difficulties Accessing Healthcare

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

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

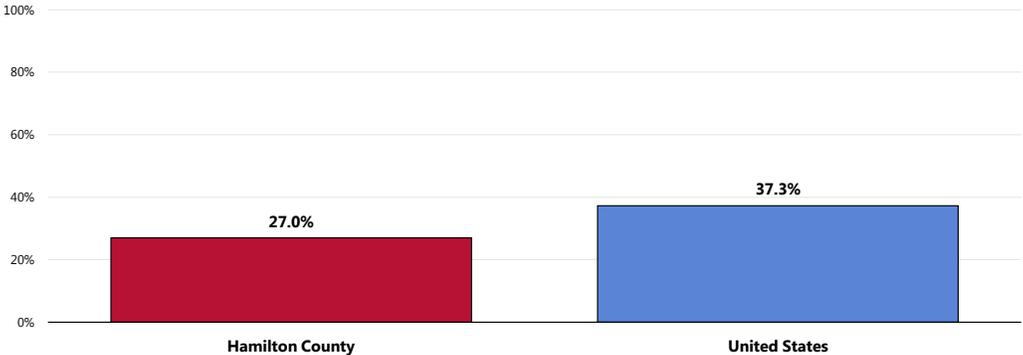
– Healthy People 2020 (www.healthypeople.gov)

## Difficulties Accessing Services

**A total of 27.0% of Hamilton County adults report some type of difficulty or delay in obtaining healthcare services in the past year.**

- Much lower than national findings.

### Experienced Difficulties or Delays of Some Kind in Receiving Needed Healthcare in the Past Year



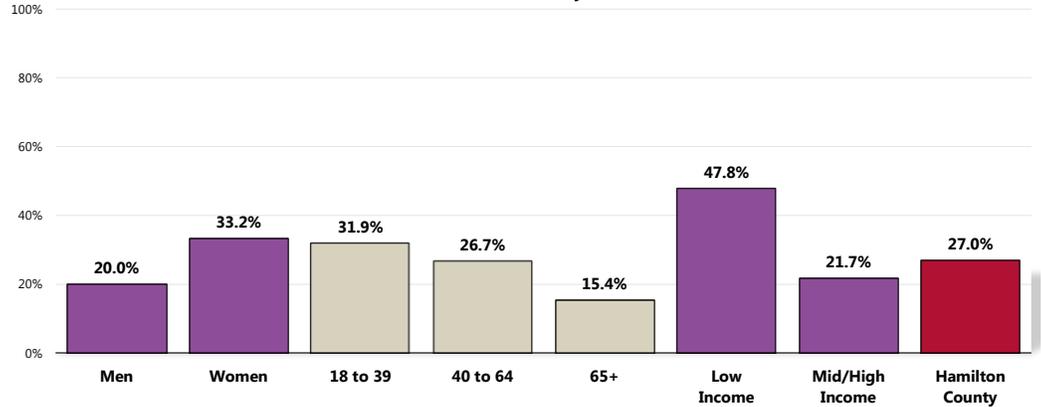
Sources: ● 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 201]  
● 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
Notes: ● Asked of all respondents.  
● Represents the percentage of respondents experiencing one or more barriers to accessing healthcare in the past 12 months.

Note that the following demographic groups more often report difficulties accessing healthcare services:

- 👥 Women.
- 👥 Young adults (under 40).
- 👥 Lower-income residents.

This indicator reflects the percentage of the total population experiencing problems accessing healthcare in the past year, regardless of whether they needed or sought care.

## Experienced Difficulties or Delays of Some Kind in Receiving Needed Healthcare in the Past Year (Hamilton County, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 201]  
 Notes: • Asked of all respondents.  
 • Represents the percentage of respondents experiencing one or more barriers to accessing healthcare in the past 12 months.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White 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.

### Barriers to Healthcare Access

To better understand healthcare access barriers, survey participants were asked whether any of six 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.

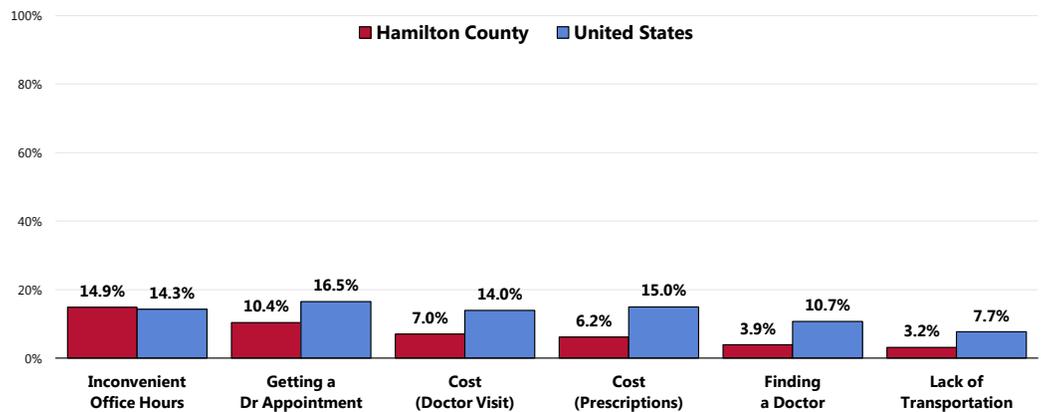
Of the tested barriers, inconvenient office hours impacted the greatest share of Hamilton County adults (14.9% say that inconvenient hours prevented them from obtaining a visit to a physician in the past year).

- This barrier (inconvenient office hours) is statistically comparable to the US prevalence.

Note also below the prevalence of the other barriers tested.

- The proportion of Hamilton County adults impacted was statistically better than that found nationwide for each of these remaining barriers.

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



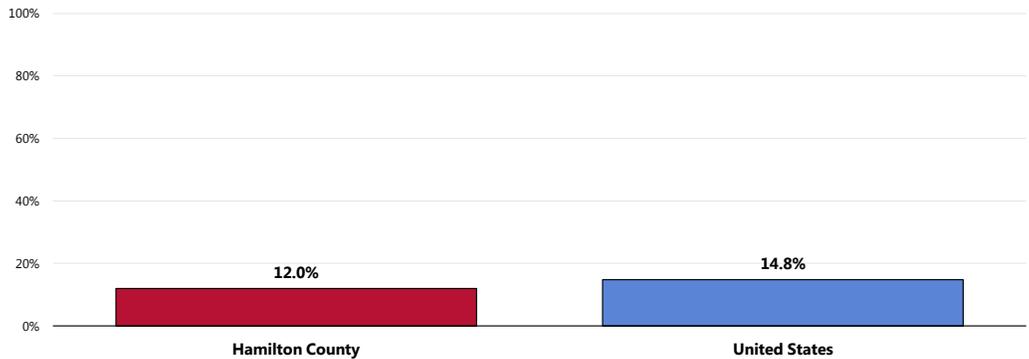
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 7-12]  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of all respondents.

## Prescriptions

Among all Hamilton County adults, 12.0% skipped or reduced medication doses in the past year in order to stretch a prescription and save money.

- Similar to national findings.

### Skipped or Reduced Prescription Doses in Order to Stretch Prescriptions and Save Money



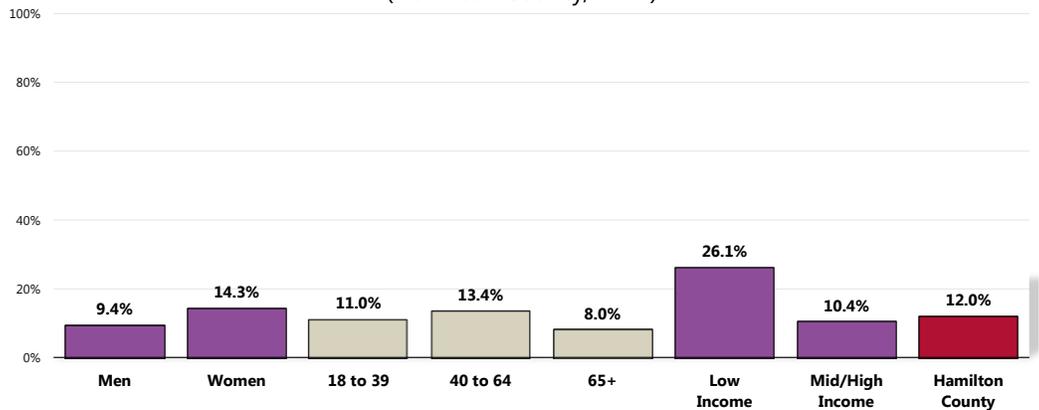
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 13]  
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: • Asked of all respondents.

👥 Respondents with lower incomes are more likely to have skipped or reduced their prescription doses.

### Skipped or Reduced Prescription Doses in Order to Stretch Prescriptions and Save Money

(Hamilton County, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 13]  
Notes: • Asked of all respondents.

• Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White 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.

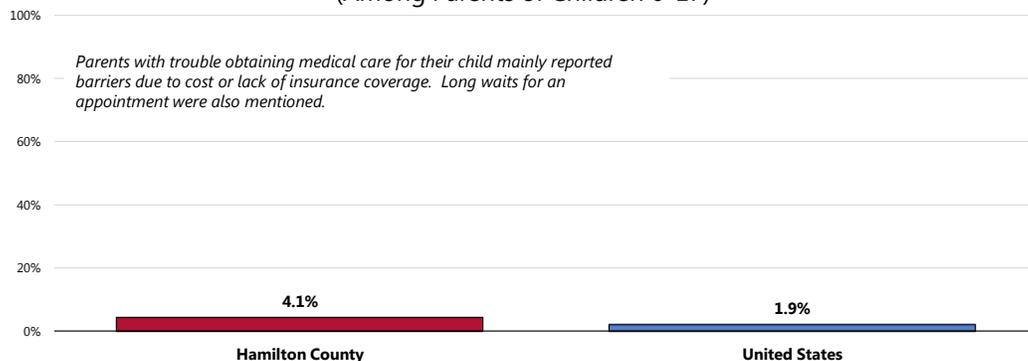
## Accessing Healthcare for Children

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.

**A total of 4.1% 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.

### Had Trouble Obtaining Medical Care for Child in the Past Year (Among Parents of Children 0-17)



*Parents with trouble obtaining medical care for their child mainly reported barriers due to cost or lack of insurance coverage. Long waits for an appointment were also mentioned.*

Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 130-131]  
• 2011 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.

### Findings Related Focus Group Findings: Access to Healthcare

Many focus group participants are concerned with access to healthcare. The main issues discussed include:

- Barriers to accessing healthcare
- Insurance status
- Medicaid reimbursement
- Prescription costs
- Need for a medical home
- ER overutilization
- Transportation
- Interpretive services

Focus group participants agree that residents encounter several **barriers** when trying to **access healthcare services** in the community, reporting that many residents are **underinsured or uninsured**, which creates additional barriers to accessing healthcare (particularly specialty services). The underinsured population includes the working poor: those individuals who may qualify for employer insurance but the deductibles are too high or the monthly employee cost is too much, so they elect to go without. Many residents with limited or no health insurance must travel outside the county to receive

specialty care due to the lengthy wait times for appointments in Hamilton County. Other residents may be unable to afford specialty care; an attendee recalls a recent experience:

*"We had a 16-year-old who broke his ankle playing football last fall. He went to an emergency room. He was given a set of crutches and his mom was given an ortho to call. She called the ortho. \$280.00 for her to walk in. She is a part-time school bus driver. She has no insurance. They are over Medicaid guidelines and he was sitting in school the following Monday and went to the school nurse. He was in so much pain."— Focus Group Participant*

Some residents may qualify for **Medicaid**, but the application process is complex and some community members struggle to fill out all of the paperwork. For those who qualify for Medicaid, finding a provider who accepts that insurance can prove difficult; respondents agree that the number of physicians who accept Medicaid has decreased in recent years due to the low **reimbursement rate** and lengthy time before payment. Participants note that some physicians are not accepting new Medicare patients either:

*"Last year we ran into it with Medicare as well. We had seniors who had been healthy and they had a situation where they took ill and they called their doctor and called their doctor in and they were told by the office that it had been two years since they saw the doctor, so they'd be considered a new patient, and I'm sorry. We're taking no new Medicare patients."— Focus Group Participant*

There are several clinics and Federally Qualified Health Centers (FQHCs) in the community which operate on sliding fee schedules to provide services to under- and uninsured residents. Several facilities exist for these residents, including the Trinity Free Clinic, Hamilton County Health Department, Riverview Hospital Primary Care Clinic, and the Heart and Soul Clinic. All of these clinics operate at capacity and have waiting lists. One participant explains the Heart and Soul Clinic, which does not charge for services and is entirely dependent on volunteers to provide the care:

*"What we see is patients who can't afford to even go to the med checks at the drug stores. They can't afford to go to the immediate cares because they want money up front... Many of our clinics are in the evening and Saturdays. We are full. We are anticipating treating more than 4,000 patients a year."— Focus Group Participant*

**Prescription medication costs and co-payments** can overwhelm families as well, even those with insurance. An attendee explains her concerns:

*"Well, I think another part of our community is the newly uninsured who have never been without a doctor, never been without insurance, but their family doctor kept them on antidepressants and other medications and then all of a sudden that prescription runs out and they stop taking their meds or of course they self-medicate before that by reducing their meds. Instead of taking a full tablet, they're cutting them in half and trying to stretch it as far as they could go, and then they may come into our clinic on a Saturday and we do not prescribe medications without having a formal testing process for any kind of mental health medication."— Focus Group Participant*

Focus group participants believe residents do not realize the importance of preventative healthcare. Many community members do not have a **medical home**, which respondents feel is critical to maintaining overall health. In turn, residents **over-utilize the emergency room**. For many individuals who do not have insurance, the emergency

room becomes their primary care provider. Participants agree that an emergency room is not an appropriate setting for routine healthcare services. They further described the overuse of the emergency room as a learned behavior or cultural issue, as one participant explains:

*"I think that's a cultural issue as far as just what you grew up with knowing, not necessarily race...and just going to the emergency room every time you have a health related issue versus making a doctor's appointment and having a normal doctor. They don't understand that concept as much, and then if you tell them, 'No, we're not taking you to an emergency room. We'll schedule an appointment tomorrow,' then we deal with a whole another set of issues, so we end up taking them to the emergency room anyways, because we have to." — Focus Group Participant*

Participants also view **transportation** as an obstacle to accessing healthcare and other services. Residents can utilize the public bus system, but hours of operation and limited routes hinder access. Community members have access to several cab providers and point-of-service transportation, but each one-way trip costs \$5, which eliminates this option for many. In addition, residents must supply notice for this service, which is not always possible. A participant describes the frustrations with the point-of-service transit:

*"We have a point of service transportation, but you have to have 24 hours, usually a week, notice. 24 hours hardly ever gets you on the bus, and you have to go at their convenience, so you may be at an appointment two hours early, which is fine if you have one in the middle of the day. It's not so great if you have one first thing in the morning. Well, and you have the ability to be at an appointment two hours." — Focus Group Participant*

Community members also rely on 911 for their transportation needs, which frustrates emergency service personnel:

*"I'm sorry, but then there's the 911 cab service, and that's what affects us. When people can't get transportation to their appointments, they call 911, because we'll be there. They say, 'We don't have any way to get to our doctors, so we want to go to the Peninsula,' and that happens. Every year we see that number going up of just casual use of 911, and of course we take them because we're not going to refuse anybody transport." — Focus Group Participant*

Focus group attendees also agree that language can act as a barrier to accessing health-care services. Currently there are an inadequate number of **interpretive services** in Hamilton County; interpreters are needed for many languages, not just Spanish. Community members who do not speak English proficiently may struggle to make an appointment, or to communicate effectively with providers.

# Primary Care Services

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

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

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

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

## Specific Source of Ongoing Care

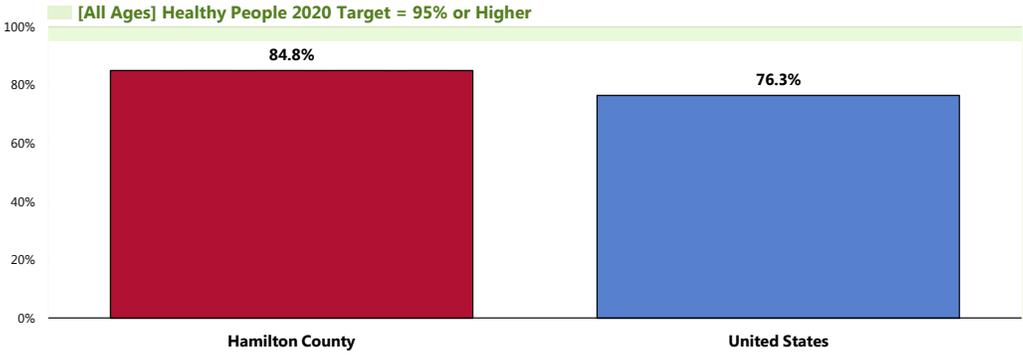
**A total of 84.8% of Hamilton County adults were determined to have a specific source of ongoing medical care (a “medical home”).**

- Better than national findings.
- Fails to satisfy the Healthy People 2010 objective (95% or higher).

Having a specific source of ongoing care includes having a doctor’s office, clinic, urgent care center, walk-in clinic, health center facility, hospital outpatient clinic, HMO or prepaid group, military/VA clinic, or some other kind of place to go if one is sick or needs advice about his or her health. This resource is also known as a “medical home.”

A hospital emergency room is not considered a source of ongoing care in this instance.

### Have a Specific Source of Ongoing Medical Care



Sources: ● 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 198]  
 ● 2011 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-5.1]  
 Notes: ● Asked of all respondents.

- 👤 No statistical differences to report when viewed by demographic characteristics.
- 👤 Among adults age 18-64, 83.9% have a specific source for ongoing medical care, more favorable than national findings.
  - Fails to satisfy the Healthy People 2020 target for this age group (89.4% or higher).

Among adults 65+, 89.6% have a specific source for care, similar to the figure reported among seniors nationally.

- Fails to satisfy the Healthy People 2020 target of 100% for seniors.

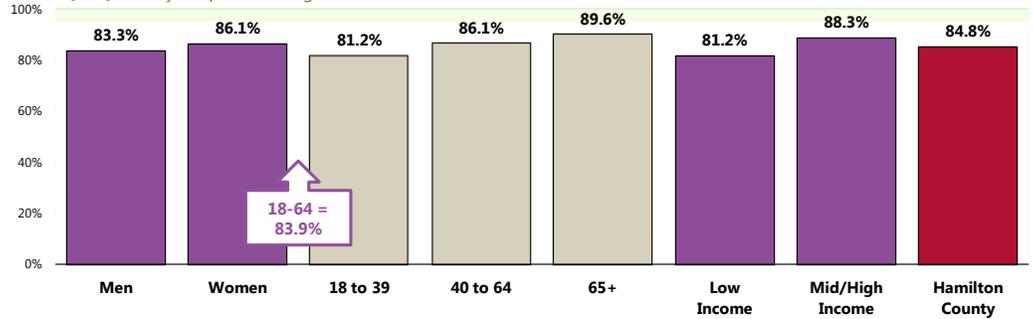
## Have a Specific Source of Ongoing Medical Care

(Hamilton County, 2012)

[All Ages] Healthy People 2020 Target = 95.0% or Higher

[18-64] Healthy People 2020 Target = 89.4% or Higher

[65+] Healthy People 2020 Target = 100%



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 198-200]

• US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objectives AHS-5.1, 5.3, 5.4]

Notes: • Asked of all respondents.

• Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White 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.

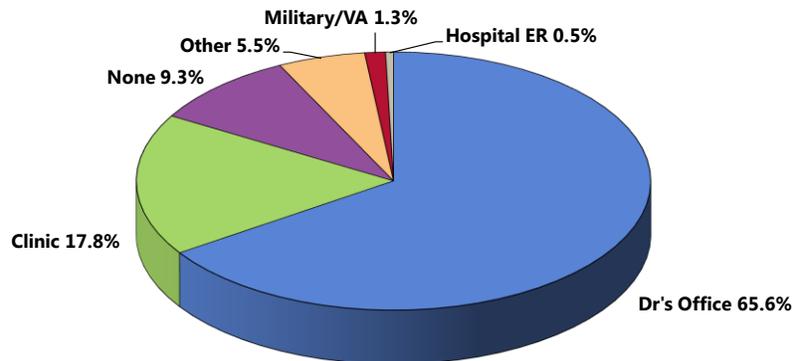
## Type of Place Used for Medical Care

When asked where they usually go if they are sick or need advice about their health, the greatest share of respondents (65.6%) identified a particular doctor's office.

A total of 17.8% say they usually go to some type of clinic, while 1.3% go to a VA provider/facility, and 0.5% seek care at a hospital emergency room.

## Particular Place Utilized for Medical Care

(Hamilton County, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 15-16]

Notes: • Asked of all respondents.

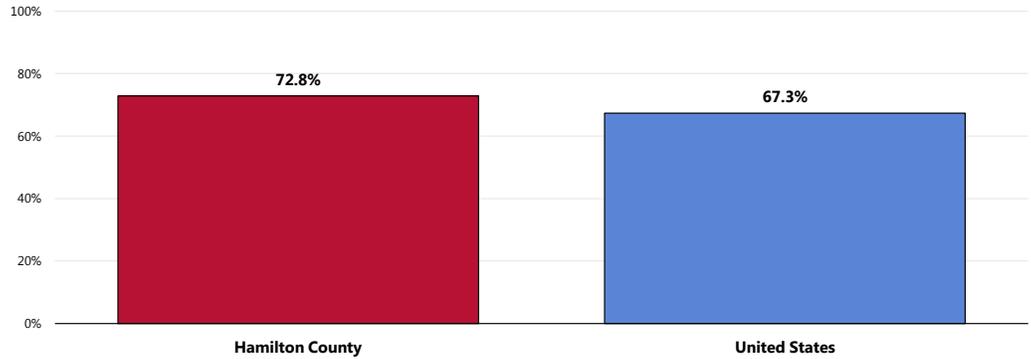
# Utilization of Primary Care Services

## Adults

A total of 72.8% of adults visited a physician for a routine checkup in the past year.

- More favorable than national findings.

### Have Visited a Physician for a Checkup in the Past Year

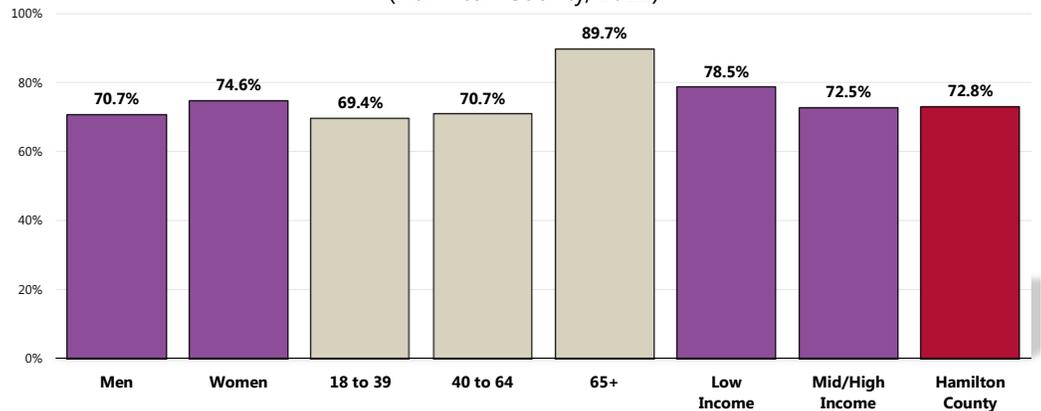


Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 17]  
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: • Asked of all respondents.

👥 Adults under age 65 are less likely to have received routine care in the past year.

### Have Visited a Physician for a Checkup in the Past Year (Hamilton County, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 17]  
• Asked of all respondents.

Notes: • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White 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.

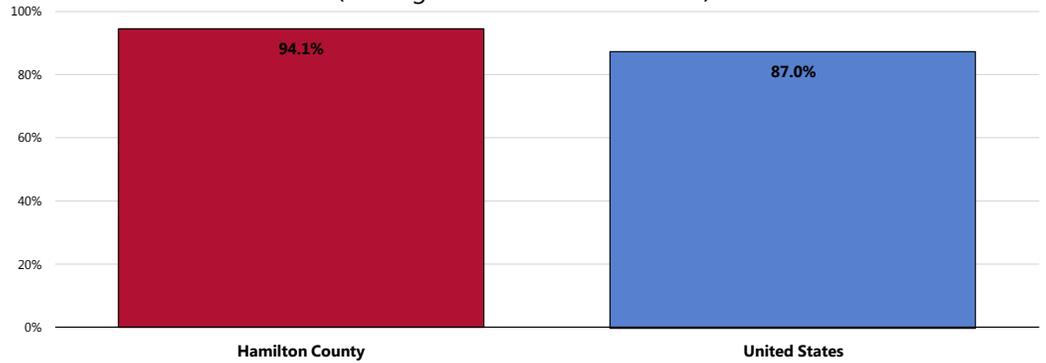
## Children

Among surveyed parents, 94.1% report that their child has had a routine checkup in the past year.

- Better than national findings.

### Child Has Visited a Physician for a Routine Checkup in the Past Year

(Among Parents of Children 0-17)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 132]  
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.

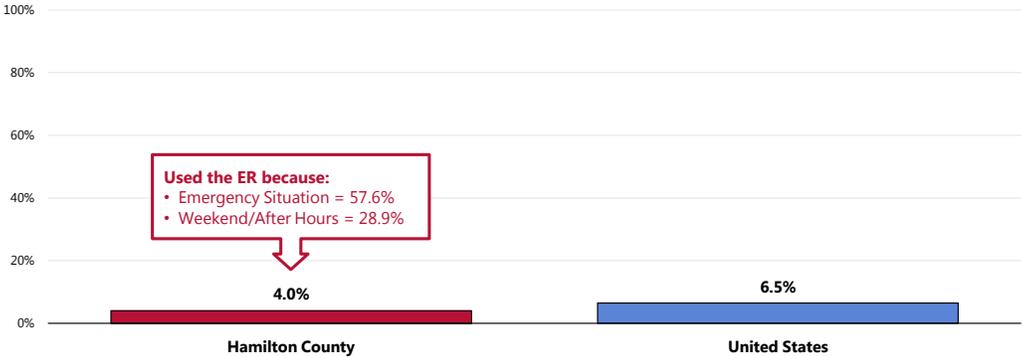
Notes: • Asked of all respondents with children 0 to 17 in the household.

# Emergency Room Utilization

A total of 4.0% of Hamilton County adults have gone to a hospital emergency room more than once in the past year about their own health.

- Lower than national findings.

## Have Used a Hospital Emergency Room More Than Once in the Past Year



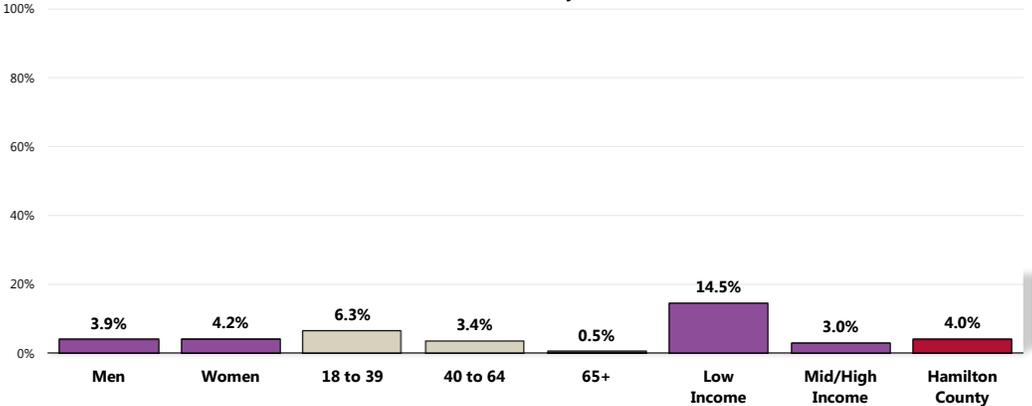
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 23-24]  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: • Asked of all respondents.

Of those using a hospital ER, 57.6% say this was due to an **emergency or life-threatening situation**, while 28.9% indicated that the visit was during **after-hours or on the weekend**.

👥 Young adults and lower-income residents are more likely to have used a hospital emergency room more than once in the past year.

## Have Used a Hospital Emergency Room More Than Once in the Past Year (Hamilton County, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 23]

Notes: • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White 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.

# Oral Health

The health of the mouth and surrounding craniofacial (skull and face) structures is central to a person's overall health and well-being. Oral and craniofacial diseases and conditions include: dental caries (tooth decay); periodontal (gum) diseases; cleft lip and palate; oral and facial pain; and oral and pharyngeal (mouth and throat) cancers.

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.

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
- Poor dietary choices

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
- 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.

Community water fluoridation and school-based dental sealant programs are 2 leading evidence-based interventions to prevent tooth decay.

Major improvements have occurred in the nation's oral health, but some challenges remain and new concerns have emerged. One important emerging oral health issue is the increase of tooth decay in preschool children. A recent CDC publication reported that, over the past decade, dental caries (tooth decay) in children ages 2 to 5 have increased.

Lack of access to dental care for all ages remains a public health challenge. This issue was highlighted in a 2008 Government Accountability Office (GAO) report that described difficulties in accessing dental care for low-income children. In addition, the Institute of Medicine (IOM) has convened an expert panel to evaluate factors that influence access to dental care.

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))

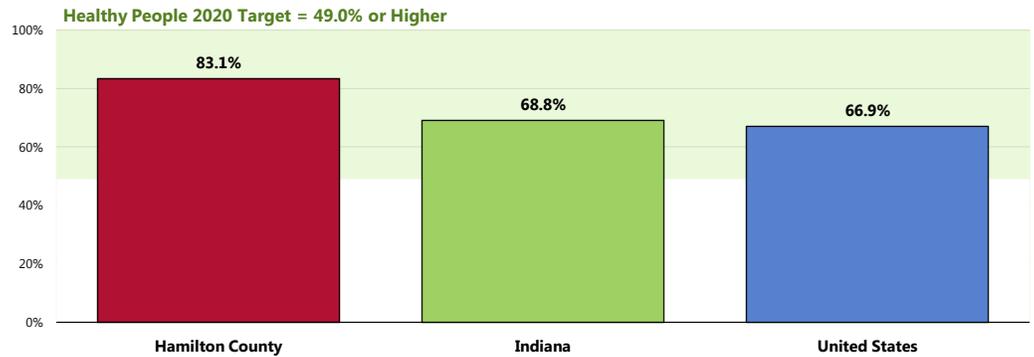
# Dental Care

## Adults

**Just over 8 in 10 Hamilton County adults (83.1%) have visited a dentist or dental clinic (for any reason) in the past year.**

- More favorable than statewide findings.
- More favorable than national findings.
- Satisfies the Healthy People 2020 target (49% or higher).

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

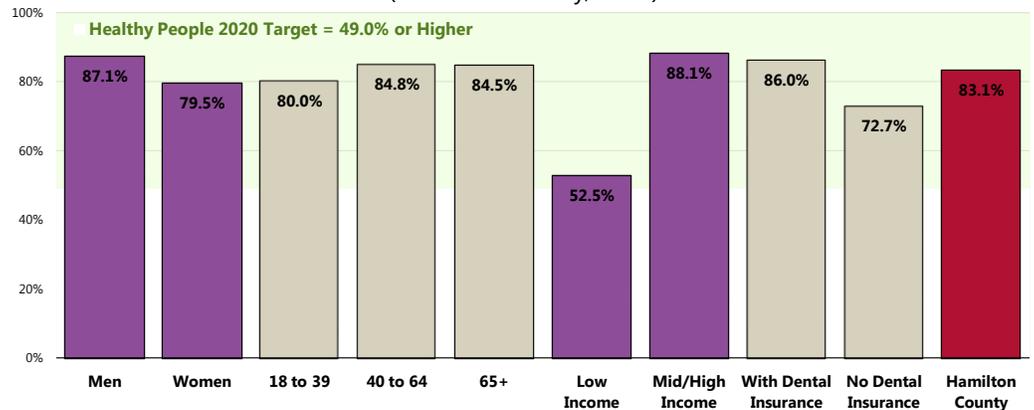


- Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 21]
  - 2011 PRC National Health Survey, Professional Research Consultants, Inc.
  - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective OH-7]
  - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2010 Indiana data.
- Notes:
- Asked of all respondents.

Population segments less likely to report recent dental visits include women, lower-income residents and adults without dental insurance coverage.

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

(Hamilton County, 2012)



- Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 21]
  - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective OH-7]
- Notes:
- Asked of all respondents.
  - Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White 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.

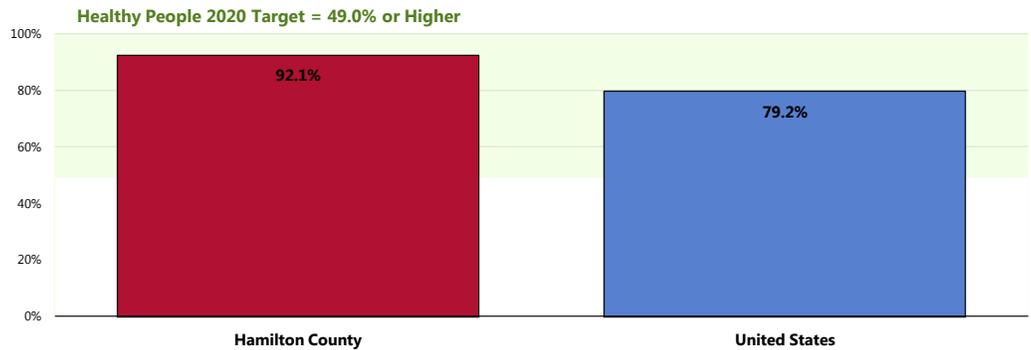
## Children

**A total of 92.1% of parents report that their child (age 2 to 17) has been to a dentist or dental clinic within the past year.**

- Better than national findings.
- Satisfies the Healthy People 2020 target (49% or higher).

### Child Has Visited a Dentist or Dental Clinic Within the Past Year

(Among Parents of Children 2-17)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 133]  
• 2011 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]

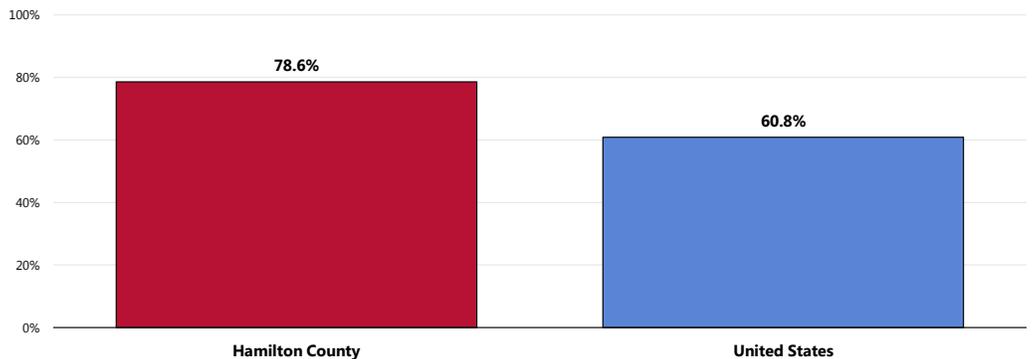
Notes: • Asked of all respondents with children age 2 through 17.

## Dental Insurance

**Most Hamilton County adults (78.6%) have dental insurance that covers all or part of their dental care costs.**

- Much higher than the national finding.

### Have Insurance Coverage That Pays All or Part of Dental Care Costs



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 22]  
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: • Asked of all respondents.

## Related Focus Group Findings: Oral Health

Focus group participants discussed several facets of oral health in the community:

- Importance of preventative dental care
- Trinity Free Clinic
- Emergency room
- 

Focus group participants emphasized that neglect of oral health can result in a significant decrease in a person's overall health. Attendees recognize the **importance of preventative dental care**; however, many residents face barriers in accessing dental treatment. Attendees agree that dentistry represents a major service gap, especially for those without private dental insurance. The overriding perception is that available resources in Hamilton County are not adequate to meet residents' oral health needs.

Local clinics like the Hope Family Care Center and Heart and Soul Clinic are trying to start dental programs in their respective facilities to serve Hamilton County residents. The **Trinity Free Clinic** currently provides free dental services, but the program operates at-capacity. The dental clinic runs children's screenings quarterly, but otherwise can only treat severe cases due to the extraordinary public demand for dental care:

*"We can't give up a chair for preventative care. We'd love to do cleanings and education. We do a kids' screening four times a year and this is kids from sixth months to five years. Each time we've done it, we've had more than 40 kids. I would say ten percent of them are referred onto a pediatric dentist who will treat them." — Focus Group Participant*

Attendees agree that community members also overuse the **emergency room** in order to fulfill any oral health concerns. Unfortunately, emergency rooms do not have the capacity to provide adequate dentistry care.

*"If we want to talk about emergency room abuse, it is dental and we've got 40 referrals from St. Vincent Carmel ER, and of those 40, two have come in because they're given antibiotics at the hospital and then they're given some pain meds and by the time they're done with their antibiotics, the pain's gone for now, so we just wait for that tooth to blow up again and people do try to remove their own teeth. It's never a good thing." — Focus Group Participant*

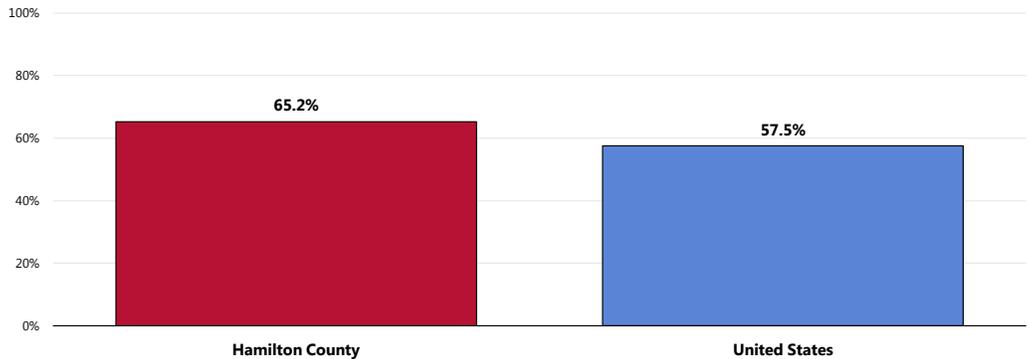
# Vision Care

RELATED ISSUE:  
See also *Vision & Hearing* in  
the **Deaths & Disease**  
section of this report.

**A total of 65.2% of residents had an eye exam in the past two years during which their pupils were dilated.**

- Statistically higher than national findings.

## Had an Eye Exam in the Past Two Years During Which the Pupils Were Dilated



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 20]  
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.

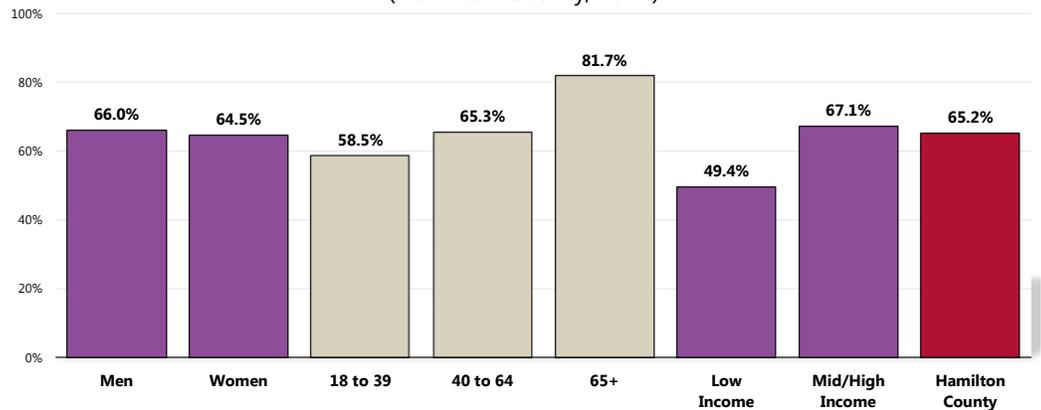
Notes: • Asked of all respondents.

Recent vision care in Hamilton County is less often reported among:

👤 Residents with lower incomes.

👤 Note also the positive correlation between age and recent eye exams.

## Had an Eye Exam in the Past Two Years During Which the Pupils Were Dilated (Hamilton County, 2012)



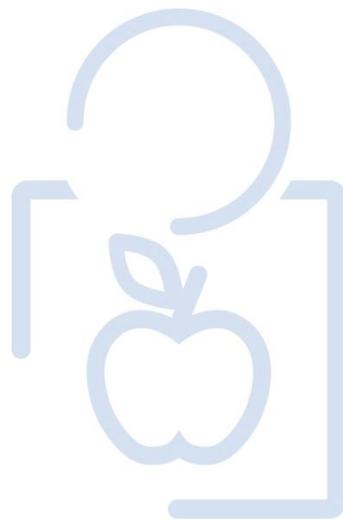
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 20]

Notes: • Asked of all respondents.

• Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White 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.

# HEALTH EDUCATION & OUTREACH

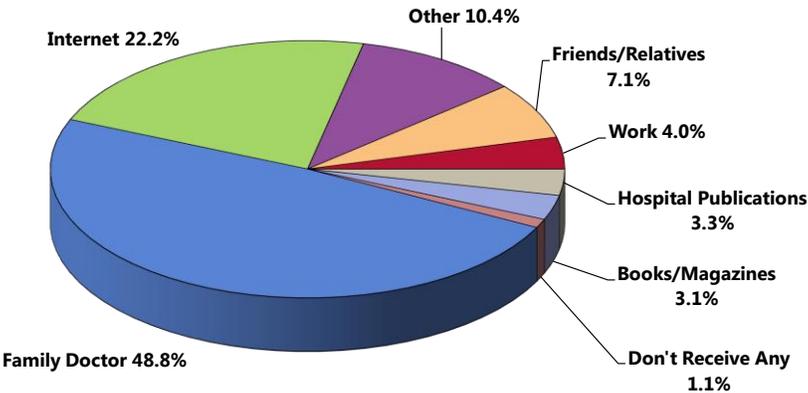


# Healthcare Information Sources

**Family physicians and the Internet are residents' primary sources of healthcare information.**

- 48.8% of Hamilton County adults cited their **family physician** as their primary source of healthcare information.
- The **Internet** received the second-highest response, with 22.2%.
  - Other sources mentioned include friends and relatives (7.1%), work (4.0%), hospital publications (3.3%) and books and magazines (3.1%).
- Just 1.1% of survey respondents say that they do not receive any healthcare information.

**Primary Source of Healthcare Information**  
(Hamilton County, 2012)



Sources: ● 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 123]  
Notes: ● Asked of all respondents.

# Participation in Health Promotion Events

Educational and community-based programs play a key role in preventing disease and injury, improving health, and enhancing quality of life.

Health status and related-health behaviors are determined by influences at multiple levels: personal, organizational/institutional, environmental, and policy. Because significant and dynamic interrelationships exist among these different levels of health determinants, educational and community-based programs are most likely to succeed in improving health and wellness when they address influences at all levels and in a variety of environments/settings.

Education and community-based programs and strategies are designed to reach people outside of traditional healthcare settings. These settings may include schools, worksites, healthcare facilities, and/or communities.

Using nontraditional settings can help encourage informal information sharing within communities through peer social interaction. Reaching out to people in different settings also allows for greater tailoring of health information and education.

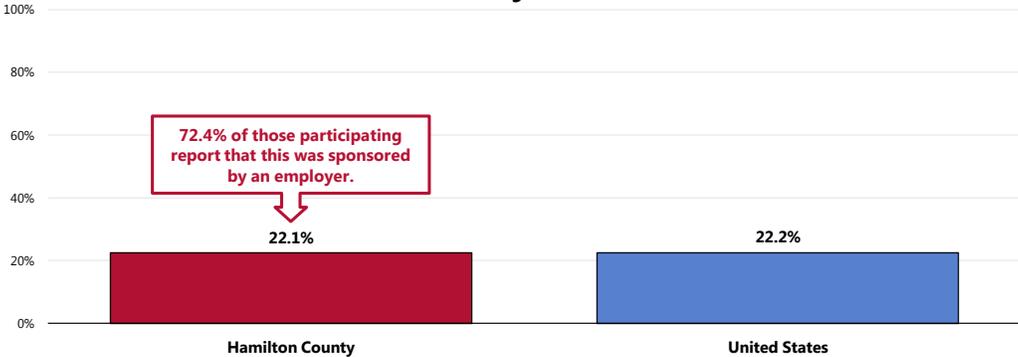
Educational and community-based programs encourage and enhance health and wellness by educating communities on topics such as: chronic diseases; injury and violence prevention; mental illness/behavioral health; unintended pregnancy; oral health; tobacco use; substance abuse; nutrition; and obesity prevention.

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

## A total of 22.1% of Hamilton County adults participated in some type of organized health promotion activity in the past year, such as health fairs, health screenings, or seminars.

- Almost identical to the national prevalence.
- 👥 Note that 72.4% of adults who participated in a health promotion activity in the past year indicate that it was sponsored by their employer.

### Participated in a Health Promotion Activity in the Past Year

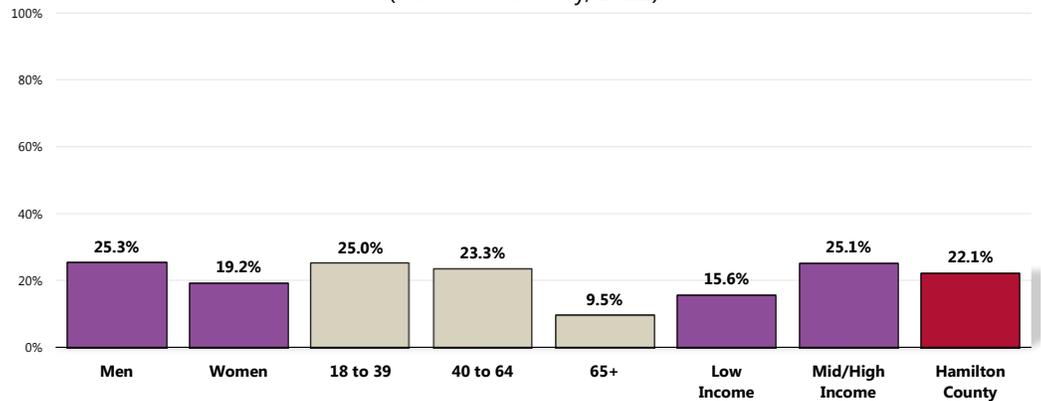


Sources: ● 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 124-125]  
● 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
Notes: ● Asked of all respondents.

The following chart outlines participation by various demographic characteristics.

 Note that adults under 65 more often report participation in health promotion activities.

### Participated in a Health Promotion Activity in the Past Year (Hamilton County, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 124]  
Notes: • Asked of all respondents.  
• Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White 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.

### Related Focus Group Findings: Collaboration

Participants spent time discussing the varying levels of collaboration occurring in the community between non-profit organizations, schools, healthcare providers and hospitals. The issues surrounding collaboration were:

- Culture collaboration amongst social service agencies
- Good Samaritan Network
- Hamilton County Health Task Force
- Willingness to collaborate
- Faith-based organizations and schools

Most of the focus group respondents perceive a **culture of collaboration to exist among social service agencies**. **The Good Samaritan Network** meets monthly and includes many local organizations. Many non-profit agencies refer back and forth in order to obtain the best care for their clients. Participants recognize that the key to success for non-profits is successful collaboration and learning about additional resources for their clients, as a participant explains:

*"And how many of them have resources that can actually help? I think that unfortunately a lot of us show up looking for help as does everybody else. There's little help we can give each other, but mainly its money. It's funding. It's availability of products or medications things like that. There's a need." — Focus Group Participant*

Another collaborative effort includes the **Hamilton County Health Task Force**, which began three years ago but has dwindled in size. One representative from public health attends occasionally, but hospitals predominately comprise the group. The task force's main objective is to examine ways in which these organizations can impact community health.

Several participants had not heard of any of these collaborative efforts and attendees stress that organizations should not assume that residents are aware of the partnerships. In addition, attendees worry about duplication of efforts due to the number of municipalities and the limited communication.

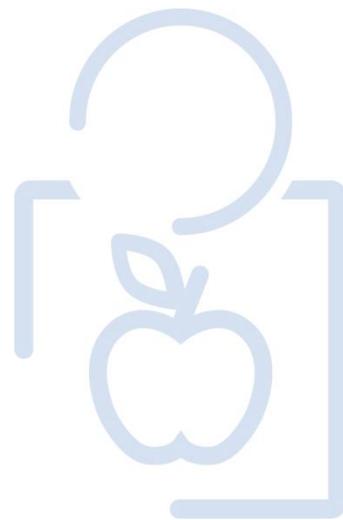
Several attendees feel that these collaborative efforts must extend beyond social service agencies and hospitals. The emergency medical providers (EMS) express a strong **willingness to collaborate**. EMS personnel collect data on patients and would like to share it with other agencies, but struggle to make the connections. An EMS personnel describes the data available:

*"For instance, when we had the pandemic scare, we were sitting there, monitoring our run types for flu type activity. How many runs were we having? Did we see an abnormal spike? We do a lot of public health activities that I think on a more global scale would be even better if we had more involvement from the entire county so you can see patterns throughout the county and catch things earlier." — Focus Group Participant*

Focus group attendees agree that local organizations need to capitalize on the established relationships that **faith-based organizations and schools** have with the community. These established relationships can create buy-in for the agencies. For example, school nurses speak with many families each year, so they need to know about the resources. Local non-profit agencies need to work on opening the lines of communication. One participant describes school nurses' capacity to educate:

*"I have 33 nurses next year, and so those are a lot of nurses to get out information. We have almost 20,000 students and that's a lot. What does that make? Almost 40,000 parents to provide information about resources to and it keeps growing and we're just one of the school systems. It would be a way to help get that information out there." — Focus Group Participant*

# LOCAL HEALTHCARE

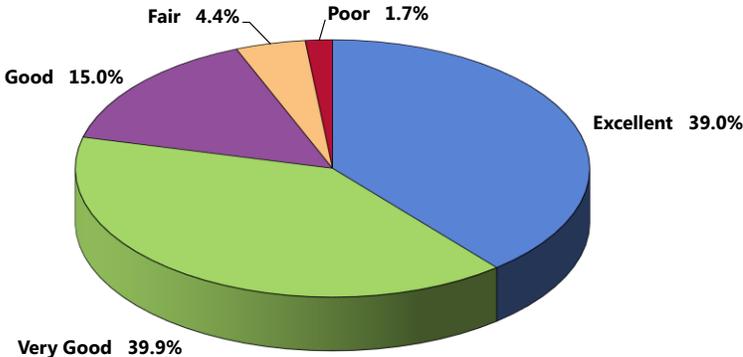


# Perceptions of Local Healthcare Services

More than 3 in 4 Hamilton County adults (78.9%) rate the overall healthcare services available in their community as “excellent” or “very good.”

- Another 15.0% gave “good” ratings.

**Rating of Overall Healthcare Services Available in the Community**  
(Hamilton County, 2012)

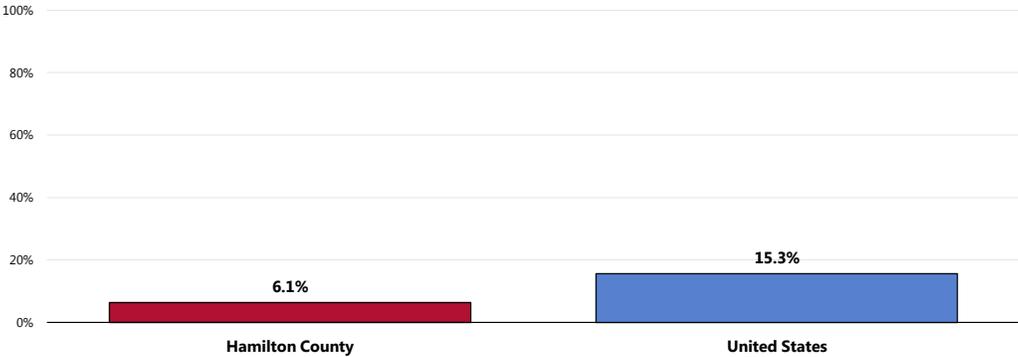


Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 6]  
Notes: • Asked of all respondents.

However, 6.1% of residents characterize local healthcare services as “fair” or “poor.”

- Much lower than the figure reported nationally.

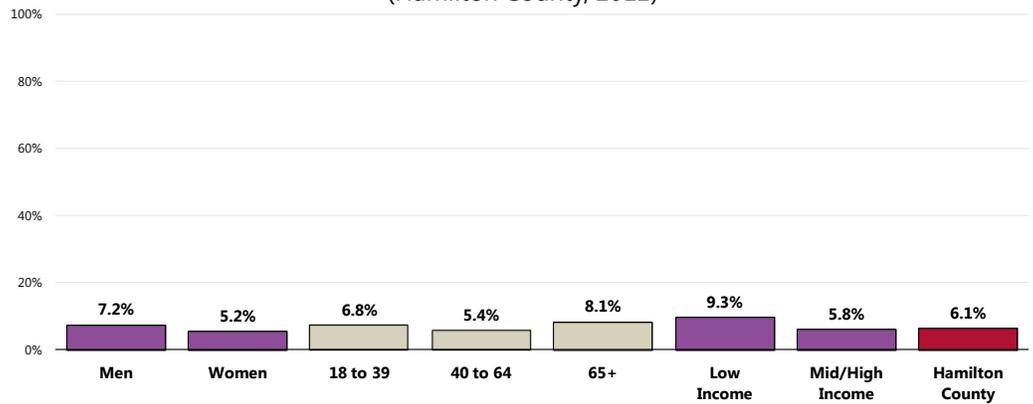
**Perceive Local Healthcare Services as “Fair/Poor”**



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 6]  
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
Notes: • Asked of all respondents.

👥 The prevalence of low ratings for local healthcare services does not vary significantly by demographic characteristics.

### Perceive Local Healthcare Services as “Fair/Poor” (Hamilton County, 2012)



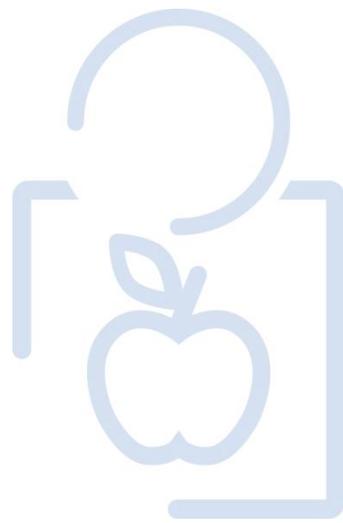
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 6]

Notes: • Asked of all respondents.

• Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., “White” reflects non-Hispanic White 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.

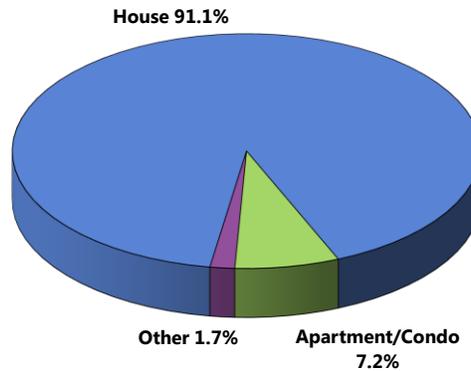
# HOUSING



# Type of Dwelling

The vast majority of survey respondents (91.1%) currently live in a house, while 7.2% live in an apartment or condo.

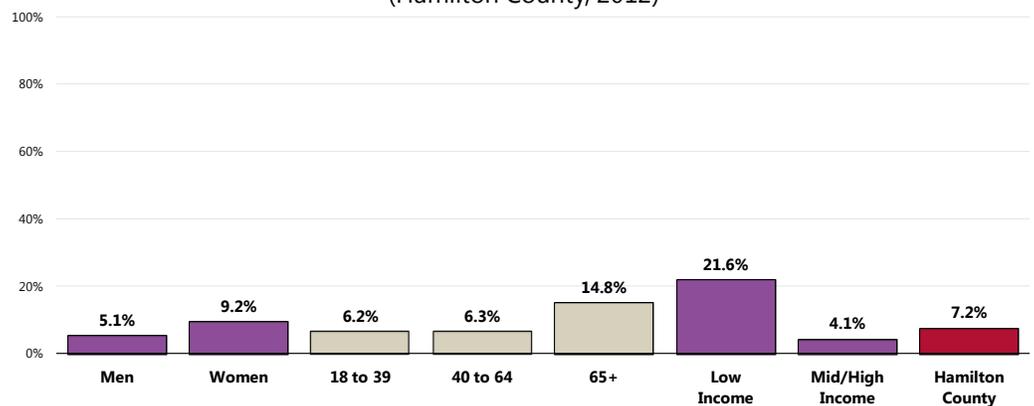
**Type of Current Dwelling**  
(Hamilton County, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 91]  
Notes: • Asked of all respondents.

👤 Lower income residents are much more likely to live in an apartment or condo.

**Currently Live in an Apartment or Condo**  
(Hamilton County, 2012)



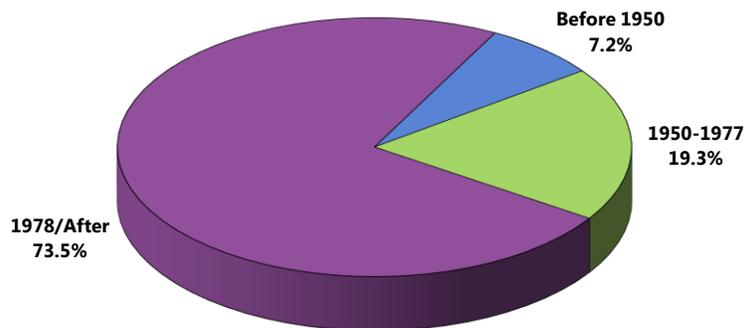
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 91]  
Notes: • Asked of all respondents.  
• Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
• Income categories reflect 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.

# Age of Housing & Lead Risk

## Age of Housing

When asked about their home or apartment building's year of construction, most (73.6%) survey respondents report living in a structure which was built in 1978 or later.

**Year of Current Home/Apartment Building's Construction**  
(Hamilton County, 2012)



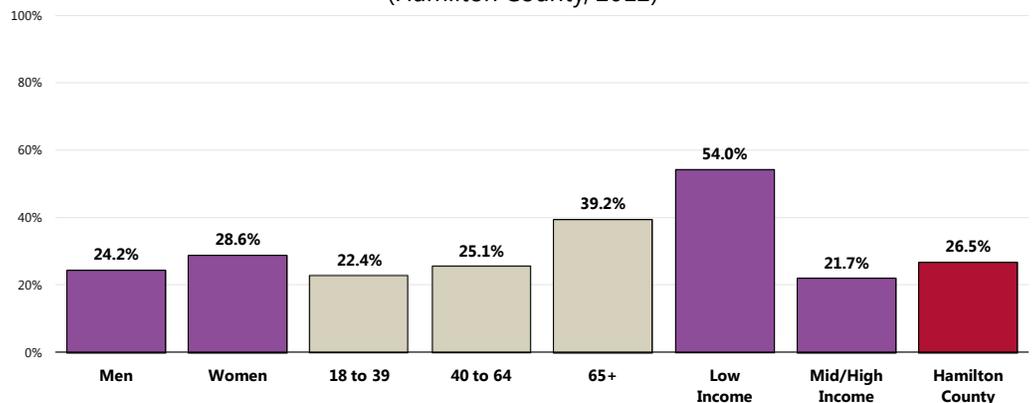
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 92-93]  
Notes: • Asked of all respondents.

## Lead Risk

A total of 26.4% of residents live in structures built prior to 1978, the year in which lead was banned from household paints.

 Low-income adults are much more likely to live in older housing.

**Currently Live in a Dwelling Built Prior to 1978**  
(Hamilton County, 2012)

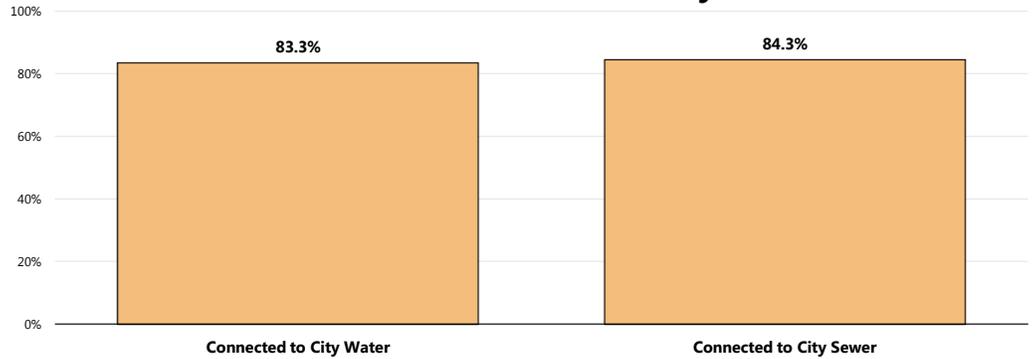


Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 92-93]  
Notes: • Asked of all respondents.  
• Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
• Income categories 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.

# Water & Sewer Service

More than 8 in 10 survey respondents report that their home is connected to city water and/or city sewer services.

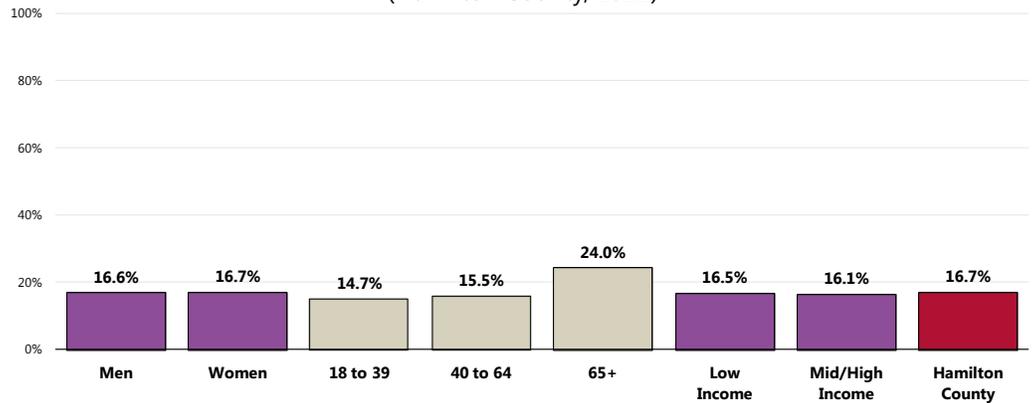
## Current Home is Connected to City Services



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 94-95]  
 Notes: • Asked of all respondents.

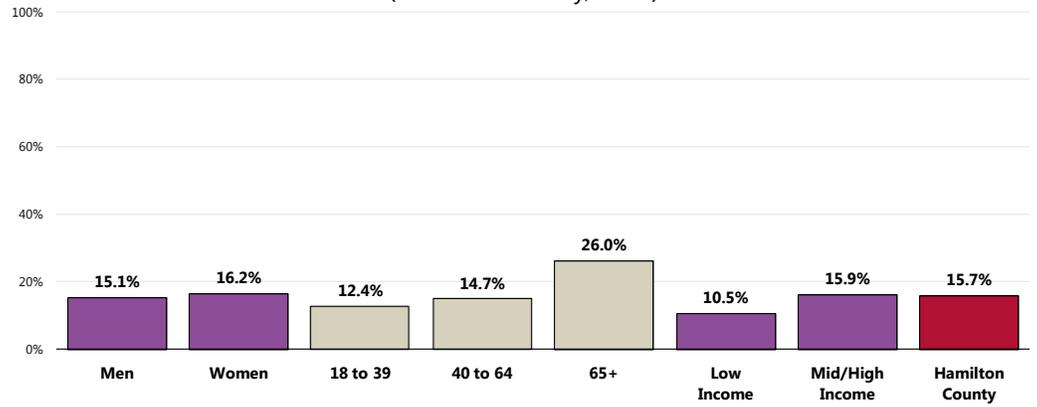
👥 Note in the following charts that Hamilton County seniors appear more likely to live in homes that are not connected to city services.

## Home is Not Currently Connected to City's Water Supply (Hamilton County, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 94]  
 Notes: • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White 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.

## Home is Not Currently Connected to City's Sewer System (Hamilton County, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 95]

Notes: • Asked of all respondents.

• Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White 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.