

June 2013



CAVERNA  
MEMORAL  
HOSPITAL

## COMMUNITY HEALTH NEEDS ASSESSMENT



## ***Caverna Memorial Hospital*** ***Horse Cave, Kentucky*** *CHNA Report*

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# ***Caverna Memorial Hospital*** ***Horse Cave, Kentucky*** *CHNA Report*

## **Hospital Overview**

Overseen by a local Board of Trustees, the Caverna Memorial Hospital is a 25-bed Critical Access Hospital located in Horse Cave, KY with two provider based Rural Health Clinics: one in Horse Cave, KY and one in Munfordville, KY. The Caverna Memorial Hospital has been determined by the Internal Revenue Service (the "IRS") to be a charitable organization as described in Section 501(c)(3) of the Internal Revenue Code of 1986, as amended (the "Code") and is exempt from federal income taxation by virtue of Sections 501(a) and 501(c)(3) of the Code.

We have recently purchased a 39-acre tract which expands our campus from 8 acres to 47 acres. Our immediate plans for this expanded campus include the construction of an on-site medical office building and developing the infrastructure of the campus to support future community healthcare needs.

By combining state-of-the-art diagnostic capability with a compassionate, patient-centered focus, our employees and physicians consider it a privilege to provide each patient with a healthcare experience that is unsurpassed.

## **Hospital History**

December 1963 - The need for a hospital in Hart County and the surrounding area was recognized and planning began. At the time, the estimated cost of the project was \$600,000 for a 30 bed hospital; it was agreed that \$300,000 was to be raised by the community and the remainder would be provided in the form of money from a federal grant.

January 1964 - The current site of Caverna Memorial Hospital was approved.

May 1964 - A "kick off" dinner was held at the Hart restaurant in Munfordville. This began the process of fund raising for the new hospital, and by the end of the following month, \$349,000 had been raised by the community. Among the early fund raising organizers were local attorney Charles Richardson and local teacher, Preston Mansfield.

July 1965 - The ground breaking ceremony was held to signal the beginning of construction for the new hospital. Construction would span more than a year and a half.

May 1967 - Construction of the new hospital was complete, and an open house was held. The open house saw more than 2,500 people tour the hospital.



# Community Health Needs Assessment

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June 5, 1967 - Caverna Memorial Hospital opened and the first patient was treated.

From its inception, Caverna Memorial Hospital has been a busy place! The early days saw the Emergency Room treating all types of injuries; the Operating Room was conducting surgeries; the maternity ward was busy delivering babies; and most of the time the inpatient rooms were full with patients.

Caverna Memorial Hospital remains a vital asset to the community serving the citizens of Hart County, KY as a "Critical Access Hospital".

The ER is staffed 24/7 with a Physician and RN's. In addition to caring for citizens of the community, accident victims are frequently brought to our ER off of I-65.

We perform many outpatient tests such as MRI, CT, or Mammography.

Numerous outpatient lab tests are conducted onsite for local physicians and also for physicians in other cities such as Louisville or Bowling Green and fax results to the office. This saves the patient time and travel.

We also have a respiratory therapy department that offers outpatient services and pulmonary function testing.

We have outpatient clinics that operate here in our hospital to bring specialized medical care closer to home for the residents of the community. Some of our clinic offerings include the following:

- Pulmonology Clinic –Dr. Michael Zacheck (Graves-Gilbert Clinic)
- Ophthalmology Clinic – Dr. Brockman (New Albany Indiana) He does cataract surgeries and various other outpatient eye surgeries
- Cardiology Clinic – Dr. Holt (E-town) Stress tests on treadmill, Echocardiograms, Holter Monitors
- Gastrointestinal Clinic/Procedures – Dr. Curtiss (Bowling Green) Upper GI (endoscopies) Lower GI (colonoscopies)
- Nephrology Clinic – Dr. Regmi

In addition to all of the specialists we have 2 physician's offices; one office in Horse Cave, KY and the other in Munfordville, KY. The Munfordville office was moved in Sept. 2010 to a new building with a lot more space and updated equipment. Construction on a new Medical Office Building is slated to begin in 2013 to relocate the current Horse Cave Clinic Office into.

## Mission, Vision, and Values

### *Our Mission...*

- To Provide the Best Patient Experience...Every Time!



# Community Health Needs Assessment

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## *Our Vision...*

- To be appreciated by each patient for giving them the best healthcare experience possible.
- To be applauded by our community for our culture of caring, compassion, and excellence.
- To be recognized by our employees as the best place they could ever hope to work.

## *Our Values...*

- We respect the dignity, privacy, uniqueness and value of each patient.
- We have a total commitment to honesty and integrity in everything that we do.
- We constantly strive for excellence and improvement.

## Executive Summary

The Patient Protection and Affordable Care Act of 2010 included a provision that requires every tax exempt, non-governmental hospital to:

- Conduct a Community Health Needs Assessment (CHNA) at least every three years;
- Adopt a Strategic Implementation Plan that includes how the needs identified in the assessment will be met; and
- Report to the Internal Revenue Service via its 990 tax form how it is meeting its implementation plan.

The Community Health Needs Assessment Report details the process used to collect, disseminate and prioritize the information in the assessment. Caverna Memorial Hospital worked closely with local healthcare and public health leaders throughout the assessment process. The end result of the assessment process was the development by the hospital of a strategic plan to address the major needs identified. For the purposes of this assessment the Hospital's community is defined as Hart County.

## Assessment

In the fall of 2011, Caverna Memorial Hospital met with the Barren River District Health Department and numerous other health care providers, community organizations and leaders to form the Barren River Community Health Planning Council. The goal of the Council was to answer the following question: "How can leaders of south central Kentucky's rural communities work together to improve our overall health status, thereby strengthening the local economy, contributing to educational success and improving quality of life?"

The assessment activities used to address this question followed the Mobilizing for Action through Planning and Partnership (MAPP) protocol. Meetings were held twice monthly for three months and then monthly. The hospital used the data collected through the survey to develop a strategic plan that addresses strengthening of partnerships with community health providers and organizations, preventive care and disease management and access to care.

# Community Health Needs Assessment

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The assessment results and strategic plan were submitted to the hospital board for review and approval and then made available to the community.

## **CMH Implementation Strategies for Addressing Community Health Needs 2013 – 2015**

Through the research and recommendations from the Community Health Needs Assessment and hospital staff, administration and Board of Directors, the following strategies will guide Caverna Memorial Hospital leadership in addressing our community's health needs over the next three years. For the purposes of this assessment the Hospital's community is defined as Hart County.

### **1. Strengthen Partnerships With Key Community Health Providers & Organizations**

A very beneficial component of the Community Health Needs Assessment process for the hospital was participating in the Barren River Community Health Planning Council. This reinforced the importance of each community health provider in our quest to meet the healthcare needs of all individuals in our community. Over the next three years, Caverna Memorial Hospital will focus on continuing to strengthen relationships with the following organizations and to develop collaborative efforts to improve health care within Hart and the nine other counties. Partnerships may include joint funding of initiatives, providing leadership on governing boards, information sharing and cooperative work on health related grants. This list is not meant to be exclusive and other organizations/providers will be added as identified. Through the CHNA these agencies were identified as those that directly address community health needs and serve the populations in most need within Caverna Memorial Hospital's service area: Barren River District Health Department; Horse Cave Housing Authority; Kentucky Cancer Program; Medicaid Managed Care Programs; Southcentral Kentucky Community Action; Western Kentucky University Rural Health Institute & Mobile Unit.

### **2. Preventative Care & Disease Management Focus**

The Community Health Needs Assessment provided data specific to preventative care and disease management. Council members reviewed the data and determined the following focus areas: Diabetes, Obesity, Cardiovascular Disease, Lung Cancer, Alcohol and Drug Abuse Addiction. Caverna Memorial Hospital does not have programs implemented to support Alcohol and Drug Abuse Addiction. Therefore that topic will not be addressed.

The hospital's plan to address these is as follows with the overall goal to educate individuals on the importance of taking ownership of their health and wellbeing. Caverna Memorial

# Community Health Needs Assessment

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Hospital used a system wide implementation strategy narrowing our focus, from highest to lowest priority: Heart Disease, Diabetes, Obesity, and Lung Cancer.

## Cardiovascular:

- Continue to provide education to the community about risk factors associated with heart disease and stroke, and how to modify those risk factors through healthy lifestyle choices. This will be an ongoing campaign utilizing educational resources as they become available.
- Continue the systematic approach by the hospital to identify and track all congestive heart failure patients who are admitted. Discharge planning will start at admission and will involve coaching and follow up services post discharge. The goal will be improved quality of life for the patient and reduction of ED visits and readmissions.
- Research the feasibility of starting a Heart Failure Clinic through utilization of the WKU Mobile Health Unit.

## Diabetes:

- Caverna Memorial Hospital will enhance awareness and utilization of outpatient Diabetes Education Programs through marketing activities and other community forums as feasible.
- Explore opportunities to identify readmissions of patients with a diagnosis of diabetes and enhance the process to refer patients for outpatient diabetes education.
- Explore opportunities to develop a process to identify ED admissions related to complications due to diabetes. Develop a process to assure patients have a regular healthcare provider.
- Diabetes education at hospital community outreach events.

## Obesity:

- Participate with regional hospital in educational offerings on obesity.
- Assist civic organizations in promoting farmers' markets.
- Continue to enhance patient and employee menus toward healthier selections.

## Lung Cancer:

- Work in conjunction with community partners for implementation of smoke free environments throughout the community.
- Provide Cooper Clayton Smoking Cessation Classes as feasible.
- Guide community members to resources outlining the dangers of smoking.

# Community Health Needs Assessment

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## 3. Access to Care

- Work in conjunction with community health partners to develop a directory of available health services and resources for the community.
- Continue to maintain or add to our array of specialty clinics to bring more medical services closer to community members.
- Build an on-campus medical office building to increase primary care capacity in the area.

## Communication Plan

Caverna Memorial Hospital will publish the Community Health Needs Assessment on its website and make hard copies available to the public upon request. The results will also be incorporated into the hospital's annual IRS tax form 990 submission.

## Conclusions

Caverna Memorial Hospital is committed to the Community Health Needs Assessment process. The Community Health Needs Assessment has strengthened relationships with other healthcare providers and organizations in our community. We will continue to seek ways to improve the health of our community.

The following statistical reports specific to Hart County, Kentucky were used in conjunction with the regional Barren River Area Development District data collected by the Barren River Community Health Planning Council to support Caverna Memorial Hospital's assessments.

## Demographics

Current population demographics and changes in demographic composition over time play a determining role in the types of health and social services needed by communities.

### Total Population

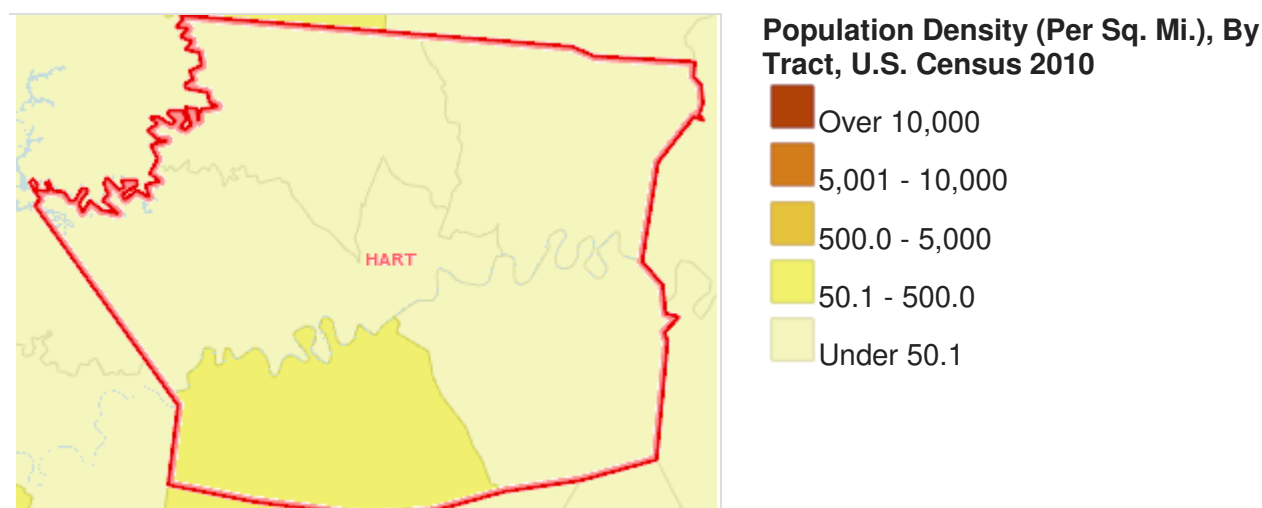
This indicator reports the total number of people in a specific geographic area. This indicator is relevant because population counts are necessary to quantify the community as defined.

Report Area	Total Population	Total Land Area (Square Miles)	Population Density (Per Square Mile)
Hart County, Kentucky	18,201	412.09	44.17

# Community Health Needs Assessment

Report Area	Total Population	Total Land Area (Square Miles)	Population Density (Per Square Mile)
Kentucky	4,285,828	39,486.30	108.54
United States	303,965,271	3,531,905.50	86.06

Data Source: [U.S. Census Bureau, 2006-2010 American Community Survey 5-Year Estimates](#). Source geography: Tract.



## Total Population, by Gender

Report Area	Male	Female	Percent Male	Percent Female
Hart County, Kentucky	9,013	9,188	49.52%	50.48%
Kentucky	2,105,483	2,180,345	49.13%	50.87%
United States	149,398,720	154,566,544	49.15%	50.85%

## Total Population, by Age Groups

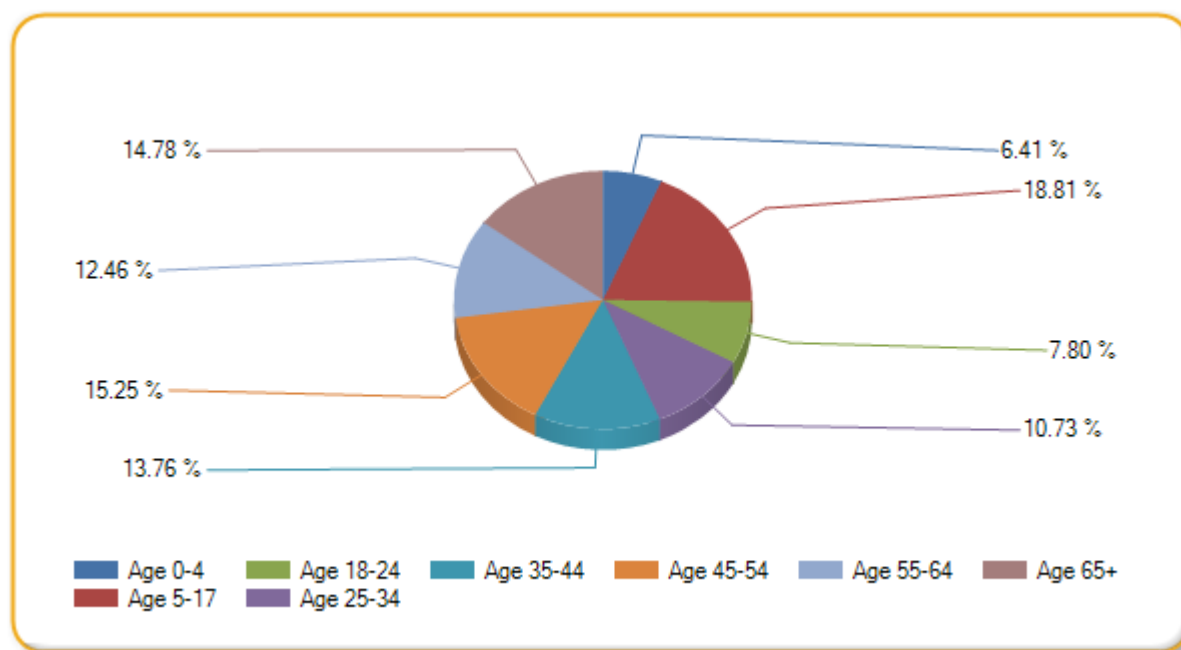
Report Area	Age 0-4	Age 5-17	Age 18-24	Age 25-34	Age 35-44	Age 45-54	Age 55-64	Age 65
Hart County, Kentucky	1,167	3,423	1,420	1,953	2,505	2,776	2,267	2,690
Kentucky	278,3	741,612	409,914	558,362	593,950	634,200	509,455	560,034

## Community Health Needs Assessment

Report Area	Age 0-4	Age 5-17	Age 18-24	Age 25-34	Age 35-44	Age 45-54	Age 55-64	Age 65
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United States	20,131,420	53,901,696	30,205,496	40,191,012	42,206,140	44,302,696	34,277,392	38,749,416

### Total Population, Percent by Age Groups

Report Area	Age 0-4	Age 5-17	Age 18-24	Age 25-34	Age 35-44	Age 45-54	Age 55-64	Age 65
Hart County, Kentucky	6.41%	18.81%	7.80%	10.73%	13.76%	15.25%	12.46%	14.78%
Kentucky	6.49%	17.30%	9.56%	13.03%	13.86%	14.80%	11.89%	13.07%
United States	6.62%	17.73%	9.94%	13.22%	13.89%	14.57%	11.28%	12.75%



## Community Health Needs Assessment

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### Total Population, by Race Alone

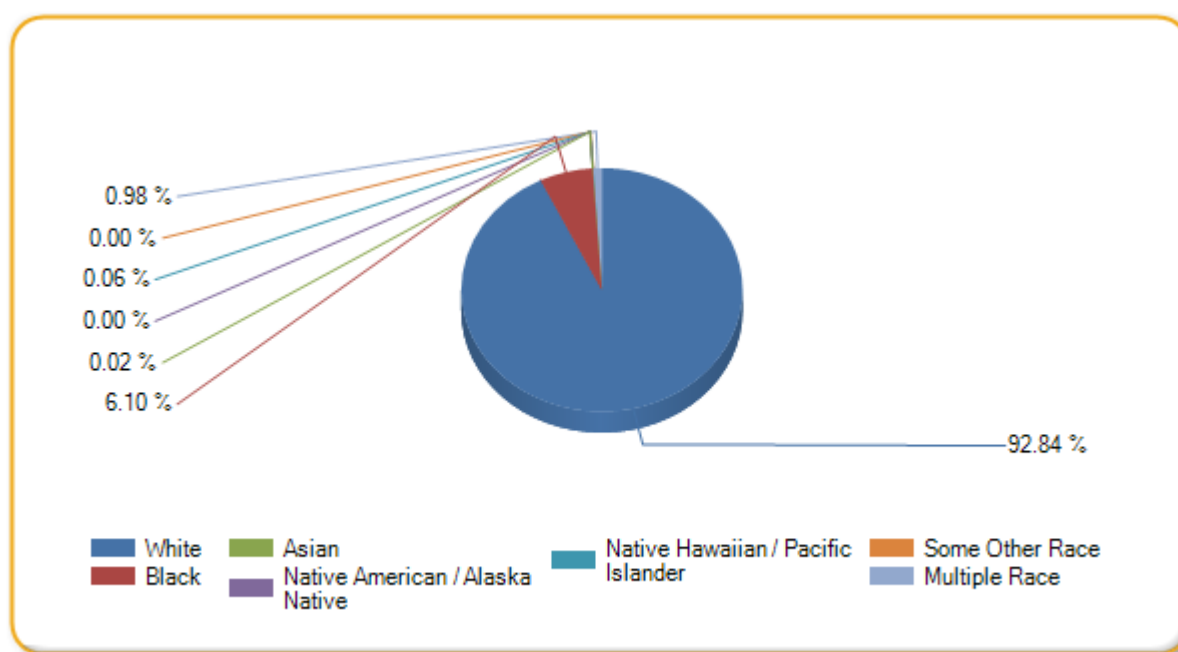
Report Area	White	Black	Asian	Native American / Alaska Native	Native Hawaiian / Pacific Islander	Some Other Race	Multiple Races
Hart County, Kentucky	16,897	1,110	4	0	11	0	179
Kentucky	3,792,514	330,764	45,604	8,794	2,674	40,178	65,300
United States	224,895,696	37,978,752	14,185,493	2,480,465	491,673	16,603,808	7,329,381

### Total Population, Percent by Race Alone

Report Area	White	Black	Asian	Native American / Alaska Native	Native Hawaiian / Pacific Islander	Some Other Race	Multiple Races
Hart County, Kentucky	92.84%	6.10%	0.02%	0%	0.06%	0%	0.98%
Kentucky	88.49%	7.72%	1.06%	0.21%	0.06%	0.94%	1.52%
United States	73.99%	12.49%	4.67%	0.82%	0.16%	5.46%	2.41%



## Community Health Needs Assessment



Hispanic Population, Total by Race

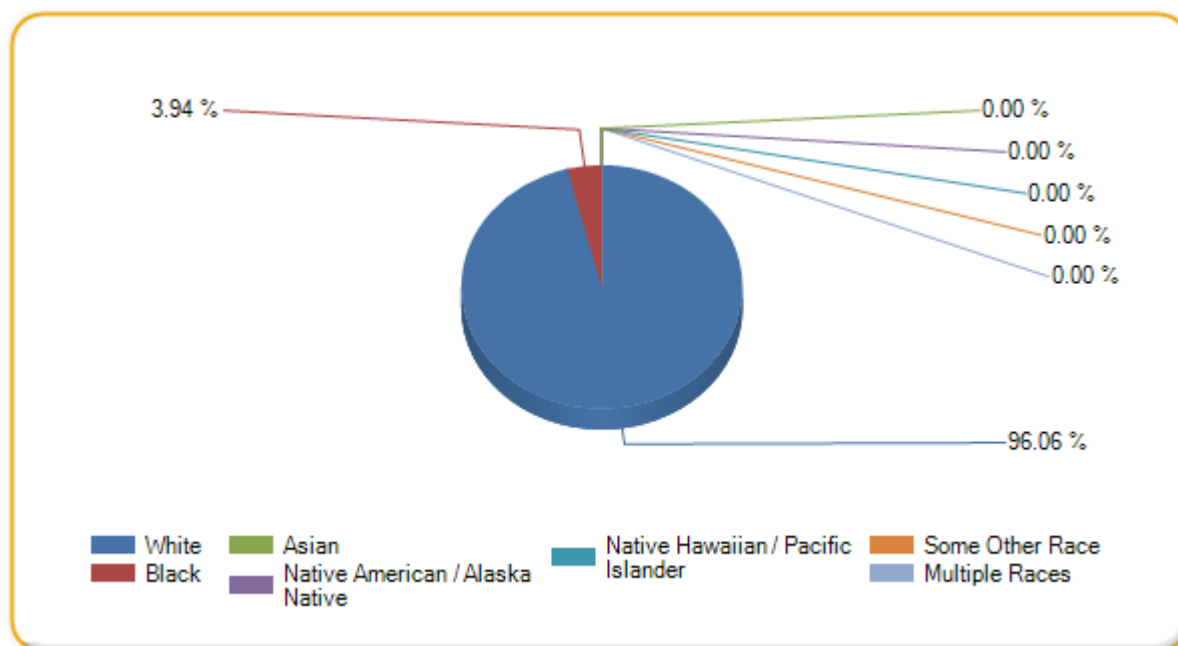
Report Area	White	Black	Asian	Native American / Alaska Native	Native Hawaiian / Pacific Islander	Some Other Race	Multiple Races
Hart County, Kentucky	122	5	0	0	0	0	0
Kentucky	67,783	3,106	382	1,044	313	35,906	8,814
United States	28,322,928	856,327	163,519	431,681	32,898	15,918,139	2,002,041

Hispanic Population, Percent by Race

Report Area	White	Black	Asian	Native American / Alaska Native	Native Hawaiian / Pacific Islander	Some Other Race	Multiple Races
Hart County, Kentucky	96.06%	3.94%	0%	0%	0%	0%	0%
Kentucky	57.76%	2.65%	0.33%	0.89%	0.27%	30.60%	7.51%

## Community Health Needs Assessment

Report Area	White	Black	Asian	Native American / Alaska Native	Native Hawaiian / Pacific Islander	Some Other Race	Multiple Races
United States	59.34%	1.79%	0.34%	0.90%	0.07%	33.35%	4.19%



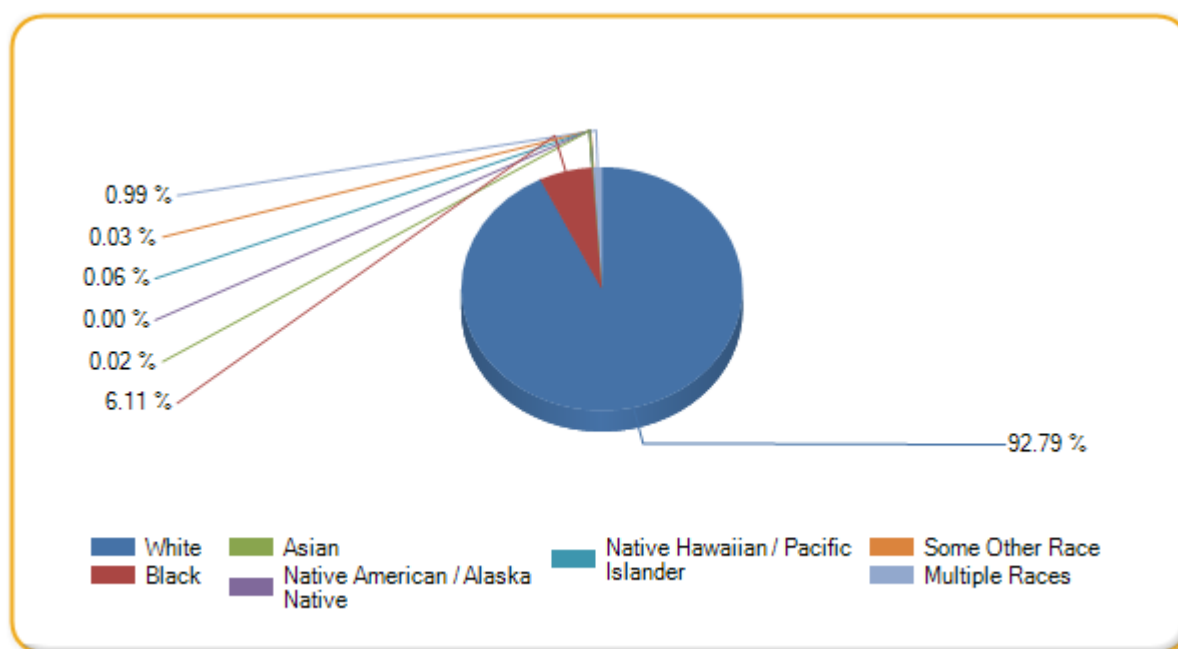
### Non-Hispanic Population, Total by Race

Report Area	White	Black	Asian	Native American / Alaska Native	Native Hawaiian / Pacific Islander	Some Other Race	Multiple Races
Hart County, Kentucky	16,775	1,105	4	0	11	0	179
Kentucky	3,724,731	327,658	45,222	7,750	2,361	4,272	56,486
United States	196,572,768	37,122,424	14,021,974	2,048,784	458,775	685,669	5,327,340

### Non-Hispanic Population, Percent by Race

## Community Health Needs Assessment

Report Area	White	Black	Asian	Native American / Alaska Native	Native Hawaiian / Pacific Islander	Some Other Race	Multiple Races
Hart County, Kentucky	92.81%	6.11%	0.02%	0%	0.06%	0.03%	0.99%
Kentucky	89.35%	7.86%	1.08%	0.19%	0.06%	0.17%	1.36%
United States	76.71%	14.49%	5.47%	0.80%	0.18%	1.10%	2.08%



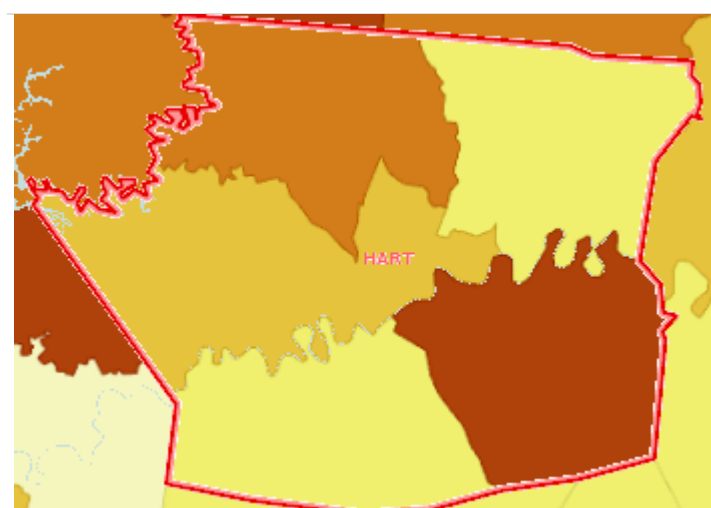
### **Total Male Population**

This indicator reports the percentage of males in a specific geographic area. This indicator is relevant because it is important to understand the percentage of males in the community, as males have unique health needs which should be considered separately from female health needs.

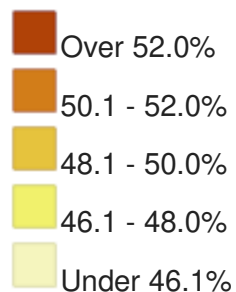
Report Area	Total Population	Total Male Population	Percent Male Population
Hart County, Kentucky	18,201	9,013	49.52%
Kentucky	4,285,828	2,105,483	49.13%
United States	303,965,280	149,398,720	49.15%

Data Source: [U.S. Census Bureau, 2006-2010 American Community Survey 5-Year Estimates](#). Source geography: Tract.

## Community Health Needs Assessment



**Percent Population, By Tract, ACS 2006-2010 5-Year Estimate**



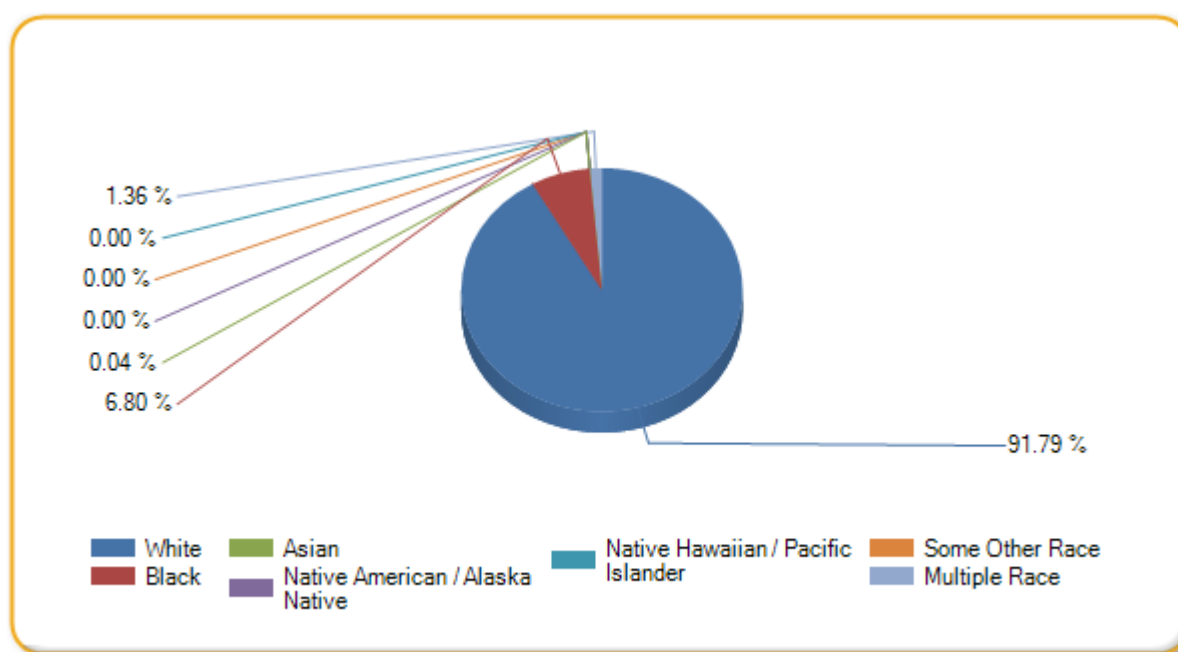
**Male Population, Total by Race Alone**

Report Area	White	Black	Asian	Native American / Alaska Native	Native Hawaiian / Pacific Islander	Some Other Race	Multiple Races
Hart County, Kentucky	8,273	613	4	0	0	0	123
Kentucky	1,860,121	162,498	20,900	4,545	1,128	23,146	33,145
United States	110,893,664	18,076,960	6,759,062	1,230,390	247,008	8,554,810	3,636,832

**Male Population, Percent by Race Alone**

Report Area	White	Black	Asian	Native American / Alaska Native	Native Hawaiian / Pacific Islander	Some Other Race	Multiple Races
Hart County, Kentucky	91.79%	6.80%	0.04%	0%	0%	0%	1.36%
Kentucky	88.35%	7.72%	0.99%	0.22%	0.05%	1.10%	1.57%
United States	74.23%	12.10%	4.52%	0.82%	0.17%	5.73%	2.43%

## Community Health Needs Assessment



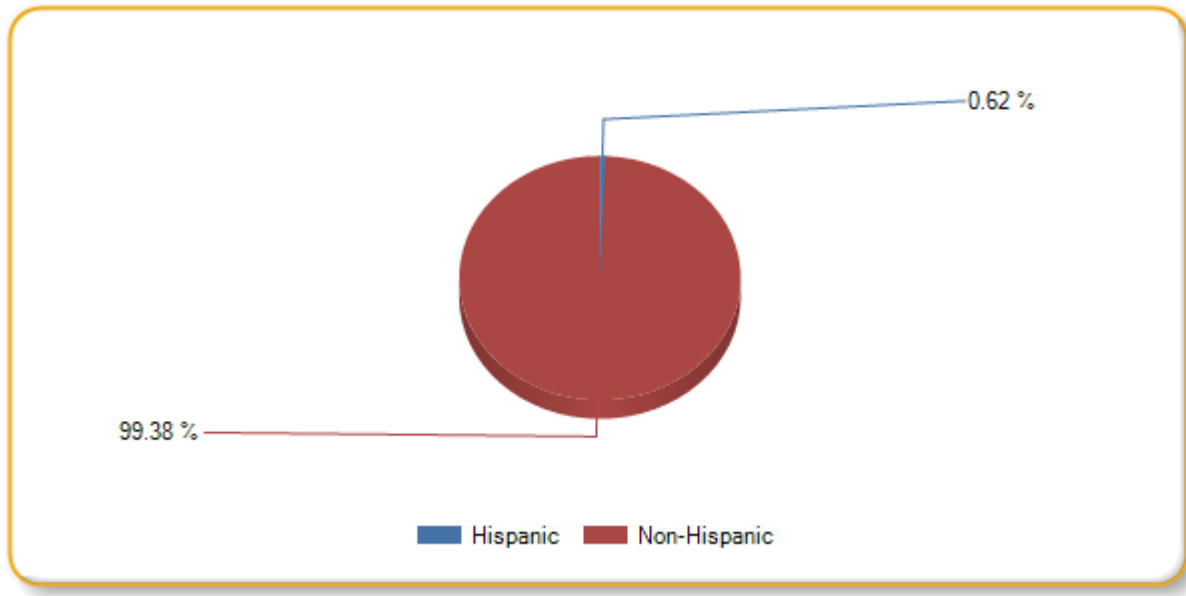
Male Population, Total by Ethnicity Alone

Report Area	Hispanic	Non-Hispanic
Hart County, Kentucky	56	8,957
Kentucky	65,260	2,040,223
United States	24,276,736	125,121,984

Male Population, Percent by Ethnicity Alone

Report Area	Hispanic	Non-Hispanic
Hart County, Kentucky	0.62%	99.38%
Kentucky	3.10%	96.90%
United States	16.25%	83.75%

## Community Health Needs Assessment



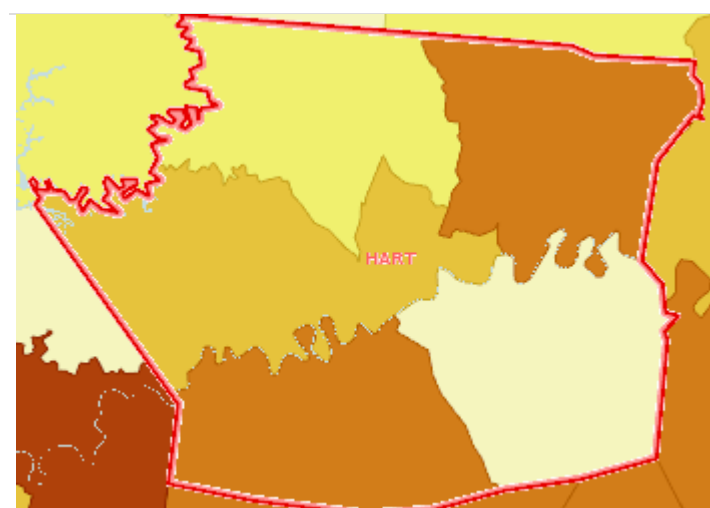
### **Total Female Population**

This indicator reports the percentage of females in a specific geographic area. This indicator is relevant because it is important to understand the percentage of females in the community, as females have unique health needs which should be considered separately from male health needs.

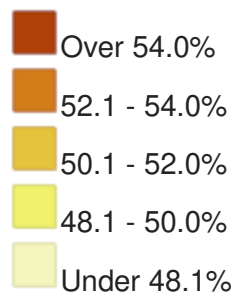
Report Area	Total Population	Total Female Population	Percent Female Population
Hart County, Kentucky	18,201	9,188	50.48%
Kentucky	4,285,828	2,180,345	50.87%
United States	303,965,280	154,566,544	50.85%

Data Source: [U.S. Census Bureau, 2006-2010 American Community Survey 5-Year Estimates](#). Source geography: Tract.

## Community Health Needs Assessment



**Percent Population, By Tract, ACS 2006-2010 5-Year Estimate**



Female Population, Total by Race Alone

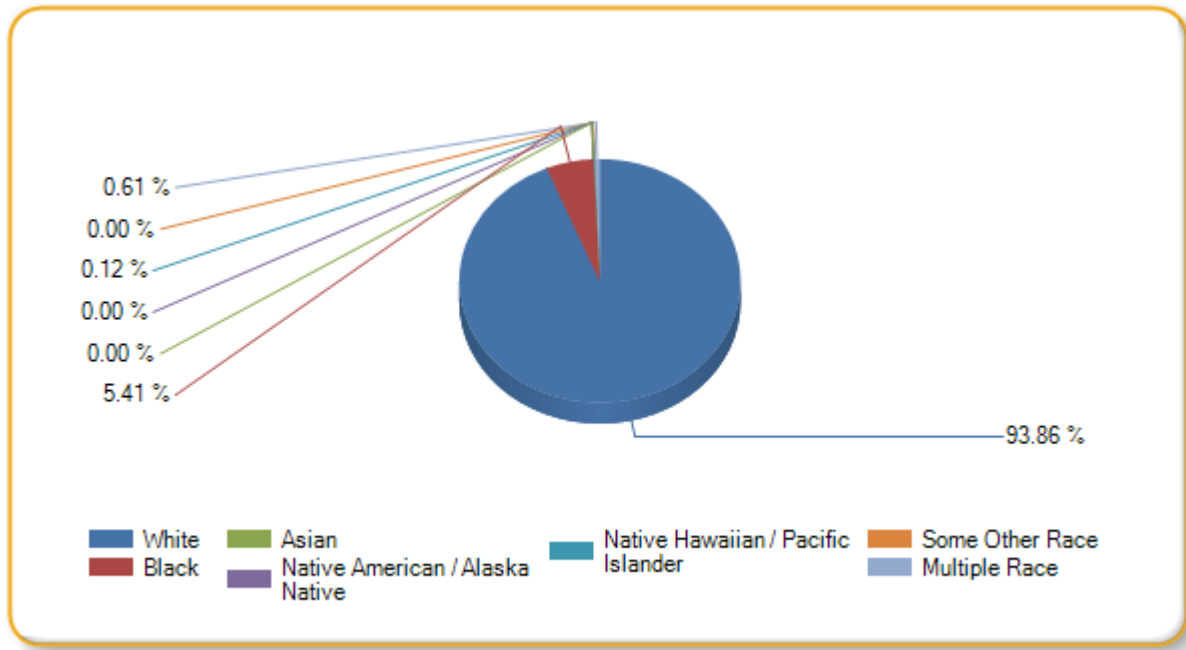
Report Area	White	Black	Asian	Native American / Alaska Native	Native Hawaiian / Pacific Islander	Some Other Race	Multiple Races
Hart County, Kentucky	8,624	497	0	0	11	0	56
Kentucky	1,932,393	168,266	24,704	4,249	1,546	17,032	32,155
United States	114,002,040	19,901,792	7,426,431	1,250,075	244,665	8,048,998	3,692,549

Female Population, Percent by Race Alone

Report Area	White	Black	Asian	Native American / Alaska Native	Native Hawaiian / Pacific Islander	Some Other Race	Multiple Races
Hart County, Kentucky	93.86%	5.41%	0%	0%	0.12%	0%	0.61%
Kentucky	88.63%	7.72%	1.13%	0.19%	0.07%	0.78%	1.47%
United States	73.76%	12.88%	4.80%	0.81%	0.16%	5.21%	2.39%



## Community Health Needs Assessment



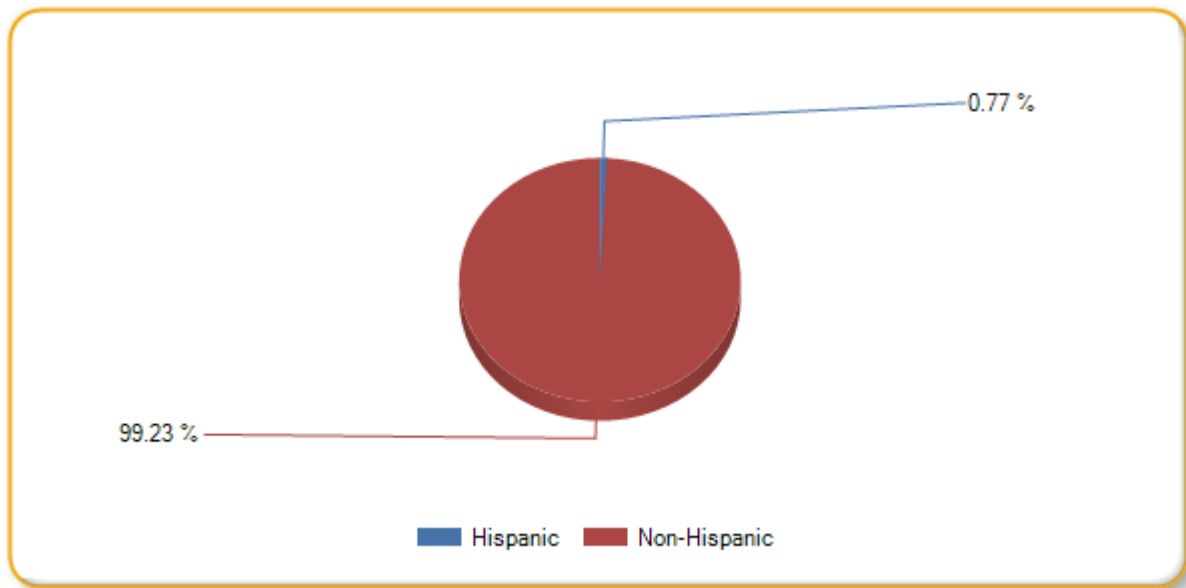
Female Population, Total by Ethnicity Alone

Report Area	Hispanic	Non-Hispanic
Hart County, Kentucky	71	9,117
Kentucky	52,088	2,128,257
United States	23,450,798	131,115,744

Female Population, Percent by Ethnicity Alone

Report Area	Hispanic	Non-Hispanic
Hart County, Kentucky	0.77%	99.23%
Kentucky	2.39%	97.61%
United States	15.17%	84.83%

## Community Health Needs Assessment

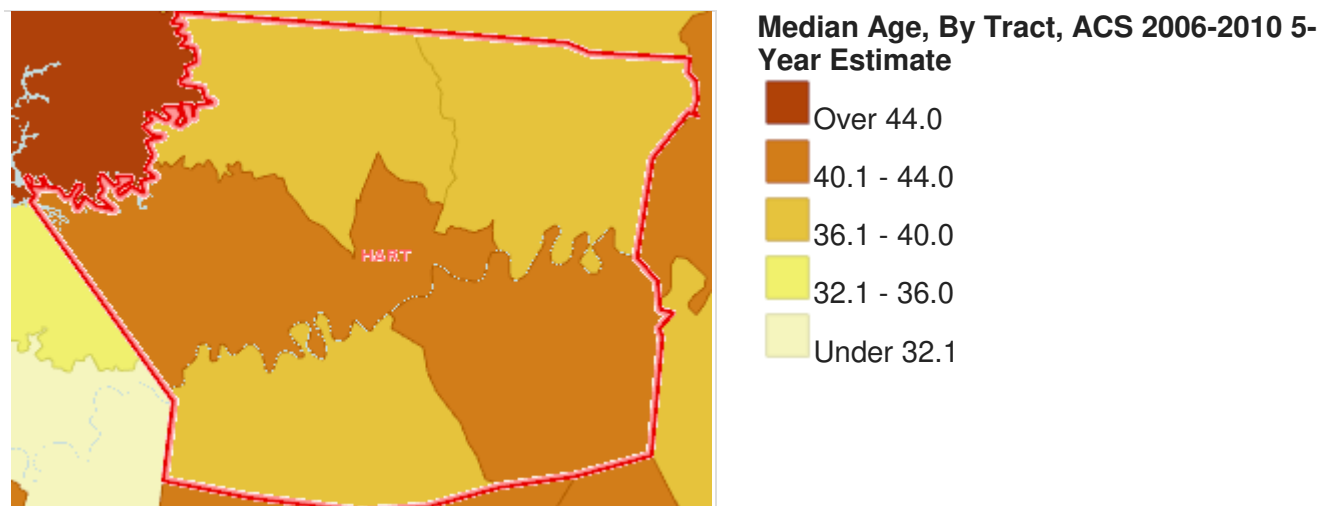


### Median Age

This indicator reports the median age according to the 2010 Census population estimate. This indicator is relevant because the age demographics of a population indicate the potential for age-specific conditions and a demand for related services.

Report Area	Total Population	Median Age
Hart County, Kentucky	18,201	39.90
Kentucky	4,285,828	37.70
United States	303,965,280	36.90

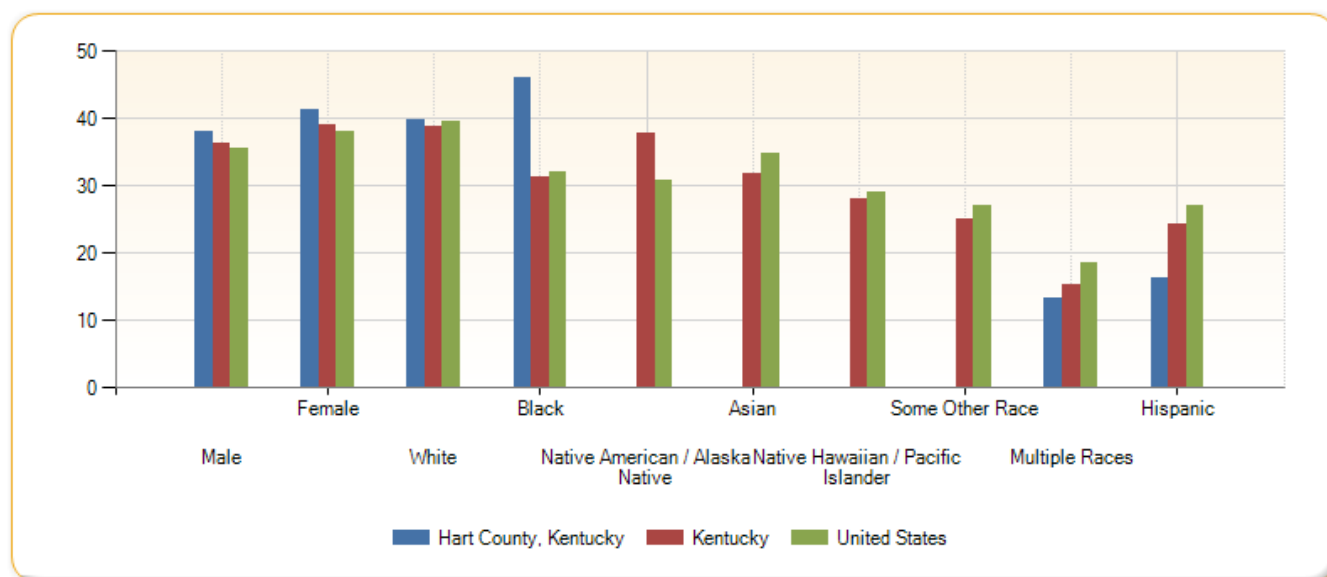
Data Source: [U.S. Census Bureau, 2006-2010 American Community Survey 5-Year Estimates](#). Source geography: Tract.



## Community Health Needs Assessment

### Population Median Age, by Gender / Race / Ethnicity

Report Area	Male	Female	White	Black	Native American / Alaska Native	Asian	Native Hawaiian / Pacific Islander	Some Other Race	Multiple Races	Hispanic
Hart County, Kentucky	38	41.40	39.70	46.10	no data	no data	no data	no data	13.30	16.30
Kentucky	36.30	39	38.90	31.40	37.80	31.80	28.10	25.10	15.20	24.30
United States	35.60	38.10	39.50	32	30.70	34.90	29.10	27.10	18.60	27



### Change in Total Population

This indicator reports the percent difference in population counts from the 2000 Census population estimate to the 2010 Census population estimate. This indicator is relevant because a positive or negative shift in total population over time impacts healthcare providers and the utilization of community resources.

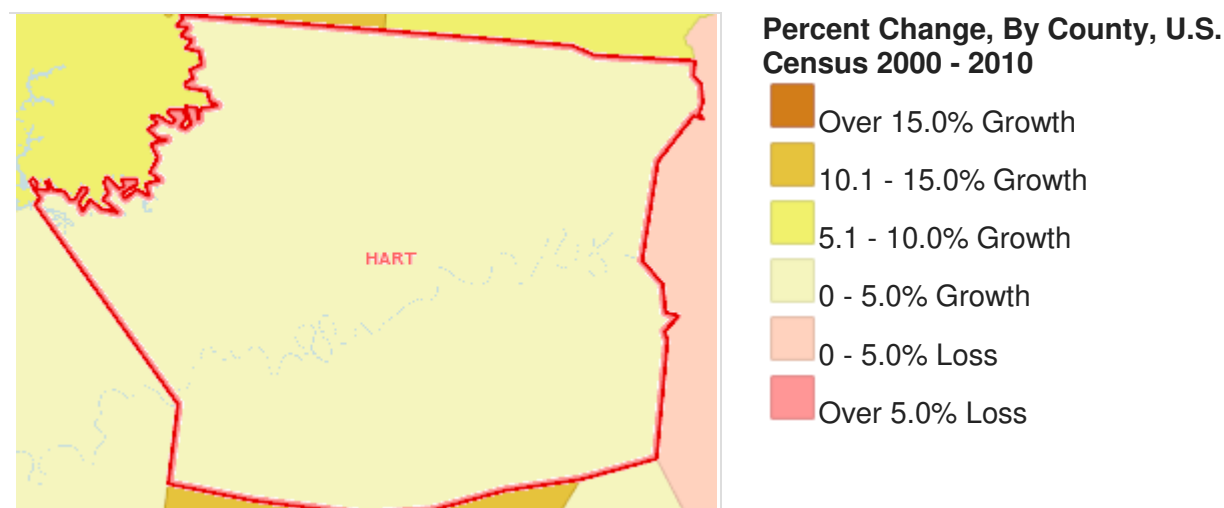
Report Area	Total Population, 2010 Census	Total Population, 2000 Census	Percent Change from 2000-2010 Census
Hart County, Kentucky	18,199	17,445	4.32%

# Community Health Needs Assessment

Report Area	Total Population, 2010 Census	Total Population, 2000 Census	Percent Change from 2000-2010 Census
Kentucky	4,339,367	4,041,769	7.36%
United States	308,745,538	281,421,906	9.71%

Note: No breakout data available.

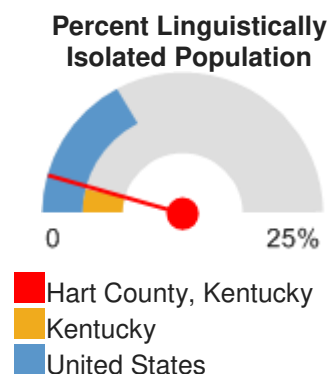
Data Source: [U.S. Census Bureau, 2000 Census of Population and Housing, Summary File 1](#); [U.S. Census Bureau, 2010 Census of Population and Housing, Summary File 1](#). Source geography: County.



## Linguistically Isolated Population

This indicator reports the percentage of the population aged 5 and older who speak a language other than English at home and speak English less than "very well." This indicator is relevant because an inability to speak English well creates barriers to healthcare access, provider communications, and health literacy/education.

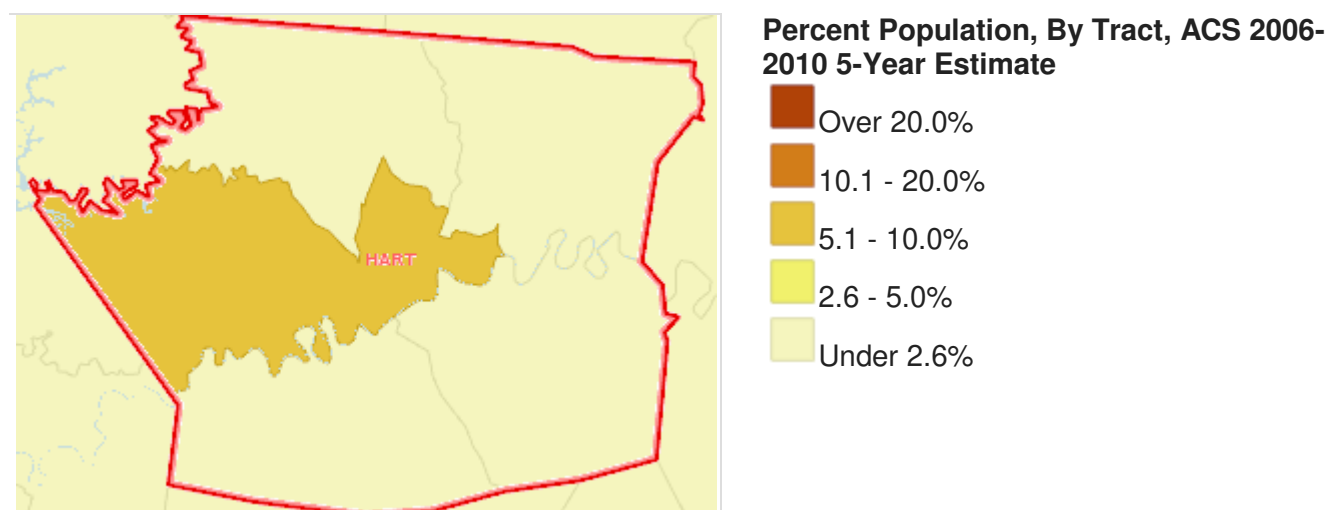
Report Area	Total Population (For Whom Linguistic Isolation is Determined)	Total Linguistically Isolated Population	Percent Linguistically Isolated Population
Hart County, Kentucky	17,034	372	<b>2.18%</b>
Kentucky	4,007,527	82,563	2.06%
United States	283,833,856	24,704,752	8.70%



# Community Health Needs Assessment

Note: This indicator is compared with the state average.

Data Source: [U.S. Census Bureau, 2006-2010 American Community Survey 5-Year Estimates](#). Source geography: Tract.



## Linguistically Isolated Population, Total by Race Alone

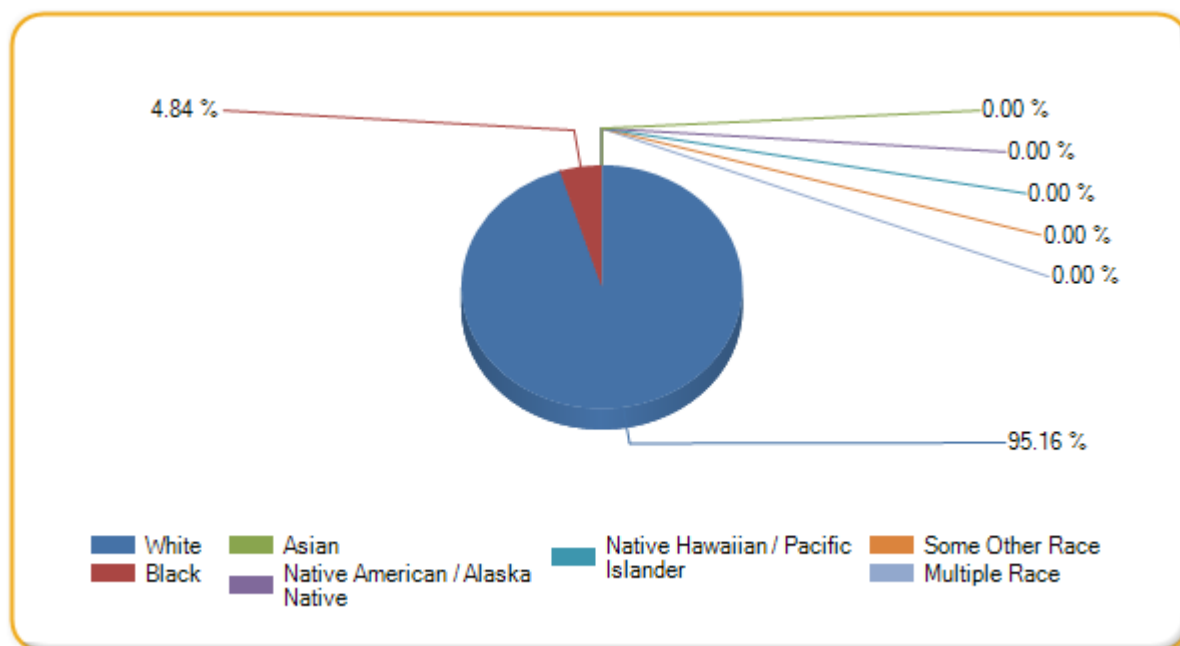
Report Area	White	Black	Asian	Native American / Alaska Native	Native Hawaiian / Pacific Islander	Some Other Race	Multiple Races
Hart County, Kentucky	354	18	0	0	0	0	0
Kentucky	45,220	4,146	14,323	401	226	16,309	1,938
United States	12,309,267	954,660	4,701,656	195,876	59,176	6,061,060	423,059

## Linguistically Isolated Population, Percent by Race Alone

Report Area	White	Black	Asian	Native American / Alaska Native	Native Hawaiian / Pacific Islander	Some Other Race	Multiple Races
Hart County, Kentucky	2.08%	0.11%	0%	0%	0%	0%	0%
Kentucky	54.77%	5.02%	17.35%	0.49%	0.27%	19.75%	2.35%

## Community Health Needs Assessment

Report Area	White	Black	Asian	Native American / Alaska Native	Native Hawaiian / Pacific Islander	Some Other Race	Multiple Races
United States	49.83%	3.86%	19.03%	0.79%	0.24%	24.53%	1.71%



### Linguistically Isolated Population, Total by Ethnicity Alone

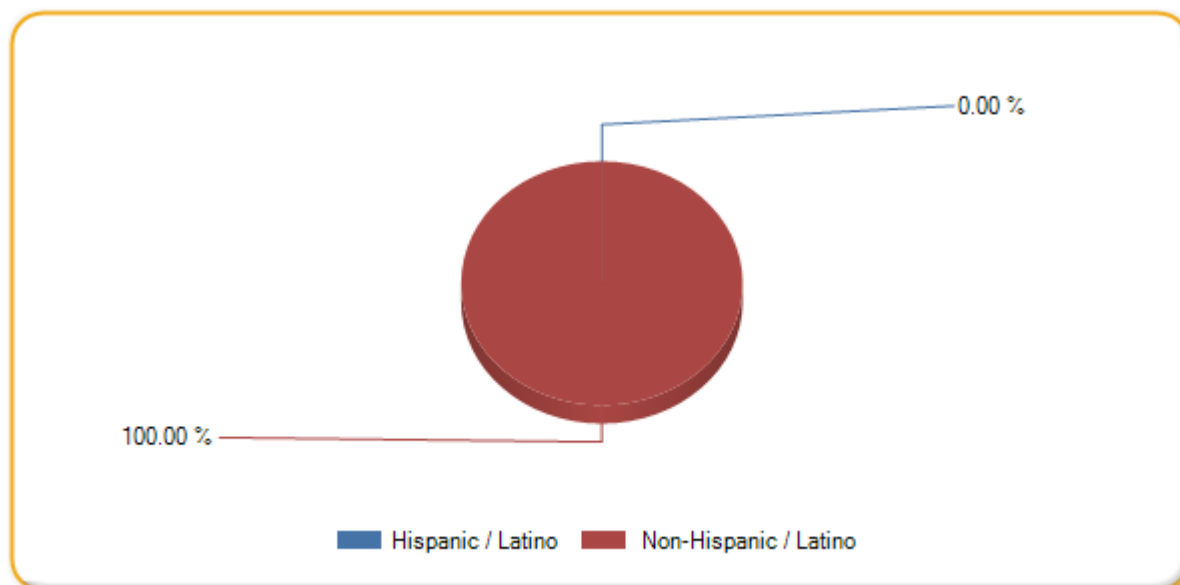
Report Area	Hispanic / Latino	Non-Hispanic / Latino
Hart County, Kentucky	23	349
Kentucky	39,780	42,783
United States	15,773,722	8,931,030

### Linguistically Isolated Population, Percent by Ethnicity Alone

Report Area	Hispanic / Latino	Non-Hispanic / Latino
Hart County, Kentucky	0.14%	4,572.85%
Kentucky	48.18%	51.82%

## Community Health Needs Assessment

Report Area	Hispanic / Latino	Non-Hispanic / Latino
United States	63.85%	36.15%

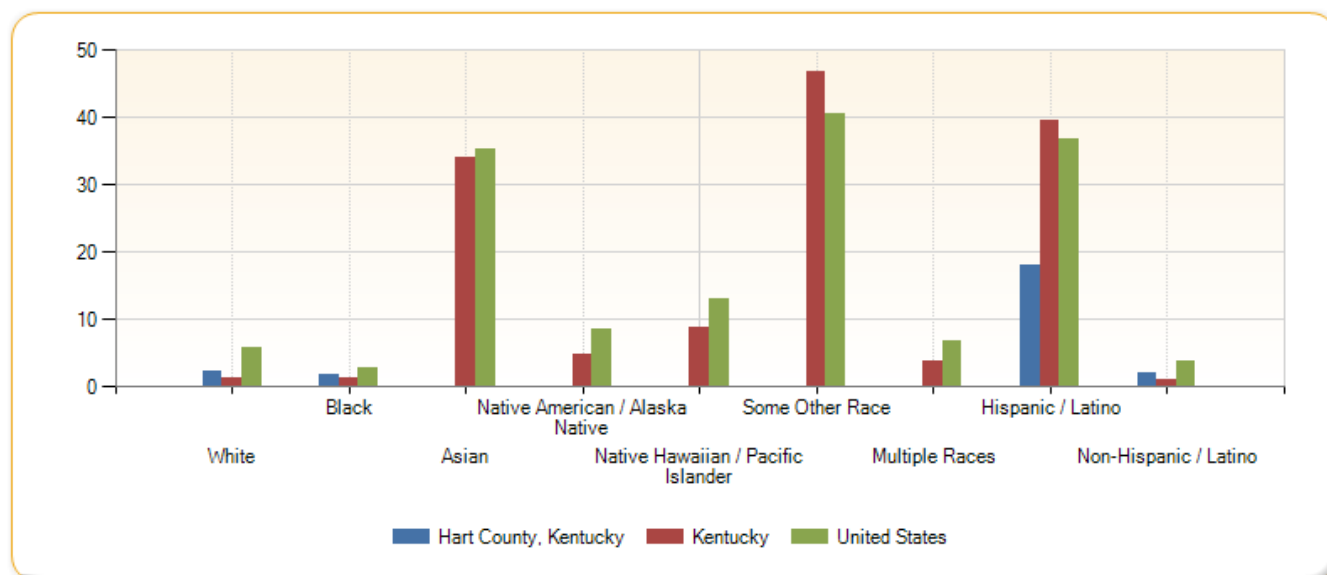


### Population by Race/Ethnicity, Percent Linguistically Isolated

Report Area	White	Black	Asian	Native American / Alaska Native	Native Hawaiian / Pacific Islander	Some Other Race	Multiple Races	Hispanic / Latino	Non-Hispanic / Latino
Hart County, Kentucky	2.24%	1.69%	0%	no data	0%	no data	0%	18.11%	2.06%
Kentucky	1.27%	1.36%	33.97%	4.71%	8.76%	46.73%	3.74%	39.59%	1.10%
United States	5.82%	2.72%	35.37%	8.58%	13.05%	40.45%	6.91%	36.89%	3.70%



# Community Health Needs Assessment



## Social & Economic Factors

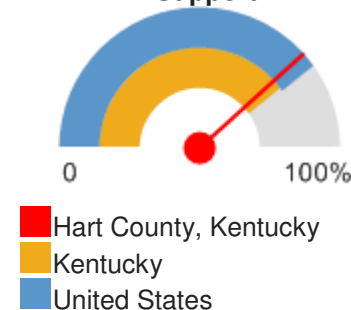
Economic and social insecurity often are associated with poor health. Poverty, unemployment, and lack of educational achievement affect access to care and a community's ability to engage in healthy behaviors. Without a network of support and a safe community, families cannot thrive. Ensuring access to social and economic resources provides a foundation for a healthy community.

### Adequate Social or Emotional Support

This indicator reports the percentage of adults aged 18 and older who self-report receiving sufficient social and emotional support all of most of the time. This indicator is relevant because social and emotional support is critical for navigating the challenges of daily life as well as for good mental health. Social and emotional support is also linked to educational achievement and economic stability.

Report Area	Surveyed Population (Age 18 )	Adults Reporting Adequate Social or Emotional Support	Percent Adults Reporting Adequate Social or Emotional Support
Hart County, Kentucky	300	230	76.67%
Kentucky	51,256	41,005	80.00%

Percent Adults Reporting Adequate Social or Emotional Support

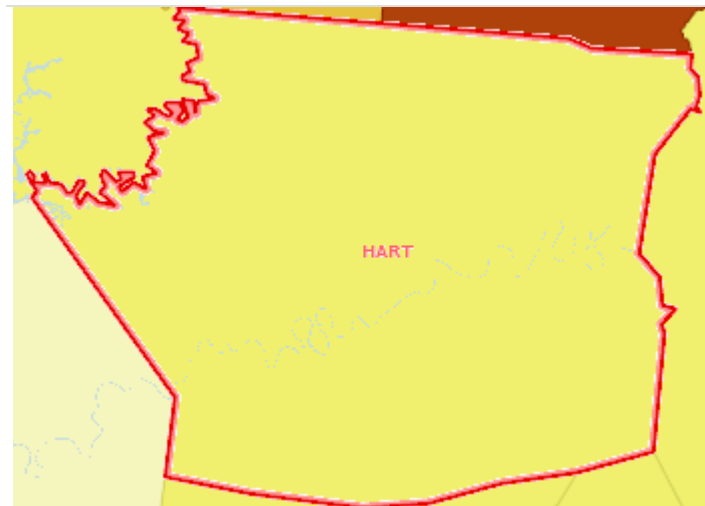


# Community Health Needs Assessment

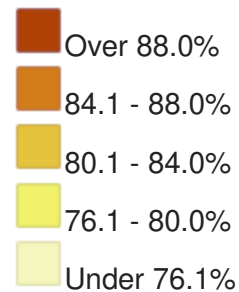
United States	2,744,636	2,204,749	80.33%
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Note: This indicator is compared with the state average. No breakout data available.

Data Source: [Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2006-2010](#). Source geography: County.



**Pct. of Adults With Adequate Social or Emotional Support, by County, BRFSS 2006-2010**

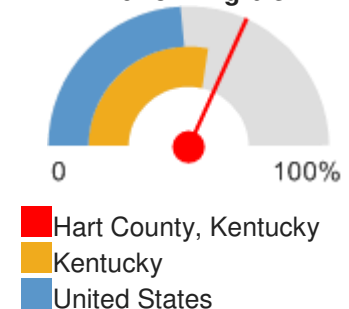


## Children Eligible for Free/Reduced Price Lunch

This indicator reports the percentage of public school students eligible for free or reduced price lunches. This indicator is relevant because it assesses vulnerable populations which are more likely to have multiple health access, health status, and social support needs. Additionally, when combined with poverty data, providers can use this measure to identify gaps in eligibility and enrollment.

Report Area	Total Student Enrollment	Number Free/Reduced Price Lunch Eligible	Percent Free/Reduced Price Lunch Eligible
Hart County, Kentucky	2,783	1,774	<b>63.74%</b>
Kentucky	673,099	380,773	56.57%
United States	49,692,766	24,021,069	48.34%

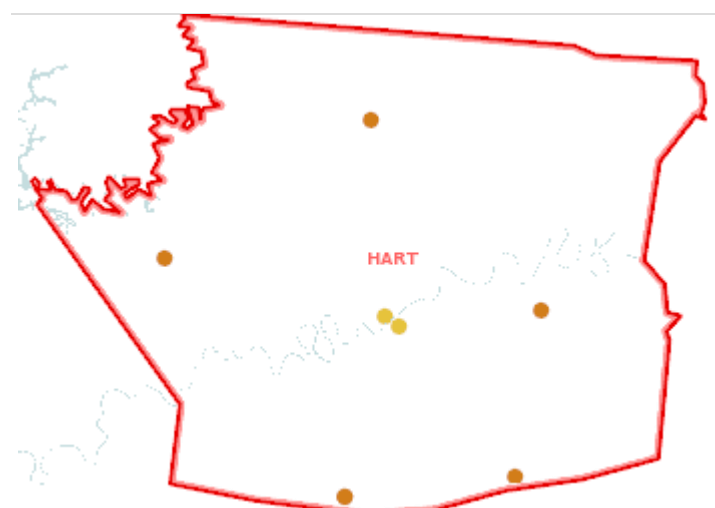
**Percent Free/Reduced Price Lunch Eligible**



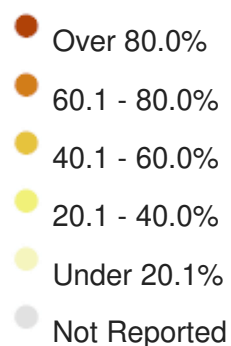
Note: This indicator is compared with the state average. No breakout data available.

Data Source: [U.S. Department of Education, National Center for Education Statistics \(NCES\), Common Core of Data, Public School Universe File, 2010-2011](#). Source geography: Address.

# Community Health Needs Assessment



**Percentage of Students Eligible for Free or Reduced Price Lunch, by School, NCES 2010-2011**

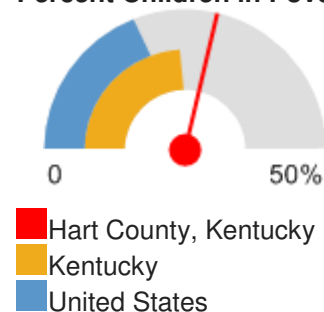


## Children in Poverty

This indicator reports the percentage of children aged 0-17 living under 100% of the Federal Poverty Level (FPL). This indicator is relevant because poverty creates barriers to access including health services, healthy food, and other necessities that contribute to poor health status.

Report Area	Total Population (For Whom Poverty Status is Determined)	Children in Poverty	Percent Children in Poverty
Hart County, Kentucky	4,444	1,269	<b>28.56%</b>
Kentucky	999,639	243,013	24.31%
United States	72,850,296	13,980,497	19.19%

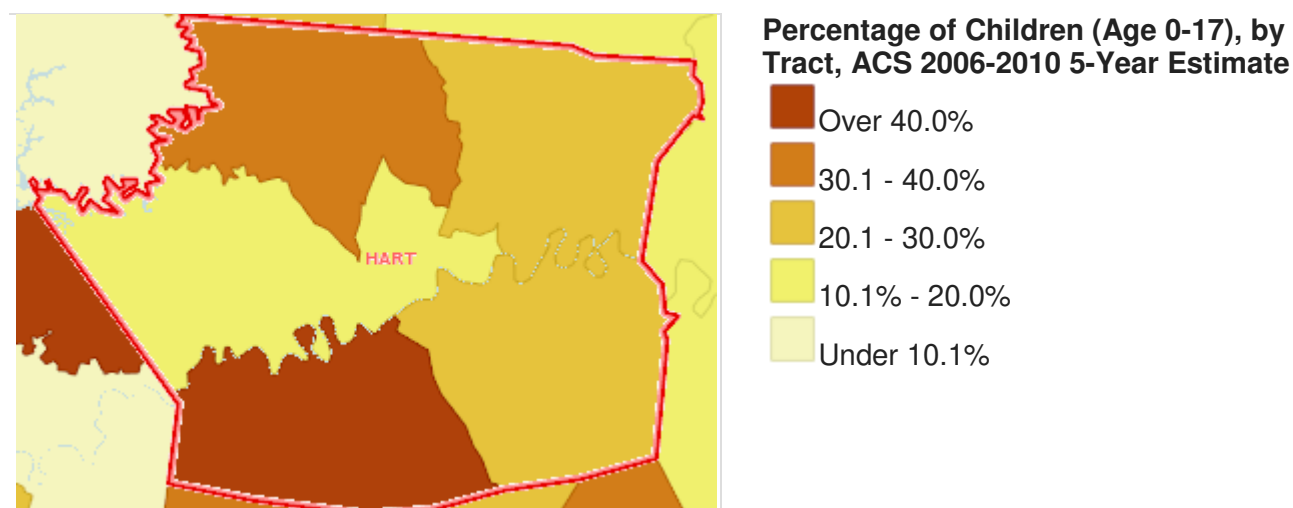
**Percent Children in Poverty**



*Note: This indicator is compared with the state average.*

*Data Source: [U.S. Census Bureau, 2006-2010 American Community Survey 5-Year Estimates](#). Source geography: Tract.*

## Community Health Needs Assessment



### Children in Poverty, Total by Gender

Report Area	Male	Female	Percent Male	Percent Female	Percent of Males in Poverty	Percent of Females in Poverty
Hart County, Kentucky	579	690	45.63%	54.37%	25.27%	32.05%
Kentucky	123,303	119,710	50.74%	49.26%	24.01%	24.63%
United States	7,085,844	6,894,653	50.68%	49.32%	19.02%	19.37%

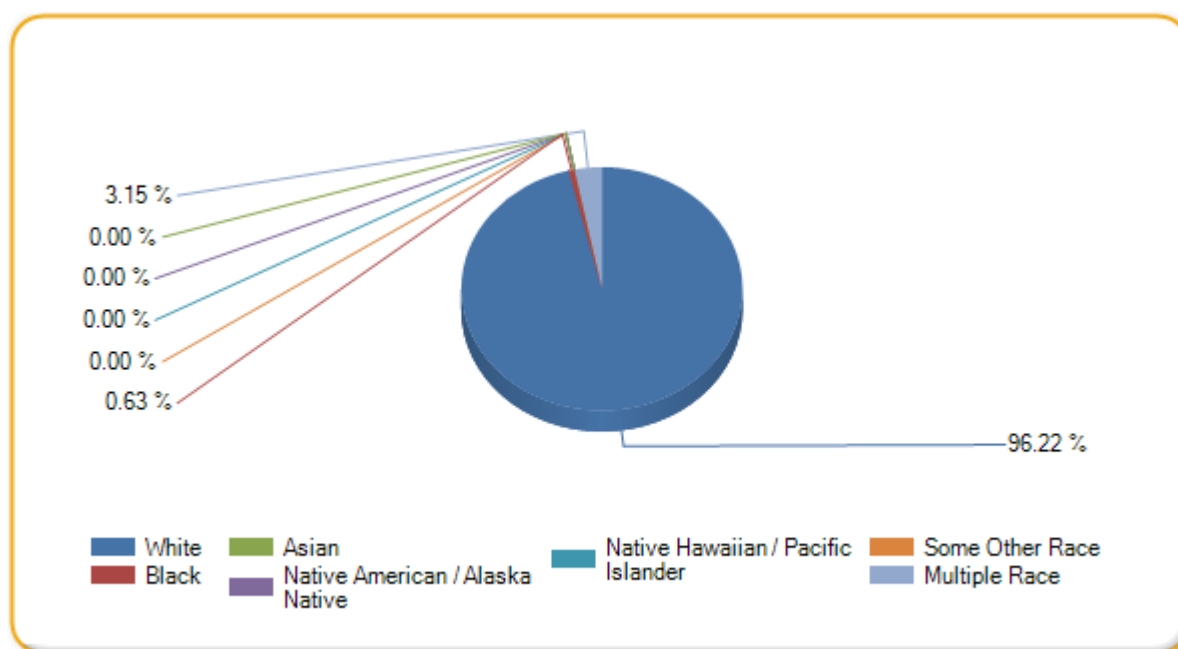
### Children in Poverty, Total by Race Alone

Report Area	White	Black	Asian	Native American / Alaska Native	Native Hawaiian / Pacific Islander	Some Other Race	Multiple Race
Hart County, Kentucky	1,221	8	0	0	0	0	40
Kentucky	182,137	40,564	1,225	673	180	5,401	12,833
United States	7,234,142	3,755,610	371,383	238,827	30,732	1,651,652	698,151

### Children in Poverty, Percent by Race Alone

## Community Health Needs Assessment

Report Area	White	Black	Asian	Native American / Alaska Native	Native Hawaiian / Pacific Islander	Some Other Race	Multiple Race
Hart County, Kentucky	96.22%	0.63%	0%	0%	0%	0%	3.15%
Kentucky	74.95%	16.69%	0.50%	0.28%	0.07%	2.22%	5.28%
United States	51.74%	26.86%	2.66%	1.71%	0.22%	11.81%	4.99%



### Children in Poverty, Total by Ethnicity Alone

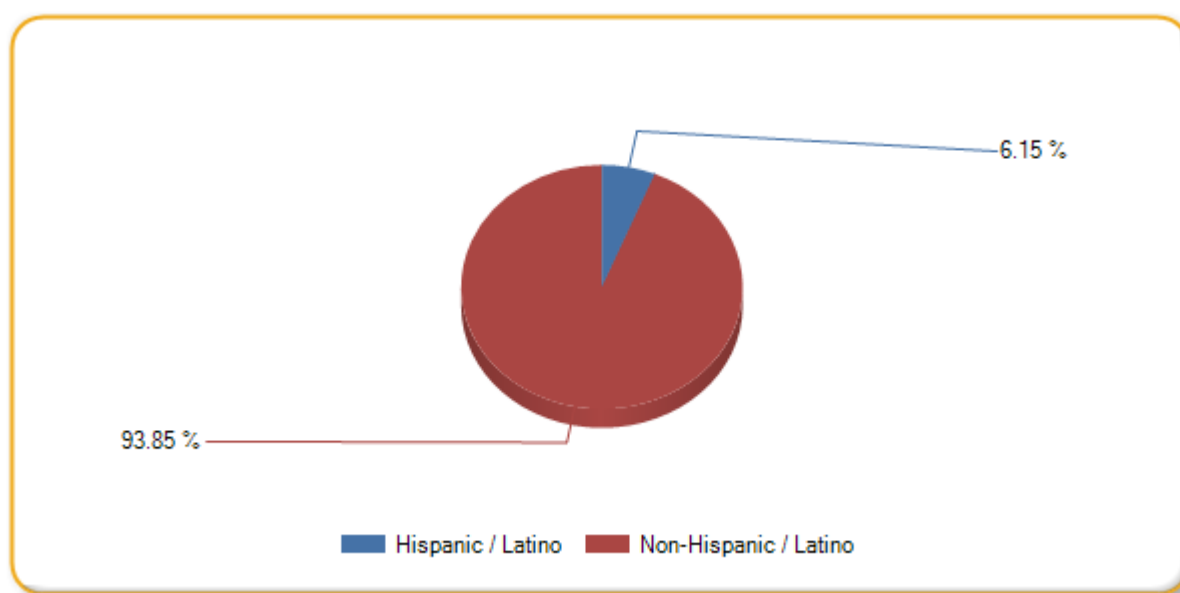
Report Area	Hispanic / Latino	Non-Hispanic / Latino
Hart County, Kentucky	78	1,191
Kentucky	17,106	225,907
United States	4,685,914	9,294,583

### Children in Poverty, Percent by Ethnicity Alone

Report Area	Hispanic / Latino	Non-Hispanic / Latino
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## Community Health Needs Assessment

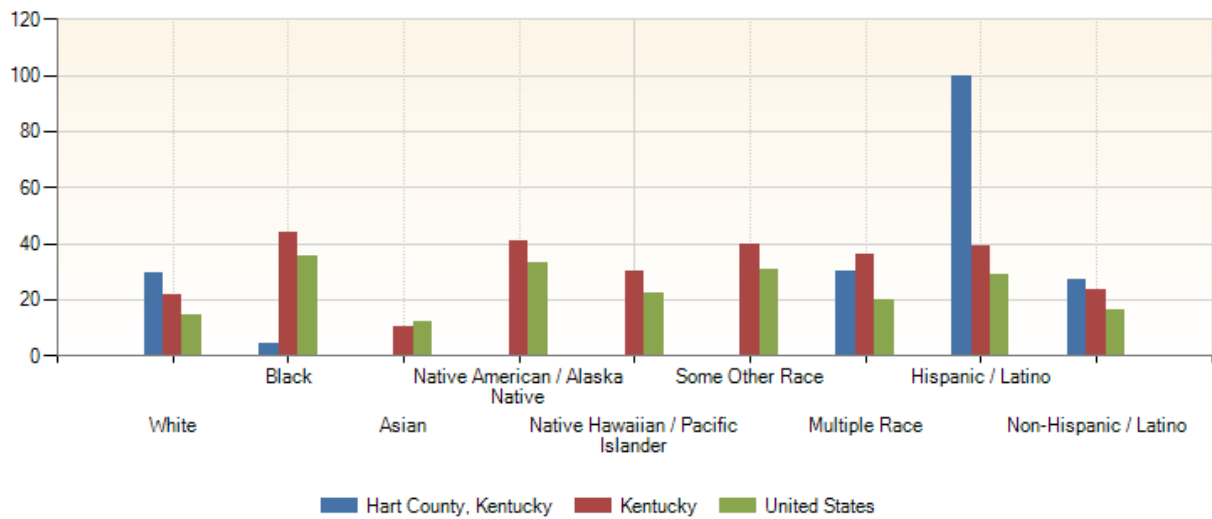
Report Area	Hispanic / Latino	Non-Hispanic / Latino
Hart County, Kentucky	6.15%	93.85%
Kentucky	7.04%	92.96%
United States	33.52%	66.48%



### Children by Race / Ethnicity, Percent in Poverty

Report Area	White	Black	Asian	Native American / Alaska Native	Native Hawaiian / Pacific Islander	Some Other Race	Multiple Race	Hispanic / Latino	Non-Hispanic / Latino
Hart County, Kentucky	29.51%	4.60%	no data	no data	no data	no data	30.08%	100%	27.28%
Kentucky	21.59%	43.73%	10.39%	41.04%	30.30%	39.46%	36.12%	39.31%	23.63%
United States	14.64%	35.40%	11.84%	33.34%	22.62%	30.86%	19.94%	29.21%	16.36%

# Community Health Needs Assessment

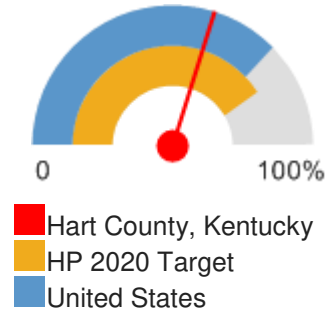


## High School Graduation Rate

This indicator reports the average freshman graduate rate, which measures the percentage of students receiving their high school diploma within four years. This indicator is relevant because low levels of education are often linked to poverty and poor health.

Report Area	Average Freshman Base Enrollment	Estimated Number of Diplomas Issued	On-Time Graduation Rate
Hart County, Kentucky	278	165	<b>59.50</b>
Kentucky	53,909	41,851	<b>77.60</b>
United States	4,024,345	3,039,015	<b>75.50</b>
<a href="#">HP 2020 Target</a>			>82.4

On-Time Graduation Rate

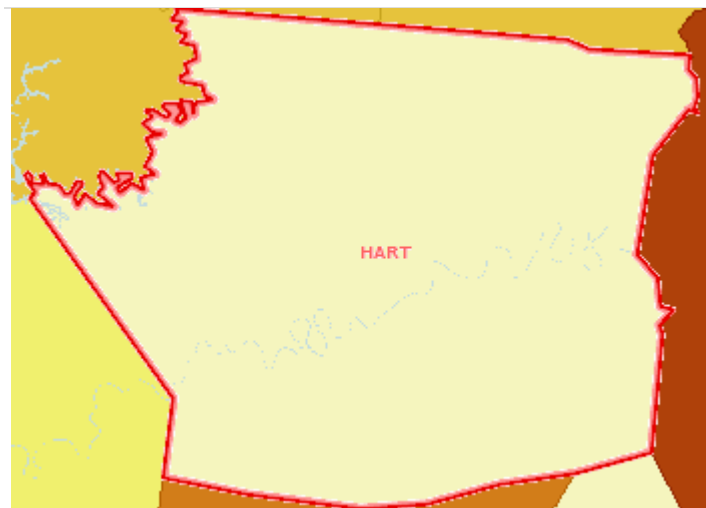


Note: This indicator is compared with the Healthy People 2020 Target. No breakout data available.

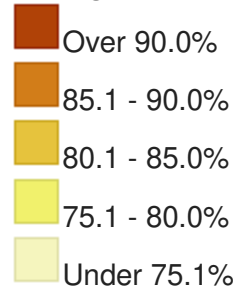
Data Source: [The University of Wisconsin, Population Health Institute, County Health Rankings, 2012](#) and the [U.S. Department of Education, National Center for Education Statistics \(NCES\), Common Core of Data, Public School Universe Survey Data, 2005-06, 2006-07 and 2007-08](#). Source geography: County.



# Community Health Needs Assessment



**Average Freshman Graduation Rate**

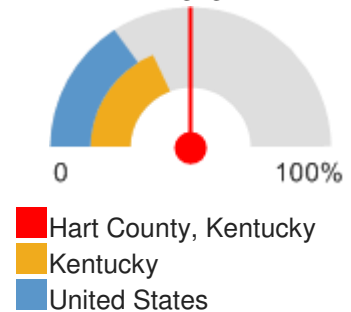


## **Population Below 200% of Poverty Level**

This indicator reports the percentage of the population living under 200% of the Federal Poverty Level (FPL). This indicator is relevant because poverty creates barriers to access including health services, healthy food, and other necessities that contribute to poor health status.

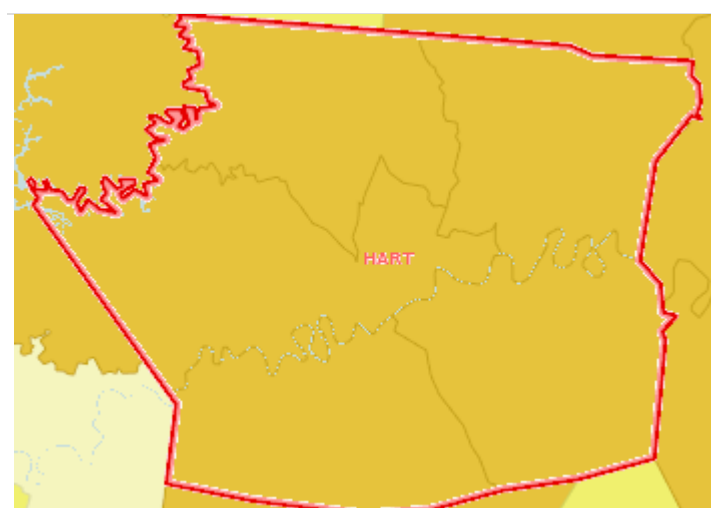
Report Area	Total Population (For Whom Poverty Status is Determined)	Population with Income Below 200% Poverty Level	Percent Population with Income Below 200% Poverty Level
Hart County, Kentucky	17,684	8,880	50.21%
Kentucky	4,157,077	1,586,181	38.16%
United States	296,141,152	94,693,416	31.98%

**Percent Population with  
Income Below 200% Poverty  
Level**

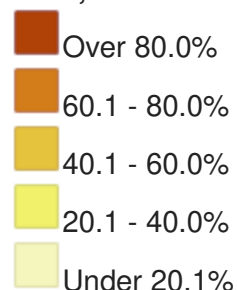


*Note: This indicator is compared with the state average. No breakout data available.*  
*Data Source: [U.S. Census Bureau, 2006-2010 American Community Survey 5-Year Estimates](#). Source geography: Tract.*

# Community Health Needs Assessment



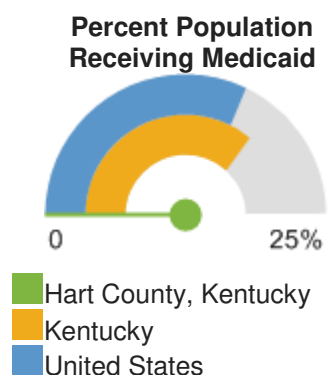
Percentage of Total Population, By Tract, ACS 2006-2010 5-Year Estimate



## Population Receiving Medicaid

This indicator reports the percentage of the population that is enrolled in Medicaid. This indicator is relevant because it assesses vulnerable populations which are more likely to have multiple health access, health status, and social support needs; when combined with poverty data, providers can use this measure to identify gaps in eligibility and enrollment.

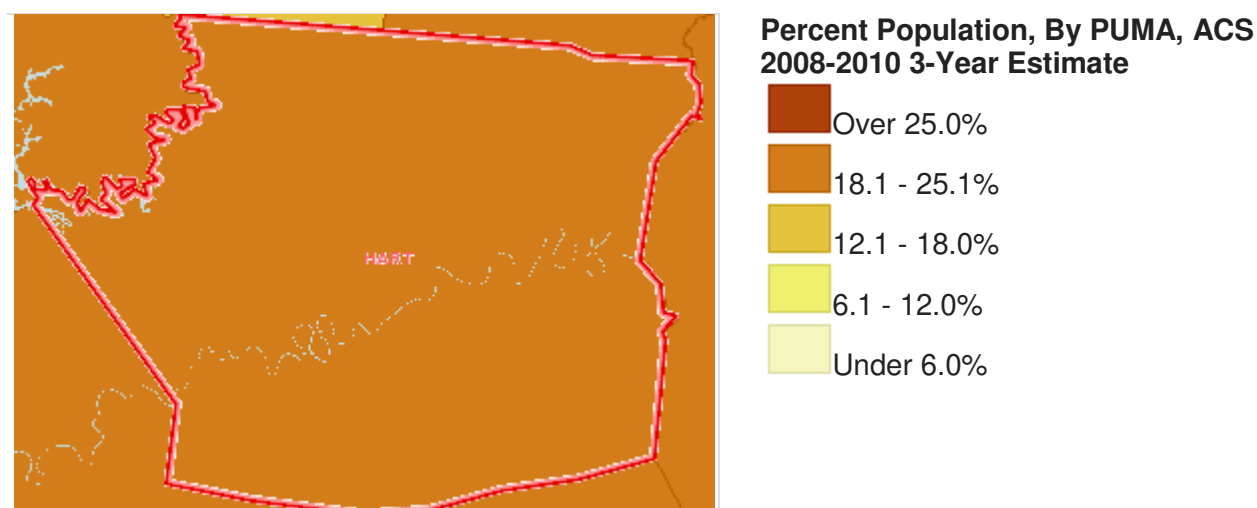
Report Area	Population (for Whom Insurance Status is Determined)	Population Receiving Medicaid	Percent Population Receiving Medicaid
Hart County, Kentucky	no data	no data	no data
Kentucky	4,227,518	767,790	18.16%
United States	301,501,760	48,541,096	16.10%



Note: This indicator is compared with the state average.

Data Source: [U.S. Census Bureau, 2008-2010 American Community Survey 3-Year Estimates](#). Source geography: PUMA.

## Community Health Needs Assessment



### Population by Gender, Total Receiving Medicaid

Report Area	Male	Female	Percent Male	Percent Female	Percent of Males Receiving Medicaid	Percent of Females Receiving Medicaid
Hart County, Kentucky	no data	no data	no data	no data	no data	no data
Kentucky	346,762	421,028	45.16%	54.84%	16.86%	19.39%
United States	21,858,516	26,682,578	45.03%	54.97%	14.87%	17.27%

### Population by Age Group, Total Receiving Medicaid

Report Area	Age 0-17	Age 18-64	Age 65	Percent Age 0-17	Percent Age 18-64	Percent Age 65
Hart County, Kentucky	no data	no data	no data	no data	no data	no data
Kentucky	379,338	295,540	92,912	49.41%	38.49%	12.10%
United States	24,267,754	18,415,838	5,857,503	49.99%	37.94%	12.07%

### Population with No High School Diploma

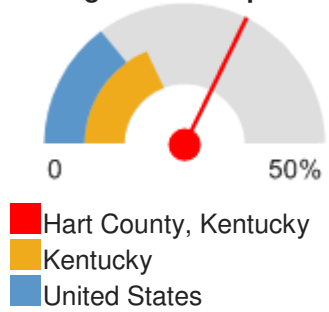
# Community Health Needs Assessment

Educational attainment is considered a *key driver* of health status.

This indicator reports the percentage of the population aged 25 and older without a high school diploma (or equivalency) or higher. This indicator is relevant because low levels of education are often linked to poverty and poor health.

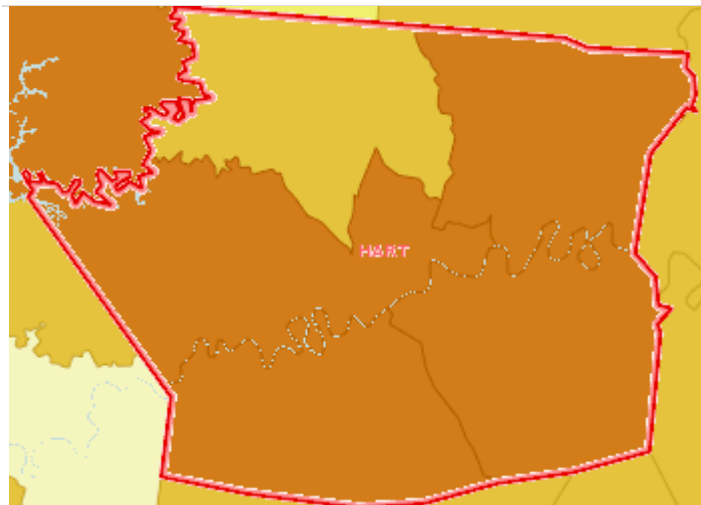
Report Area	Total Population (For Whom Educational Attainment is Determined)	Population with No High School Diploma	Percent Population with No High School Diploma
Hart County, Kentucky	12,191	3,933	<b>32.26%</b>
Kentucky	2,856,001	543,787	19.04%
United States	199,726,656	29,898,482	14.97%

**Percent Population with No High School Diploma**

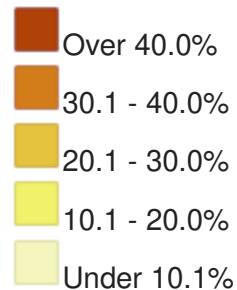


Note: This indicator is compared with the state average.

Data Source: [U.S. Census Bureau, 2006-2010 American Community Survey 5-Year Estimates](#). Source geography: Tract.



**Percentage of Total Population (Age 25 ), By Tract, ACS 2006-2010 5-Year Estimate**



## Population with No High School Diploma, Total by Gender

Report Area	Male	Female	Percent Male	Percent Female	Percent of Males with No High School Diploma	Percent of Females with No High School Diploma

## Community Health Needs Assessment

Report Area	Male	Female	Percent Male	Percent Female	Percent of Males with No High School Diploma	Percent of Females with No High School Diploma
Hart County, Kentucky	1,976	1,957	50.24%	49.76%	33.57%	31.04%
Kentucky	279,681	264,106	51.43%	48.57%	20.38%	17.80%
United States	14,979,577	14,918,906	50.10%	49.90%	15.60%	14.39%

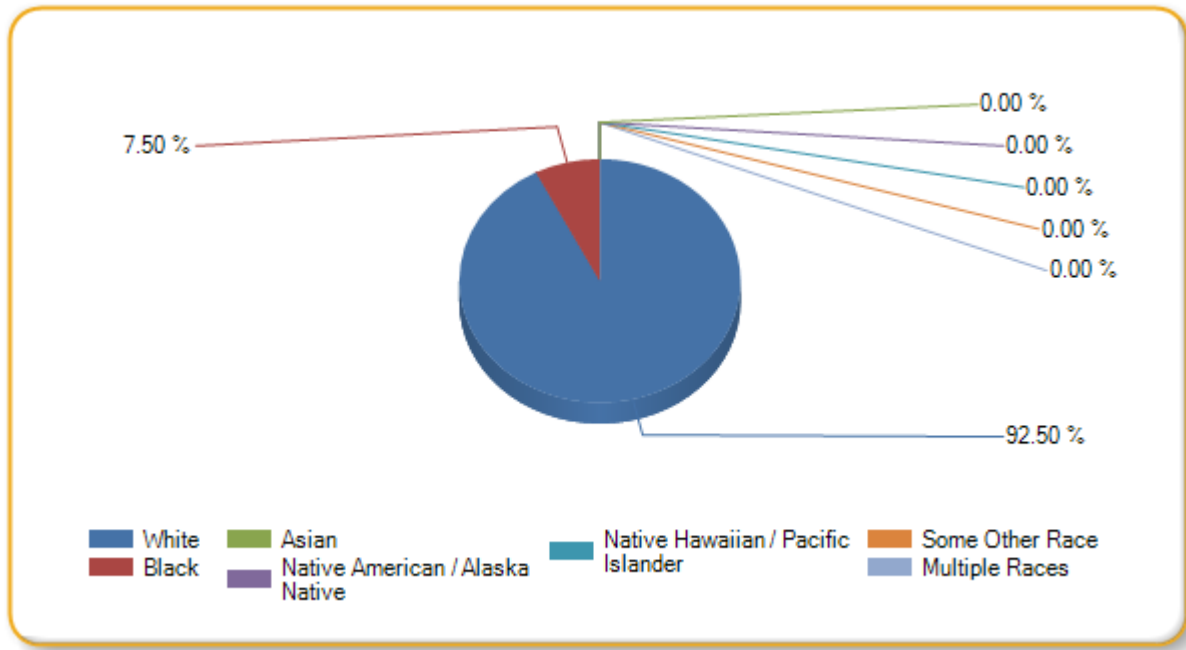
### Population with No High School Diploma, Total by Race Alone

Report Area	White	Black	Asian	Native American / Alaska Native	Native Hawaiian / Pacific Islander	Some Other Race	Multiple Races
Hart County, Kentucky	3,638	295	0	0	0	0	0
Kentucky	488,280	36,692	3,533	1,398	249	8,524	5,111
United States	19,517,580	4,355,718	1,362,029	338,366	40,131	3,827,321	457,337

### Population with No High School Diploma, Percent by Race Alone

Report Area	White	Black	Asian	Native American / Alaska Native	Native Hawaiian / Pacific Islander	Some Other Race	Multiple Races
Hart County, Kentucky	92.50%	7.50%	0%	0%	0%	0%	0%
Kentucky	89.79%	6.75%	0.65%	0.26%	0.05%	1.57%	0.94%
United States	65.28%	14.57%	4.56%	1.13%	0.13%	12.80%	1.53%

## Community Health Needs Assessment



### Population with No High School Diploma, Total by Ethnicity Alone

Report Area	Hispanic / Latino	Non-Hispanic / Latino
Hart County, Kentucky	28	3,905
Kentucky	20,889	522,898
United States	9,834,425	20,064,057

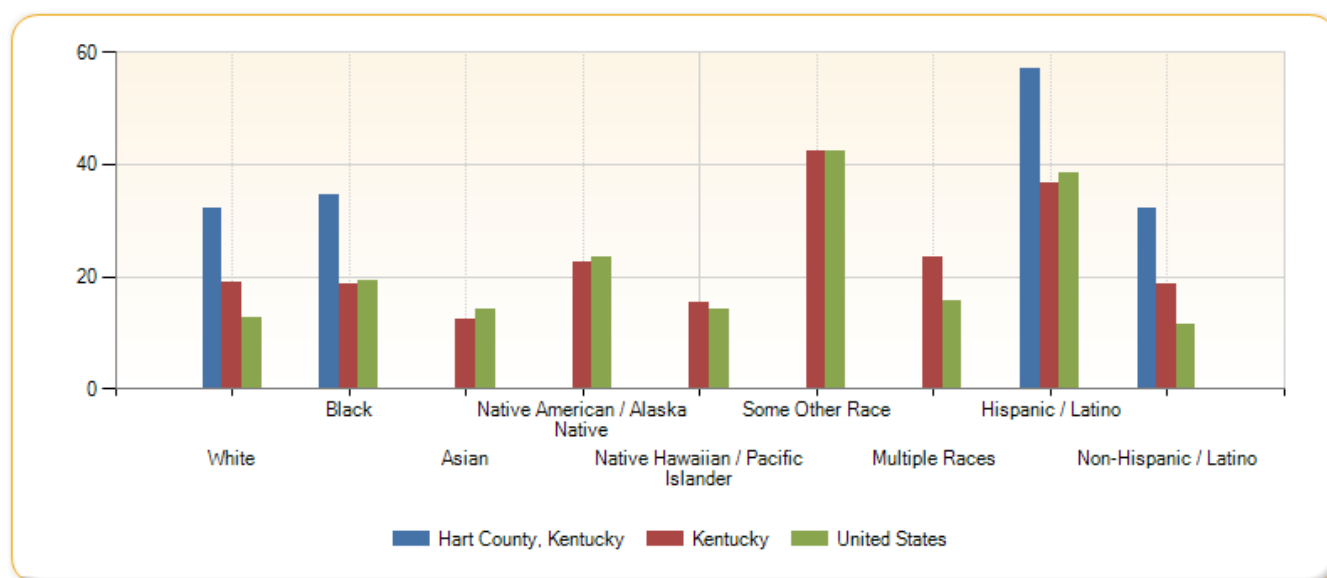
### Population with No High School Diploma, Percent by Ethnicity Alone

Report Area	Hispanic / Latino	Non-Hispanic / Latino
Hart County, Kentucky	0.71%	99.29%
Kentucky	3.84%	96.16%
United States	32.89%	67.11%

### Population by Race / Ethnicity, Percent with No High School Diploma

## Community Health Needs Assessment

Report Area	White	Black	Asian	Native American / Alaska Native	Native Hawaiian / Pacific Islander	Some Other Race	Multiple Races	Hispanic / Latino	Non-Hispanic / Latino
Hart County, Kentucky	32.20%	34.71%	0%	no data	no data	no data	0%	57.14%	32.16%
Kentucky	18.91%	18.75%	12.28%	22.50%	15.45%	42.25%	23.48%	36.57%	18.68%
United States	12.69%	19.14%	14.27%	23.40%	14.09%	42.48%	15.80%	38.47%	11.52%



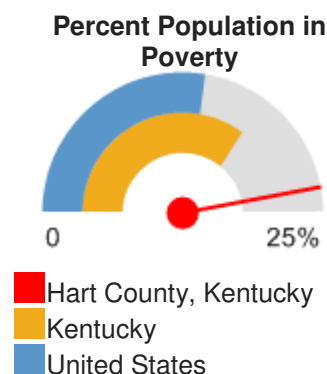
### **Poverty Rate (< 100% FPL)**

Poverty is considered a *key driver* of health status.

This indicator reports the percentage of the population living below 100% of the Federal Poverty Level (FPL). This indicator is relevant because poverty creates barriers to access including health services, healthy food, and other necessities that contribute to poor health status.

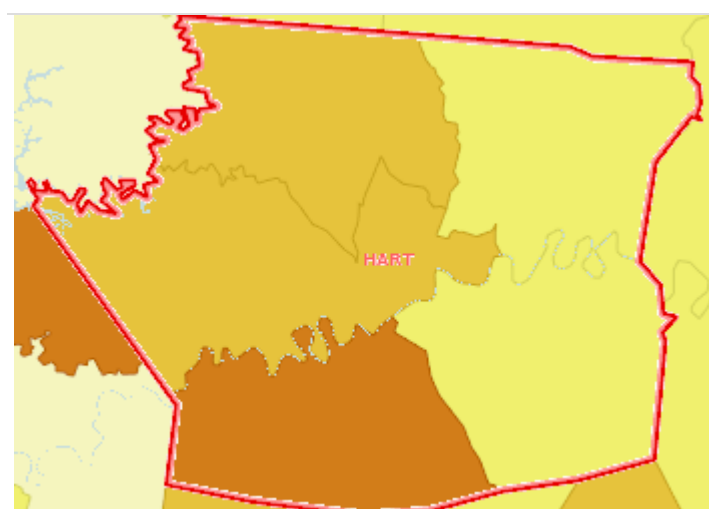
# Community Health Needs Assessment

Report Area	Total Population (For Whom Poverty Status is Determined)	Total Population in Poverty	Percent Population in Poverty
Hart County, Kentucky	17,684	4,155	<b>23.50%</b>
Kentucky	4,157,077	735,782	17.70%
United States	296,141,152	40,917,512	13.82%

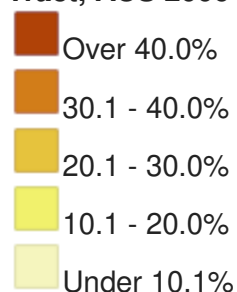


Note: This indicator is compared with the state average.

Data Source: [U.S. Census Bureau, 2006-2010 American Community Survey 5-Year Estimates](#). Source geography: Tract.



**Percentage of Total Population, By Tract, ACS 2006-2010 5-Year Estimate**



## Population in Poverty, Total by Gender

Report Area	Male	Female	Percent Male	Percent Female	Percent of Males in Poverty	Percent of Females in Poverty
Hart County, Kentucky	1,637	2,518	39.40%	60.60%	18.86%	27.97%
Kentucky	324,373	411,409	44.09%	55.91%	15.99%	19.33%
United States	18,063,626	22,853,888	44.15%	55.85%	12.48%	15.10%

## Population in Poverty, Total by Race Alone

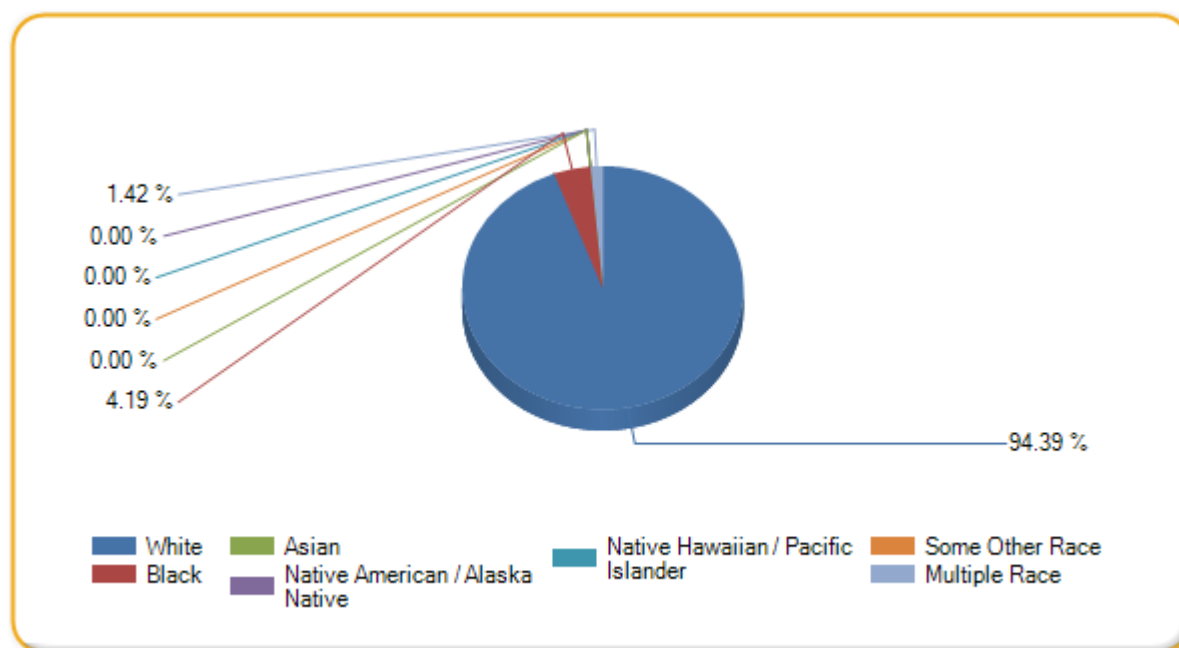


## Community Health Needs Assessment

Report Area	White	Black	Asian	Native American / Alaska Native	Native Hawaiian / Pacific Islander	Some Other Race	Multiple Race
Hart County, Kentucky	3,922	174	0	0	0	0	59
Kentucky	598,861	96,290	5,735	2,366	443	12,412	19,675
United States	24,378,350	9,180,061	1,580,505	631,614	78,712	3,803,254	1,265,017

### Population in Poverty, Percent by Race Alone

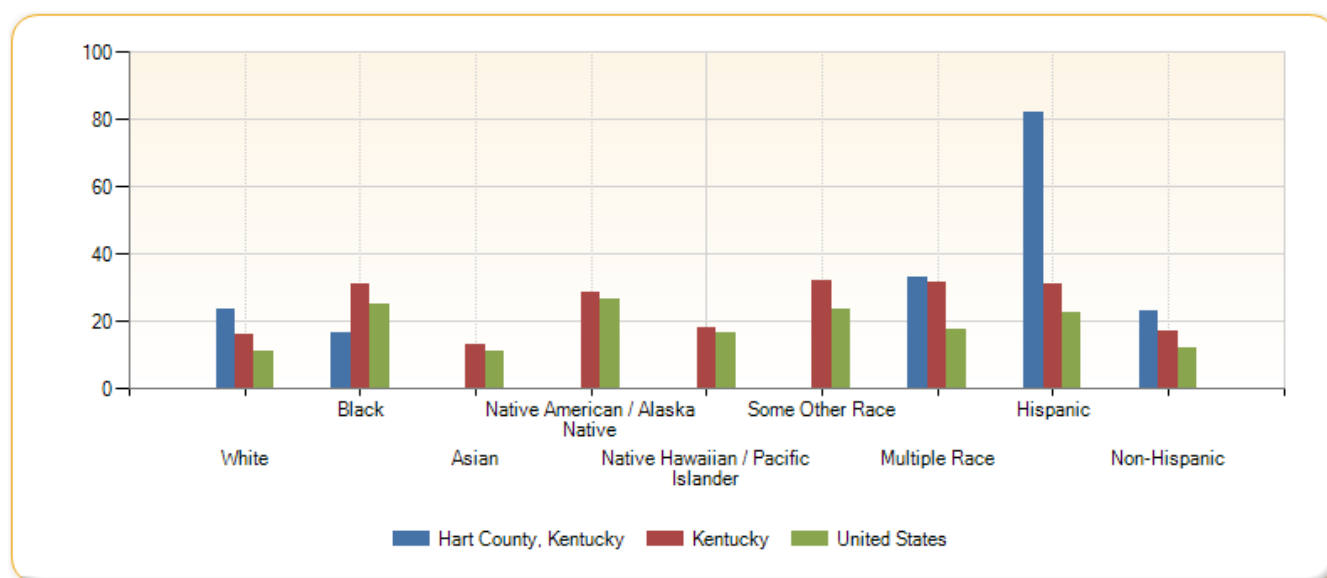
Report Area	White	Black	Asian	Native American / Alaska Native	Native Hawaiian / Pacific Islander	Some Other Race	Multiple Race
Hart County, Kentucky	94.39%	4.19%	0%	0%	0%	0%	1.42%
Kentucky	81.39%	13.09%	0.32%	0.78%	0.06%	1.69%	2.67%
United States	59.58%	22.44%	1.54%	3.86%	0.19%	9.29%	3.09%



### Population by Race/Ethnicity, Percent in Poverty

## Community Health Needs Assessment

Report Area	White	Black	Asian	Native American / Alaska Native	Native Hawaiian / Pacific Islander	Some Other Race	Multiple Race	Hispanic	Non-Hispanic
Hart County, Kentucky	23.85 %	16.59 %	0%	no data	0%	no data	32.96 %	81.89%	23.07%
Kentucky	16.22%	31.12 %	12.92 %	28.77%	18.32%	32.10 %	31.52 %	30.99%	17.33%
United States	11.10%	25.28 %	11.34 %	26.42%	16.50%	23.41 %	17.84 %	22.41%	12.21%



### Supplemental Nutrition Assistance Program (SNAP) Recipients

This indicator reports the average percentage of the population receiving the Supplemental Nutrition Assistance Program (SNAP) benefits from the months of July 2008 to July 2009. This indicator is relevant because it assesses vulnerable populations which are more likely to have multiple health access, health status, and social support needs; when combined with poverty data, providers can use this measure to identify gaps in eligibility and enrollment.

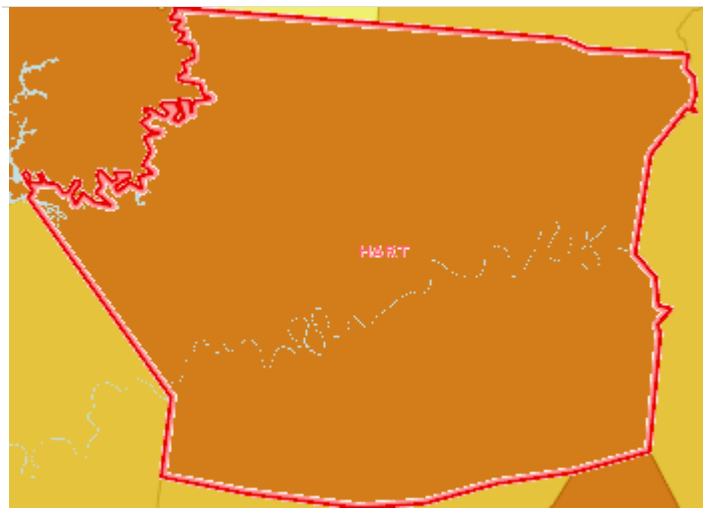
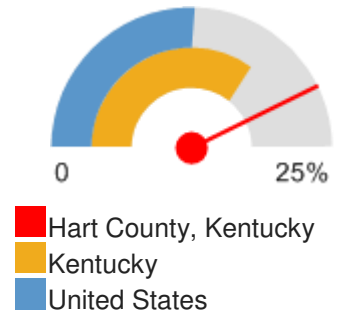
Report Area	Total Estimated Population, 2009	Total Population Receiving SNAP Benefits	Percent Population Receiving SNAP Benefits

**Percent Population Receiving SNAP Benefits**

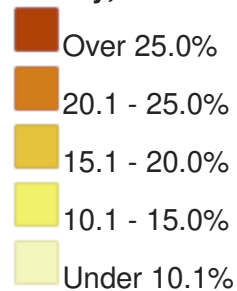
# Community Health Needs Assessment

Hart County, Kentucky	18,396	3,924	<b>21.33%</b>
Kentucky	4,314,113	761,654	17.65%
United States	307,006,550	38,701,176	12.60%

Note: This indicator is compared with the state average. No breakout data available.  
Data Source: [U.S. Census Bureau, Small Area Income and Poverty Estimates \(SAIPE\), 2009](#). Source geography: County.



**Percentage of Total Population, By County, SAIPE 2009**

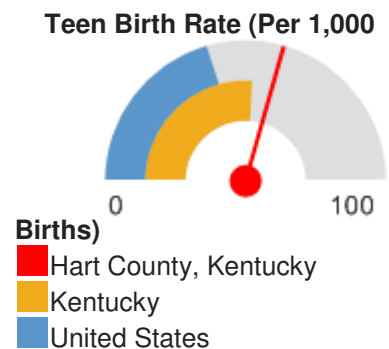


## Teen Births

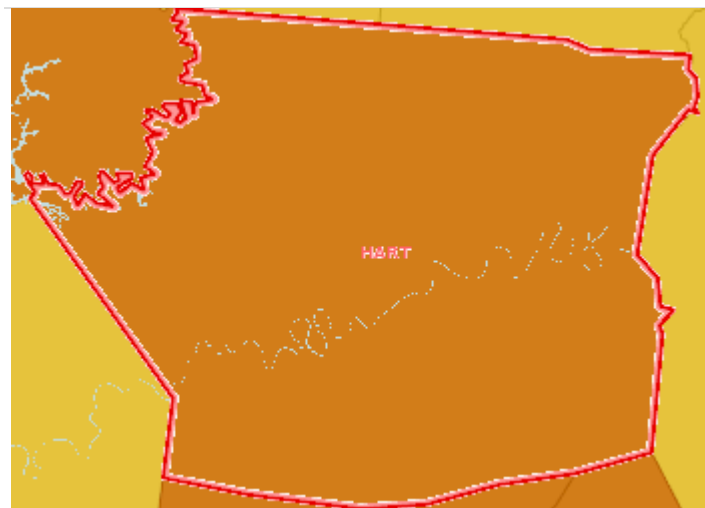
This indicator reports the rate of total births to women under the age of 15 - 19 per 1,000 female population age 15 - 19. This indicator is relevant because in many cases, teen parents have unique social, economic, and health support services. Additionally, high rates of teen pregnancy may indicate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

Report Area	Female Population Age 15 - 19	Births to Mothers Age 15 - 19	Teen Birth Rate (Per 1,000 Births)
Hart County, Kentucky	4,075	240	<b>58.90</b>
Kentucky	959,367	49,983	52.10
United States	72,071,117	2,969,330	41.20

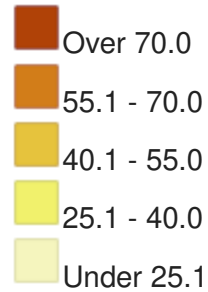
Note: This indicator is compared with the state average.  
Data Source: [Centers for Disease Control and Prevention, National Vital Statistics Systems, 2003-2009](#). Accessed through the [Health Indicators Warehouse](#). Source geography: County.



## Community Health Needs Assessment

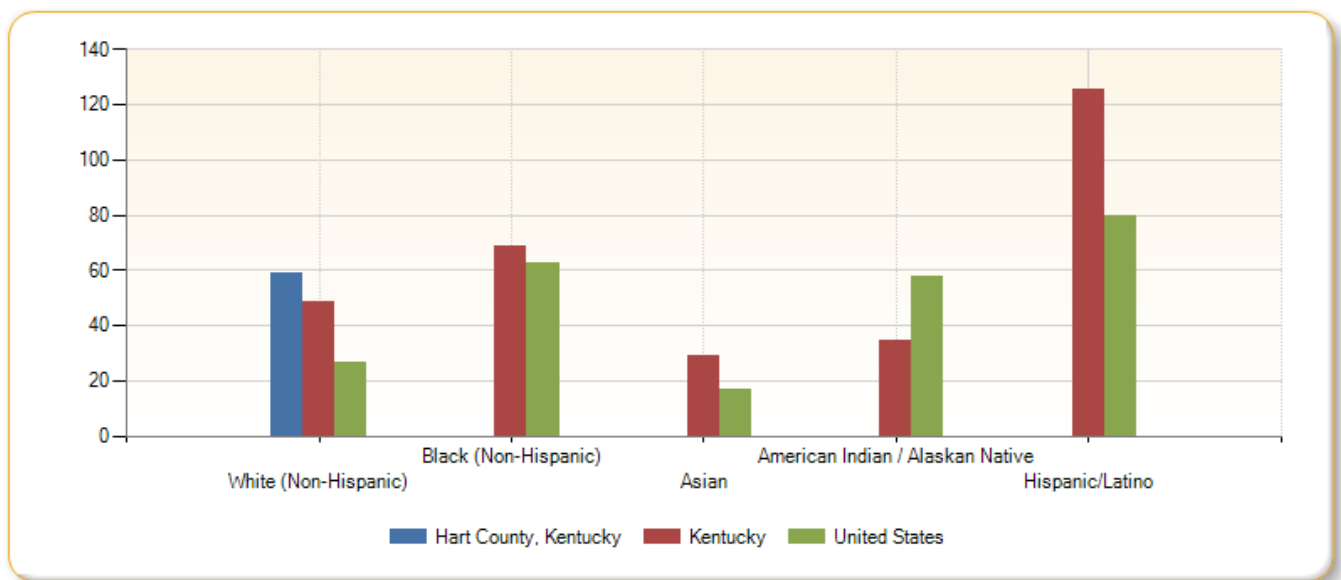


**Rate of Births to Women Age 15 - 19  
(Per 1,000 Population), By County, CDC  
NVSS 2003-2009**



**Teenage Girls by Race / Ethnicity, Birth Rate (Per 1,000 Births)**

Report Area	White (Non-Hispanic)	Black (Non-Hispanic)	Asian	American Indian / Alaskan Native	Hispanic/Latino
Hart County, Kentucky	58.90	no data	no data	no data	no data
Kentucky	48.70	68.60	28.80	34.50	125.50
United States	26.30	62.40	16.70	57.50	79.70

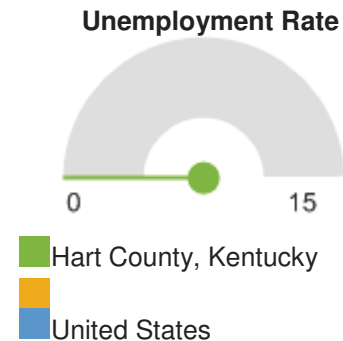


# Community Health Needs Assessment

## Unemployment Rate

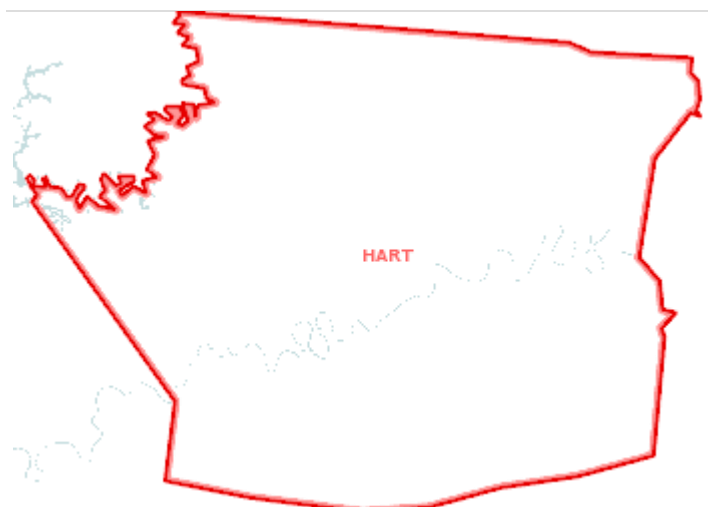
This indicator reports the percentage of the civilian noninstitutionalized population age 16 and older that is unemployed (non-seasonally adjusted). This indicator is relevant because unemployment creates financial instability and barriers to access including insurance coverage, health services, healthy food, and other necessities that contribute to poor health status.

Report Area	Total Labor Force	Number Unemployed	Unemployment Rate
Hart County, Kentucky	no data	no data	no data
Kentucky	no data	no data	no data
United States	no data	no data	no data

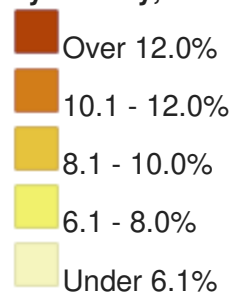


*Note: This indicator is compared with the state average. No breakout data available.*

*Data Source: [U.S. Bureau of Labor Statistics, July, 2012 Local Area Unemployment Statistics](#). Source geography: County.*



### **Percentage of Workforce Unemployed, By County, BLS 2012**



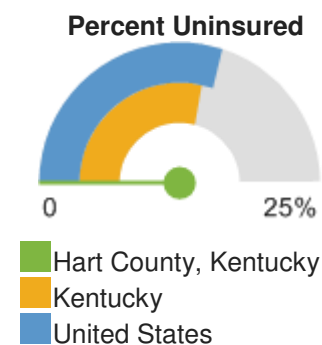
## Uninsured Population

The lack of health insurance is considered a *key driver* of health status.

This indicator reports the percentage of the total civilian non-institutionalized population without health insurance coverage. This indicator is relevant because lack of insurance is a primary barrier to healthcare access including regular primary care, specialty care, and other health services that contributes to poor health status.

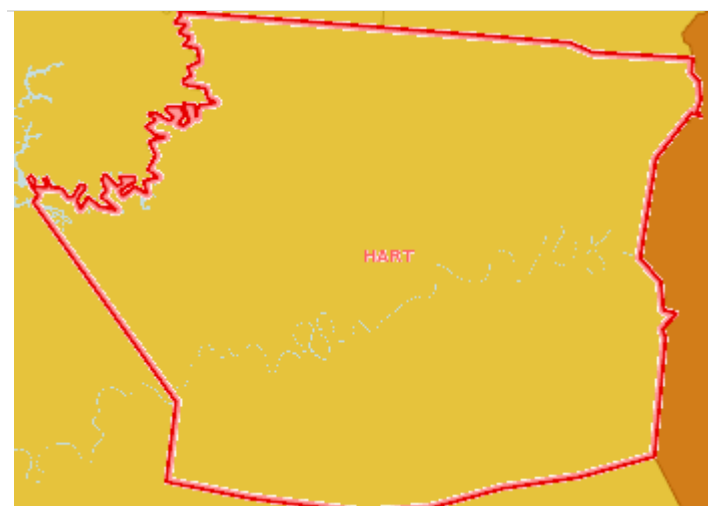
# Community Health Needs Assessment

Report Area	Total Population (For Whom Insurance Status is Determined)	Number Uninsured	Percent Uninsured
Hart County, Kentucky	no data	no data	no data
Kentucky	4,227,518	606,921	14.36%
United States	301,501,760	45,368,296	15.05%

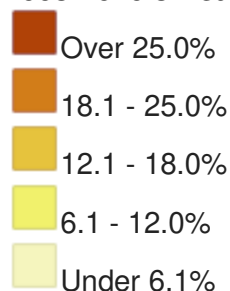


Note: This indicator is compared with the state average.

Data Source: [U.S. Census Bureau, 2008-2010 American Community Survey 3-Year Estimates](#). Source geography: PUMA.



**Percent Population, By PUMA, ACS 2008-2010 3-Year Estimate**



## Uninsured Population, Total by Gender

Report Area	Male	Female	Percent Male	Percent Female	Percent of Males that are Uninsured	Percent of Females that are Uninsured
Hart County, Kentucky	no data	no data	no data	no data	no data	no data
Kentucky	322,361	284,560	53.11%	46.89%	15.68%	13.11%
United States	24,442,600	20,925,698	53.88%	46.12%	16.62%	13.55%

## Community Health Needs Assessment

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### Uninsured Population, Total by Race Alone

Report Area	White	Black	Asian	Native American / Alaska Native	Native Hawaiian / Pacific Islander	Some Other Race	Multiple Race
Hart County, Kentucky	no data	no data	no data	no data	no data	no data	no data
Kentucky	512,937	57,042	6,922	1,813	no data	17,667	9,815
United States	29,670,864	6,568,259	2,162,975	715,557	81,233	5,065,630	1,103,781

### Uninsured Population, Percent by Race Alone

Report Area	White	Black	Asian	Native American / Alaska Native	Native Hawaiian / Pacific Islander	Some Other Race	Multiple Race
Hart County, Kentucky	no data	no data	no data	no data	no data	no data	no data
Kentucky	84.51%	9.40%	1.14%	0.30%	no data	2.91%	1.62%
United States	65.40%	14.48%	4.77%	1.58%	0.18%	11.17%	2.43%

### Uninsured Population, Total by Ethnicity Alone

Report Area	Hispanic / Latino	Non-Hispanic / Latino
Hart County, Kentucky	no data	no data
Kentucky	44,865	562,056
United States	15,043,083	30,325,213

### Uninsured Population, Percent by Ethnicity Alone

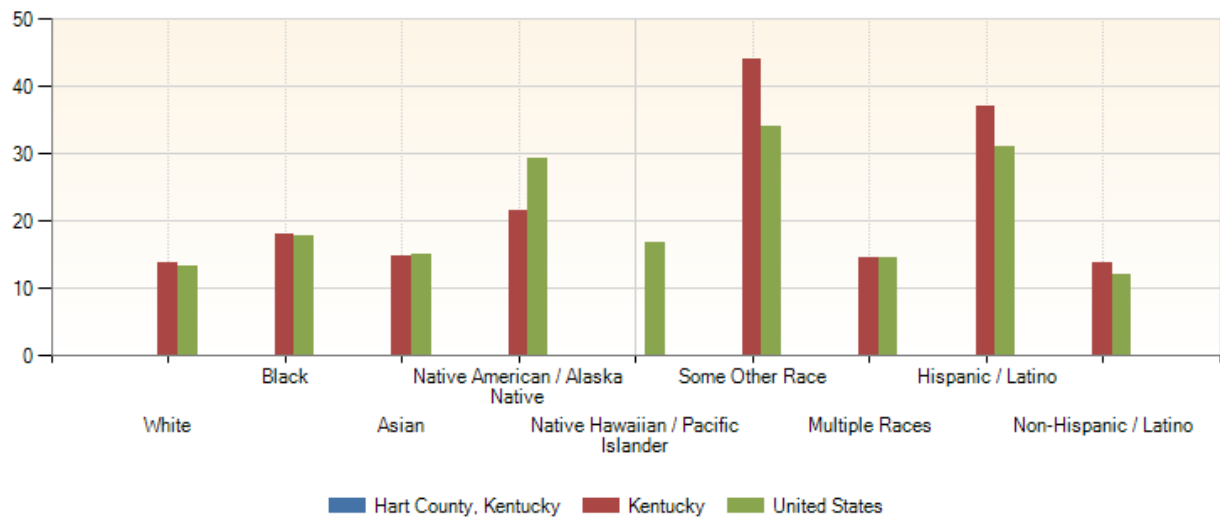
Report Area	Hispanic / Latino	Non-Hispanic / Latino
Hart County, Kentucky	no data	no data

## Community Health Needs Assessment

Report Area	Hispanic / Latino	Non-Hispanic / Latino
Kentucky	7.39%	92.61%
United States	33.16%	66.84%

### Population by Race/Ethnicity, Percent Uninsured

Report Area	White	Black	Asian	Native American / Alaska Native	Native Hawaiian / Pacific Islander	Some Other Race	Multiple Races	Hispanic / Latino	Non-Hispanic / Latino
Hart County, Kentucky	no data	no data	no data	no data	no data	no data	no data	no data	no data
Kentucky	13.70%	17.96%	14.82%	21.48%	no data	44.08%	14.47%	37.09%	13.69%
United States	13.22%	17.69%	14.97%	29.29%	16.72%	34.10%	14.45%	30.97%	11.99%





# Community Health Needs Assessment

## Physical Environment

A community's health also is affected by the physical environment. A safe, clean environment that provides access to healthy food and recreational opportunities is important to maintaining and improving community health.

### Fast Food Restaurant Access

This indicator reports the number of fast food restaurants per 100,000 population. Fast food restaurants are defined as limited-service establishments primarily engaged in providing food services (except snack and nonalcoholic beverage bars) where patrons generally order or select items and pay before eating. This indicator is relevant because it provides a measure of healthy food access and environmental influences on dietary behaviors.

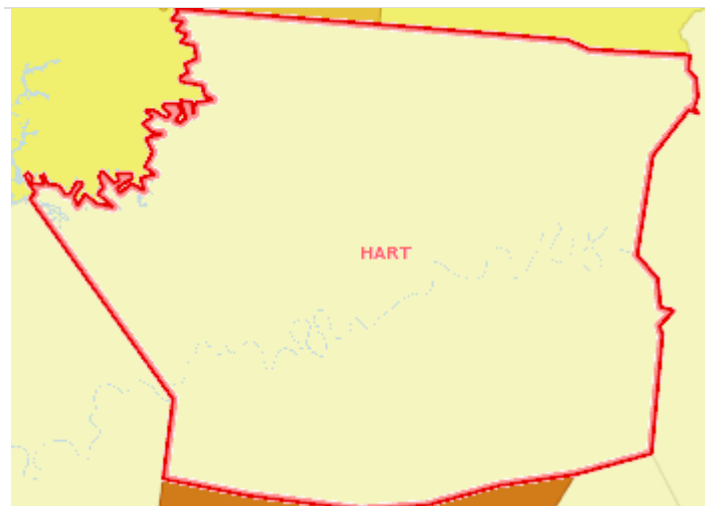
Report Area	Total Population, 2010 Census	Number of Establishments	Establishment Rate (Per 100,000 Pop.)
Hart County, Kentucky	18,199	6	32.97
Kentucky	4,339,367	2,964	68.30
United States	308,745,538	213,453	69.14

Establishment Rate (Per 100,000 Pop.)



■ Hart County, Kentucky  
■ Kentucky  
■ United States

*Note: This indicator is compared with the state average. No breakout data available.  
Data Source: [U.S. Census Bureau, County Business Patterns, 2010](#). Source geography: County.*



Fast Food Restaurant Rate (Per 100,000 Pop.), By County, US Census County Business Patterns, 2010

■ Over 100.0  
■ 80.1 - 100.0  
■ 60.1 - 80.0  
■ 40.1 - 60.0  
■ Under 40.1

### Grocery Store Access

## Community Health Needs Assessment

This indicator reports the number of grocery stores per 100,000 population. Grocery stores are defined as supermarkets and smaller grocery stores primarily engaged in retailing a general line of food, such as canned and frozen foods; fresh fruits and vegetables; and fresh and prepared meats, fish, and poultry. Included are delicatessen-type establishments. Convenience stores and large general merchandise stores that also retail food, such as supercenters and warehouse club stores are excluded. This indicator is relevant because it provides a measure of healthy food access and environmental influences on dietary behaviors.

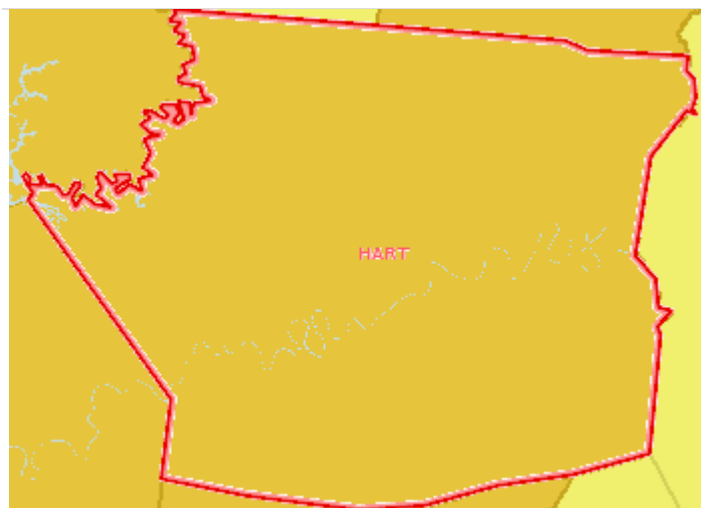
Report Area	Total Population, 2010 Census	Number of Establishments	Establishment Rate (Per 100,000 Pop.)
Hart County, Kentucky	18,199	5	27.47
Kentucky	4,339,367	891	20.53
United States	308,745,538	67,342	21.81

Establishment Rate (Per 100,000 Pop.)

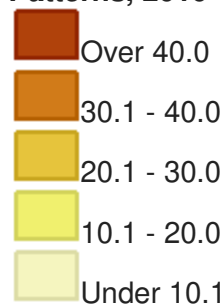


■ Hart County, Kentucky  
■ Kentucky  
■ United States

*Note: This indicator is compared with the state average. No breakout data available.  
Data Source: [U.S. Census Bureau, County Business Patterns, 2010](#). Source geography: County.*



Grocery Stores (Per 100,000 Pop.), By County, US Census County Business Patterns, 2010



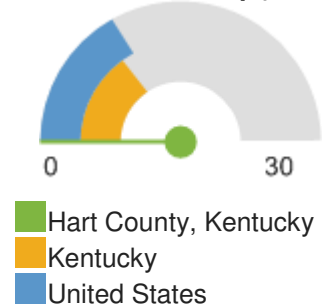
### Liquor Store Access

This indicator reports the number of beer, wine, and liquor stores per 100,000 population, as defined by North American Industry Classification System (NAICS) Code 445310. This indicator is relevant because it provides a measure of healthy food access and environmental influences on dietary behaviors.

## Community Health Needs Assessment

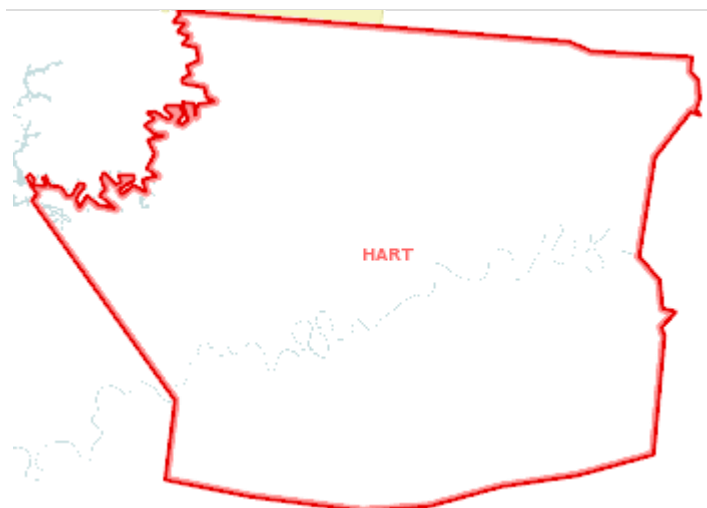
Report Area	Total Population, 2010 Census	Number of Establishments	Establishment Rate (Per 100,000 Pop.)
Hart County, Kentucky	18,199	0	0
Kentucky	4,339,367	399	9.19
United States	308,745,538	31,482	10.20

Establishment Rate (Per 100,000 Pop.)

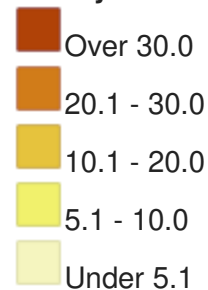


Note: This indicator is compared with the state average. No breakout data available.

Data Source: [U.S. Census Bureau, County Business Patterns, 2010](#). Source geography: County.



Beer, Wine, or Liquor Store Rate (Per 100,000 Pop.), By County, US Census County Business Patterns, 2010

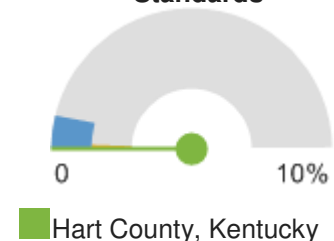


### Poor Air Quality (Ozone)

This indicator reports the percentage of days per year with Ozone (O<sub>3</sub>) levels above the National Ambient Air Quality Standard of 75 parts per billion (ppb). Figures are calculated using data collected by monitoring stations and modeled to include census tracts where no monitoring stations exist. This indicator is relevant because poor air quality contributes to respiratory issues and overall poor health.

Report Area	Average Daily Ozone Concentration	Number of Days Exceeding Emissions Standards	Percentage of Days Exceeding Emissions Standards
Hart County, Kentucky	26.01	0	0%

Percentage of Days Exceeding Emissions Standards

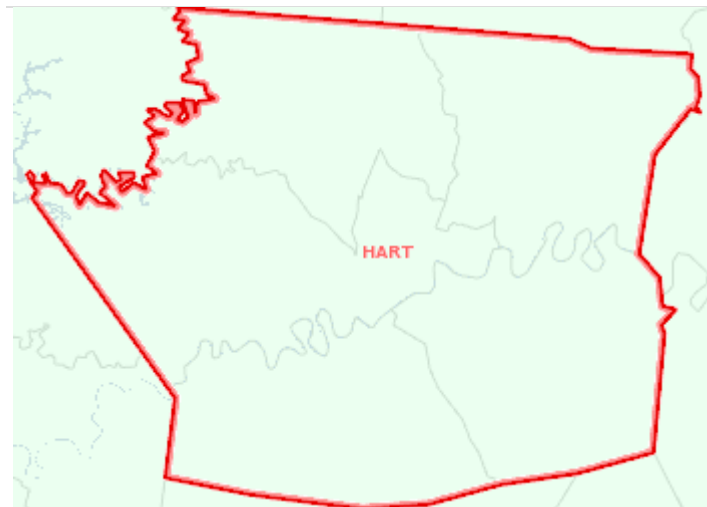


# Community Health Needs Assessment

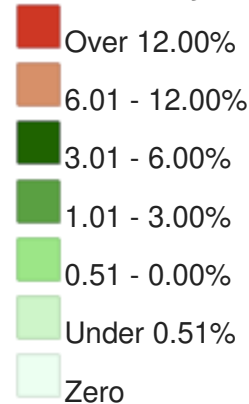
Kentucky	26.00	0.51	0.14%
United States	24.82	2.92	0.80%

■ Kentucky  
■ United States

Note: This indicator is compared with the state average. No breakout data available.  
 Data Source: [Centers for Disease Control and Prevention, National Environmental Public Health Tracking Network, 2008](#). Source geography: Tract.



**Percentage of Days Above NAAQS Standards, By Tract, CDC 2008**

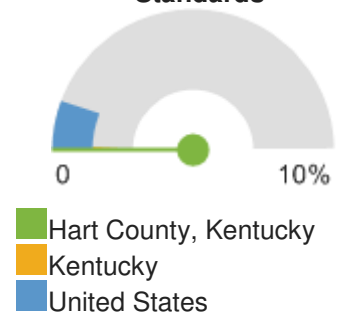


## Poor Air Quality (Particulate Matter 2.5)

This indicator reports the percentage of days with particulate matter 2.5 levels above the National Ambient Air Quality Standard (35 micrograms per cubic meter) per year, calculated using data collected by monitoring stations and modeled to include counties where no monitoring stations occur. This indicator is relevant because poor air quality contributes to respiratory issues and overall poor health.

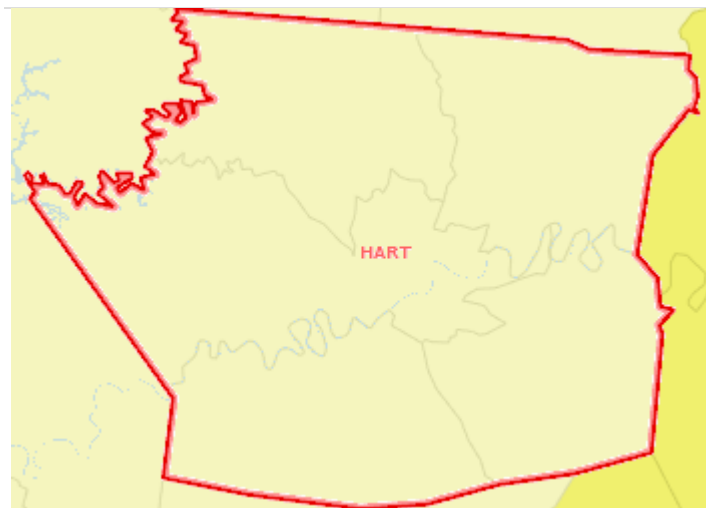
Report Area	Average Daily Ambient Particulate Matter 2.5	Number of Days Exceeding Emissions Standards	Percentage of Days Exceeding Emissions Standards
Hart County, Kentucky	10.29	0	0%
Kentucky	10.89	0.30	0.08%
United States	10.72	4.07	1.16%

**Percentage of Days Exceeding Emissions Standards**

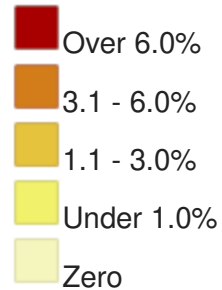


Note: This indicator is compared with the state average. No breakout data available.  
 Data Source: [Centers for Disease Control and Prevention, National Environmental Public Health Tracking Network, 2008](#). Source geography: Tract.

## Community Health Needs Assessment



Pct. of Days Above National Ambient Air Quality Standard (PM 2.5), By Tract, CDC 2008

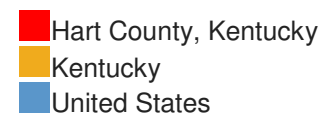


### Population Living in Food Deserts

This indicator reports the percentage of the population living in census tracts designated as food deserts. A food desert is defined as a low-income census tract (where a substantial number or share of residents has low access to a supermarket or large grocery store). This indicator is relevant because it highlights populations and geographies facing food insecurity.

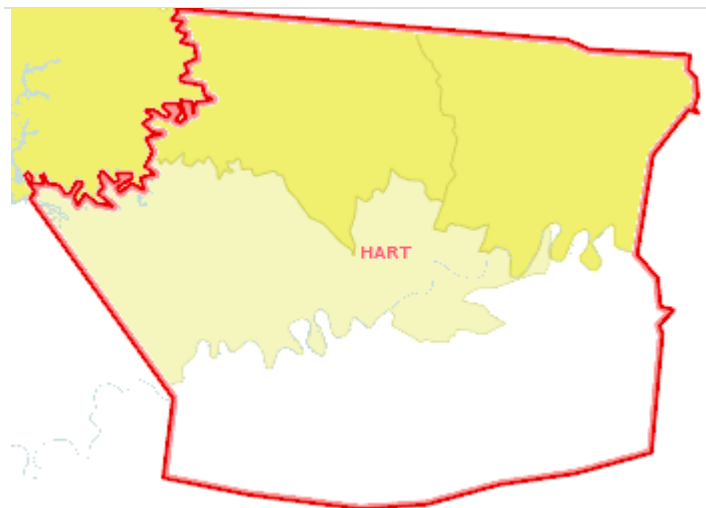
Report Area	Total Population	Population Living in a Food Deserts	Percent Living in Food Deserts
Hart County, Kentucky	17,445	9,532	54.64%
Kentucky	4,041,769	254,356	6.29%
United States	281,421,906	25,609,433	9.10%

Percent Living in Food Deserts

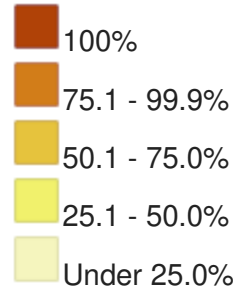


Note: This indicator is compared with the state average. No breakout data available.  
Data Source: [U.S. Department of Agriculture, Food Desert Locator, 2009](#). Source geography: Tract (2000).

# Community Health Needs Assessment



Percentage of Population with Low Food Access, by Tract, USDA 2006

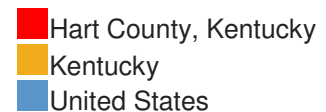


## Recreation and Fitness Facility Access

This indicator reports the number per 100,000 population of recreation and fitness facilities as defined by North American Industry Classification System (NAICS) Code 713940. This indicator is relevant because access to recreation and fitness facilities encourages physical activity and other healthy behaviors.

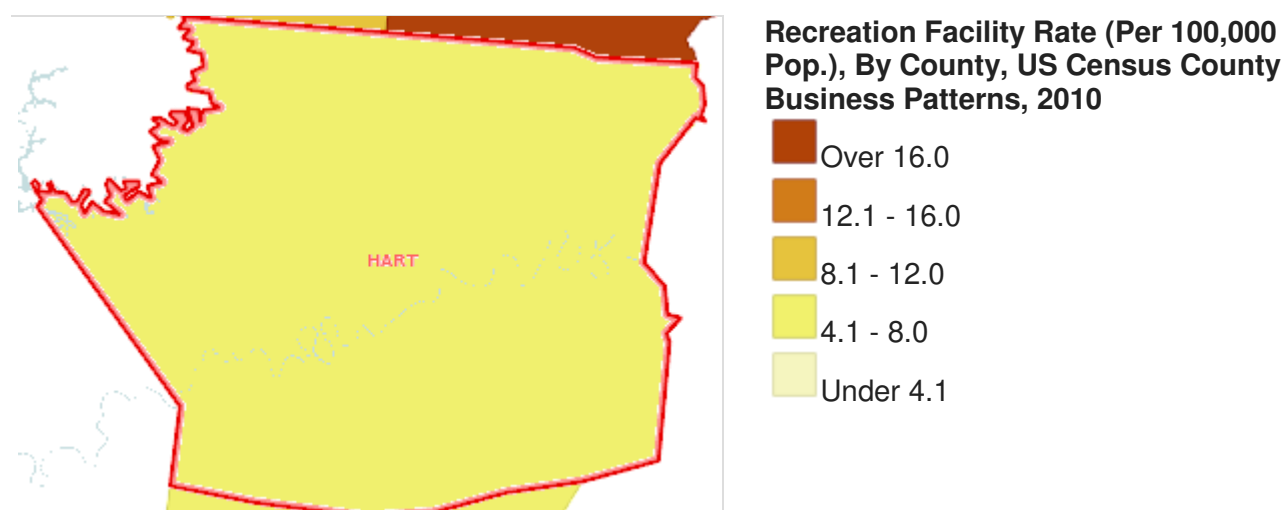
Report Area	Total Population, 2010 Census	Number of Establishments	Establishment Rate (Per 100,000 Pop.)
Hart County, Kentucky	18,199	1	5.49
Kentucky	4,339,367	353	8.13
United States	308,745,538	29,896	9.68

Establishment Rate (Per 100,000 Pop.)



Note: This indicator is compared with the state average. No breakout data available.  
Data Source: [U.S. Census Bureau, County Business Patterns, 2010](#). Source geography: County.

# Community Health Needs Assessment

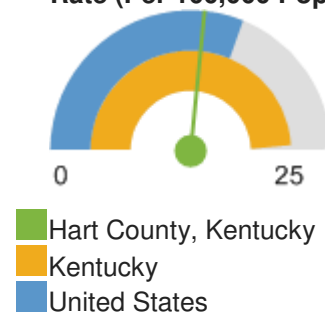


## WIC-Authorized Food Store Access

This indicator reports the number of food stores and other retail establishments per 100,000 population that are authorized to accept WIC Program (Special Supplemental Nutrition Program for Women, Infants, and Children) benefits and that carry designated WIC foods and food categories. This indicator is relevant because it provides a measure of food security and healthy food access for women and children in poverty as well as environmental influences on dietary behaviors.

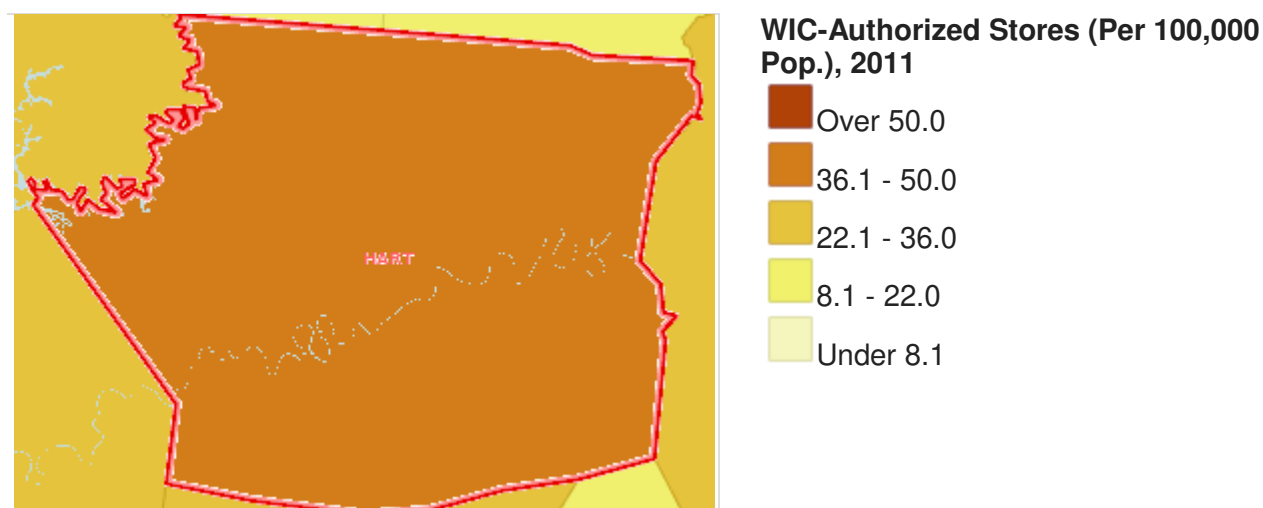
Report Area	Total Population (2011 Estimate)	Number WIC-Authorized Food Stores	WIC-Authorized Food Store Rate (Per 100,000 Pop.)
Hart County, Kentucky	18,235	7	38.30
Kentucky	4,388,103	1,082	24.60
United States	318,921,538	50,042	15.60

**WIC-Authorized Food Store Rate (Per 100,000 Pop.)**



*Note: This indicator is compared with the state average. No breakout data available.*  
*Data Source: [U.S. Department of Agriculture, Food Environment Atlas, 2012](#). Source geography: County.*

# Community Health Needs Assessment



## Clinical Care

A lack of access to care presents barriers to good health. The supply and accessibility of facilities and physicians, the rate of uninsurance, financial hardship, transportation barriers, cultural competency, and coverage limitations affect access.

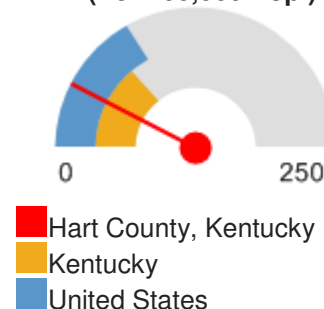
Rates of morbidity, mortality, and emergency hospitalizations can be reduced if community residents access services such as health screenings, routine tests, and vaccinations. Prevention indicators can call attention to a lack of access or knowledge regarding one or more health issues and can inform program interventions.

## Access to Primary Care

This indicator reports the number of primary care physicians per 100,000 population. This indicator is relevant because a shortage of health professionals contributes to access and health status issues.

Report Area	Total Population	Total Primary Care Providers	Primary Care Provider Rate (Per 100,000 Pop.)
Hart County, Kentucky	18,199	7	38.40
Kentucky	4,339,367	3,061	70.50
United States	312,471,327	264,897	84.70

**Primary Care Provider Rate (Per 100,000 Pop.)**

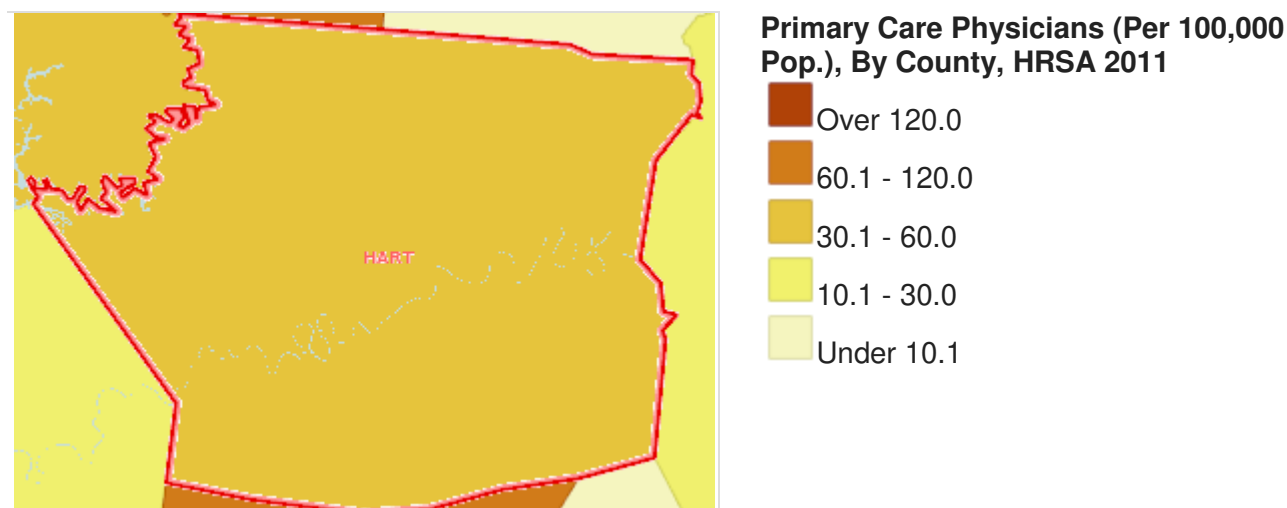


*Note: This indicator is compared with the state average. No breakout data available.*  
*Data Source: [U.S. Health Resources and Services Administration Area Resource](#)*



# Community Health Needs Assessment

[File, 2011](#). Source geography: County.

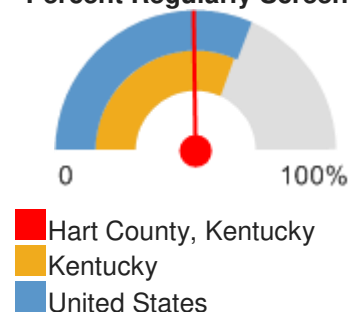


## **Breast Cancer Screening (Mammogram)**

This indicator reports the percentage of female Medicare enrollees, age 65 or older, who have received one or more mammograms in the past two years. This indicator is relevant because engaging in preventive behaviors allows for early detection and treatment of health problems. This indicator can also highlight a lack of access to preventive care, a lack of health knowledge, insufficient provider outreach, and/or social barriers preventing utilization of services.

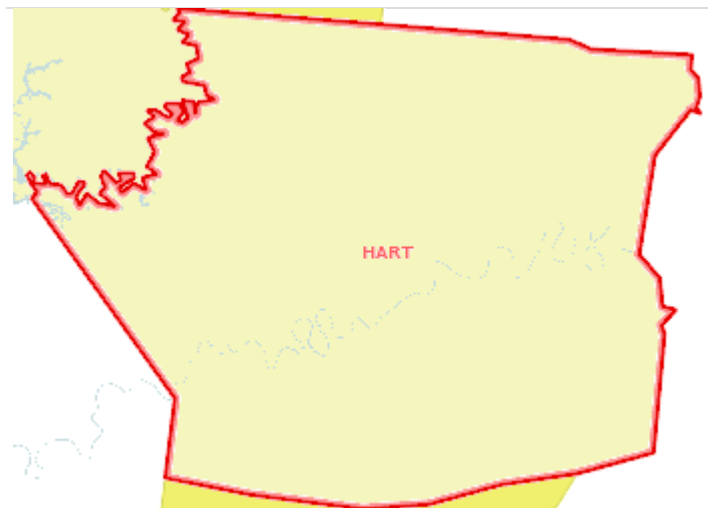
Report Area	Total Female Medicare Enrollees	Number Regularly Screened	Percent Regularly Screened
Hart County, Kentucky	228	113	<b>49.56%</b>
Kentucky	33,423	21,031	62.92%
United States	4,203,461	2,660,626	63.30%

**Percent Regularly Screened**



*Note: This indicator is compared with the state average. No breakout data available.*  
*Data Source: [Dartmouth Atlas of Healthcare, Selected Measures of Primary Care Access and Quality, 2003-2007](#). Source geography: County.*

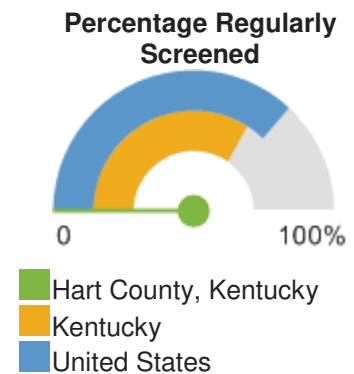
## Community Health Needs Assessment



### **Cervical Cancer Screening (Pap Test)**

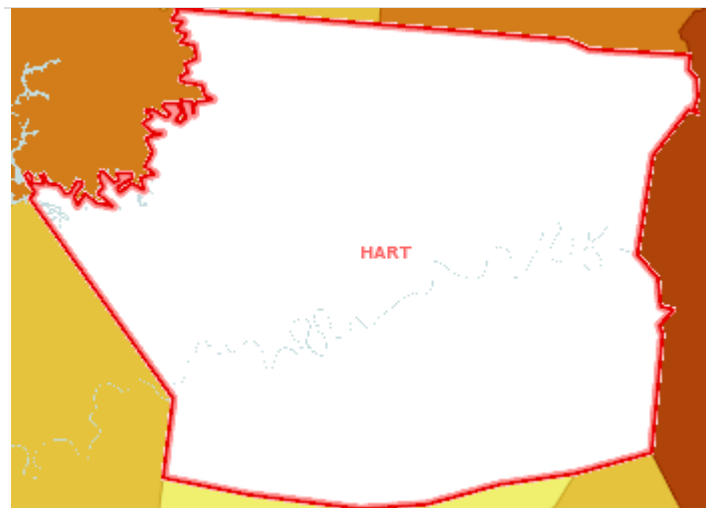
This indicator reports the percentage of women aged 18 and older who self-report that they have had a Pap test in the past three years. This indicator is relevant because engaging in preventive behaviors allows for early detection and treatment of health problems. This indicator can also highlight a lack of access to preventive care, a lack of health knowledge, insufficient provider outreach, and/or social barriers preventing utilization of services.

Report Area	Total Population (Women Age 18 )	Est. Population Regularly Screened	Percentage Regularly Screened
Hart County, Kentucky	7,098	no data	no data
Kentucky	1,675,352	1,146,979	68.46%
United States	116,709,909	86,326,160	73.97%

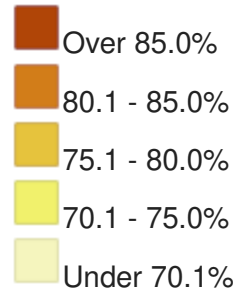


*Note: This indicator is compared with the state average. No breakout data available.*  
*Data Source: [Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2004-2010](#). Source geography: County.*

## Community Health Needs Assessment



Pct. of Women (Age 18 ) with Pap Test in Past 2 Years, By County, CDC BRFSS 2004-2010

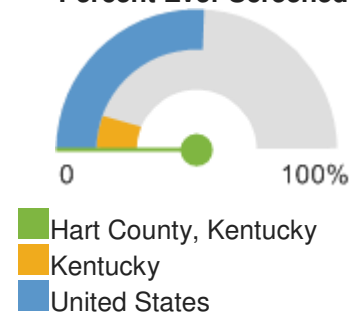


### **Colon Cancer Screening (Sigmoid/Colonoscopy)**

This indicator reports the percentage of adult men aged 50 and older who self-report that they have ever had a sigmoidoscopy or colonoscopy. This indicator is relevant because engaging in preventive behaviors allows for early detection and treatment of health problems. This indicator can also highlight a lack of access to preventive care, a lack of health knowledge, insufficient provider outreach, and/or social barriers preventing utilization of services.

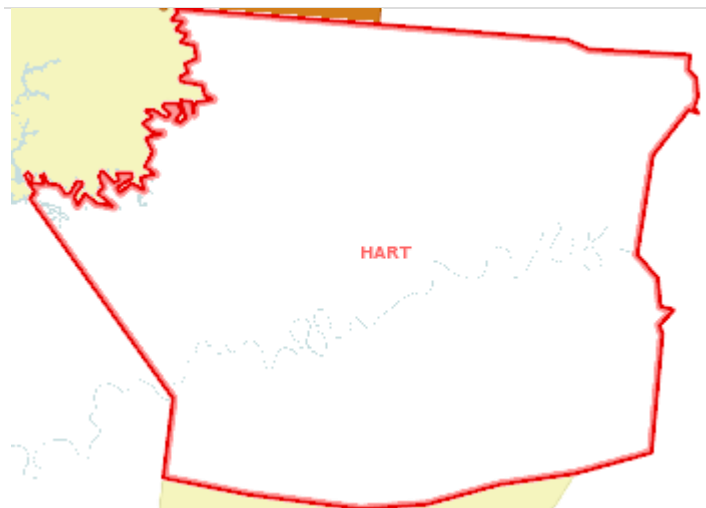
Report Area	Total Population (Men Aged 50 )	Number Ever Screened	Percent Ever Screened
Hart County, Kentucky	2,786	no data	no data
Kentucky	3,827,390	446,747	11.67%
United States	119,567,203	61,919,221	51.79%

Percent Ever Screened

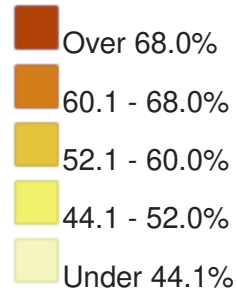


Note: This indicator is compared with the state average. No breakout data available.  
Data Source: [Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2004-2010](#). Source geography: County.

# Community Health Needs Assessment



**Pct. of Men (Age 50 ) Ever Receiving Sigmoid/Colonoscopy, By County, CDC BRFSS 2004-2010**

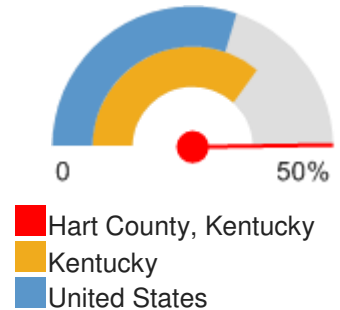


## Dental Care Utilization (Adult)

This indicator reports the percentage of adults aged 18 and older who self-report that they have not visited a dentist, dental hygienist or dental clinic within the past year. This indicator is relevant because engaging in preventive behaviors decreases the likelihood of developing future health problems. This indicator can also highlight a lack of access to preventive care, a lack of health knowledge, insufficient provider outreach, and/or social barriers preventing utilization of services.

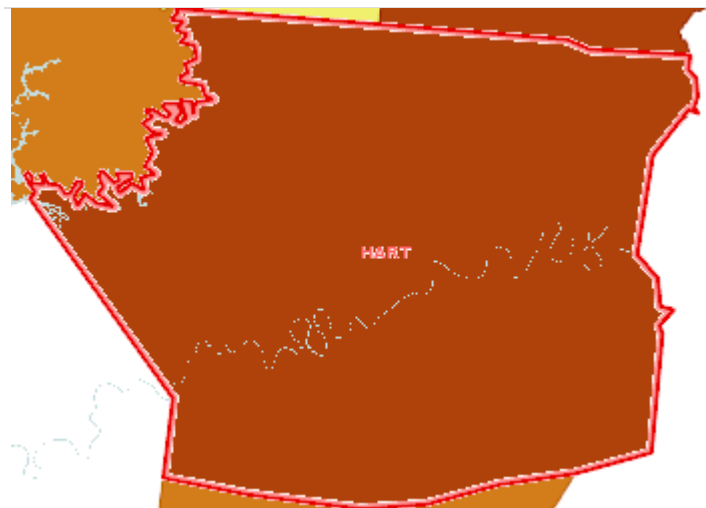
Report Area	Total Population (Age 18 )	Number Adults with No Dental Exam	Percent Adults with No Dental Exam
Hart County, Kentucky	13,611	6,821	<b>50.12%</b>
Kentucky	3,265,915	1,187,487	36.36%
United States	232,747,222	70,151,188.94	30.14%

**Percent Adults with No Dental Exam**

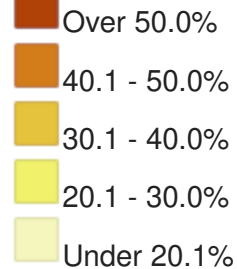


*Note: This indicator is compared with the state average. No breakout data available.*  
*Data Source: [Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2006-2010](#). Source geography: County.*

## Community Health Needs Assessment



Pct. of Population (Age 18 ) without Dental Exam within Past 1 Year, By County, CDC BRFSS 2006-2010

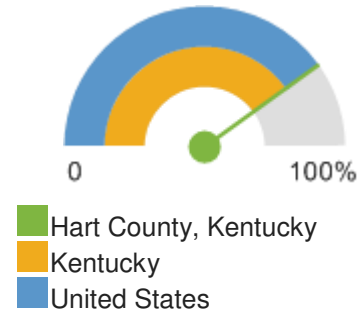


### **Diabetes Management (Hemoglobin A1c Test)**

This indicator reports the percentage of diabetic Medicare patients who have had a hemoglobin A1c (hA1c) test, a blood test which measures blood sugar levels, administered by a health care professional in the past year. This indicator is relevant because engaging in preventive behaviors allows for early detection and treatment of health problems. This indicator can also highlight a lack of access to preventive care, a lack of health knowledge, insufficient provider outreach, and/or social barriers preventing utilization of services.

Report Area	Total Medicare Enrollees (Age 65-75) with Diabetes	Number Patients Tested	Percent Patients Tested
Hart County, Kentucky	312	250	80.13%
Kentucky	49,625	39,651	79.90%
United States	5,408,188	4,343,573	80.31%

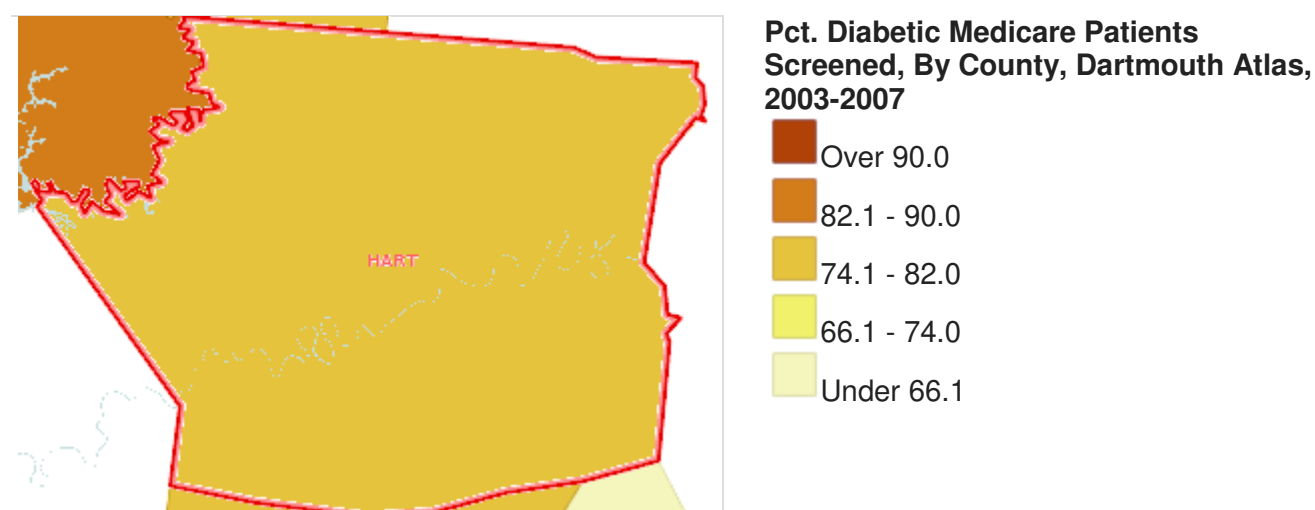
Percent Patients Tested



Note: This indicator is compared with the state average. No breakout data available.

Data Source: [Dartmouth Atlas of Healthcare, Selected Measures of Primary Care Access and Quality, 2003-2007](#). Source geography: County.

## Community Health Needs Assessment



### **Facilities Designated as Health Professional Shortage Areas**

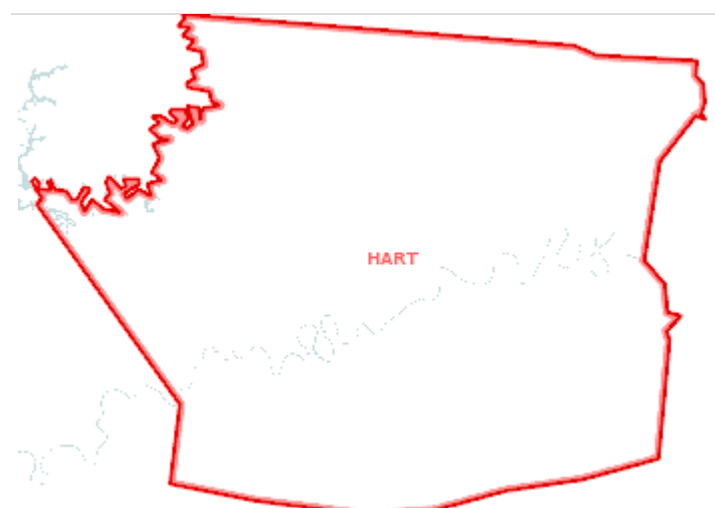
This indicator reports the number and location of health care facilities designated as "Health Professional Shortage Areas" (HPSAs), defined as having shortages of primary medical care, dental or mental health providers. This indicator is relevant because a shortage of health professionals contributes to access and health status issues.

Report Area	Total Facilities	Primary Care Facilities	Mental Health Care Facilities	Dental Care Facilities
Hart County, Kentucky	0	0	0	0
Kentucky	182	61	66	55
United States	8,198	3,137	2,601	2,460

*Note: No breakout data available.*

*Data Source: [U.S. Health Resources and Services Administration, Health Professional Shortage Area File, 2012](#). Source geography: Address.*

## Community Health Needs Assessment



**Health Professional Shortage Area  
Facilities, by Type, HRSA, Nov. 2012**

- Primary Care
- Dental Care
- Mental Health

### **Federally Qualified Health Centers**

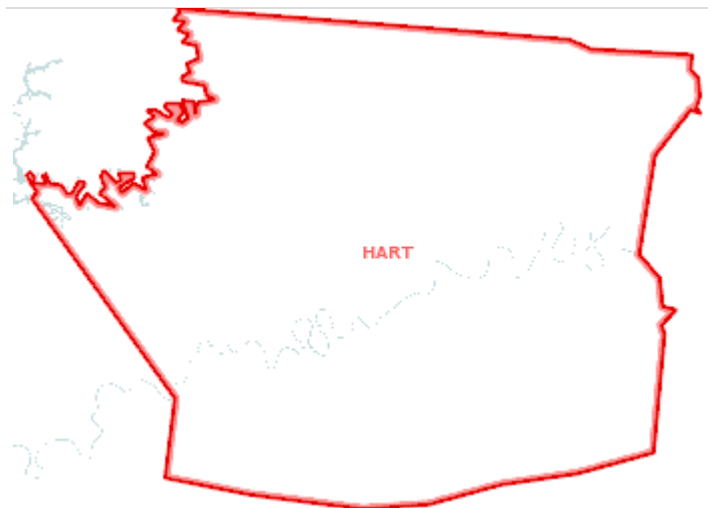
This indicator reports the number of Federally Qualified Health Centers (FQHCs) in the community. This indicator is relevant because FQHCs are community assets that provide health care to vulnerable populations; they receive extra funding from the federal government to promote access to ambulatory care in areas designated as medically underserved.

Report Area	Number of Federally Qualified Health Centers
Hart County, Kentucky	0
Kentucky	69
United States	5,459

*Note: No breakout data available.*

*Data Source: [U.S. Health Resources and Services Administration, Centers for Medicare & Medicaid Services, Provider of Service File, 2011](#). Source geography: Address.*

# Community Health Needs Assessment



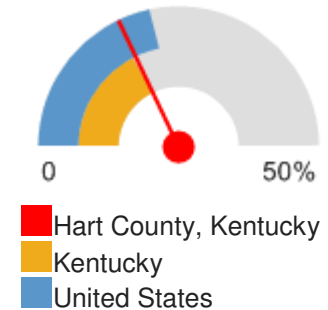
● Federally Qualified Health Centers

## High Blood Pressure Management

This indicator reports the percentage of adults aged 18 and older who self-report that they are not taking medication for their high blood pressure. This indicator is relevant because engaging in preventive behaviors decreases the likelihood of developing future health problems. When considered with other indicators of poor health, this indicator can also highlight a lack of access to preventive care, a lack of health knowledge, insufficient provider outreach, and/or social barriers preventing utilization of services.

Report Area	Total Population (Age 18 )	Number Adults Not Taking Blood Pressure Medication (When Needed)	Percent Adults Not Taking Medication
Hart County, Kentucky	13,611	2,433	<b>17.88%</b>
Kentucky	3,265,915	574,801	17.60%
United States	232,747,222	50,606,335.52	21.74%

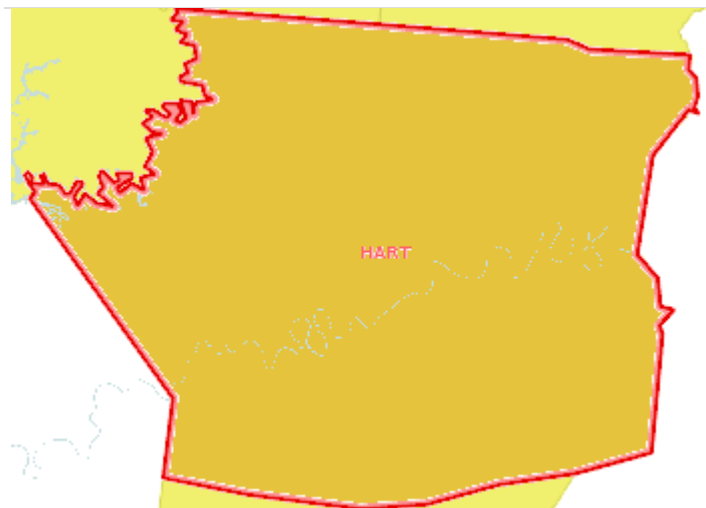
Percent Adults Not Taking Medication



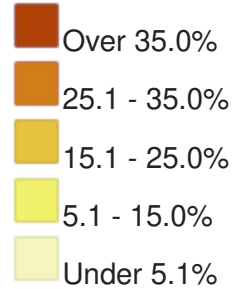
Note: This indicator is compared with the state average. No breakout data available.  
Data Source: [Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2006-2010](#). Source geography: County.



# Community Health Needs Assessment



**Pct. of Adults (Age 18 ) Not Taking Medicine for High Blood Pressure (When Present), by County, CDC BRFSS 2006-2010**

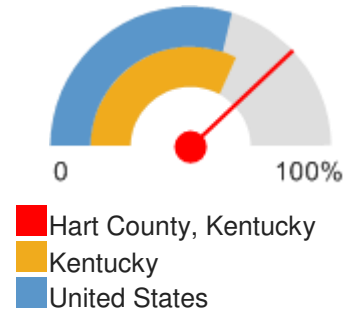


## HIV Screenings

This indicator reports the percentage of teens and adults age 12-70 who self-report that they have never been screened for HIV. This indicator is relevant because engaging in preventive behaviors allows for early detection and treatment of health problems. This indicator can also highlight a lack of access to preventive care, a lack of health knowledge, insufficient provider outreach, and/or social barriers preventing utilization of services.

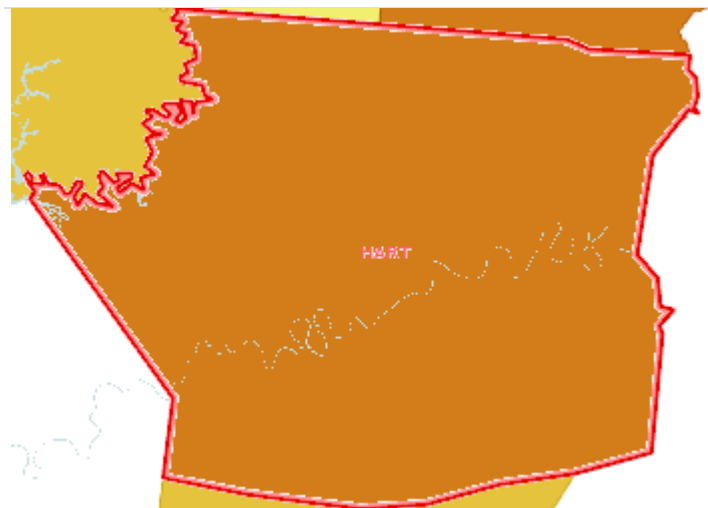
Report Area	Total Population (Age 18 )	Number Adults Never Screened	Percent Adults Never Screened
Hart County, Kentucky	13,611	10,323	<b>75.85%</b>
Kentucky	3,265,915	2,131,336	65.26%
United States	232,747,222	139,253,113.51	59.83%

**Percent Adults Never Screened**

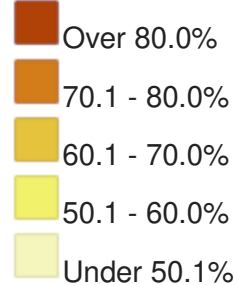


*Note: This indicator is compared with the state average. No breakout data available.*  
*Data Source: [Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2006-2010](#). Source geography: County.*

## Community Health Needs Assessment



**Pct. of Population (Age 18 ) Never Screened for HIV/AIDS, By County, CDC BRFSS 2006-2010**

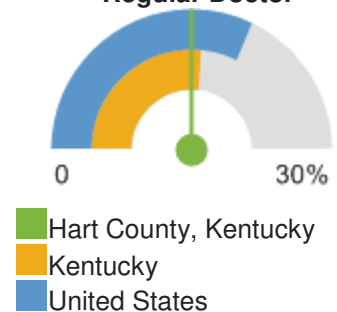


### **Lack of a Consistent Source of Primary Care**

This indicator reports the percentage of adults aged 18 and older who self-report that they do not have at least one person who they think of as their personal doctor or health care provider. This indicator is relevant because access to regular primary care is important to preventing major health issues and emergency department visits.

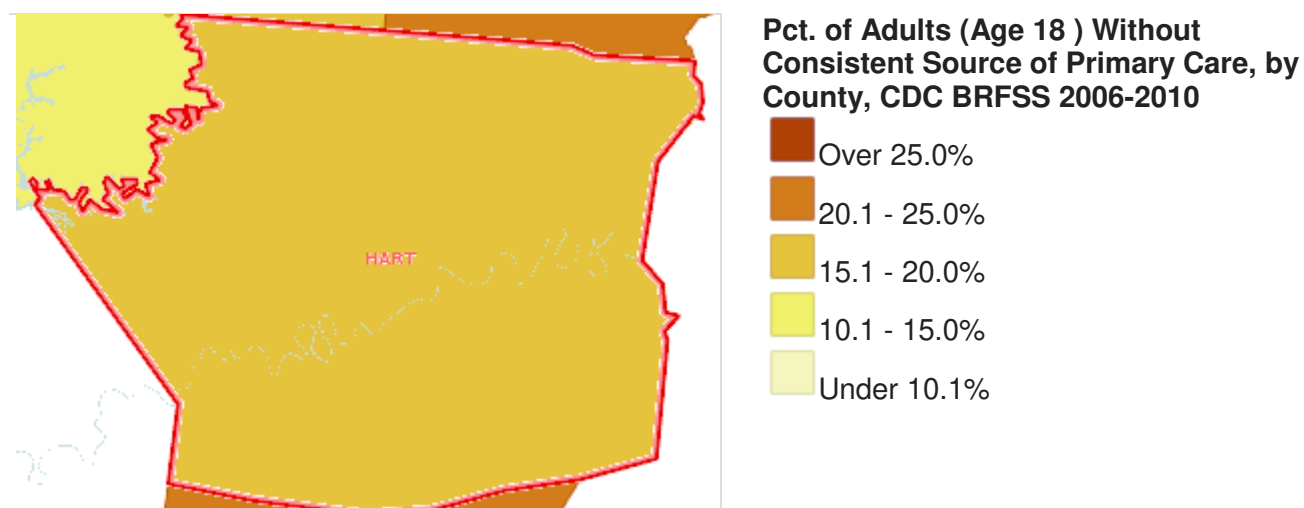
Report Area	Total Population (Age 18 )	Number Adults Without Any Regular Doctor	Percent Adults Without Any Regular Doctor
Hart County, Kentucky	13,611	2,048	15.05%
Kentucky	3,265,915	521,567	15.97%
United States	232,747,222	44,961,851.44	19.32%

**Percent Adults Without Any Regular Doctor**



*Note: This indicator is compared with the state average. No breakout data available.*  
*Data Source: [Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2006-2010](#). Source geography: County.*

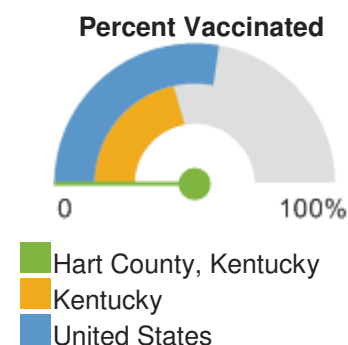
## Community Health Needs Assessment



### **Pneumonia Vaccinations (Age 65 )**

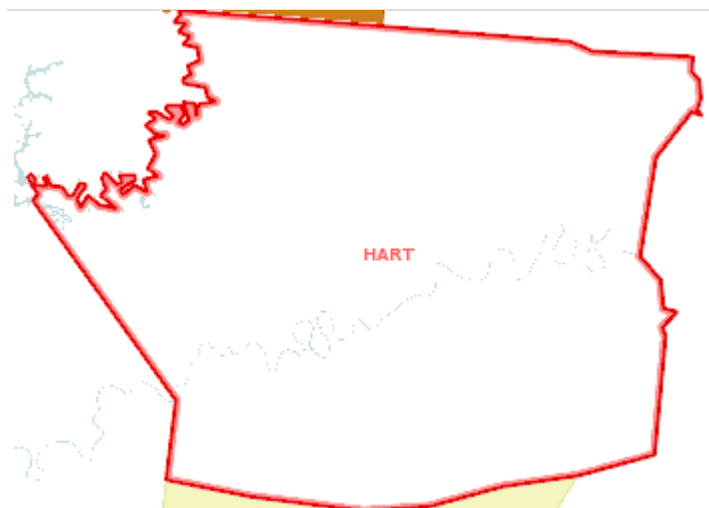
This indicator reports the percentage of adults aged 65 and older who self-report that they have ever received a pneumonia vaccine. This indicator is relevant because engaging in preventive behaviors decreases the likelihood of developing future health problems. This indicator can also highlight a lack of access to preventive care, a lack of health knowledge, insufficient provider outreach, and/or social barriers preventing utilization of services.

Report Area	Total Population (Adults Aged 65 )	Number Vaccinated	Percent Vaccinated
Hart County, Kentucky	2,515	no data	no data
Kentucky	548,001	239,898	43.78%
United States	37,999,225	21,156,717	55.68%

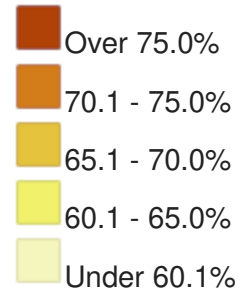


*Note: This indicator is compared with the state average. No breakout data available.*  
*Data Source: [Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2004-2010](#). Source geography: County.*

## Community Health Needs Assessment



**Pct. of Population (Age 65+)Receiving Flu Shot, Past Year, By County, CDC BRFSS 2004-2010**

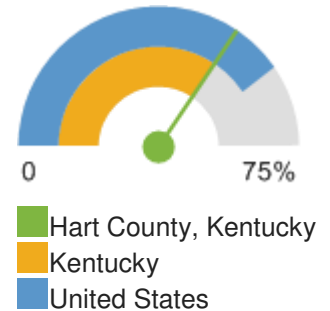


### **Population Living in a Health Professional Shortage Area**

This indicator reports the percentage of the population that is living in a geographic area designated as a "Health Professional Shortage Area" (HPSA), defined as having a shortage of primary medical care, dental or mental health professionals. This indicator is relevant because a shortage of health professionals contributes to access and health status issues.

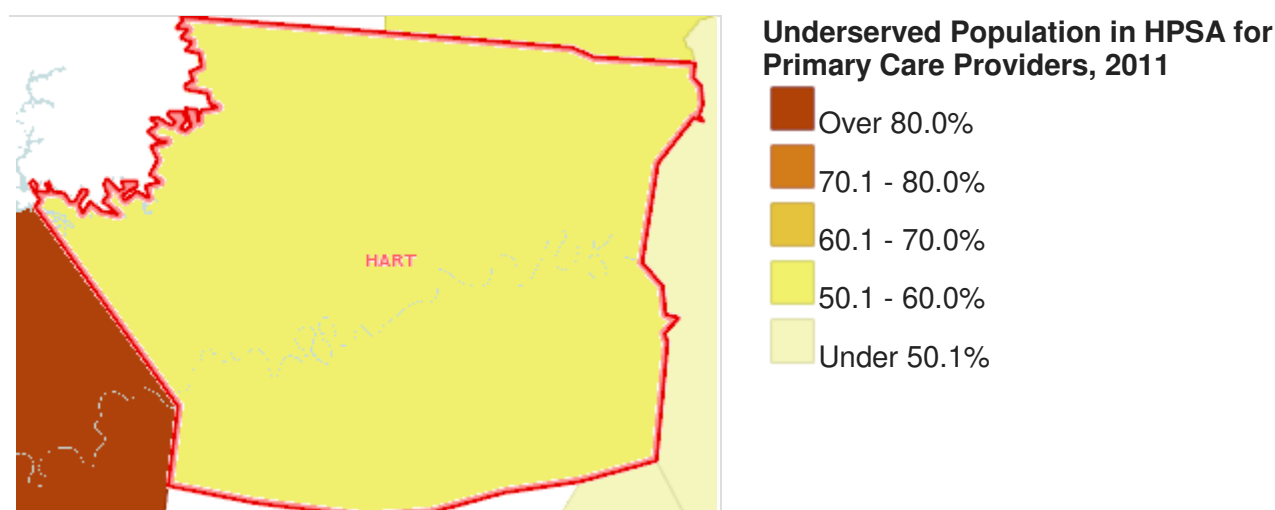
Report Area	Total Population, 2010 Census	HPSA Designation Population	Underserved Population	Percent of Designated Population Underserved
Hart County, Kentucky	18,199	17,759.04	9,160.95	<b>51.58%</b>
Kentucky	4,339,367	754,401.78	389,660.46	51.65%
United States	312,676,557	52,826,822.65	32,117,352.05	60.80%

**Percent of Designated Population Underserved**



*Note: This indicator is compared with the state average. No breakout data available.*  
*Data Source: [U.S. Health Resources and Services Administration, Health Professional Shortage Area File, 2012](#). Source geography: HPSA.*

# Community Health Needs Assessment

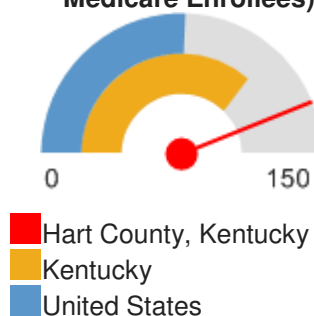


## Preventable Hospital Events

This indicator reports the discharge rate (per 1,000 Medicare enrollees) for conditions that are ambulatory care sensitive (ACS). ACS conditions include pneumonia, dehydration, asthma, diabetes, and other conditions which could have been prevented if adequate primary care resources were available and accessed by those patients. This indicator is relevant because analysis of ACS discharges allows demonstrating a possible “return on investment” from interventions that reduce admissions (for example, for uninsured or Medicaid patients) through better access to primary care resources.

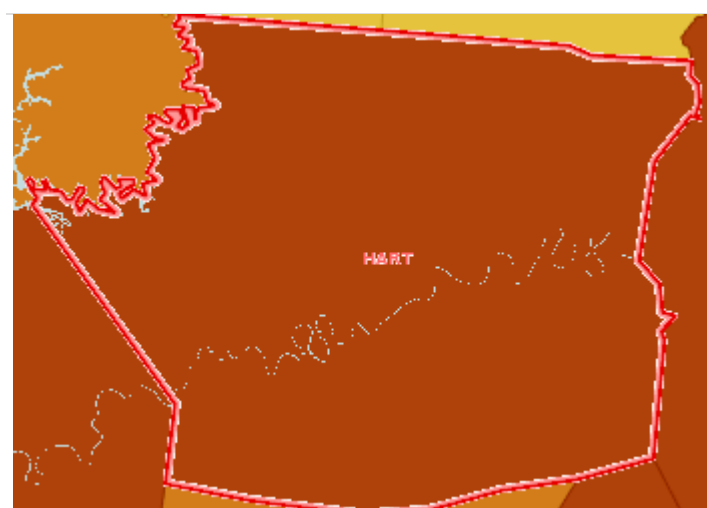
Report Area	Total Medicare Enrollees (Age 65-75)	Patient Discharges for Ambulatory Care Sensitive (ACS) Conditions	Preventable Hospital Event Discharge Rate (Per 1,000 Medicare Enrollees)
Hart County, Kentucky	2,457	324	<b>131.87</b>
Kentucky	456,071	50,383	110.47
United States	53,239,865	4,053,740	76.14

**Preventable Hospital Event Discharge Rate (Per 1,000 Medicare Enrollees)**

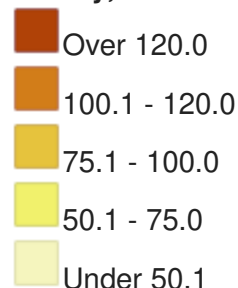


*Note: This indicator is compared with the state average. No breakout data available.*  
*Data Source: [Dartmouth Atlas of Healthcare, Selected Measures of Primary Care Access and Quality, 2003-2007](#). Source geography: County.*

# Community Health Needs Assessment



Rate (Per 1,000 Medicare Patients), By County, Dartmouth Atlas, 2003-2007



## HEALTH BEHAVIORS

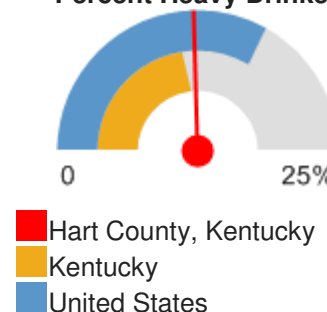
Health behaviors such as poor diet, a lack of exercise, and substance abuse contribute to poor health status.

### Heavy Alcohol Consumption

This indicator reports the percentage of adults aged 18 and older who self-report heavy alcohol consumption (defined as more than two drinks per day for men and one drink per day for women). This indicator is relevant because current behaviors are determinants of future health and this indicator may illustrate a cause of significant health issues, such as cirrhosis, cancers, and untreated mental and behavioral health needs.

Report Area	Total Population (Age 18 )	Number Heavy Drinkers	Percent Heavy Drinkers
Hart County, Kentucky	13,815	1,699.25	12.30%
Kentucky	1,874,800	213,727	11.40%
United States	111,821,887	18,576,867	16.61%

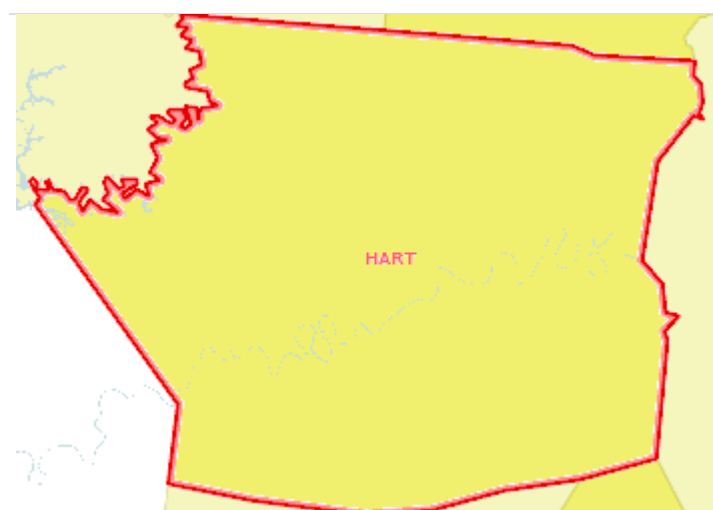
Percent Heavy Drinkers



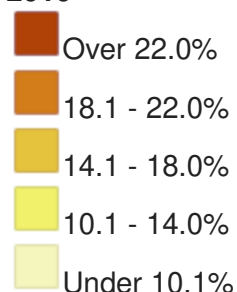
Note: This indicator is compared with the state average. No breakout data available.

Data Source: [Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2004-2010](#). Source geography: County.

## Community Health Needs Assessment



Pct. of Adults (Age 18 ) Drinking Alcohol Heavily, By County, CDC BRFSS 2004-2010

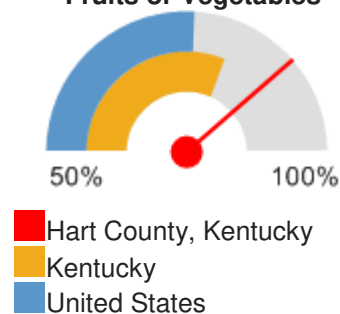


### Inadequate Fruit/Vegetable Consumption (Adult)

This indicator reports the percentage of adults aged 18 and older who self-report consuming less than 5 servings of fruits and vegetables each day. This indicator is relevant because current behaviors are determinants of future health, and because unhealthy eating habits may illustrate a cause of significant health issues, such as obesity and diabetes.

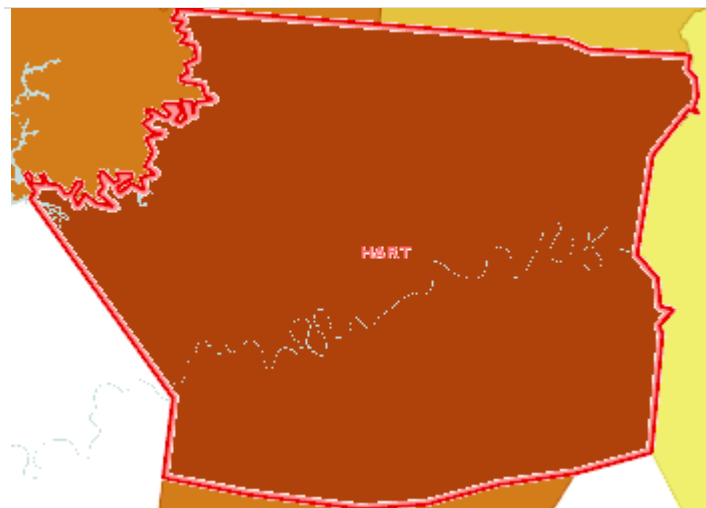
Report Area	Total Population (Age 18 )	Population Consuming Few Fruits or Vegetables	Percent Consuming Few Fruits or Vegetables
Hart County, Kentucky	13,815	12,226.28	<b>88.50%</b>
Kentucky	1,874,800	1,524,212	81.30%
United States	111,821,887	84,891,309	75.92%

Percent Consuming Few Fruits or Vegetables

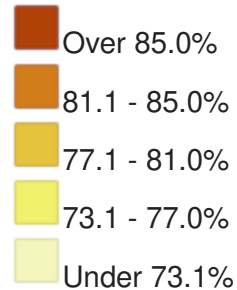


Note: This indicator is compared with the state average. No breakout data available.  
Data Source: [Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2003-2009](#). Source geography: County.

## Community Health Needs Assessment



Pct. of Adults (Age 18 ) Consuming Few Fruits/Vegetables, By County, CDC BRFSS 2004-2010

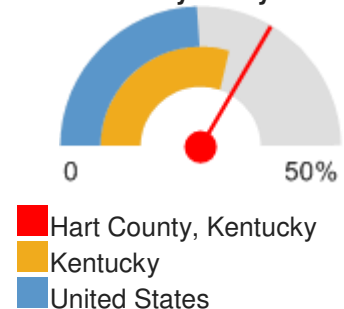


### Physical Inactivity (Adult)

This indicator reports the percentage of adults aged 18 and older who self-report no leisure time for activity, based on the question: "During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise?". This indicator is relevant because current behaviors are determinants of future health and this indicator may illustrate a cause of significant health issues, such as obesity and poor cardiovascular health.

Report Area	Total Population (Age 18 )	Number Physically Inactive	Percent Physically Inactive
Hart County, Kentucky	13,815	4,614.21	33.40%
Kentucky	1,874,800	558,690	29.80%
United States	111,821,887	27,579,949	24.66%

Percent Physically Inactive

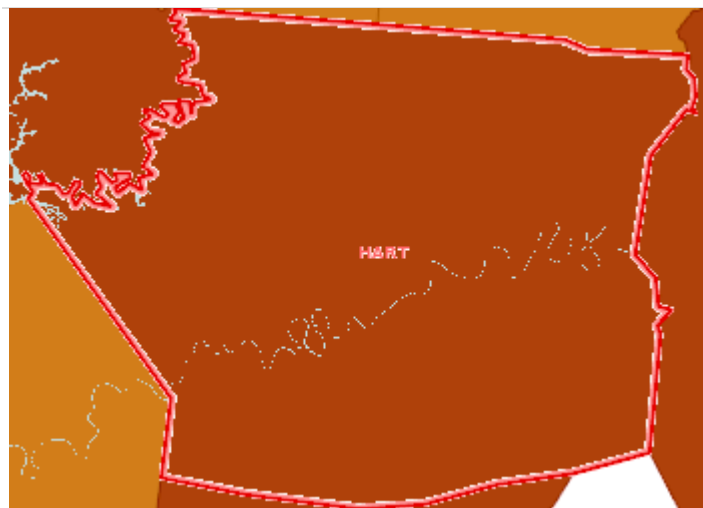


Note: This indicator is compared with the state average. No breakout data available.

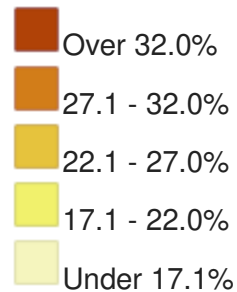
Data Source: [Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2004-2010](#). Source geography: County.



## Community Health Needs Assessment



Pct. of Adults (Age 18 ) Performing No Physical Activity, By County, CDC BRFSS 2004-2010

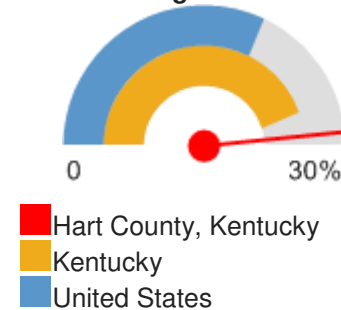


### Tobacco Usage (Adult)

This indicator reports the percentage of adults aged 18 and older who self-report currently smoking cigarettes some days or every day. This indicator is relevant because tobacco use is linked to leading causes of death such as cancer and cardiovascular disease.

Report Area	Total Population (Age 18 )	Number Cigarette Smokers	Percent Cigarette Smokers
Hart County, Kentucky	13,815	4,006	29.00%
Kentucky	1,874,800	504,321	26.90%
United States	111,821,887	21,551,350	19.27%

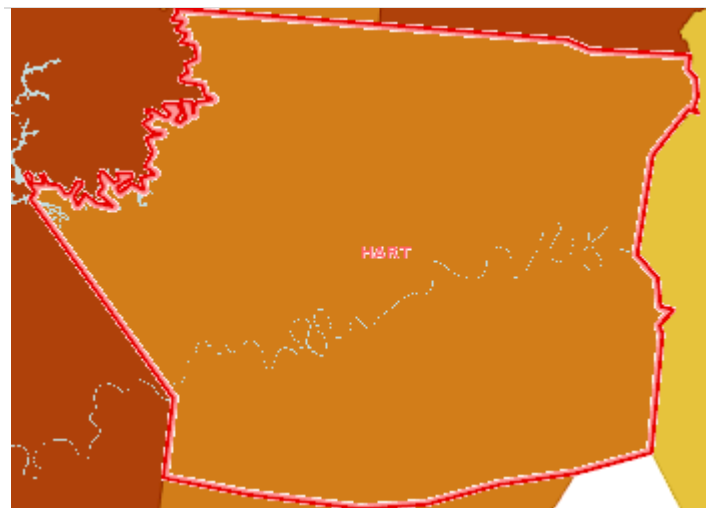
Percent Cigarette Smokers



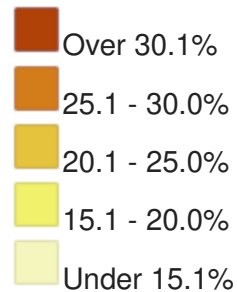
Note: This indicator is compared with the state average. No breakout data available.

Data Source: [Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2004-2010](#). Source geography: County.

# Community Health Needs Assessment



**Pct. of Adults (Age 18 ) Smoking Cigarettes, By County, CDC BRFSS 2004-2010**



## Health Outcomes

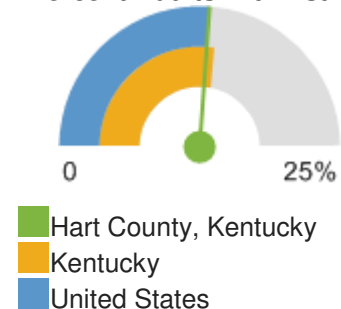
Measuring morbidity and mortality rates allows assessing linkages between social determinants of health and outcomes. By comparing, for example, the prevalence of certain chronic diseases to indicators in other categories (e.g., poor diet and exercise) with outcomes (e.g., high rates of obesity and diabetes), various causal relationship may emerge, allowing a better understanding of how certain community health needs may be addressed.

### Asthma Prevalence

This indicator reports the percentage of adults aged 18 and older who self-report that they have ever been told by a doctor, nurse, or other health professional that they had asthma. This indicator is relevant because asthma is a prevalent problem in the U.S. that is often exacerbated by poor environmental conditions.

Report Area	Total Population (Age 18 )	Number Adults with Asthma	Percent Adults with Asthma
Hart County, Kentucky	13,611	1,776	13.05%
Kentucky	3,265,915	449,716	13.77%
United States	232,747,222	30,473,296.44	13.09%

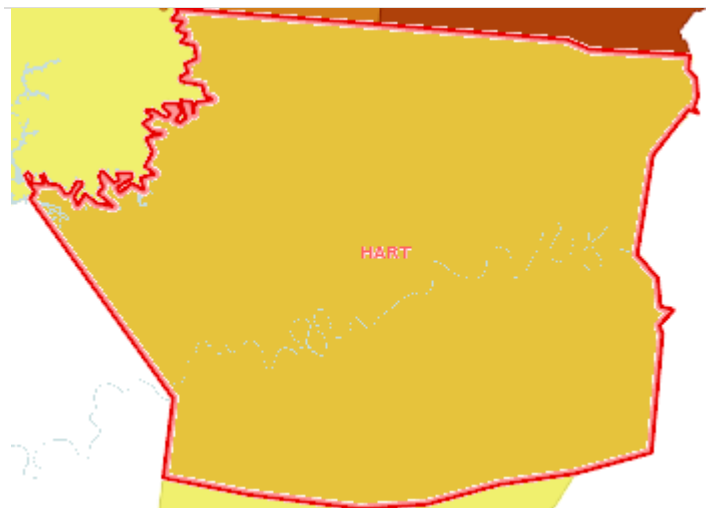
**Percent Adults with Asthma**



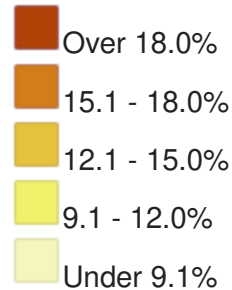
*Note: This indicator is compared with the state average. No breakout data available.*

*Data Source: [Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2006-2010](#). Source geography: County.*

# Community Health Needs Assessment



**Pct. of Population (Age 18 ) Ever Diagnosed with Asthma, By County, CDC BRFSS 2006-2010**

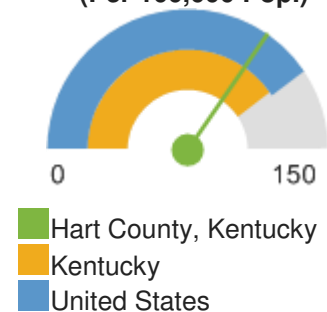


## **Breast Cancer Incidence**

This indicator reports the age adjusted incidence rate (cases per 100,000 population per year) of females with breast cancer adjusted to 2000 U.S. standard population age groups (Under Age 1, 1-4, 5-9, ..., 80-84, 85 and older). This indicator is relevant because cancer is a leading cause of death and it is important to identify cancers separately to better target interventions.

Report Area	Total Population, ACS 2005-2009	Annual Incidence, 2005-2009 Average	Annual Incidence Rate (Per 100,000 Pop.)
Hart County, Kentucky	18,288	19	<b>103.80</b>
Kentucky	4,252,000	5,153	121.20
United States	301,461,536	367,783	122

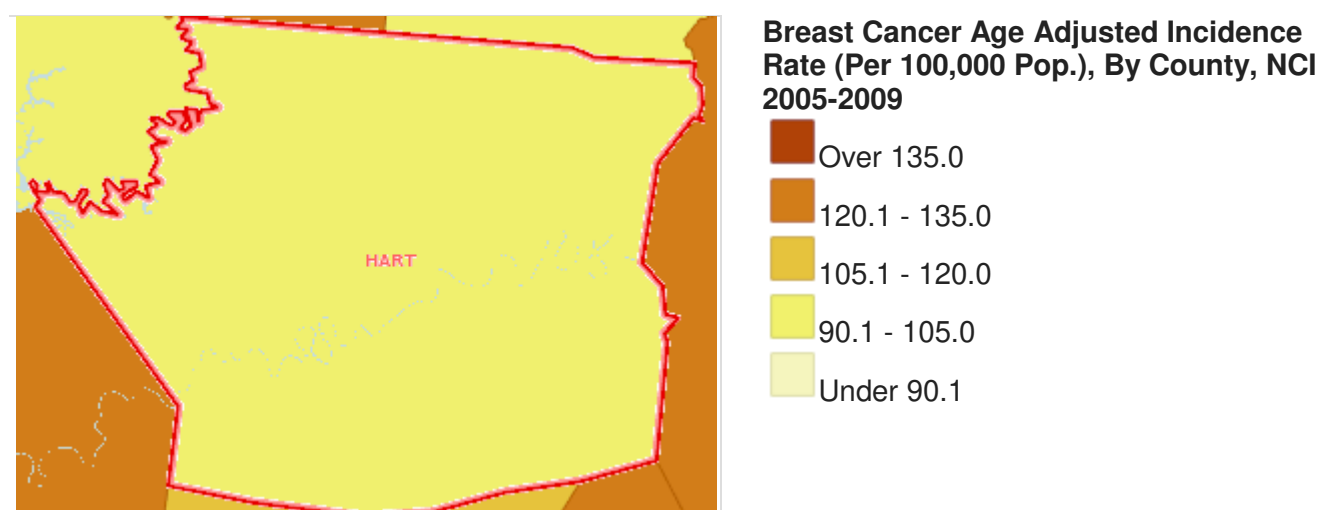
**Annual Incidence Rate (Per 100,000 Pop.)**



*Note: This indicator is compared with the state average.*

*Data Source: [The Centers for Disease Control and Prevention](#), and the [National Cancer Institute: State Cancer Profiles, 2005-2009](#). Source geography: County.*

## Community Health Needs Assessment



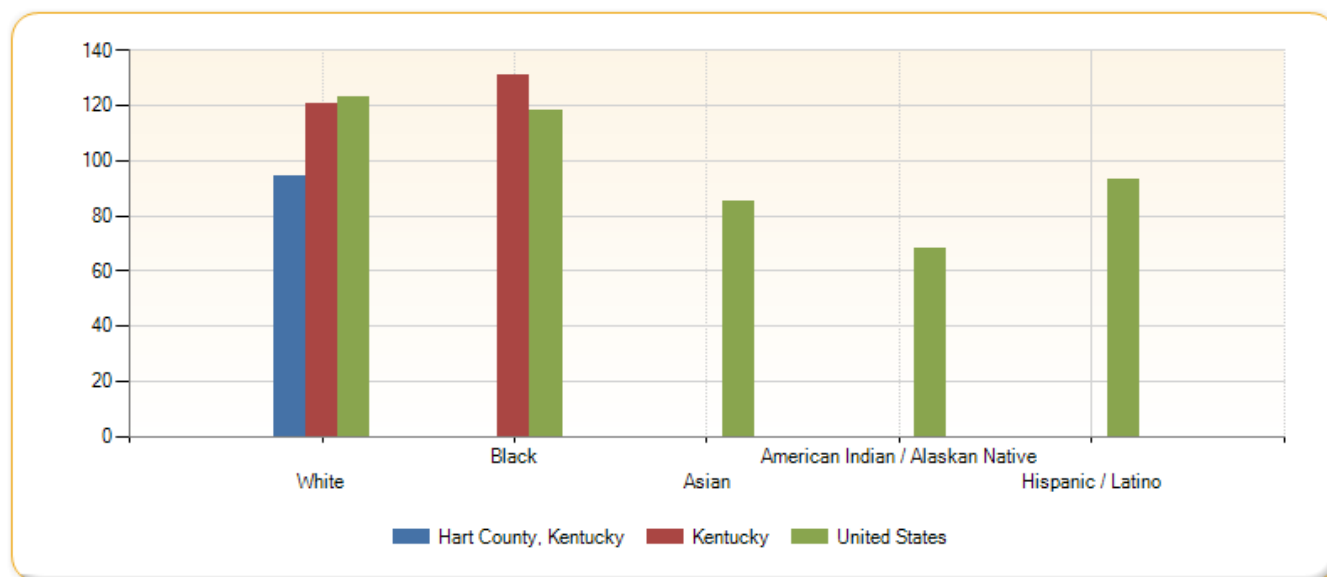
### Population by Race / Ethnicity, New Breast Cancer Incidence (Count)

Report Area	White	Black	Asian	American Indian / Alaskan Native	Hispanic / Latino
Hart County, Kentucky	16	no data	no data	no data	no data
Kentucky	4,559	418	no data	no data	no data
United States	276,098	43,972	11,261	1,655	280,661

### Population by Race / Ethnicity, Breast Cancer Incidence Rate (Per 100,000)

Report Area	White	Black	Asian	American Indian / Alaskan Native	Hispanic / Latino
Hart County, Kentucky	94.19	no data	no data	no data	no data
Kentucky	120.50	131.20	no data	no data	no data
United States	123	118	85.30	68.30	93.10

## Community Health Needs Assessment

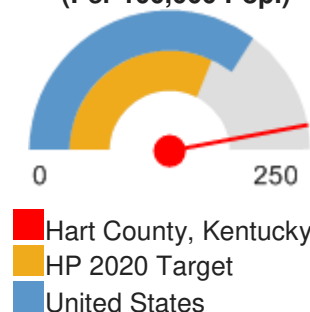


### Cancer Mortality

This indicator reports the rate of death due to malignant neoplasm (cancer) per 100,000 population. Figures are reported as crude rates, and as rates age-adjusted to year 2000 standard. Rates are resummarized for report areas from county level data, only where data is available. This indicator is relevant because cancer is a leading cause of death in the United States.

Report Area	Total Population, 2006-2010 Average	Annual Deaths, 2006-2010 Average	Crude Death Rate (Per 100,000 Pop.)	Age-Adjusted Death Rate (Per 100,000 Pop.)
Hart County, Kentucky	18,199	49	271.44	<b>234.56</b>
Kentucky	4,284,446	9,648	225.18	<b>209.50</b>
United States	303,844,430	566,121	186.32	<b>176.66</b>
<u>HP 2020 Target</u>				<= 160.6

Age-Adjusted Death Rate (Per 100,000 Pop.)

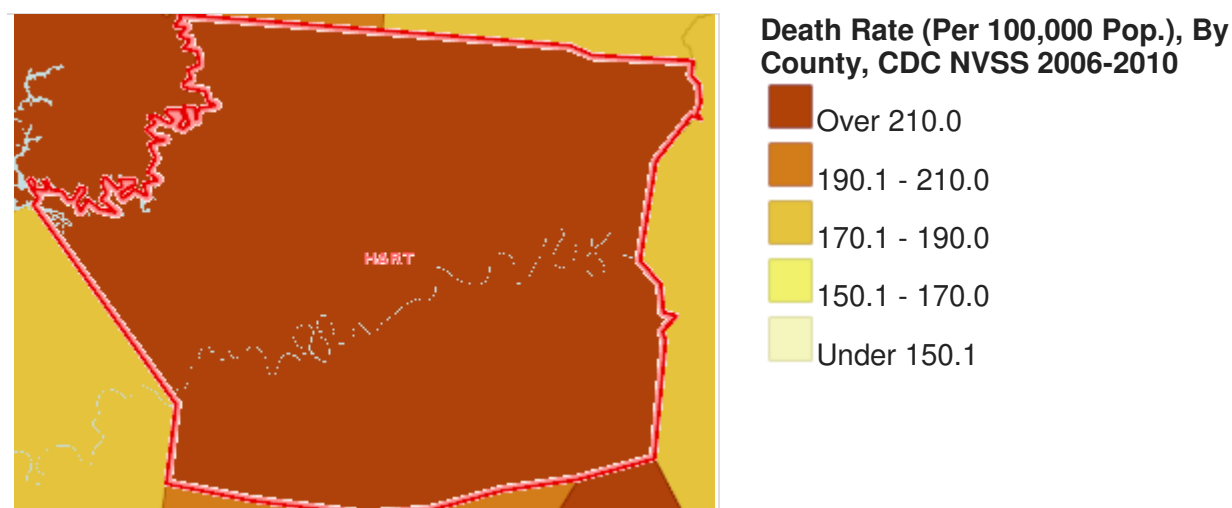


Note: This indicator is compared with the Healthy People 2020 Target.

Data Source: [Centers for Disease Control and Prevention, National Center for Health Statistics, Underlying Cause of Death, 2006-2010](#). Accessed through [CDC WONDER](#).

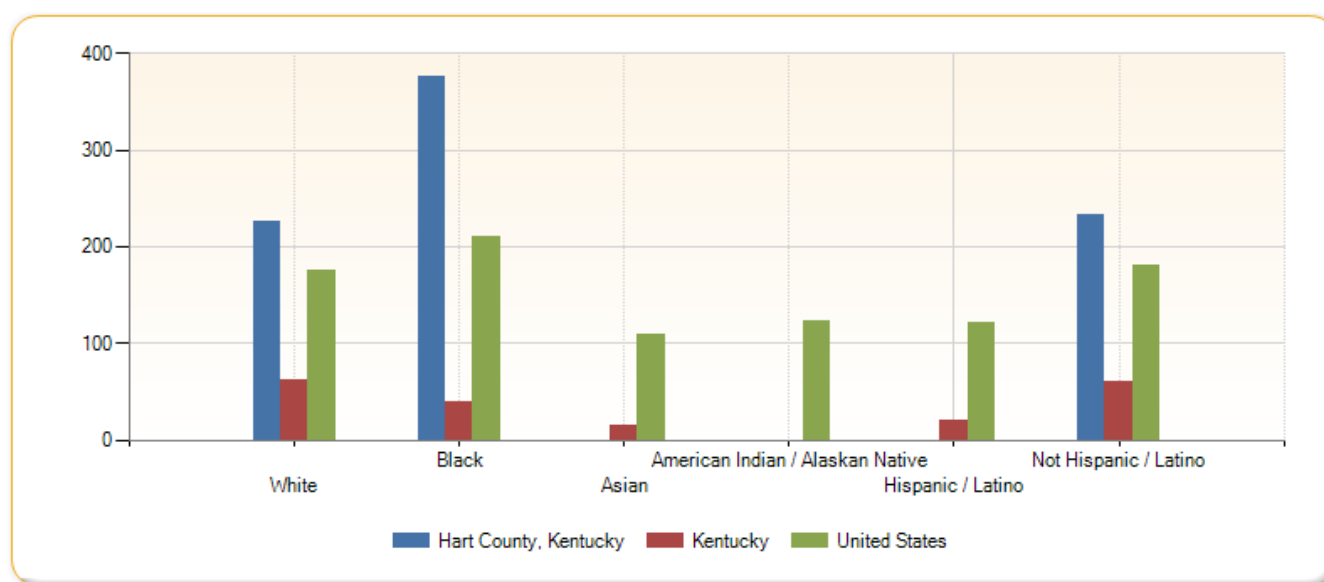
Source geography: County.

## Community Health Needs Assessment



Population by Race / Ethnicity, Cancer Mortality, Age-Adjusted Rate (Per 100,000 Pop.)

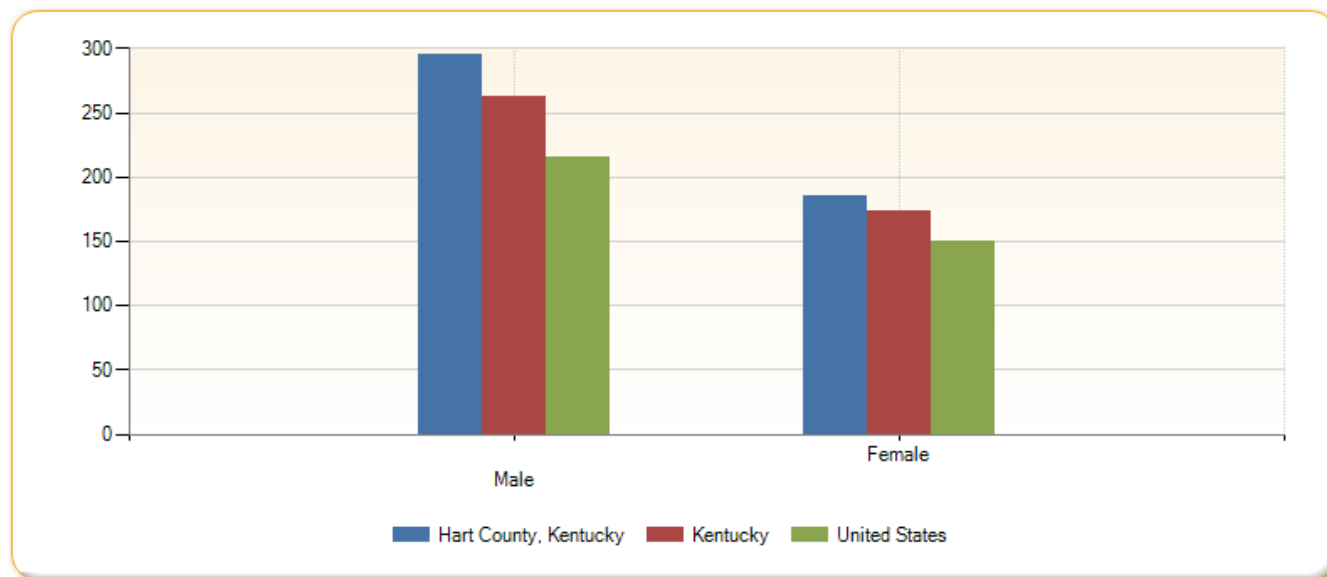
Report Area	White	Black	Asian	American Indian / Alaskan Native	Hispanic / Latino	Not Hispanic / Latino
Hart County, Kentucky	226.53	375.92	no data	no data	no data	233.49
Kentucky	62.13	38.54	15.65	no data	20.53	60.87
United States	176.12	209.70	108.72	122.20	121.09	180.92



# Community Health Needs Assessment

## Population by Gender, Cancer Mortality, Age-Adjusted Rate (Per 100,000 Pop.)

Report Area	Male	Female
Hart County, Kentucky	295.49	184.81
Kentucky	262.14	173.52
United States	215.04	150.05

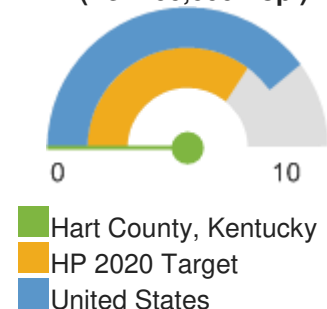


## Cervical Cancer Incidence

This indicator reports the age adjusted incidence rate (cases per 100,000 population per year) of females with cervical cancer adjusted to 2000 U.S. standard population age groups (Under age 1, 1-4, 5-9, ..., 80-84, 85 and older). This indicator is relevant because cancer is a leading cause of death and it is important to identify cancers separately to better target interventions.

Report Area	Total Population, ACS 2005-2009	Annual Incidence, 2005-2009 Average	Annual Incidence Rate (Per 100,000 Pop.)
Hart County, Kentucky	18,288	no data	no data
Kentucky	4,252,000	383	9
United States	301,461,536	24,117	8

### Annual Incidence Rate (Per 100,000 Pop.)



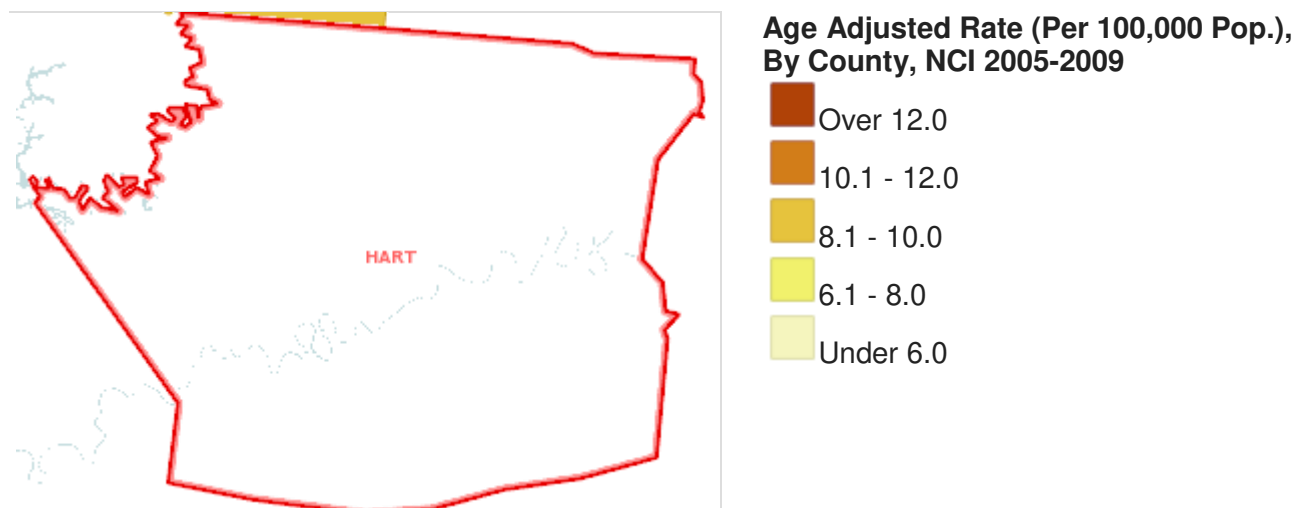
# Community Health Needs Assessment

[HP 2020  
Target](#)

<= 7.1

Note: This indicator is compared with the Healthy People 2020 Target.

Data Source: [The Centers for Disease Control and Prevention, and the National Cancer Institute: State Cancer Profiles, 2005-2009](#). Source geography: County.



## Population by Race / Ethnicity, New Cervical Cancer Incidence (Count)

Report Area	White	Black	Asian	American Indian / Alaskan Native	Hispanic / Latino
Hart County, Kentucky	no data	no data	no data	no data	no data
Kentucky	329	33	no data	no data	no data
United States	17,284	3,838	950	177	35,572

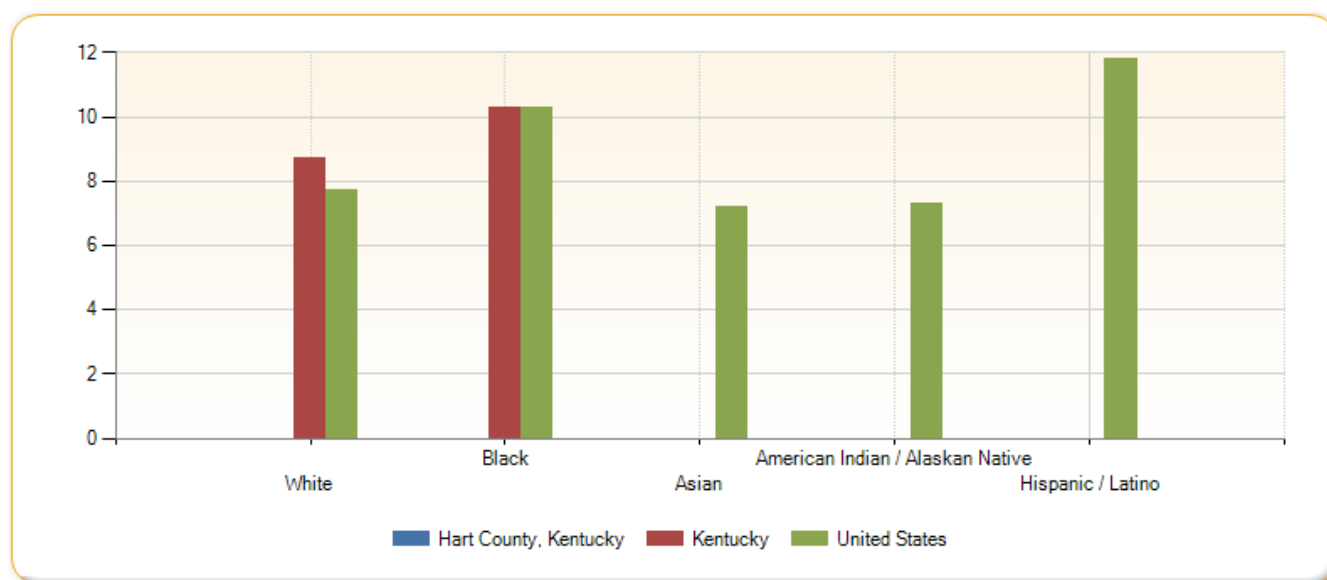
## Population by Race / Ethnicity, Cervical Cancer Incidence Rate (Per 100,000)

Report Area	White	Black	Asian	American Indian / Alaskan Native	Hispanic / Latino
Hart County, Kentucky	no data	no data	no data	no data	no data



## Community Health Needs Assessment

Report Area	White	Black	Asian	American Indian / Alaskan Native	Hispanic / Latino
Kentucky	8.70	10.30	no data	no data	no data
United States	7.70	10.30	7.20	7.30	11.80

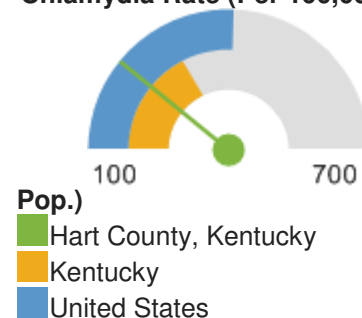


### Chlamydia Incidence

This indicator reports incidence rate of chlamydia cases per 100,000 population. This indicator is relevant because it is a measure of poor health status and indicates the prevalence of unsafe sex practices.

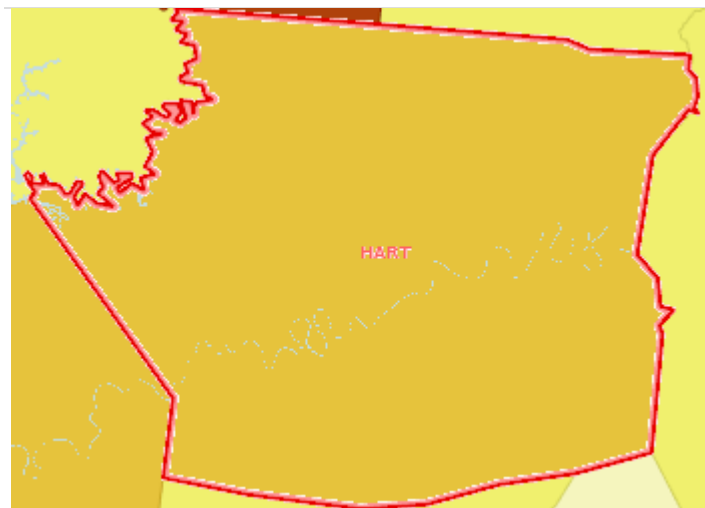
Report Area	Total Population, 2010 Census	Reported Cases of Chlamydia	Chlamydia Rate (Per 100,000 Pop.)
Hart County, Kentucky	18,199	42	<b>230.78</b>
Kentucky	4,339,367	13,293	311.36
United States	308,730,677	1,236,680	406.89

Chlamydia Rate (Per 100,000)

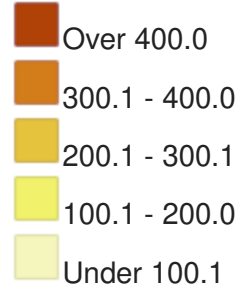


Note: This indicator is compared with the state average. No breakout data available.  
 Data Source: [Centers for Disease Control and Prevention and the National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, 2009](#). Source geography: County.

# Community Health Needs Assessment



**Chlamydia Incidence (Per 100,000 Pop.), By County, CDC 2009**

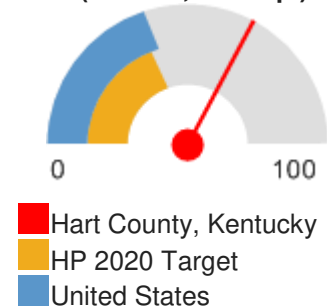


## Colon and Rectum Cancer Incidence

This indicator reports the age adjusted incidence rate (cases per 100,000 population per year) of colon and rectum cancer adjusted to 2000 U.S. standard population age groups (Under age 1, 1-4, 5-9, ..., 80-84, 85 and older). This indicator is relevant because cancer is a leading cause of death and it is important to identify cancers separately to better target interventions.

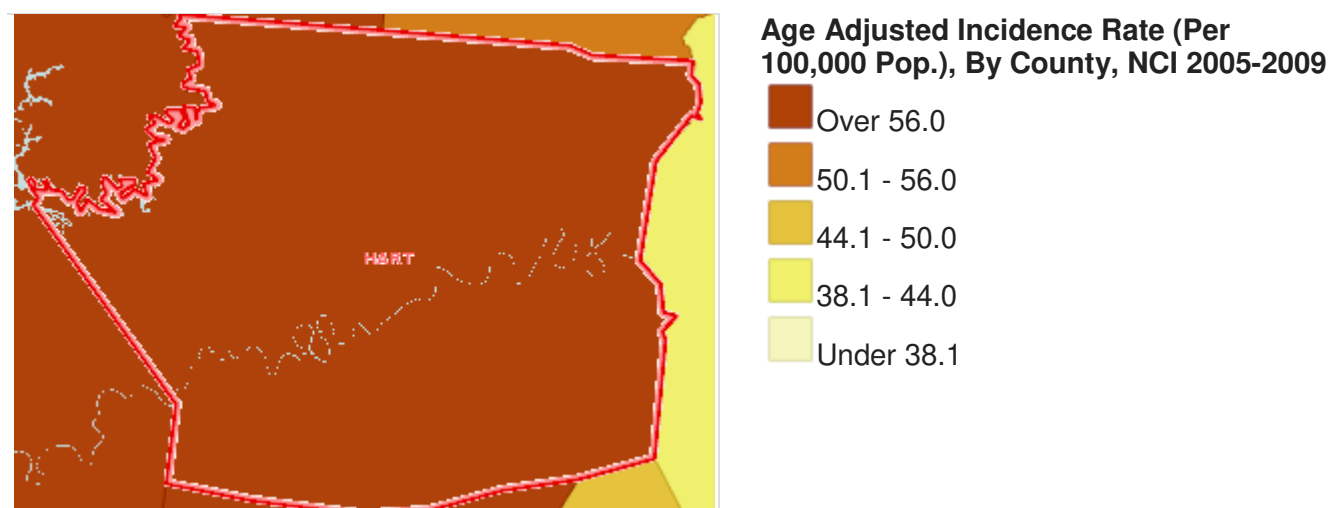
Report Area	Total Population, ACS 2005-2009	Annual Incidence, 2005-2009 Average	Annual Incidence Rate (Per 100,000 Pop.)
Hart County, Kentucky	18,288	12	<b>65.60</b>
Kentucky	4,252,000	2,343	<b>55.10</b>
United States	301,461,536	121,188	<b>40.20</b>
<a href="#">HP 2020 Target</a>			<b>&lt;= 38.6</b>

**Annual Incidence Rate (Per 100,000 Pop.)**



*Note: This indicator is compared with the Healthy People 2020 Target.*  
*Data Source: [The Centers for Disease Control and Prevention](#), and the [National Cancer Institute: State Cancer Profiles, 2005-2009](#). Source geography: County.*

## Community Health Needs Assessment



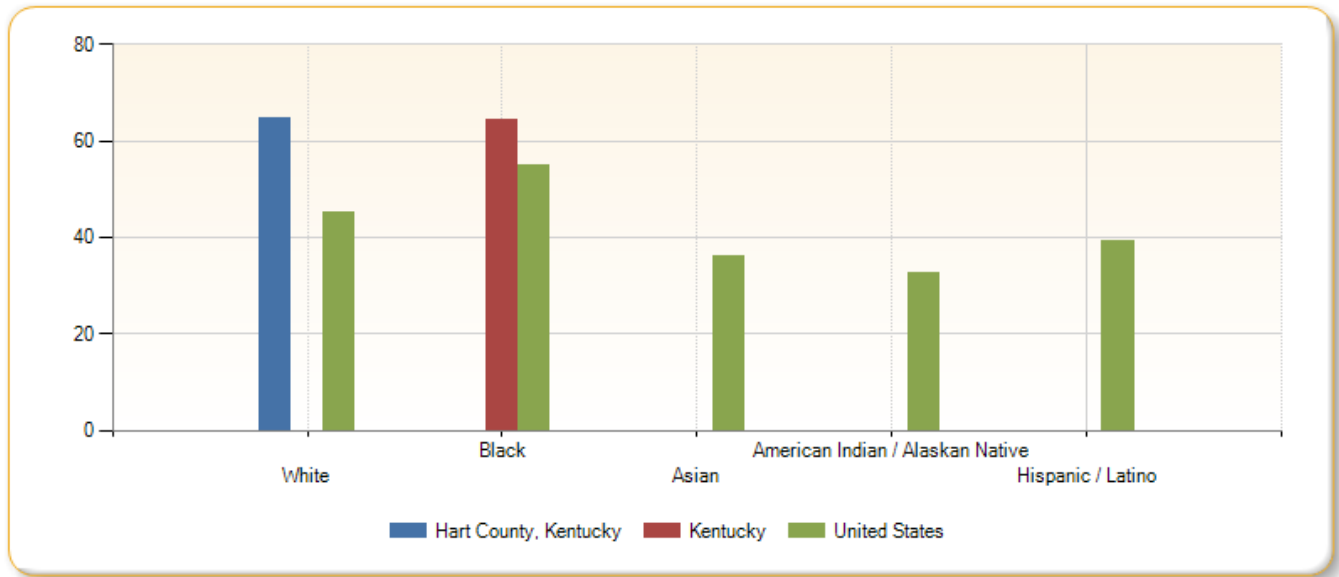
Population by Race / Ethnicity, New Colon and Rectum Cancer Incidence (Count)

Report Area	White	Black	Asian	American Indian / Alaskan Native	Hispanic / Latino
Hart County, Kentucky	11	0	0	0	0
Kentucky	no data	205	0	0	0
United States	101,236	20,421	4,752	788	118,173

Population by Race / Ethnicity, Colon and Rectum Cancer Incidence Rate (Per 100,000)

Report Area	White	Black	Asian	American Indian / Alaskan Native	Hispanic / Latino
Hart County, Kentucky	64.76	0	0	0	0
Kentucky	no data	64.30	0	0	0
United States	45.10	54.80	36	32.50	39.20

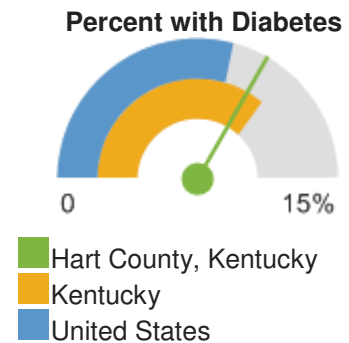
## Community Health Needs Assessment



### Diabetes Prevalence

This indicator reports the percentage of adults aged 20 and older who have ever been told by a doctor that they have diabetes. This indicator is relevant because diabetes is a prevalent problem in the U.S.; it may indicate an unhealthy lifestyle and puts individuals at risk for further health issues.

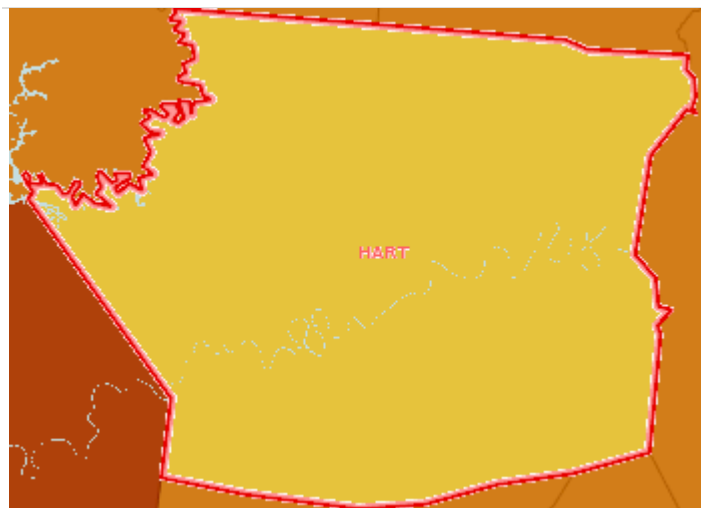
Report Area	Total Population (Age 20 )	Population with Diabetes	Percent with Diabetes
Hart County, Kentucky	15,040	1,504	10%
Kentucky	3,390,692.28	369,559	10.90%
United States	239,583,791.97	21,015,523	8.77%



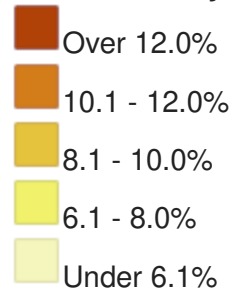
Note: This indicator is compared with the state average.

Data Source: [Centers for Disease Control and Prevention, National Diabetes Surveillance System, 2009](#). Source geography: County.

## Community Health Needs Assessment

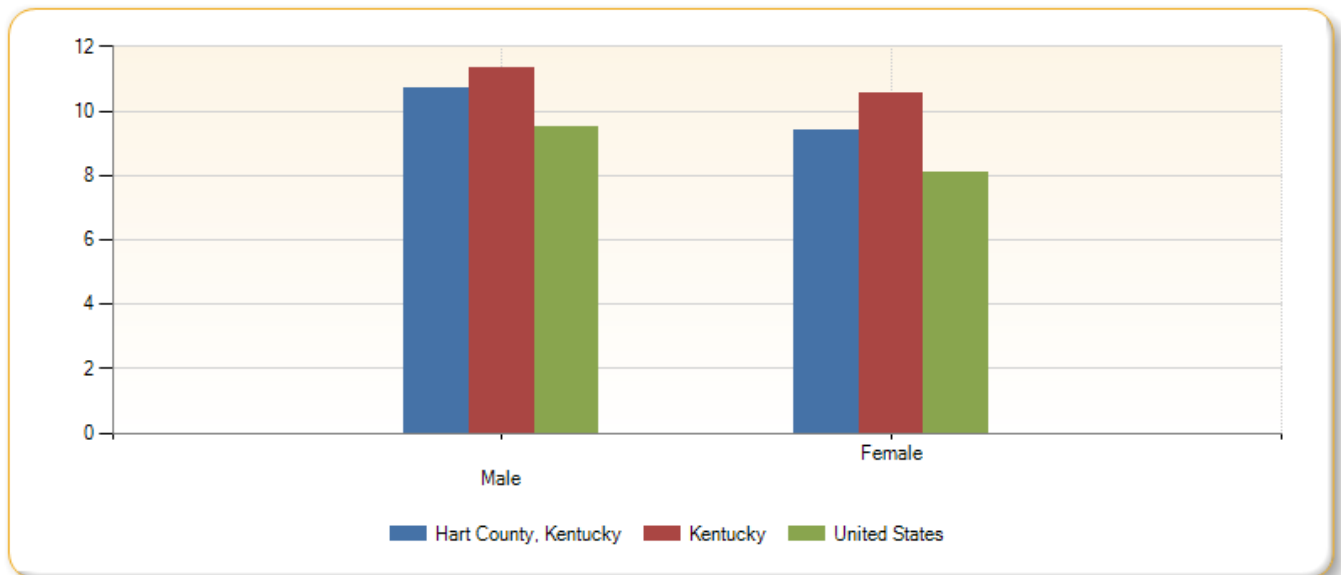


**Pct. Adults Diagnosed with Diabetes, By County, CDC National Diabetes Surveillance System, 2009**



**Population by Gender, Adults with Diabetes, Percentage (Age-Adjusted)**

Report Area	Male	Female
Hart County, Kentucky	10.70%	9.40%
Kentucky	11.31%	10.57%
United States	9.48%	8.08%



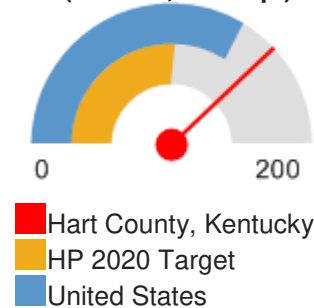
### Heart Disease Mortality

## Community Health Needs Assessment

This indicator reports the rate of death due to coronary heart disease per 100,000 population. Figures are reported as crude rates, and as rates age-adjusted to year 2000 standard. Rates are resummarized for report areas from county level data, only where data is available. This indicator is relevant because heart disease is a leading cause of death in the United States.

Report Area	Total Population, 2006-2010 Average	Annual Deaths, 2006-2010 Average	Crude Death Rate (Per 100,000 Pop.)	Age-Adjusted Death Rate (Per 100,000 Pop.)
Hart County, Kentucky	18,199	30	164.84	<b>152.38</b>
Kentucky	4,284,446	6,570	153.35	<b>146.72</b>
United States	303,844,430	432,552	142.36	<b>134.65</b>
<a href="#">HP 2020 Target</a>				<= 100.8

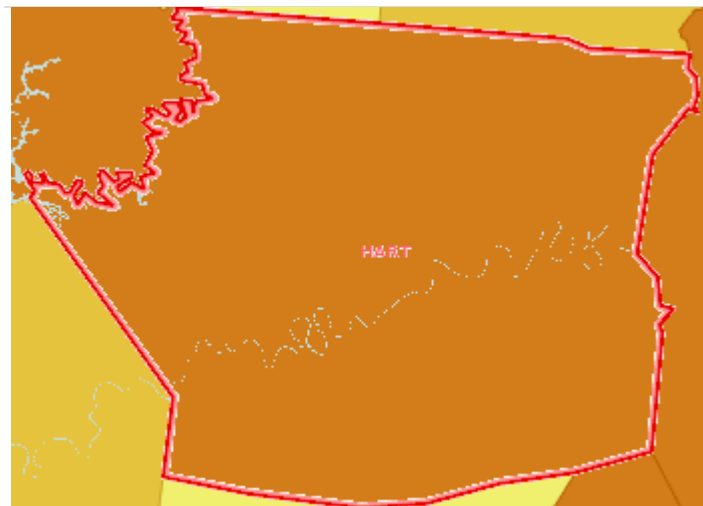
Age-Adjusted Death Rate (Per 100,000 Pop.)



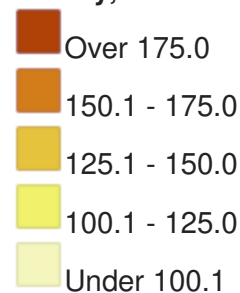
Note: This indicator is compared with the Healthy People 2020 Target.

Data Source: [Centers for Disease Control and Prevention, National Center for Health Statistics, Underlying Cause of Death, 2006-2010](#). Accessed through [CDC WONDER](#).

Source geography: County.



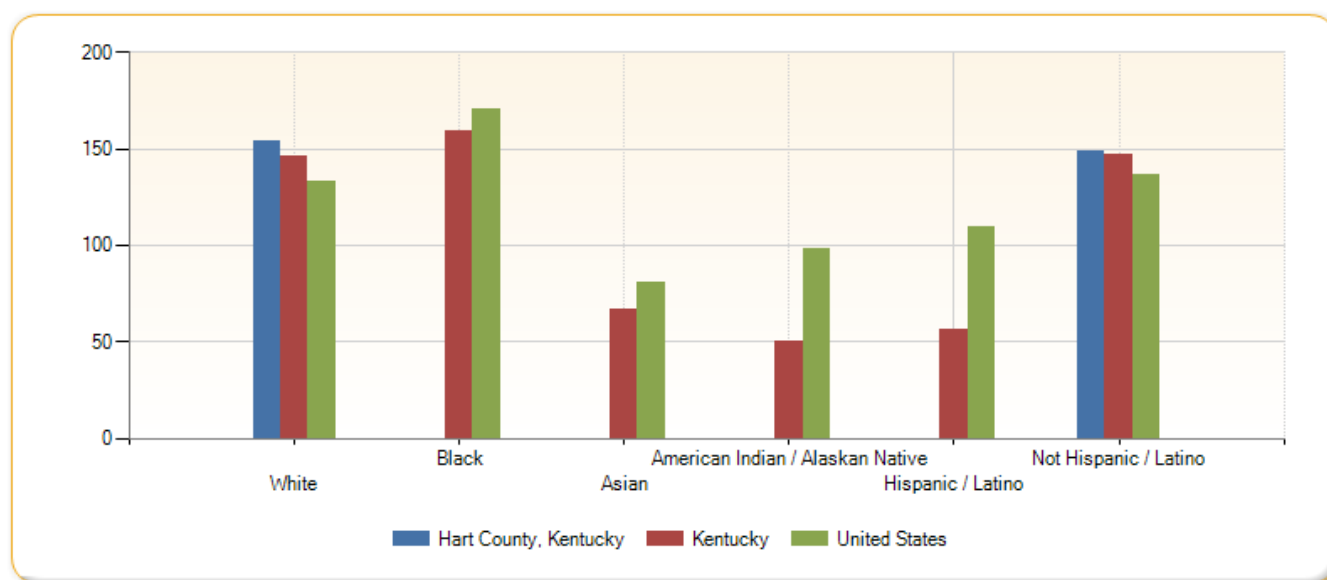
Death Rate (Per 100,000 Pop.), By County, CDC NVSS 2006-2010



Population by Race / Ethnicity, Coronary Heart Disease Mortality, Age-Adjusted Rate (Per 100,000 Pop.)

## Community Health Needs Assessment

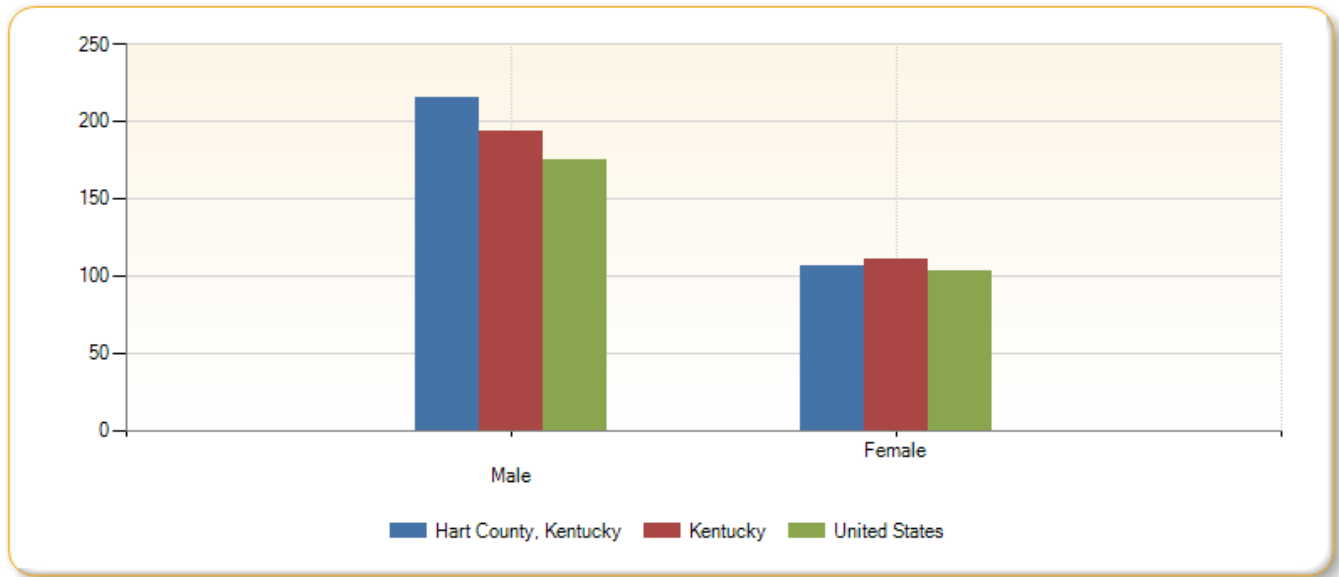
Report Area	White	Black	Asian	American Indian / Alaskan Native	Hispanic / Latino	Not Hispanic / Latino
Hart County, Kentucky	153.70	no data	no data	no data	no data	149.15
Kentucky	146.54	159.08	66.42	50.03	56.55	147.32
United States	132.80	170.35	80.47	98.48	109.88	136.45



Population by Gender, Coronary Heart Disease Mortality, Age-Adjusted Rate (Per 100,000 Pop.)

Report Area	Male	Female
Hart County, Kentucky	215.83	106.15
Kentucky	194.04	110.28
United States	175	103.44

## Community Health Needs Assessment

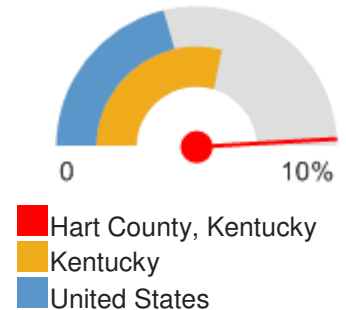


### Heart Disease Prevalence

This indicator reports the percentage of adults aged 18 and older who have ever been told by a doctor that they have coronary heart disease or angina. This indicator is relevant because coronary heart disease is a leading cause of death in the U.S. and is also related to high blood pressure, high cholesterol, and heart attacks.

Report Area	Total Population (Age 18 )	Number Adults with Heart Disease	Percent Adults with Heart Disease
Hart County, Kentucky	13,611	1,384	<b>10.17%</b>
Kentucky	3,265,915	191,056	5.85%
United States	232,747,222	9,911,760.85	4.26%

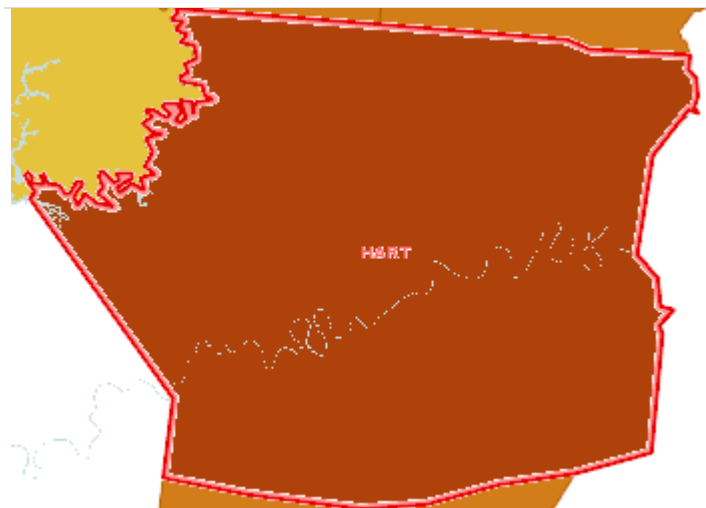
Percent Adults with Heart Disease



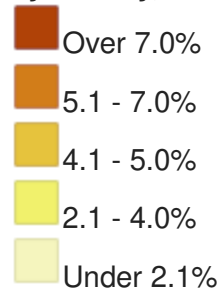
Note: This indicator is compared with the state average. No breakout data available.  
 Data Source: [Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2006-2010](#). Source geography: County.



## Community Health Needs Assessment



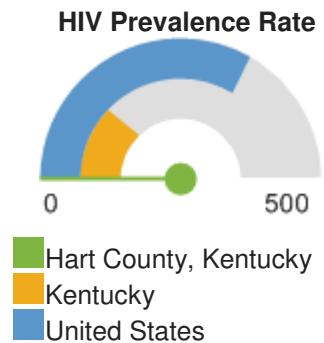
**Pct. of Population (Age 18 ) Ever Diagnosed with Cardiovascular Disease, By County, CDC BRFSS 2006-2010**



### **HIV Prevalence**

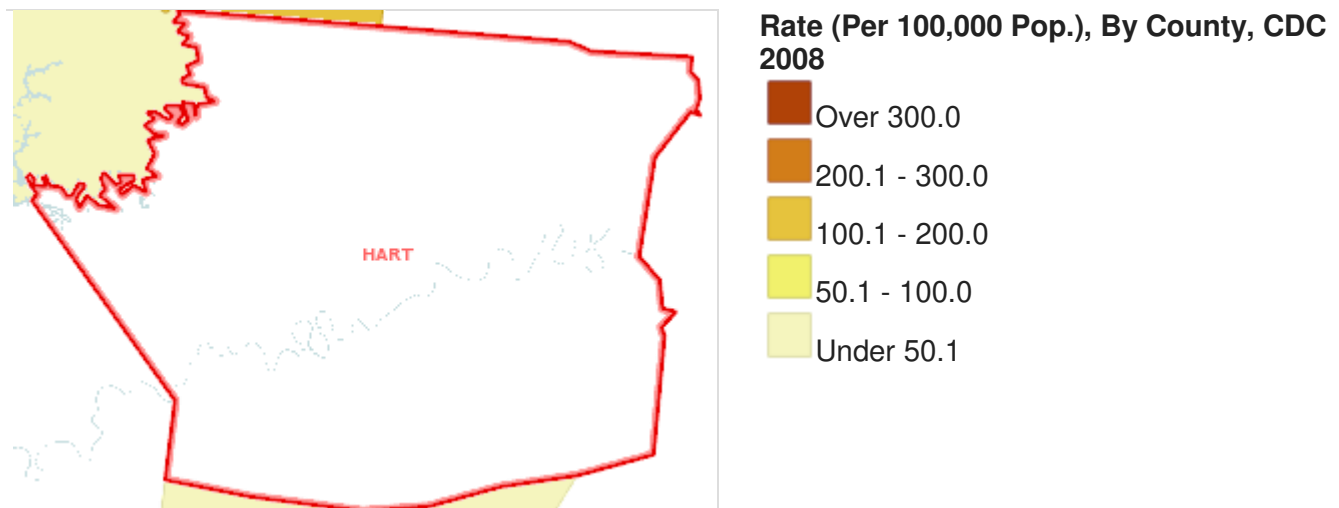
This indicator reports prevalence rate of HIV per 100,000 population. This indicator is relevant because HIV is a life-threatening communicable disease that disproportionately affects minority populations and may also indicate the prevalence of unsafe sex practices.

Report Area	Total Population ACS 2005-2009	Estimated Population with HIV	HIV Prevalence Rate
Hart County, Kentucky	18,288	no data	no data
Kentucky	4,252,000	5,276	124.10
United States	297,679,913	994,491	334



*Note: This indicator is compared with the state average. No breakout data available.  
Data Source: [Centers for Disease Control and Prevention and the National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, 2008](#). Source geography: County.*

# Community Health Needs Assessment

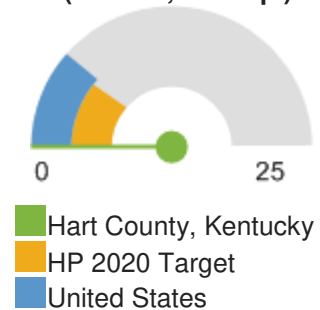


## Homicide

This indicator reports the rate of death due to assault (homicide) per 100,000 population. Figures are reported as crude rates, and as rates age-adjusted to year 2000 standard. Rates are resummarized for report areas from county level data, only where data is available. This indicator is relevant because homicide rate is a measure of poor community safety and is a leading cause of premature death.

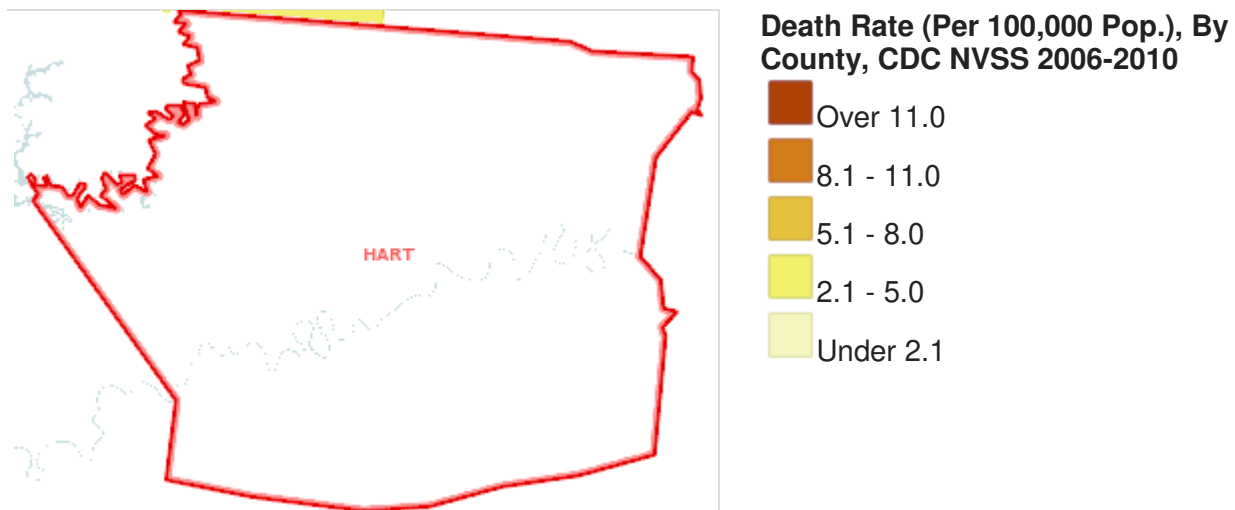
Report Area	Total Population, 2006-2010 Average	Annual Deaths, 2006-2010 Average	Crude Death Rate (Per 100,000 Pop.)	Age-Adjusted Death Rate (Per 100,000 Pop.)
Hart County, Kentucky	18,199	0	no data	no data
Kentucky	4,284,446	211	4.93	4.99
United States	303,844,430	17,564	5.78	5.81
<a href="#">HP 2020 Target</a>				<= 5.5

**Age-Adjusted Death Rate (Per 100,000 Pop.)**



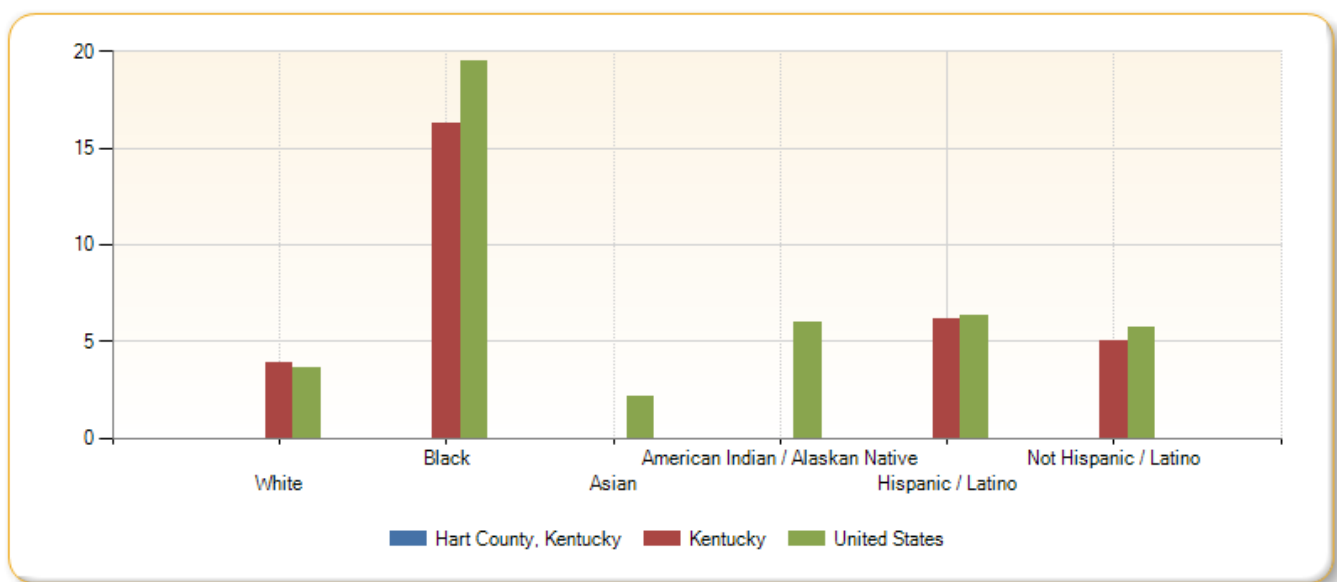
Note: This indicator is compared with the Healthy People 2020 Target.  
 Data Source: [Centers for Disease Control and Prevention, National Center for Health Statistics, Underlying Cause of Death, 2006-2010](#). Accessed through [CDC WONDER](#).  
 Source geography: County.

## Community Health Needs Assessment



Population by Race / Ethnicity, Homicide, Age-Adjusted Rate (Per 100,000 Pop.)

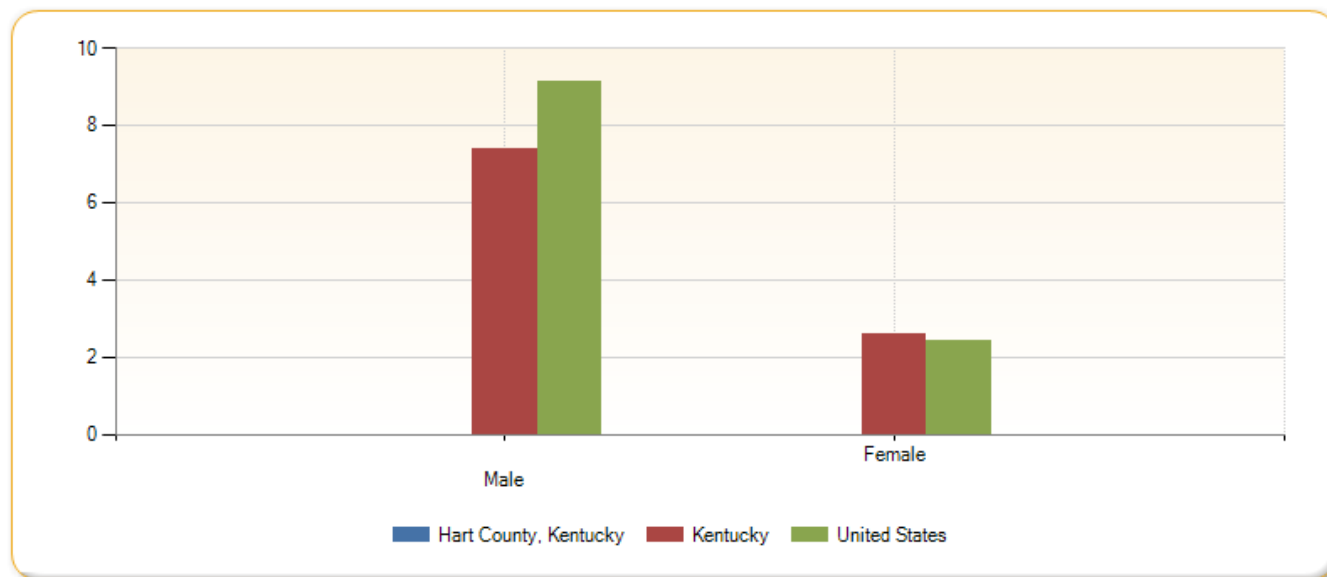
Report Area	White	Black	Asian	American Indian / Alaskan Native	Hispanic / Latino	Not Hispanic / Latino
Hart County, Kentucky	no data	no data	no data	no data	no data	no data
Kentucky	3.90	16.27	no data	no data	6.16	4.98
United States	3.58	19.50	2.16	5.98	6.33	5.68



# Community Health Needs Assessment

## Population by Gender, Homicide Mortality, Age-Adjusted Rate (Per 100,000 Pop.)

Report Area	Male	Female
Hart County, Kentucky	no data	no data
Kentucky	7.41	2.61
United States	9.16	2.43

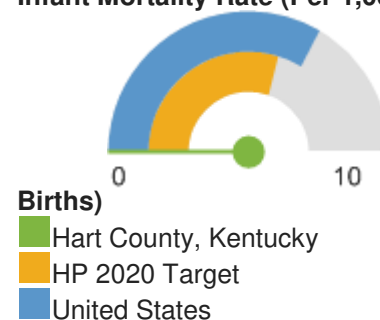


## Infant Mortality

This indicator reports the rate of deaths to infants less than one year of age per 1,000 births. This indicator is relevant because high rates of infant mortality indicate the existence of broader issues pertaining to access to care and maternal and child health.

Report Area	Total Births	Total Infant Deaths	Infant Mortality Rate (Per 1,000 Births)
Hart County, Kentucky	1,679	0	0
Kentucky	400,944	2,768	6.90
United States	58,600,996	393,074	6.71

### Infant Mortality Rate (Per 1,000 Births)



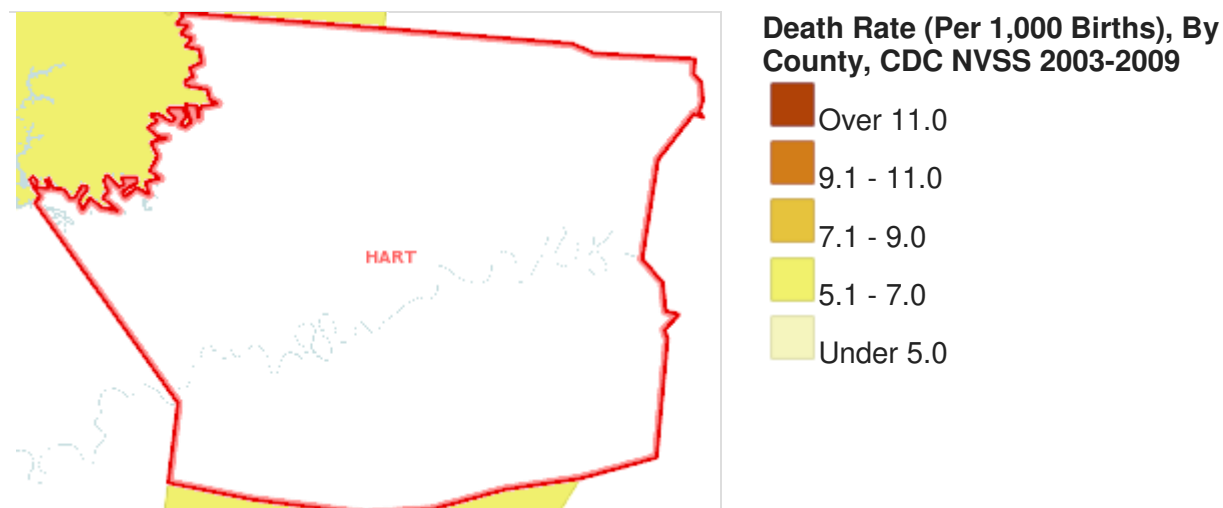
# Community Health Needs Assessment

[HP 2020  
Target](#)

<= 6.0

Note: This indicator is compared with the Healthy People 2020 Target.

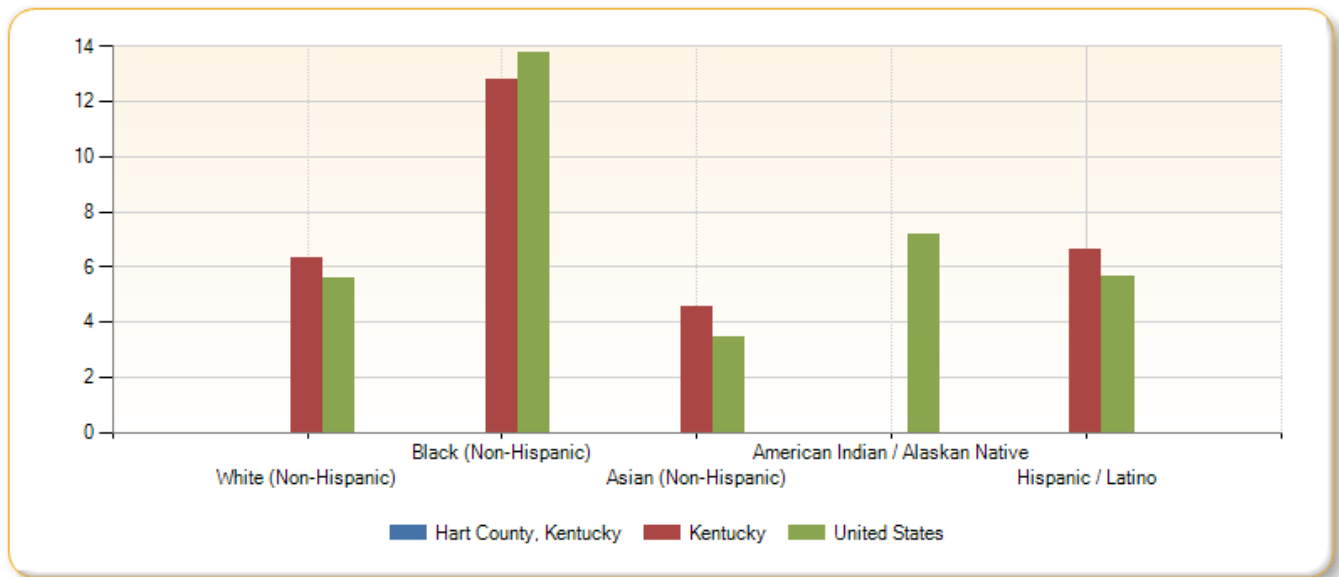
Data Source: [Centers for Disease Control and Prevention, National Vital Statistics System, 2003-2009](#). Source geography: County.



Population by Race / Ethnicity, Infant Mortality Rate (Per 1,000 Live Births)

Report Area	White (Non-Hispanic)	Black (Non-Hispanic)	Asian (Non-Hispanic)	American Indian / Alaskan Native	Hispanic / Latino
Hart County, Kentucky	no data	no data	no data	no data	no data
Kentucky	6.30	12.77	4.53	no data	6.62
United States	5.58	13.76	3.44	7.17	5.65

## Community Health Needs Assessment

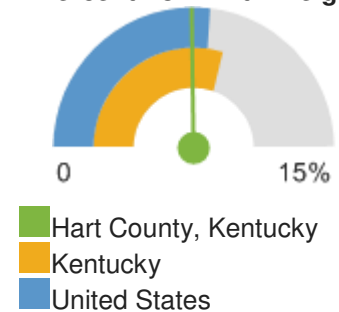


### Low Birth Weight

This indicator reports the percentage of total births that were low birth weight (Under 2500g). This indicator is relevant because low birth weight infants are at high risk for health problems. This indicator can also highlight the existence of health disparities.

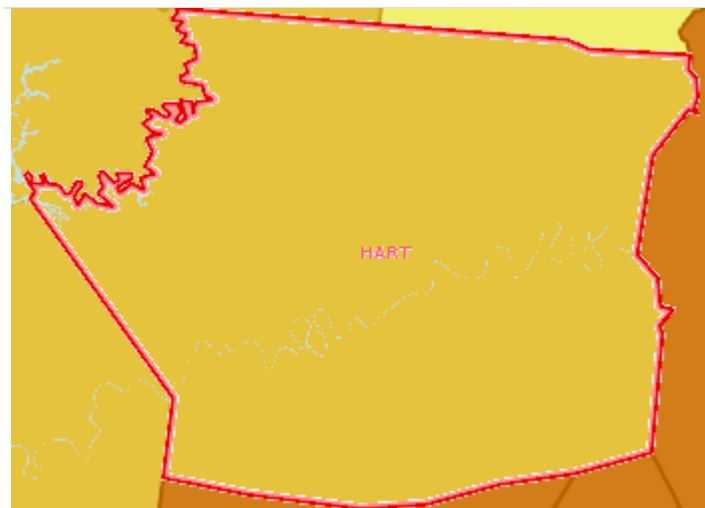
Report Area	Total Births	Number Low Birth Weight (< 2500g)	Percent Low Birth Weight
Hart County, Kentucky	1,705	127	7.45%
Kentucky	397,042	35,632	8.97%
United States	29,126,451	2,359,843	8.10%

Percent Low Birth Weight

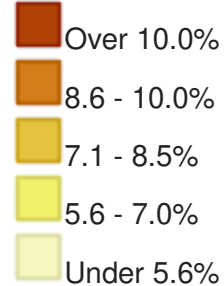


*Note: This indicator is compared with the state average. No breakout data available.*  
*Data Source: [Centers for Disease Control and Prevention, National Vital Statistics Systems, 2003-2009](#). Accessed through the [Health Indicators Warehouse](#). Source geography: County.*

## Community Health Needs Assessment



Pct. of Total Live Births, By County, NCHS 2002-2008

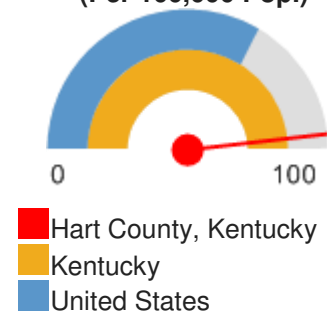


### Lung Cancer Incidence

This indicator reports the age adjusted incidence rate (cases per 100,000 population per year) of lung cancer adjusted to 2000 U.S. standard population age groups (Under age 1, 1-4, 5-9, ..., 80-84, 85 and older). This indicator is relevant because cancer is a leading cause of death and it is important to identify cancers separately to better target interventions.

Report Area	Total Population, ACS 2005-2009	Annual Incidence, 2005-2009 Average	Annual Incidence Rate (Per 100,000 Pop.)
Hart County, Kentucky	18,288	19	<b>103.80</b>
Kentucky	4,252,000	4,269	100.40
United States	301,461,536	202,582	67.20

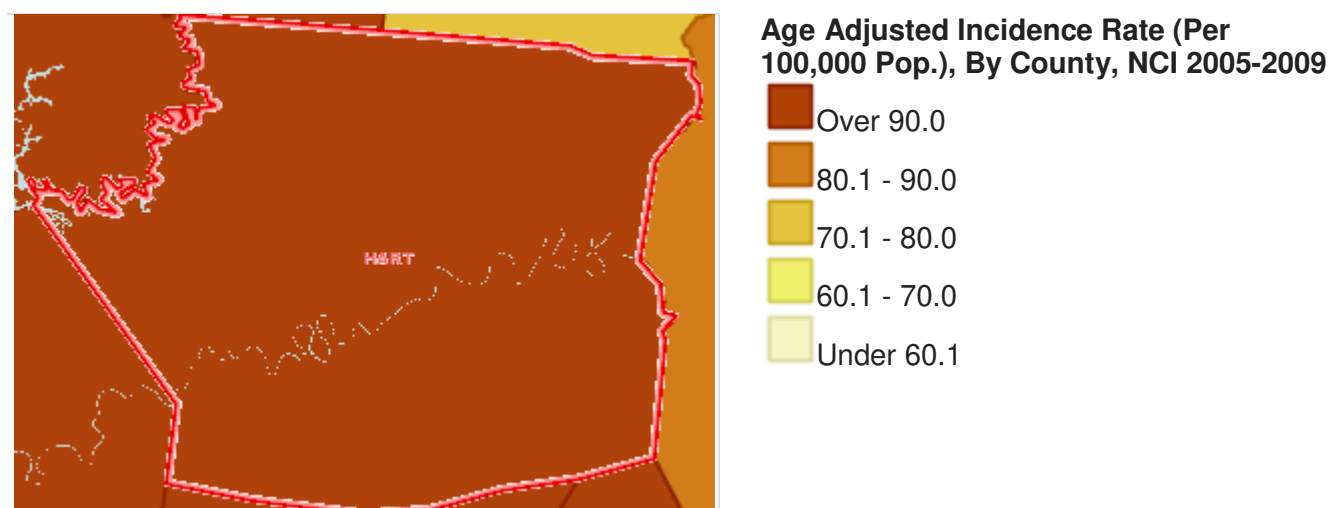
Annual Incidence Rate (Per 100,000 Pop.)



Note: This indicator is compared with the state average.

Data Source: [The Centers for Disease Control and Prevention, and the National Cancer Institute: State Cancer Profiles, 2005-2009](#). Source geography: County.

## Community Health Needs Assessment



Population by Race / Ethnicity, New Lung Cancer Incidence (Count)

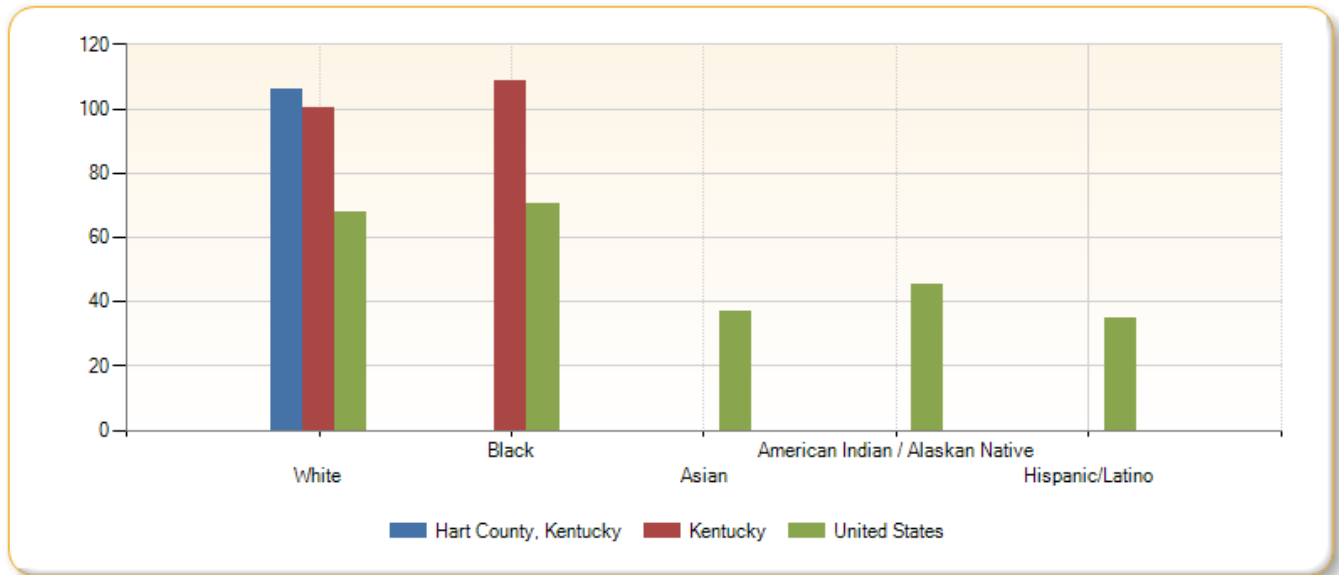
Report Area	White	Black	Asian	American Indian / Alaskan Native	Hispanic / Latino
Hart County, Kentucky	18	no data	no data	no data	no data
Kentucky	3,802	346	no data	no data	no data
United States	152,415	26,309	4,884	1,093	104,607

Population by Race / Ethnicity, Lung Cancer Incidence Rate (Per 100,000)

Report Area	White	Black	Asian	American Indian / Alaskan Native	Hispanic / Latino
Hart County, Kentucky	105.96	no data	no data	no data	no data
Kentucky	100.50	108.40	no data	no data	no data
United States	67.90	70.60	37	45.10	34.70



## Community Health Needs Assessment

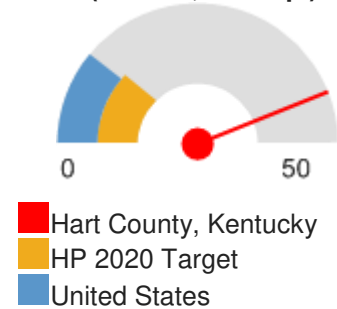


### Motor Vehicle Crash Death

This indicator reports the rate of death due to motor vehicle crashes per 100,000 population, which include collisions with another motor vehicle, a nonmotorist, a fixed object, and a non-fixed object, an overturn, and any other non-collision. This indicator is relevant because motor vehicle crash deaths are preventable and they are a cause of premature death.

Report Area	Total Deaths, 2008-2010	Average Annual Deaths, 2008-2010	Average Annual Death Rate (Per 100,000 Pop.)
Hart County, Kentucky	24	8	<b>43.96</b>
Kentucky	2,346	782	<b>18</b>
United States	103,048	34,349	<b>11.13</b>
<a href="#">HP 2020 Target</a>			<b>&lt;= 12.4</b>

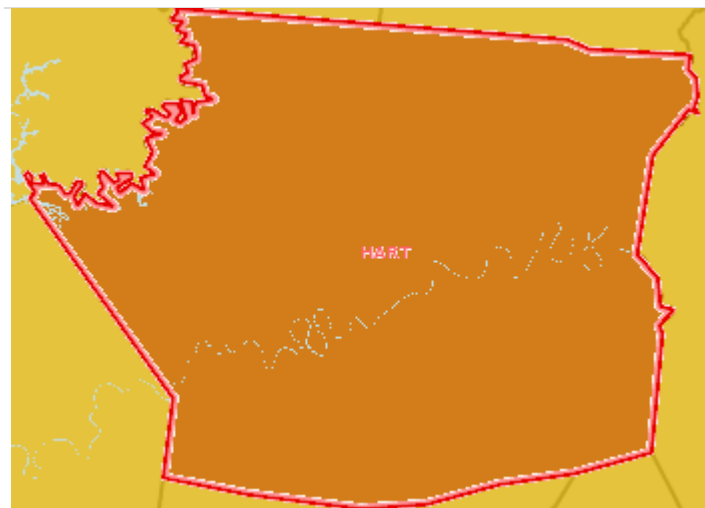
Average Annual Death Rate (Per 100,000 Pop.)



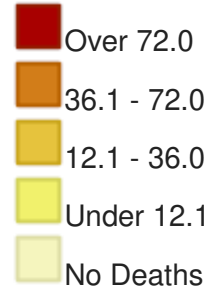
Note: This indicator is compared with the Healthy People 2020 Target. No breakout data available.

Data Source: [National Highway Traffic Safety Administration, Fatality Analysis Reporting System, 2008-2010](#). Source geography: County.

## Community Health Needs Assessment



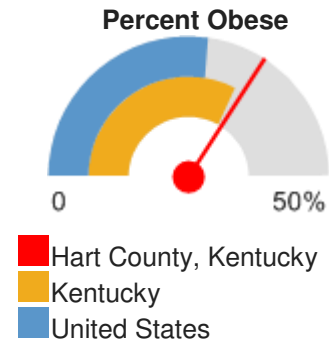
Death Rate (Per 100,000 Pop.), By County, NHTSA, 2008-2010



### **Obesity (Adult)**

This indicator reports the percentage of adults aged 18 and older who self-report that they have a Body Mass Index (BMI) greater than 30.0 (obese). This indicator is relevant because excess weight is a prevalent problem in the U.S.; it indicates an unhealthy lifestyle and puts individuals at risk for further health issues.

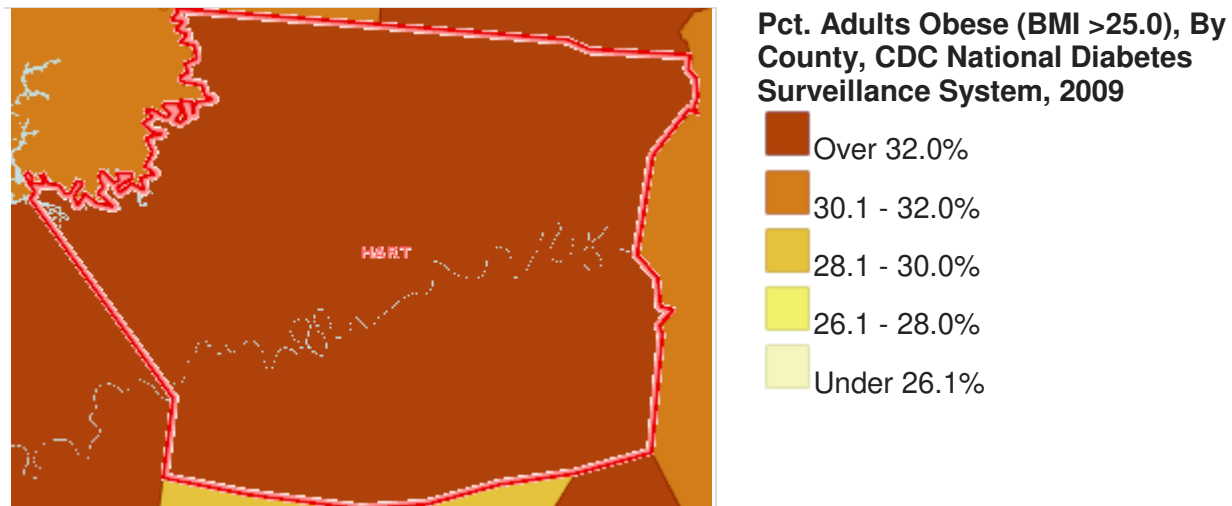
Report Area	Total Population (Age 20 )	Number Obese	Percent Obese
Hart County, Kentucky	13,526.47	4,599	<b>34%</b>
Kentucky	3,194,767.04	1,048,993	32.83%
United States	224,690,904.71	61,460,308	27.35%



Note: This indicator is compared with the state average.

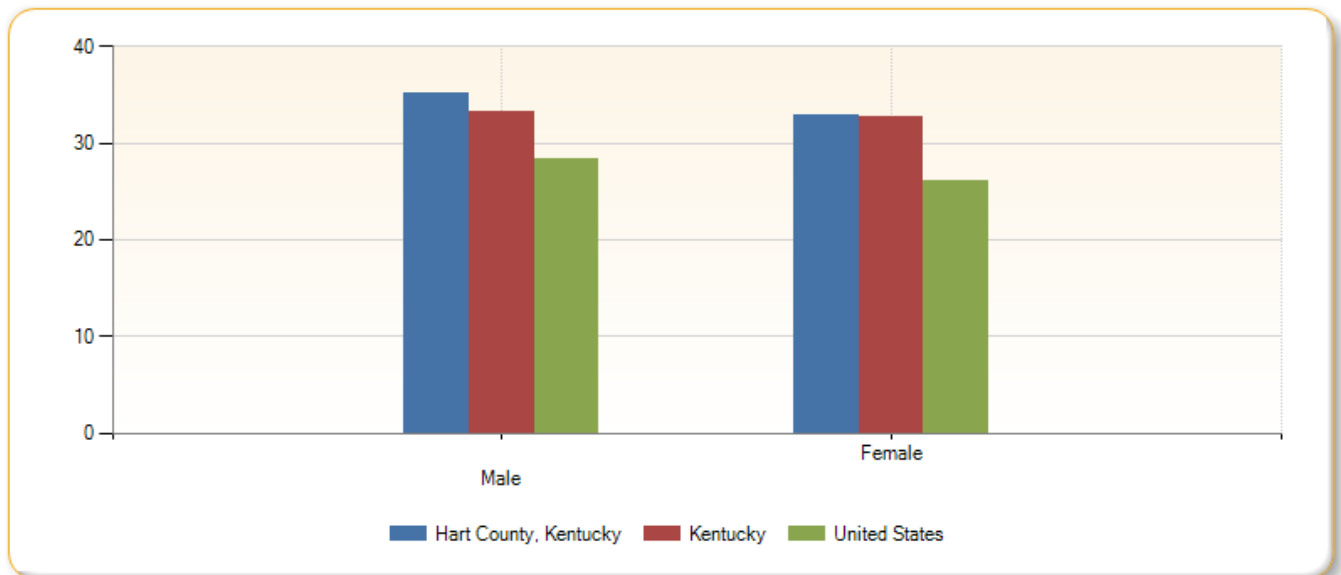
Data Source: [Centers for Disease Control and Prevention, National Diabetes Surveillance System, 2009](#). Source geography: County.

## Community Health Needs Assessment



Population by Gender, Adults Obese, Percentage (Age-Adjusted)

Report Area	Male	Female
Hart County, Kentucky	35.20%	32.90%
Kentucky	33.20%	32.70%
United States	28.30%	26.03%

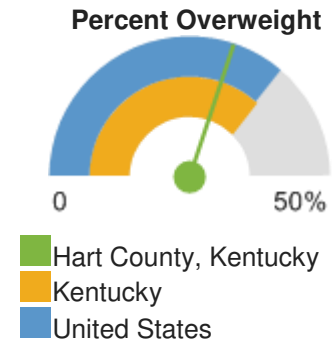


### Overweight (Adult)

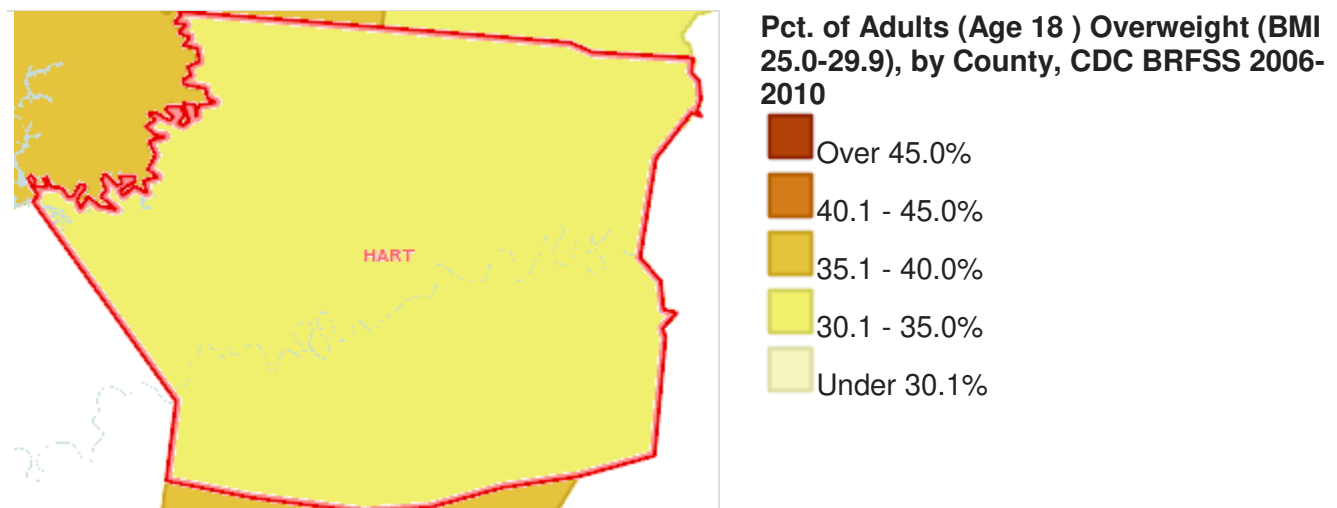
## Community Health Needs Assessment

This indicator reports the percentage of adults aged 18 and older who self-report that they have a Body Mass Index (BMI) between 25.0 and 30.0 (overweight). This indicator is relevant because excess weight is a prevalent problem in the U.S.; it indicates an unhealthy lifestyle and puts individuals at risk for further health issues.

Report Area	Total Population (Age 18 )	Number Overweight	Percent Overweight
Hart County, Kentucky	13,611	4,106	30.17%
Kentucky	3,265,915	1,212,308	37.12%
United States	232,747,222	84,521,271.09	36.31%



*Note: This indicator is compared with the state average. No breakout data available.*  
*Data Source: [Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2006-2010](#). Source geography: County.*



## Pedestrian Motor Vehicle Death

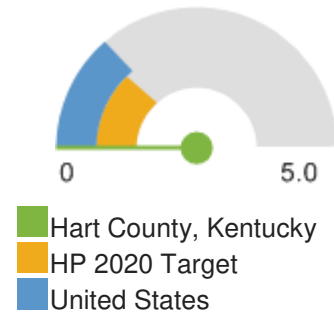
This indicator reports the rate of pedestrians killed by motor vehicles per 100,000 population. This indicator is relevant because pedestrian-motor vehicle crash deaths are preventable and they are a cause of premature death.

Report Area	Total Deaths, 2008-2010	Average Annual Deaths, 2008-2010	Average Annual Death Rate (Per 100,000 Pop.)

**Average Annual Death Rate  
(Per 100,000 Pop.)**

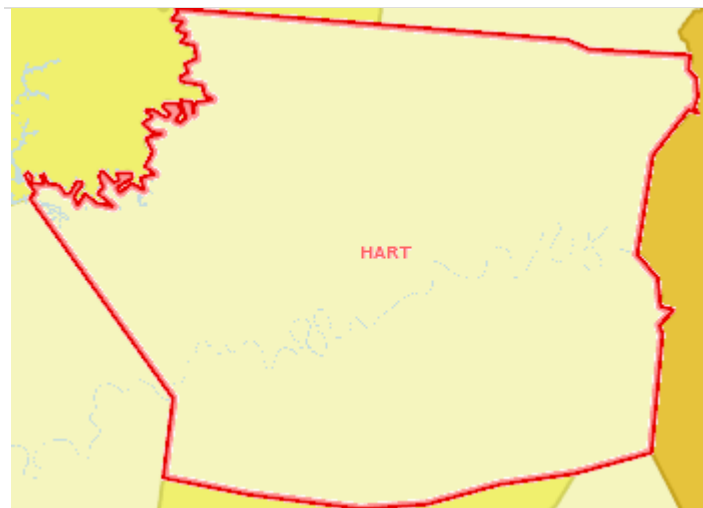
## Community Health Needs Assessment

Hart County, Kentucky	0	0	0
Kentucky	165	55	1.20
United States	12,750	4,250	1.38
<a href="#">HP 2020 Target</a>			<= 1.3

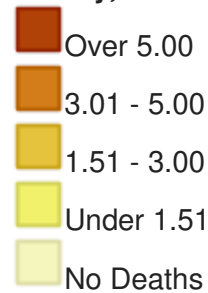


Note: This indicator is compared with the Healthy People 2020 Target. No breakout data available.

Data Source: [National Highway Traffic Safety Administration, Fatality Analysis Reporting System, 2008-2010](#). Source geography: County.



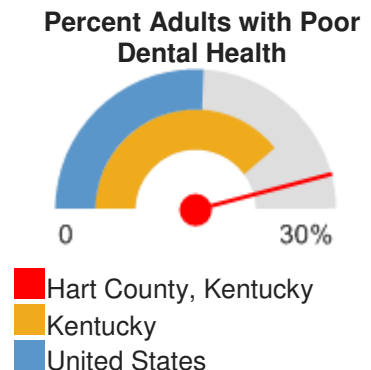
Death Rate (Per 100,000 Pop.), By County, NHTSA, 2008-2010



### Poor Dental Health

This indicator reports the percentage of adults age 18 and older who self-report that six or more of their permanent teeth have been removed due to tooth decay, gum disease, or infection. This indicator is relevant because it indicates lack of access to dental care and/or social barriers to utilization of dental services.

Report Area	Total Population (Age 18 )	Number Adults with Poor Dental Health	Percent Adults with Poor Dental Health
Hart County, Kentucky	13,611	3,751	27.56%
Kentucky	3,265,915	775,981	23.76%

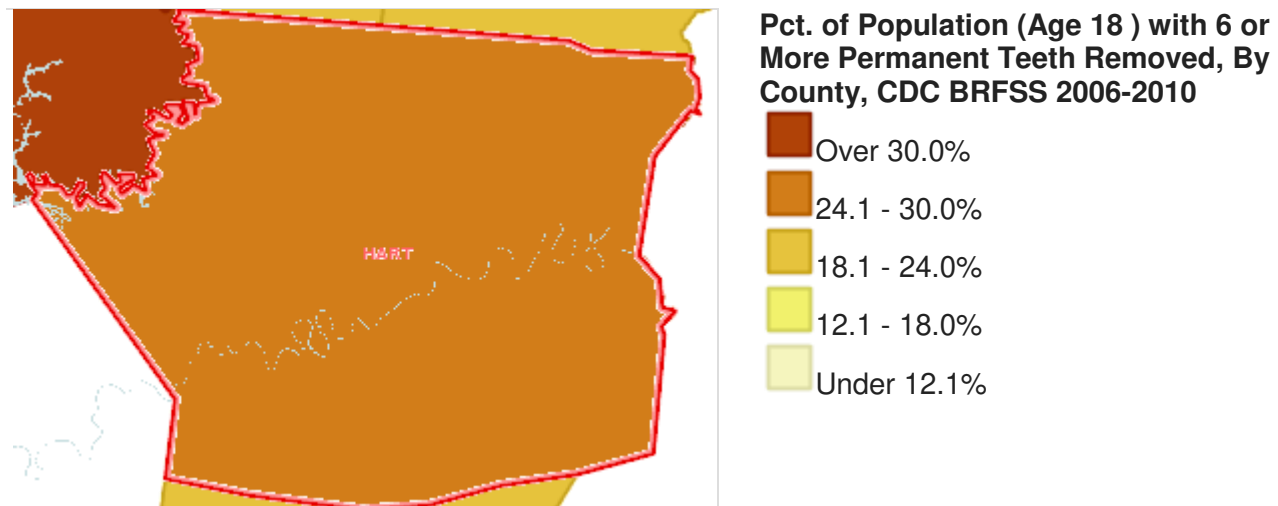


# Community Health Needs Assessment

United States	232,747,222	36,229,520	15.57%
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Note: This indicator is compared with the state average. No breakout data available.

Data Source: [Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2006-2010](#). Source geography: County.

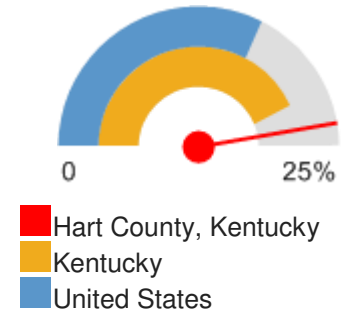


## Poor General Health

This indicator reports the percentage of adults age 18 and older who self-report having poor or fair health. This indicator is relevant because it is a measure of general poor health status. The source of this indicator is the Centers for Disease Control and Prevention, Behavioral Risk Factors Surveillance System (BRFSS) 2010.

Report Area	Total Population (Age 18 )	Number Reporting Poor General Health	Percent Reporting Poor General Health
Hart County, Kentucky	13,815	3,647.16	<b>26.40%</b>
Kentucky	1,874,800	406,832	21.70%
United States	111,821,887	18,188,242	16.27%

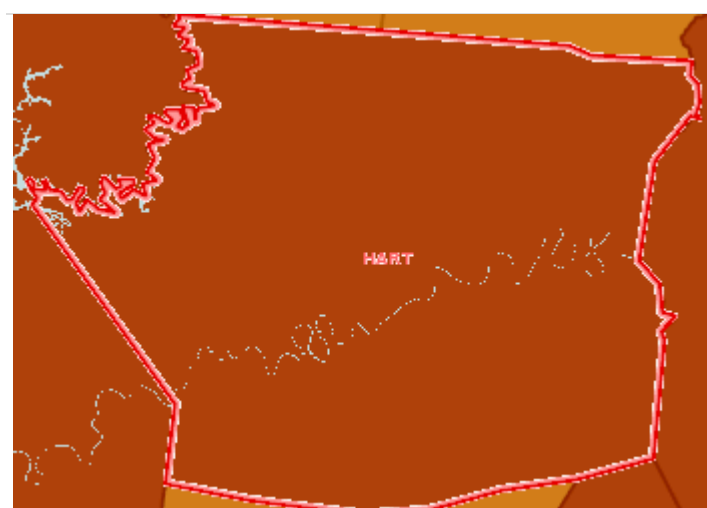
**Percent Reporting Poor General Health**



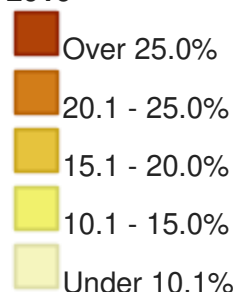
Note: This indicator is compared with the state average. No breakout data available.

Data Source: [Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2004-2010](#). Source geography: County.

# Community Health Needs Assessment



**Pct. of Adults (Age 18 ) with Poor or Fair Health, By County, CDC BRFSS 2004-2010**

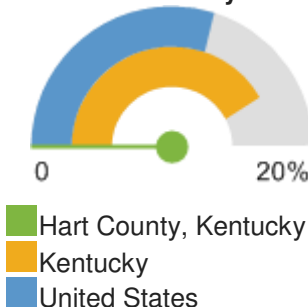


## Population with Any Disability

This indicator reports the percentage of the total civilian noninstitutionalized population with a disability. This indicator is relevant because disabled individuals comprise a vulnerable population that requires targeted services and outreach by providers.

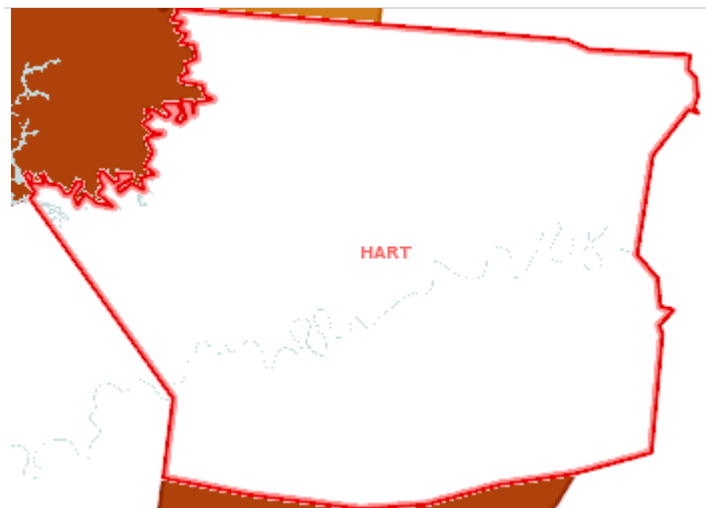
Report Area	Population for Whom Disability Status Is Determined	Total Population with a Disability	Percent Population with a Disability
Hart County, Kentucky	no data	no data	no data
Kentucky	4,227,518	709,911	16.79%
United States	301,501,760	36,180,124	12%

**Percent Population with a Disability**

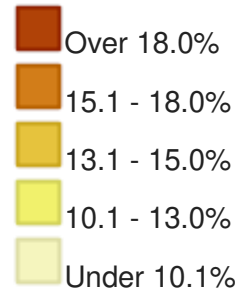


*Note: This indicator is compared with the state average. No breakout data available.*  
*Data Source: [U.S. Census Bureau, 2008-2010 American Community Survey 3-Year Estimates](#). Source geography: Tract.*

## Community Health Needs Assessment



Disabled Population, By County, 2008-2010 3-Year ACS

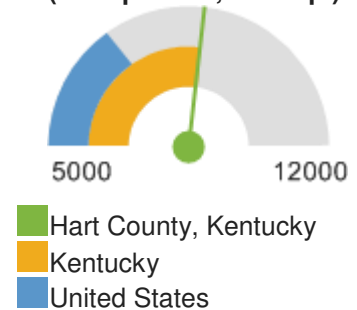


### Premature Death

This indicator reports Years of Potential Life Lost (YPLL) before age 75 per 100,000 population for all causes of death, age-adjusted to the 2000 standard. YPLL measures premature death and is calculated by subtracting the age of death from the 75 year benchmark. This indicator is relevant because a measure of premature death can provide a unique and comprehensive look at overall health status.

Report Area	Total Population, 2006-2008 Average	Annual Premature Deaths, 2006-2008 Average	Years of Potential Life Lost (Rate per 100,000 Pop.)
Hart County, Kentucky	17,065	98	8,750
Kentucky	4,007,668	19,434	8,785
United States	283,115,015	1,058,493	7,131

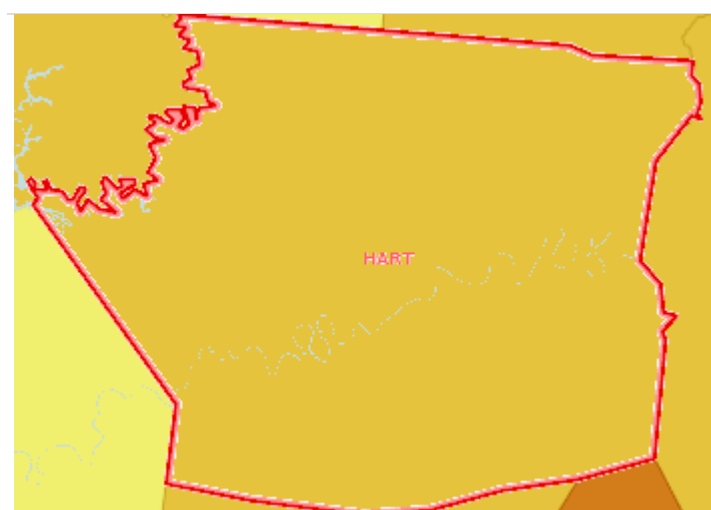
Years of Potential Life Lost (Rate per 100,000 Pop.)



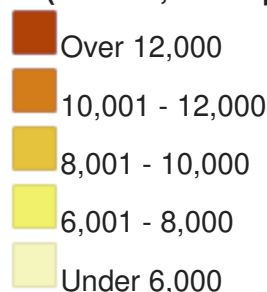
Note: This indicator is compared with the state average. No breakout data available.  
Data Source: [Centers for Disease Control and Prevention, National Vital Statistics System, 2008-2010 \(As Reported in the 2012 County Health Rankings\)](#). Source geography: County.



# Community Health Needs Assessment



**Years of Potential Life Lost Before Age 75 (Per 100,000 Pop.)**

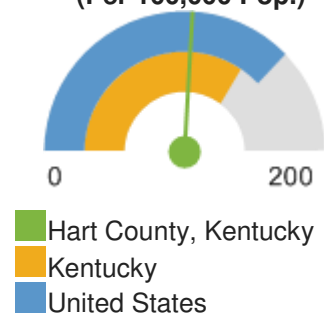


## Prostate Cancer Incidence

This indicator reports the age adjusted incidence rate (cases per 100,000 population per year) of males with prostate cancer adjusted to 2000 U.S. standard population age groups (Under age 1, 1-4, 5-9, ..., 80-84, 85 and older). This indicator is relevant because cancer is a leading cause of death and it is important to identify cancers separately to better target interventions.

Report Area	Total Population, ACS 2005-2009	Annual Incidence, 2005-2009 Average	Annual Incidence Rate (Per 100,000 Pop.)
Hart County, Kentucky	18,288	19	103.80
Kentucky	4,252,000	5,910	139
United States	301,461,536	456,412	151.40

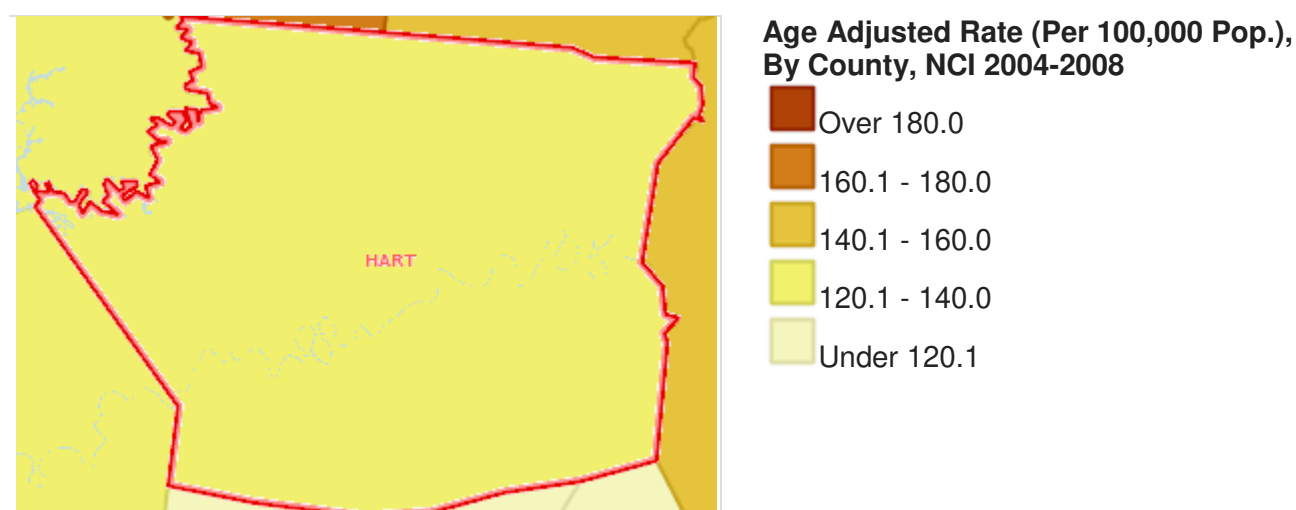
**Annual Incidence Rate (Per 100,000 Pop.)**



*Note: This indicator is compared with the state average.*

*Data Source: [The Centers for Disease Control and Prevention](#), and the [National Cancer Institute: State Cancer Profiles, 2005-2009](#). Source geography: County.*

## Community Health Needs Assessment



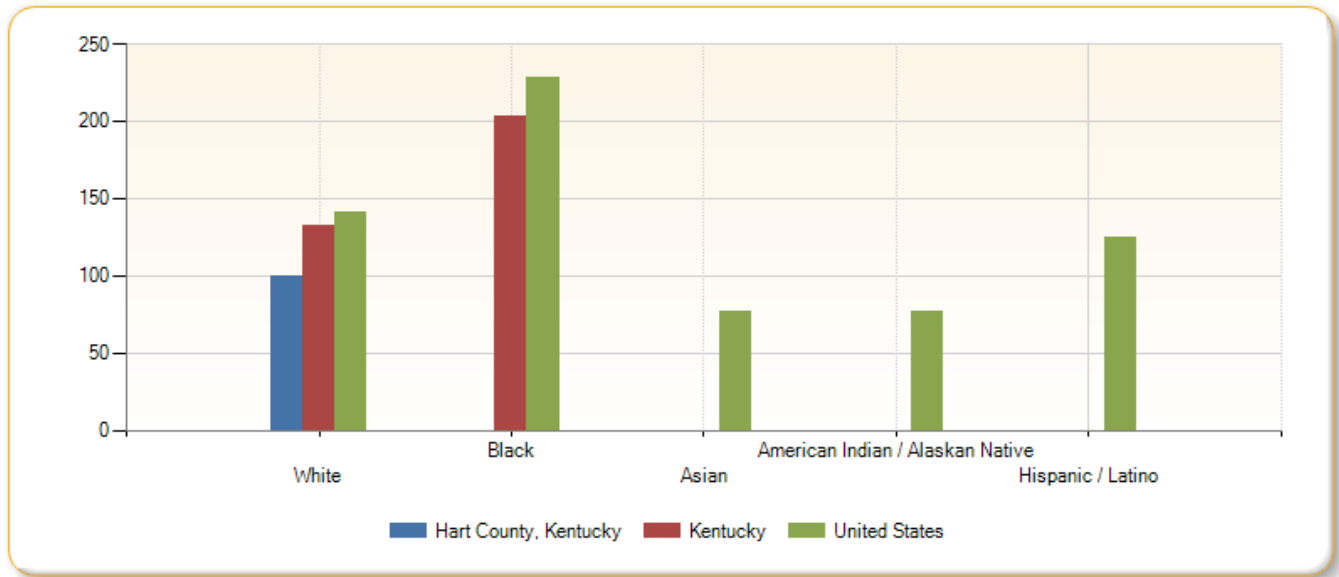
### Population by Race / Ethnicity, New Prostate Cancer Incidence (Count)

Report Area	White	Black	Asian	American Indian / Alaskan Native	Hispanic / Latino
Hart County, Kentucky	17	no data	no data	no data	no data
Kentucky	5,032	648	no data	no data	no data
United States	316,053	85,187	10,151	1,861	375,018

### Population by Race / Ethnicity, Prostate Cancer Incidence Rate (Per 100,000)

Report Area	White	Black	Asian	American Indian / Alaskan Native	Hispanic / Latino
Hart County, Kentucky	100.08	no data	no data	no data	no data
Kentucky	133	203.20	no data	no data	no data
United States	140.80	228.60	76.90	76.80	124.40

## Community Health Needs Assessment

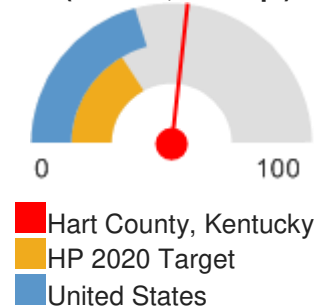


### Stroke Mortality

This indicator reports the rate of death due to cerebrovascular disease (stroke) per 100,000 population. Figures are reported as crude rates, and as rates age-adjusted to year 2000 standard. Rates are resummarized for report areas from county level data, only where data is available. This indicator is relevant because stroke is a leading cause of death in the United States.

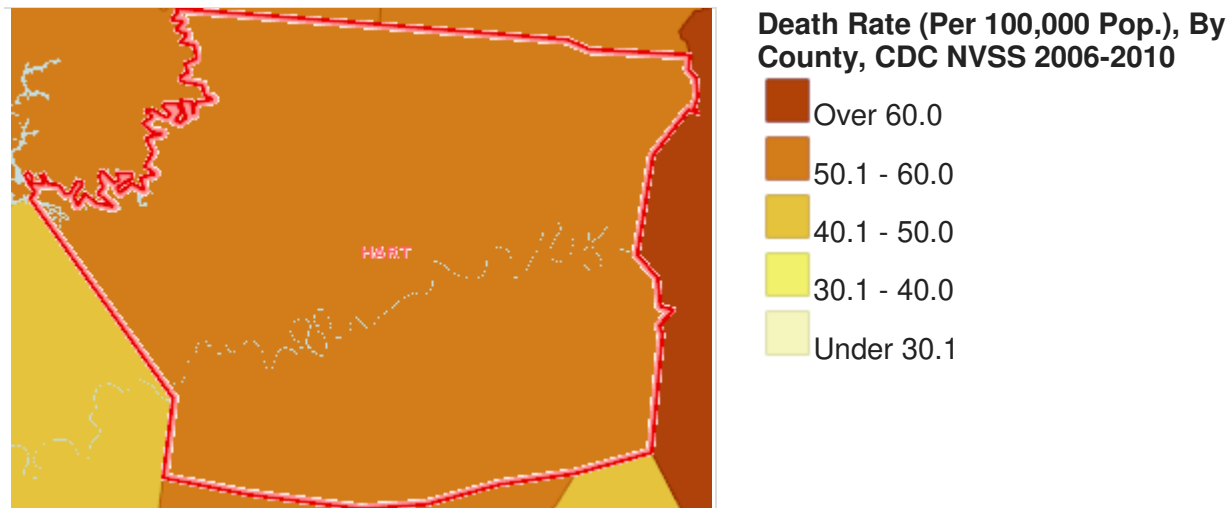
Report Area	Total Population, 2006-2010 Average	Annual Deaths, 2006-2010 Average	Crude Death Rate (Per 100,000 Pop.)	Age-Adjusted Death Rate (Per 100,000 Pop.)
Hart County, Kentucky	18,199	10	53.85	<b>53.79</b>
Kentucky	4,284,446	2,099	48.99	<b>47.93</b>
United States	303,844,430	133,107	43.81	<b>41.78</b>
<u>HP 2020 Target</u>				<b>&lt;= 33.8</b>

Age-Adjusted Death Rate (Per 100,000 Pop.)



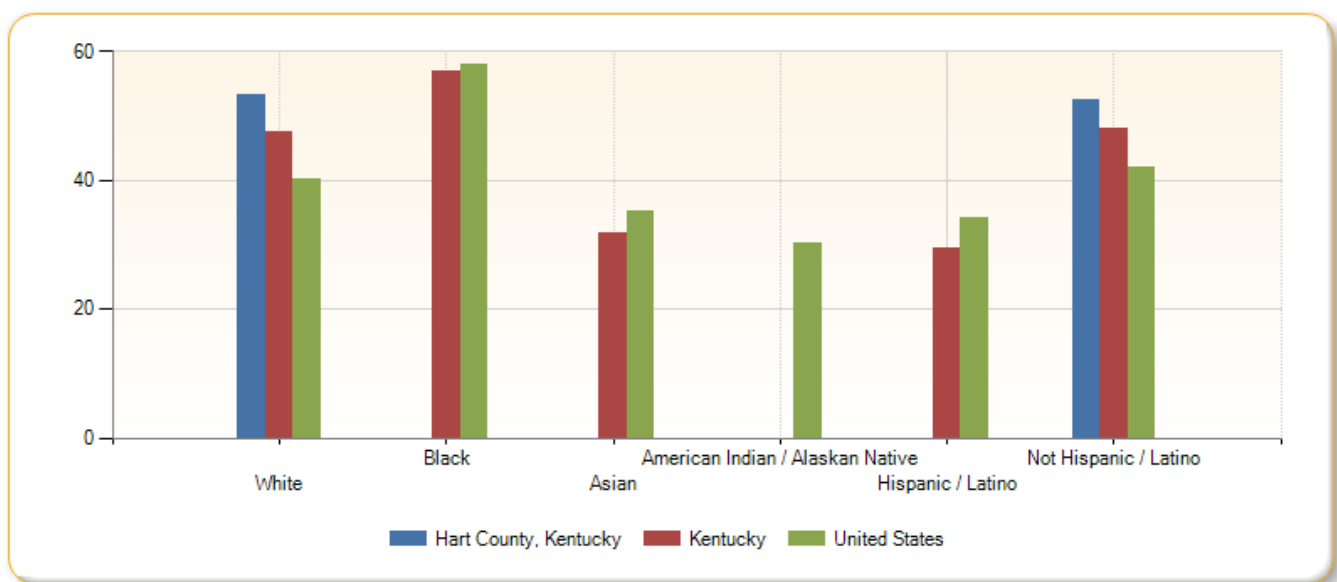
Note: This indicator is compared with the Healthy People 2020 Target.  
 Data Source: [Centers for Disease Control and Prevention, National Center for Health Statistics, Underlying Cause of Death, 2006-2010](#). Accessed through [CDC WONDER](#).  
 Source geography: County.

## Community Health Needs Assessment



Population by Race / Ethnicity, Stroke Mortality, Age-Adjusted Rate (Per 100,000 Pop.)

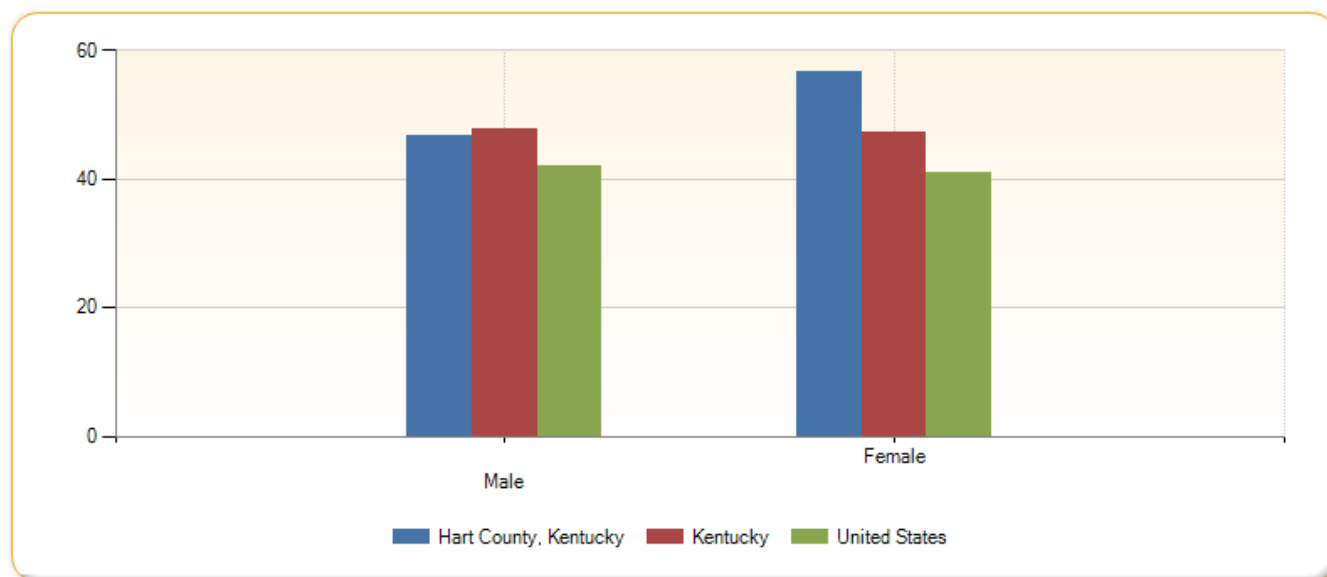
Report Area	White	Black	Asian	American Indian / Alaskan Native	Hispanic / Latino	Not Hispanic / Latino
Hart County, Kentucky	53.29	no data	no data	no data	no data	52.39
Kentucky	47.42	56.85	31.85	no data	29.46	48.02
United States	40.10	57.97	35.27	30.36	34.20	42.14



## Community Health Needs Assessment

### Population by Gender, Stroke Mortality, Age-Adjusted Rate (Per 100,000 Pop.)

Report Area	Male	Female
Hart County, Kentucky	46.62	56.60
Kentucky	47.80	47.25
United States	41.95	40.96

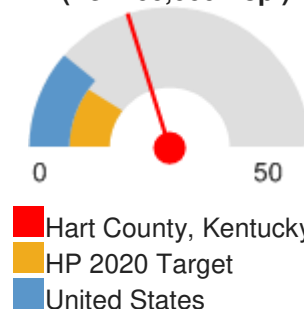


## Suicide

This indicator reports the rate of death due to intentional self-harm (suicide) per 100,000 population. Figures are reported as crude rates, and as rates age-adjusted to year 2000 standard. Rates are resummarized for report areas from county level data, only where data is available. This indicator is relevant because suicide is an indicator of poor mental health.

Report Area	Total Population, 2006-2010 Average	Annual Deaths, 2006-2010 Average	Crude Death Rate (Per 100,000 Pop.)	Age-Adjusted Death Rate (Per 100,000 Pop.)
Hart County, Kentucky	18,199	3	17.58	<b>20.05</b>

Age-Adjusted Death Rate (Per 100,000 Pop.)



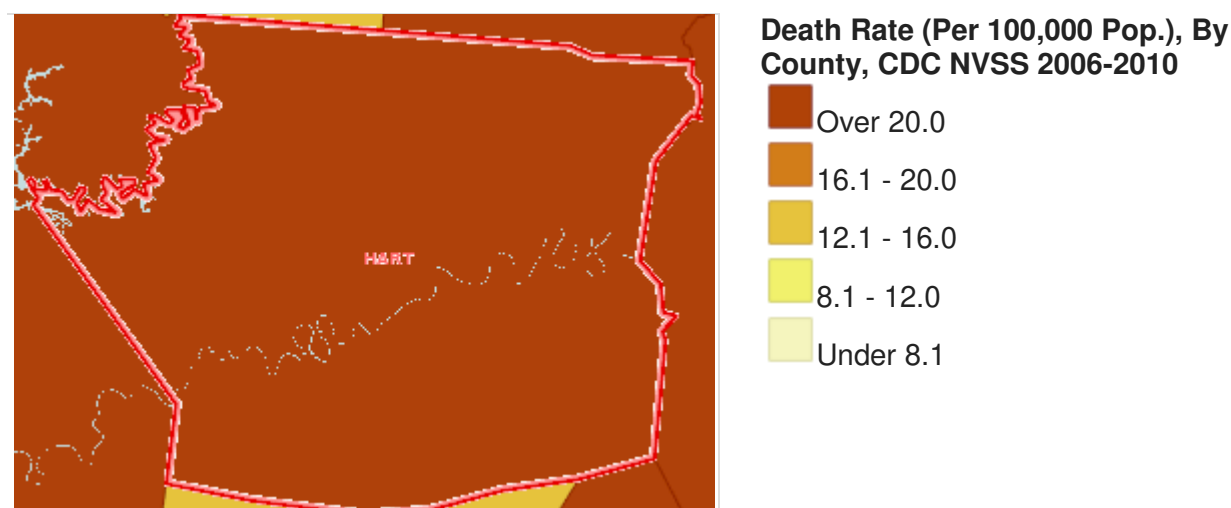
## Community Health Needs Assessment

Kentucky	4,284,446	621	14.50	<b>14.26</b>
United States	303,844,430	35,841	11.80	<b>11.57</b>
<a href="#">HP 2020 Target</a>				<= 10.2

Note: This indicator is compared with the Healthy People 2020 Target.

Data Source: [Centers for Disease Control and Prevention, National Center for Health Statistics, Underlying Cause of Death, 2006-2010](#). Accessed through [CDC WONDER](#).

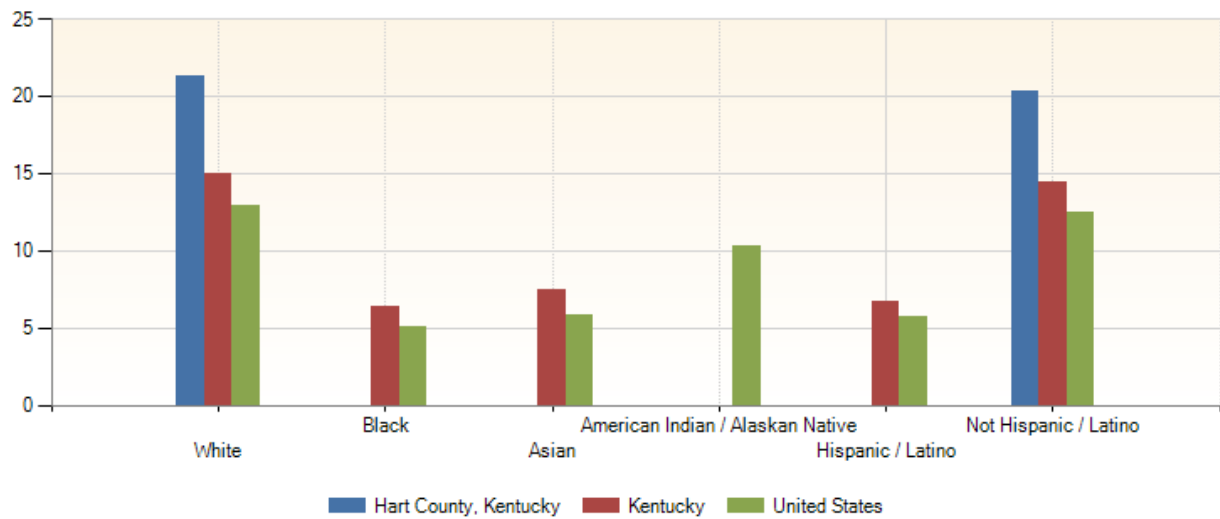
Source geography: County.



Population by Race / Ethnicity, Suicide, Age-Adjusted Rate (Per 100,000 Pop.)

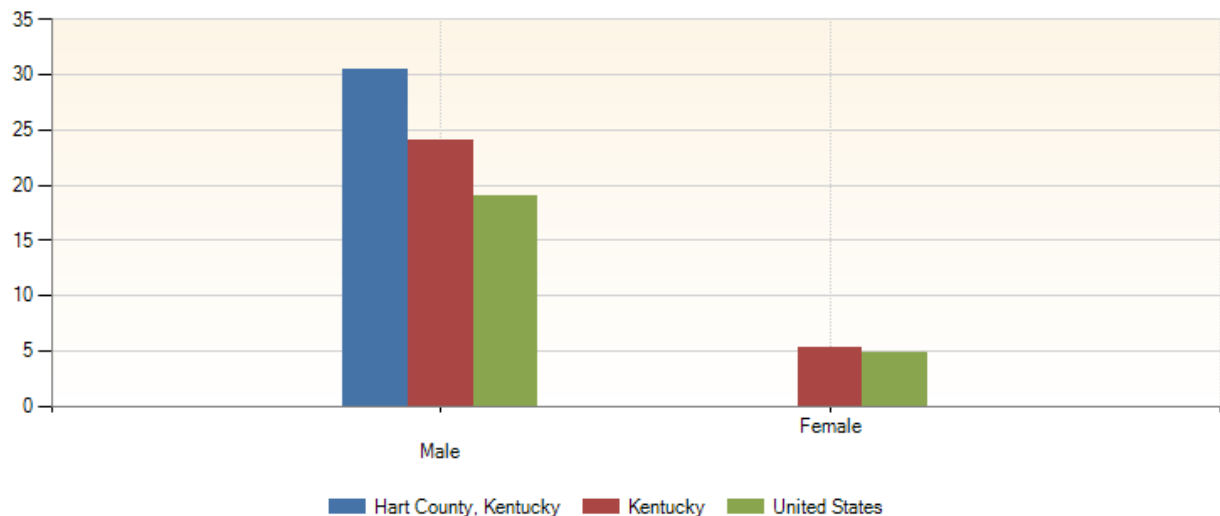
Report Area	White	Black	Asian	American Indian / Alaskan Native	Hispanic / Latino	Not Hispanic / Latino
Hart County, Kentucky	21.28	no data	no data	no data	no data	20.32
Kentucky	15	6.33	7.49	no data	6.70	14.43
United States	12.89	5.11	5.80	10.30	5.71	12.44

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Population by Gender, Suicide Mortality, Age-Adjusted Rate (Per 100,000 Pop.)

Report Area	Male	Female
Hart County, Kentucky	30.49	no data
Kentucky	24.11	5.25
United States	18.96	4.77



### FOOTNOTES

Total Population

# Community Health Needs Assessment

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## Data Background:

The American Community Survey (ACS) is a nationwide, continuous survey designed to provide communities with reliable and timely demographic, housing, social, and economic data. The ACS samples nearly 3 million addresses each year, resulting in nearly 2 million final interviews. The ACS replaces the long-form decennial census; however, the number of household surveys reported annually for the ACS is significantly less than the number reported in the long-form decennial census. As a result, the ACS combines detailed population and housing data from multiple years to produce reliable estimates for small counties, neighborhoods, and other local areas. Negotiating between timeliness and accuracy, the ACS annually releases current, one-year estimates for geographic areas with large populations; three-year, and five-year estimates are also released each year for additional areas based on minimum population thresholds.

Citation: [\*U.S. Census Bureau: A Compass for Understanding and Using American Community Survey Data \(2008\)\*](#).

For more information about this source, including data collection methodology and definitions, refer to the [American Community Survey](#) website.

## Methodology:

Counts for population subgroups and total area population data are acquired from the U.S. Census Bureau's American Community Survey. Data represent estimates for the 5 year period 2006-2010. Data are summarized to 2010 census tract boundaries. Population density is measured as the number of persons per square mile using following formula:

$$\text{Population Density} = [\text{Total Population}] / [\text{Geographic Unit Area (Square Miles)}]$$

Other indicator statistics are measured as a percentage of the total population using the following formula:

$$\text{Percentage} = [\text{Subgroup Population}] / [\text{Total Population}] * 100$$

For more information on the data reported in the American Community Survey, please see the complete [American Community Survey 2010 Subject Definitions](#).

## Notes:

### Race and Ethnicity

Indicator race and ethnicity statistics are generated from self-identified survey responses. Race and ethnicity (Hispanic origin) are collected as two separate categories in the American Community Survey (ACS) based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. Using the OMB standard, the race categories reported in the ACS are: White, Black, American Indian/Alaskan Native, Asian, and Other. An ACS survey respondent may identify as one race alone, or may choose multiple races. Respondents selecting multiple categories are racially identified as "Two or More Races". The minimum ethnicity categories reported are: Hispanic or Latino, and Not Hispanic or Latino. Respondents may only choose one ethnicity. For more information, please review the documentation provided in the CHNA *Data and Indicators* FAQs.

### Data limitations

Beginning in 2006, the population in group quarters (GQ) was included in the ACS. Some types



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of GQ populations have age, gender, race, or ethnicity distributions that are very different from the household population. The inclusion of the GQ population could therefore have a noticeable impact on the population subgroup distribution. This is particularly true for areas with a substantial GQ population (like areas with military bases, colleges, or jails). For more information, please review the documentation provided on pages 46 and 47 of the [American Community Survey 2010 Subject Definitions](#).

## Total Male Population

### **Data Background:**

The American Community Survey (ACS) is a nationwide, continuous survey designed to provide communities with reliable and timely demographic, housing, social, and economic data. The ACS samples nearly 3 million addresses each year, resulting in nearly 2 million final interviews. The ACS replaces the long-form decennial census; however, the number of household surveys reported annually for the ACS is significantly less than the number reported in the long-form decennial census. As a result, the ACS combines detailed population and housing data from multiple years to produce reliable estimates for small counties, neighborhoods, and other local areas. Negotiating between timeliness and accuracy, the ACS annually releases current, one-year estimates for geographic areas with large populations; three-year, and five-year estimates are also released each year for additional areas based on minimum population thresholds.

*Citation: [U.S. Census Bureau: A Compass for Understanding and Using American Community Survey Data \(2008\)](#).*

For more information about this source, including data collection methodology and definitions, refer to the [American Community Survey](#) website.

### **Methodology:**

Population counts for demographic groups and total area population data are acquired from the U.S. Census Bureau's American Community Survey. Data represent estimates for the 5 year period 2006-2010. Data are summarized to 2010 census tract boundaries. Area demographic statistics are measured as a percentage of the total population using the following formula:

$$\text{Percentage} = [\text{Subgroup Population}] / [\text{Total Population}] * 100$$

For more information on the data reported in the American Community Survey, please see the complete [American Community Survey 2010 Subject Definitions](#).

### **Notes:**

#### **Race and Ethnicity**

Indicator race and ethnicity statistics are generated from self-identified survey responses. Race and ethnicity (Hispanic origin) are collected as two separate categories in the American Community Survey (ACS) based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. Using the OMB standard, the race categories reported in the ACS are: White, Black, American Indian/Alaskan Native, Asian, and Other. An ACS survey respondent may identify as one race alone, or may choose multiple races. Respondents selecting multiple categories are racially identified as "Two or More Races". The minimum ethnicity categories reported are: Hispanic or Latino, and Not Hispanic or Latino. Respondents may only choose one ethnicity. For more information, please review the documentation

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provided in the CHNA *Data and Indicators* FAQs.

## **Data limitations**

Beginning in 2006, the population in group quarters (GQ) was included in the ACS. Some types of GQ populations have sex distributions that are very different from the household population. The inclusion of the GQ population could therefore have a noticeable impact on the sex distribution. This is particularly true for areas with a substantial GQ population (like areas with military bases, colleges, or jails). For more information, please review the documentation provided on pages 16 and 17 of the [American Community Survey 2010 Subject Definitions](#).

## Total Female Population

### **Data Background:**

The American Community Survey (ACS) is a nationwide, continuous survey designed to provide communities with reliable and timely demographic, housing, social, and economic data. The ACS samples nearly 3 million addresses each year, resulting in nearly 2 million final interviews. The ACS replaces the long-form decennial census; however, the number of household surveys reported annually for the ACS is significantly less than the number reported in the long-form decennial census. As a result, the ACS combines detailed population and housing data from multiple years to produce reliable estimates for small counties, neighborhoods, and other local areas. Negotiating between timeliness and accuracy, the ACS annually releases current, one-year estimates for geographic areas with large populations; three-year, and five-year estimates are also released each year for additional areas based on minimum population thresholds.

Citation: [U.S. Census Bureau: A Compass for Understanding and Using American Community Survey Data \(2008\)](#).

For more information about this source, including data collection methodology and definitions, refer to the [American Community Survey](#) website.

### **Methodology:**

Population counts for demographic groups and total area population data are acquired from the U.S. Census Bureau's American Community Survey. Data represent estimates for the 5 year period 2006-2010. Data are summarized to 2010 census tract boundaries. Area demographic statistics are measured as a percentage of the total population using the following formula:

$$\text{Percentage} = [\text{Subgroup Population}] / [\text{Total Population}] * 100$$

For more information on the data reported in the American Community Survey, please see the complete [American Community Survey 2010 Subject Definitions](#).

### **Notes:**

#### **Race and Ethnicity**

Indicator race and ethnicity statistics are generated from self-identified survey responses. Race and ethnicity (Hispanic origin) are collected as two separate categories in the American Community Survey (ACS) based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. Using the OMB standard, the race categories reported in the ACS are: White, Black, American Indian/Alaskan Native, Asian, and Other. An ACS survey respondent may identify as one race alone, or may choose multiple races. Respondents

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selecting multiple categories are racially identified as “Two or More Races”. The minimum ethnicity categories reported are: Hispanic or Latino, and Not Hispanic or Latino. Respondents may only choose one ethnicity. For more information, please review the documentation provided in the CHNA *Data and Indicators* FAQs.

## **Data limitations**

Beginning in 2006, the population in group quarters (GQ) was included in the ACS. Some types of GQ populations have sex distributions that are very different from the household population. The inclusion of the GQ population could therefore have a noticeable impact on the sex distribution. This is particularly true for areas with a substantial GQ population (like areas with military bases, colleges, or jails). For more information, please review the documentation provided on pages 16 and 17 of the [American Community Survey 2010 Subject Definitions](#).

## Median Age

### **Data Background:**

The American Community Survey (ACS) is a nationwide, continuous survey designed to provide communities with reliable and timely demographic, housing, social, and economic data. The ACS samples nearly 3 million addresses each year, resulting in nearly 2 million final interviews. The ACS replaces the long-form decennial census; however, the number of household surveys reported annually for the ACS is significantly less than the number reported in the long-form decennial census. As a result, the ACS combines detailed population and housing data from multiple years to produce reliable estimates for small counties, neighborhoods, and other local areas. Negotiating between timeliness and accuracy, the ACS annually releases current, one-year estimates for geographic areas with large populations; three-year, and five-year estimates are also released each year for additional areas based on minimum population thresholds.

Citation: [U.S. Census Bureau: A Compass for Understanding and Using American Community Survey Data \(2008\)](#).

For more information about this source, including data collection methodology and definitions, refer to the [American Community Survey](#) website.

### **Methodology:**

Median age data acquired from the U.S. Census Bureau’s American Community Survey. Data represent estimates for the 5 year period 2006-2010. Data are summarized by the U.S. Census Bureau to 2010 census tract boundaries. Data provided by the census are area estimates; as a median, this indicator cannot be resummarized or recalculated.

For more information on the data reported in the American Community Survey, please see the complete [American Community Survey 2010 Subject Definitions](#).

### **Notes:**

#### **Race and Ethnicity**

Indicator race and ethnicity statistics are generated from self-identified survey responses. Race and ethnicity (Hispanic origin) are collected as two separate categories in the American Community Survey (ACS) based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. Using the OMB standard, the race categories reported in the ACS

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are: White, Black, American Indian/Alaskan Native, Asian, and Other. An ACS survey respondent may identify as one race alone, or may choose multiple races. Respondents selecting multiple categories are racially identified as “Two or More Races”. The minimum ethnicity categories reported are: Hispanic or Latino, and Not Hispanic or Latino. Respondents may only choose one ethnicity. For more information, please review the documentation provided in the CHNA *Data and Indicators* FAQs.

## **Data limitations**

Beginning in 2006, the population in group quarters (GQ) was included in the ACS. Some types of GQ populations have age distributions that are very different from the household population. The inclusion of the GQ population could therefore have a noticeable impact on the age distribution. This is particularly true for areas with a substantial GQ population (like areas with military bases, colleges, or jails). For more information, please review the documentation provided on pages 46 and 47 of the [American Community Survey 2010 Subject Definitions](#).

## Change in Total Population

### **Data Background:**

The United States Census Bureau conducts a decennial census as mandated by the U.S. Constitution. Basic information is collected as a survey from every individual in the country and is presented as a count of the universe population for the United States.

### **Methodology:**

The data is downloaded in text format from the U.S. Census Bureau's FTP site for the years 2000 and 2010. The text documents are then uploaded into a SQL database. The demographics indicators are mapped using population provided for county area (Sum Level 050). Total populations are derived directly from data provided. The rate of population change is calculated using  $\text{Total Population 2010} - \text{Total Population 2000} = \text{Population Change}$ .

## Linguistically Isolated Population

### **Data Background:**

The American Community Survey (ACS) is a nationwide, continuous survey designed to provide communities with reliable and timely demographic, housing, social, and economic data. The ACS samples nearly 3 million addresses each year, resulting in nearly 2 million final interviews. The ACS replaces the long-form decennial census; however, the number of household surveys reported annually for the ACS is significantly less than the number reported in the long-form decennial census. As a result, the ACS combines detailed population and housing data from multiple years to produce reliable estimates for small counties, neighborhoods, and other local areas. Negotiating between timeliness and accuracy, the ACS annually releases current, one-year estimates for geographic areas with large populations; three-year, and five-year estimates are also released each year for additional areas based on minimum population thresholds.

Citation: [U.S. Census Bureau: A Compass for Understanding and Using American Community Survey Data \(2008\)](#).

For more information about this source, including data collection methodology and definitions, refer to the [American Community Survey](#) website.

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## Methodology:

Population counts for socio-economic groups and total area population data are acquired from the U.S. Census Bureau's American Community Survey. Data represent estimates for the 5 year period 2006-2010. Data are summarized to 2010 census tract boundaries. ACS respondents who reported speaking a language

## Notes:

### Race and Ethnicity

Indicator race and ethnicity statistics are generated from self-identified survey responses. Race and ethnicity (Hispanic origin) are collected as two separate categories in the American Community Survey (ACS) based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. Using the OMB standard, the race categories reported in the ACS are: White, Black, American Indian/Alaskan Native, Asian, and Other. An ACS survey respondent may identify as one race alone, or may choose multiple races. Respondents selecting multiple categories are racially identified as "Two or More Races". The minimum ethnicity categories reported are: Hispanic or Latino, and Not Hispanic or Latino. Respondents may only choose one ethnicity. For more information, please review the documentation provided in the CHNA *Data and Indicators* FAQs.

### Data limitations

Ideally, the data on ability to speak English represented a person's perception of their own English-speaking ability. However, because one household member usually completes American Community Survey questionnaires, the responses may have represented the perception of another household member. For more information, please review the documentation provided on pages 45 - 46 of the [American Community Survey 2010 Subject Definitions](#).

## Adequate Social or Emotional Support

### Data Background:

The Behavioral Risk Factor Surveillance System (BRFSS) is "... a collaborative project of the Centers for Disease Control and Prevention (CDC) and U.S. states and territories. The BRFSS, administered and supported by CDC's Behavioral Risk Factor Surveillance Branch, is an ongoing data collection program designed to measure behavioral risk factors for the adult population (18 years of age or older) living in households. The BRFSS was initiated in 1984, with 15 states collecting surveillance data on risk behaviors through monthly telephone interviews. Over time, the number of states participating in the survey increased, so that by 2001, 50 states, the District of Columbia, Puerto Rico, Guam, and the Virgin Islands were participating in the BRFSS."

*Citation: Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services. [Overview: BRFSS 2010](#).*

The health characteristics estimated from the BRFSS pertain to the adult non-institutionalized population (age 18 years or older and living in households) and includes data pertaining to health behaviors, chronic conditions, access and utilization of healthcare, and general health. Surveys are administered to populations at the state level and then delivered to the CDC. BRFSS survey data are analyzed by the CDC's National Center for Health Statistics (NCHS). Annual risk factor prevalence data are released for those geographic areas with 50 or more

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survey results and 10,000 or more total population (50 States, 170 Cities and Counties) in order to maintain the accuracy and confidentiality of the data. Multi-year estimates are produced by the NCHS to expand the coverage of data to approximately 2500 counties. These estimates are maintained in the [Health Indicator Warehouse](#), the official repository of the nation's health data. For more information on the BRFSS survey methods, or to obtain a copy of the 2010 questionnaire, please visit [the Behavioral Risk Factor Surveillance System](#) home page.

## Methodology:

Indicator percentages are acquired for years 2004-2010 from Behavioral Risk Factor Surveillance System (BRFSS) prevalence data, which is housed in the Health Indicator Warehouse. Percentages are generated based on the valid responses to the following question:

*"How often do you get the social and emotional support you need?"*

This indicator represents the percentage of those persons who answered that they receive social/emotional support all or most of the time. Percentages are age-adjusted and only pertain to the non-institutionalized population aged 18 and up. Population numerators (number of adults) are not provided in the Health Indicator Warehouse data tables and were generated using the following formula:

**[Persons with Inadequate Support] = ([Indicator Percentage] / 100) \* [Total Population] .**

Adult population figures used in the data tables are acquired from the American Community Survey (ACS) 2006-2010 five year estimates. Additional detailed information about the BRFSS, including questionnaires, data collection procedures, and [data processing methodologies](#) are available on the BRFSS web site. For additional information about the multi-year estimates, please visit the [Health Indicator Warehouse](#).

## Children Eligible for Free/Reduced Price Lunch

### Data Background:

The National Center for Education Statistics (NCES) is the primary federal entity for collecting, analyzing, and reporting data related to education in the United States and other nations. It fulfills a congressional mandate to collect, collate, analyze, and report full and complete statistics on the condition of education in the United States; conduct and publish reports and specialized analyses of the meaning and significance of such statistics; assist state and local education agencies in improving their statistical systems; and review and report on education activities in foreign countries.

Citation: [Documentation to the NCES Common Core of Data Public Elementary/Secondary School Universe Survey \(2011\).](#)

The National Center for Education Statistics produces annually the Public School Universe Survey from the Common Core of Data (CCD). The data are supplied by state education agency officials and include information that describes schools and school districts, including name, address, and phone number; descriptive information about students and staff, including demographics; and fiscal data, including revenues and current expenditures.

Citation: [National Center for Education Statistics, Common Core of Data \(CCD\). \(2011\).](#)

### Methodology:



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Total student counts and counts for students eligible for free and reduced price lunches are acquired for the school year 2009-2010 from the NCES Common Core of Data Public School Universe Survey. Percent student eligibility is calculated using the following formula: :

$$\text{Percentage} = [\text{Eligible Students}] / [\text{Total Student Enrollment}] * 100.$$

Point locations for schools are obtained by selecting the local address for each school in the public school universe file. Addresses are loaded into the Google Geocoding API service, which matches each record to a known address, and returns the corresponding point location coordinates.

## Children in Poverty

### **Data Background:**

The American Community Survey (ACS) is a nationwide, continuous survey designed to provide communities with reliable and timely demographic, housing, social, and economic data. The ACS samples nearly 3 million addresses each year, resulting in nearly 2 million final interviews. The ACS replaces the long-form decennial census; however, the number of household surveys reported annually for the ACS is significantly less than the number reported in the long-form decennial census. As a result, the ACS combines detailed population and housing data from multiple years to produce reliable estimates for small counties, neighborhoods, and other local areas. Negotiating between timeliness and accuracy, the ACS annually releases current, one-year estimates for geographic areas with large populations; three-year, and five-year estimates are also released each year for additional areas based on minimum population thresholds.

*Citation: [U.S. Census Bureau: A Compass for Understanding and Using American Community Survey Data \(2008\)](#).*

For more information about this source, including data collection methodology and definitions, refer to the [American Community Survey](#) website.

### **Methodology:**

Population counts for socio-economic groups and total area population data are acquired from the U.S. Census Bureau's American Community Survey. Data represent estimates for the 5 year period 2006-2010. Data are summarized to 2010 census tract boundaries. The ACS determines poverty status by comparing a person's total family income (within the 12 months prior to the survey) with the [poverty threshold](#) for that person's family size and composition. Specified poverty levels are obtained by multiplying the official thresholds by a specific factor. Poverty statistics are measured as a percentage of the total non-institutionalized population using the following formula:

$$\text{Percentage} = [\text{Subgroup Population}] / [\text{Total Population}] * 100$$

Poverty status was determined for all people except institutionalized people, people in military group quarters, people in college dormitories, and unrelated individuals under 15 years old. These groups were excluded from the numerator and denominator when calculating poverty rates. For more information on the data reported in the American Community Survey, please see the complete [American Community Survey 2010 Subject Definitions](#).

### **Notes:**

# Community Health Needs Assessment

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## **Race and Ethnicity**

Indicator race and ethnicity statistics are generated from self-identified survey responses. Race and ethnicity (Hispanic origin) are collected as two separate categories in the American Community Survey (ACS) based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. Using the OMB standard, the race categories reported in the ACS are: White, Black, American Indian/Alaskan Native, Asian, and Other. An ACS survey respondent may identify as one race alone, or may choose multiple races. Respondents selecting multiple categories are racially identified as “Two or More Races”. The minimum ethnicity categories reported are: Hispanic or Latino, and Not Hispanic or Latino. Respondents may only choose one ethnicity. For more information, please review the documentation provided in the CHNA *Data and Indicators* FAQs.

## **Data limitations**

Beginning in 2006, the population in group quarters (GQ) is included in the ACS. The part of the group quarters population in the poverty universe (for example, people living in group homes or those living in agriculture workers’ dormitories) is many times more likely to be in poverty than people living in households. Direct comparisons of the data would likely result in erroneous conclusions about changes in the poverty status of all people in the poverty universe. For more information, please review the documentation provided on pages 102 - 104 of the [American Community Survey 2010 Subject Definitions](#).

## High School Graduation Rate

### **Data Background:**

The County Health Rankings (CHR) is a data service of the [University of Wisconsin Population Health Institute](#) which measures the health of nearly all counties in the nation and ranks them within states. CHR has been published for the nation's counties annually since 2010, expanding on similar work specific to Wisconsin since 2003. Rankings are compiled using county-level measures from a variety of national and state data sources. These measures are standardized and combined using scientifically-informed weights. County Health Rankings is a free public service, providing their wealth of their rankings and source data to the public for download. For more information and to explore the original data, please visit the [County Health Rankings](#) website.

### **Methodology:**

Graduation rates are acquired for all US counties from the 2012 County Health Rankings (CHR). The 2011 County Health Rankings (CHR) used graduation rates calculated from the National Center for Education Statistics (NCES) using an estimated cohort. This measure is generally known as the Averaged Freshman Graduation Rate (AFGR). Starting in 2012, CHR reports cohort graduation rates collected from State Department of Education websites. These rates are an improvement over the AFGR rates previously reported due to student-level outcomes tracking that accounts better for transfers, early and late completers. For 12 states, CHR continues to use NCES-based AFGRs. These states are: AL, AK, AR, CT, HI, ID, MT, NJ, ND, OK, SD and TN.

Total freshmen cohorts were compiled for all counties from school-level data, provided by NCES for academic years 2005-06 through 2007-08. Using the graduation rates from the 2012 CHR and these class sizes, the number of graduates\* was estimated for each county. On-time



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graduation rate, or average freshman graduation rate, is re-calculated for unique service areas and aggregated county groupings using the following formula:

**Graduation Rate = [Estimated Number of Graduates] / [Average Base Freshman Enrollment] \* 100.**

\*Average freshman graduation rate is a measure of on-time graduation only. It does not include 5th year high school completers, or high-school equivalency completers such as GED recipients. For more information on average freshman graduation rates, please review the information on page 4 of the [NCES Common Core of Data Public-Use Local Education Agency Dropout and Completion Data File](#)

## Notes:

1. Data is collected from individual state departments of education, which may use different methods for assessing high school dropouts and completers. Comparison of data across states is not advised.
2. Data is summarized to counties based on school location, and not attendance zones. For example, data for all students attending a school in county X are assigned to county X, even if they reside in county Y.

## Population Below 200% of Poverty Level

### Data Background:

The American Community Survey (ACS) is a nationwide, continuous survey designed to provide communities with reliable and timely demographic, housing, social, and economic data. The ACS samples nearly 3 million addresses each year, resulting in nearly 2 million final interviews. The ACS replaces the long-form decennial census; however, the number of household surveys reported annually for the ACS is significantly less than the number reported in the long-form decennial census. As a result, the ACS combines detailed population and housing data from multiple years to produce reliable estimates for small counties, neighborhoods, and other local areas. Negotiating between timeliness and accuracy, the ACS annually releases current, one-year estimates for geographic areas with large populations; three-year, and five-year estimates are also released each year for additional areas based on minimum population thresholds.

Citation: [U.S. Census Bureau: A Compass for Understanding and Using American Community Survey Data \(2008\)](#).

For more information about this source, including data collection methodology and definitions, refer to the [American Community Survey](#) website.

### Methodology:

Population counts for socio-economic groups and total area population data are acquired from the U.S. Census Bureau's American Community Survey. Data represent estimates for the 5 year period 2006-2010. Data are summarized to 2010 census tract boundaries. The ACS determines poverty status by comparing a person's total family income (within the 12 months prior to the survey) with the [poverty threshold](#) for that person's family size and composition. Specified poverty levels are obtained by multiplying the official thresholds by a specific factor. Poverty statistics are measured as a percentage of the total non-institutionalized population using the following formula:

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$$\text{Percentage} = [\text{Subgroup Population}] / [\text{Total Population}] * 100$$

Poverty status was determined for all people except institutionalized people, people in military group quarters, people in college dormitories, and unrelated individuals under 15 years old. These groups were excluded from the numerator and denominator when calculating poverty rates. For more information on the data reported in the American Community Survey, please see the complete [American Community Survey 2010 Subject Definitions](#).

## Notes:

### Race and Ethnicity

Indicator race and ethnicity statistics are generated from self-identified survey responses. Race and ethnicity (Hispanic origin) are collected as two separate categories in the American Community Survey (ACS) based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. Using the OMB standard, the race categories reported in the ACS are: White, Black, American Indian/Alaskan Native, Asian, and Other. An ACS survey respondent may identify as one race alone, or may choose multiple races. Respondents selecting multiple categories are racially identified as "Two or More Races". The minimum ethnicity categories reported are: Hispanic or Latino, and Not Hispanic or Latino. Respondents may only choose one ethnicity. For more information, please review the documentation provided in the CHNA *Data and Indicators* FAQs.

### Data limitations

Beginning in 2006, the population in group quarters (GQ) is included in the ACS. The part of the group quarters population in the poverty universe (for example, people living in group homes or those living in agriculture workers' dormitories) is many times more likely to be in poverty than people living in households. Direct comparisons of the data would likely result in erroneous conclusions about changes in the poverty status of all people in the poverty universe. For more information, please review the documentation provided on pages 102 - 104 of the [American Community Survey 2010 Subject Definitions](#).

## Population Receiving Medicaid

### Data Background:

The American Community Survey (ACS) is a nationwide, continuous survey designed to provide communities with reliable and timely demographic, housing, social, and economic data. The ACS samples nearly 3 million addresses each year, resulting in nearly 2 million final interviews. The ACS replaces the long-form decennial census; however, the number of household surveys reported annually for the ACS is significantly less than the number reported in the long-form decennial census. As a result, the ACS combines detailed population and housing data from multiple years to produce reliable estimates for small counties, neighborhoods, and other local areas. Negotiating between timeliness and accuracy, the ACS annually releases current, one-year estimates for geographic areas with large populations; three-year, and five-year estimates are also released each year for additional areas based on minimum population thresholds.

Citation: [U.S. Census Bureau: A Compass for Understanding and Using American Community Survey Data \(2008\)](#).

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For more information about this source, including data collection methodology and definitions, refer to the [American Community Survey](#) website.

## Methodology:

Population counts for socio-economic groups and total area population data are acquired from the U.S. Census Bureau's American Community Survey. Data represent estimates for the 5 year period 2006-2010. Data are summarized to 2010 census tract boundaries. Health insurance coverage status is classified in the ACS according to yes/no responses to questions (16a - 16h) representing eight categories of health insurance, including: Employer-based, Directly-purchased, Medicare, Medicaid/Medical Assistance, TRICARE, VA health care, Indian Health Service, and Other. An eligibility edit was applied to give Medicaid, Medicare, and TRICARE coverage to individuals based on program eligibility rules. People were considered insured if they reported at least one "yes" to Questions 16a - 16f. Indicator statistics are measured as a percentage of the total population using the following formula:

$$\text{Percentage} = [\text{Subgroup Population}] / [\text{Total Population}] * 100$$

For more information on the data reported in the American Community Survey, please see the complete [American Community Survey 2010 Subject Definitions](#).

## Notes:

### Race and Ethnicity

Indicator race and ethnicity statistics are generated from self-identified survey responses. Race and ethnicity (Hispanic origin) are collected as two separate categories in the American Community Survey (ACS) based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. Using the OMB standard, the race categories reported in the ACS are: White, Black, American Indian/Alaskan Native, Asian, and Other. An ACS survey respondent may identify as one race alone, or may choose multiple races. Respondents selecting multiple categories are racially identified as "Two or More Races". The minimum ethnicity categories reported are: Hispanic or Latino, and Not Hispanic or Latino. Respondents may only choose one ethnicity. For more information, please review the documentation provided in the CHNA *Data and Indicators* FAQs.

### Data limitations

The universe for most health insurance coverage estimates is the civilian noninstitutionalized population, which excludes active-duty military personnel and the population living in correctional facilities and nursing homes. Some noninstitutionalized GQ populations have health insurance coverage distributions that are different from the household population (e.g., the prevalence of private health insurance among residents of college dormitories is higher than the household population). The proportion of the universe that is in the noninstitutionalized GQ populations could therefore have a noticeable impact on estimates of the health insurance coverage. Institutionalized GQ populations may also have health insurance coverage distributions that are different from the civilian noninstitutionalized population, the distributions in the published tables may differ slightly from how they would look if the total population were represented.

### Comparability

Health insurance coverage was added to the 2008 ACS and so no equivalent measure is

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available from previous ACS surveys or Census 2000. Health insurance estimates for geographies with less than 100,000 population will not be available until the 2012 ACS release, after 5-years of data have been collected on the subject. For more information, please review the documentation provided on pages 68 - 70 of the [American Community Survey 2010 Subject Definitions](#).

## Population with No High School Diploma

### **Data Background:**

The American Community Survey (ACS) is a nationwide, continuous survey designed to provide communities with reliable and timely demographic, housing, social, and economic data. The ACS samples nearly 3 million addresses each year, resulting in nearly 2 million final interviews. The ACS replaces the long-form decennial census; however, the number of household surveys reported annually for the ACS is significantly less than the number reported in the long-form decennial census. As a result, the ACS combines detailed population and housing data from multiple years to produce reliable estimates for small counties, neighborhoods, and other local areas. Negotiating between timeliness and accuracy, the ACS annually releases current, one-year estimates for geographic areas with large populations; three-year, and five-year estimates are also released each year for additional areas based on minimum population thresholds.

*Citation: [U.S. Census Bureau: A Compass for Understanding and Using American Community Survey Data \(2008\)](#).*

For more information about this source, including data collection methodology and definitions, refer to the [American Community Survey](#) website.

### **Methodology:**

Population counts for socio-economic groups and total area population data are acquired from the U.S. Census Bureau's American Community Survey. Data represent estimates for the 5 year period 2006-2010. Data are summarized to 2010 census tract boundaries. Educational attainment is classified in the ACS according to the highest degree earned or the highest level of school completed. Persons age 25 and older who were neither high school graduates nor recipients of high school equivalency diplomas (like the GED) are included in the population subgroup. Indicator statistics are measured as a percentage of the total population using the following formula:

$$\text{Percentage} = [\text{Subgroup Population}] / [\text{Total Population}] * 100$$

For more information on the data reported in the American Community Survey, please see the complete [American Community Survey 2010 Subject Definitions](#).

### **Notes:**

#### **Race and Ethnicity**

Indicator race and ethnicity statistics are generated from self-identified survey responses. Race and ethnicity (Hispanic origin) are collected as two separate categories in the American Community Survey (ACS) based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. Using the OMB standard, the race categories reported in the ACS are: White, Black, American Indian/Alaskan Native, Asian, and Other. An ACS survey respondent may identify as one race alone, or may choose multiple races. Respondents

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selecting multiple categories are racially identified as “Two or More Races”. The minimum ethnicity categories reported are: Hispanic or Latino, and Not Hispanic or Latino. Respondents may only choose one ethnicity. For more information, please review the documentation provided in the CHNA *Data and Indicators* FAQs.

## **Data limitations**

Beginning in 2006, the population in group quarters (GQ) is included in the ACS. Some types of GQ populations may have educational attainment distributions that are different from the household population. The inclusion of the GQ population could therefore have a noticeable impact on the educational attainment distribution. This is particularly true for areas with a substantial GQ population. For more information, please review the documentation provided on pages 59 - 61 of the [American Community Survey 2010 Subject Definitions](#).

## Poverty Rate (< 100% FPL)

### **Data Background:**

The American Community Survey (ACS) is a nationwide, continuous survey designed to provide communities with reliable and timely demographic, housing, social, and economic data. The ACS samples nearly 3 million addresses each year, resulting in nearly 2 million final interviews. The ACS replaces the long-form decennial census; however, the number of household surveys reported annually for the ACS is significantly less than the number reported in the long-form decennial census. As a result, the ACS combines detailed population and housing data from multiple years to produce reliable estimates for small counties, neighborhoods, and other local areas. Negotiating between timeliness and accuracy, the ACS annually releases current, one-year estimates for geographic areas with large populations; three-year, and five-year estimates are also released each year for additional areas based on minimum population thresholds.

Citation: [U.S. Census Bureau: A Compass for Understanding and Using American Community Survey Data \(2008\)](#).

For more information about this source, including data collection methodology and definitions, refer to the [American Community Survey](#) website.

### **Methodology:**

Population counts for socio-economic groups and total area population data are acquired from the U.S. Census Bureau’s American Community Survey. Data represent estimates for the 5 year period 2006-2010. Data are summarized to 2010 census tract boundaries. The ACS determines poverty status by comparing a person’s total family income (within the 12 months prior to the survey) with the [poverty threshold](#) for that person’s family size and composition. Specified poverty levels are obtained by multiplying the official thresholds by a specific factor. Poverty statistics are measured as a percentage of the total non-institutionalized population using the following formula:

$$\text{Percentage} = [\text{Subgroup Population}] / [\text{Total Population}] * 100$$

Poverty status was determined for all people except institutionalized people, people in military group quarters, people in college dormitories, and unrelated individuals under 15 years old. These groups were excluded from the numerator and denominator when calculating poverty

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rates. For more information on the data reported in the American Community Survey, please see the complete [American Community Survey 2010 Subject Definitions](#).

## Notes:

### **Race and Ethnicity**

Indicator race and ethnicity statistics are generated from self-identified survey responses. Race and ethnicity (Hispanic origin) are collected as two separate categories in the American Community Survey (ACS) based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. Using the OMB standard, the race categories reported in the ACS are: White, Black, American Indian/Alaskan Native, Asian, and Other. An ACS survey respondent may identify as one race alone, or may choose multiple races. Respondents selecting multiple categories are racially identified as “Two or More Races”. The minimum ethnicity categories reported are: Hispanic or Latino, and Not Hispanic or Latino. Respondents may only choose one ethnicity. For more information, please review the documentation provided in the CHNA *Data and Indicators* FAQs.

### **Data limitations**

Beginning in 2006, the population in group quarters (GQ) is included in the ACS. The part of the group quarters population in the poverty universe (for example, people living in group homes or those living in agriculture workers’ dormitories) is many times more likely to be in poverty than people living in households. Direct comparisons of the data would likely result in erroneous conclusions about changes in the poverty status of all people in the poverty universe. For more information, please review the documentation provided on pages 102 - 104 of the [American Community Survey 2010 Subject Definitions](#).

## Supplemental Nutrition Assistance Program (SNAP) Recipients

### **Data Background:**

The U.S. Census Bureau's Small Area Income and Poverty Estimates (SAIPE) provides estimates at the state, county, and school district level of income and poverty statistics for the administration of federal programs. This data is modeled using estimates of income or poverty from the Annual Social and Economic Supplement (ASEC) to the Current Population Survey (CPS).

### **Methodology:**

The data on SNAP recipients is downloaded from the U.S. Census Bureau's SAIPE website and is uploaded into the SQL environment. The number of SNAP recipients and the percentage are taken directly from the data. The total population for each county is calculated as:  $\text{Total Recipients} / (\text{Percent} / 100) = \text{Estimated Total Populations}$ .

## Teen Births

### **Data Background:**

The Division of Vital Statistics is a branch of the Centers for Disease Control and Prevention (CDC) National Center for Health Statistics (NCHS) responsible for maintaining birth and death records for the nation. Data are compiled for the National Vital Statistics System (NVSS) through a joint effort between the NCHS and various state and local health agencies, who are responsible for registering vital events – births, deaths, marriages, divorces, and fetal deaths. In



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some states, additional information is recorded about each birth. This information includes child's gender and birth weight; mother's race, ethnicity and age; mother's education; gestation period; prenatal care, and more. Vital statistics are analyzed and released annually in various data warehouses, including [CDC WONDER](#), [VitalStats](#), and the [Health Indicator Warehouse](#).

The [Health Indicator Warehouse](#) is the official repository of the nation's health data, providing public access to the information resources of the Centers for Disease Control and Prevention (CDC), the Environmental Protection Agency (EPA), the Health Resources and Services Administration (HRSA), and others.

## **Methodology:**

Counts for this indicator represent the annual average births over the 7-year period 2003-2009. Original data was tabulated by the CDC based on information reported on each birth certificate. Rates represent the number of births per 1,000 female population based on the following formula:

$$\text{Rate} = [\text{Births to Mothers Age 15-19}] / [\text{Female Population Age 15-19}] * 1,000$$

Data was acquired from the Health Indicators Warehouse. For more information about this source, including data inclusion requirements and subject definitions, please visit the [Health Indicator Warehouse indicator page](#) or refer to the NVSS [natality public use file documentation](#).

## Unemployment Rate

### **Data Background:**

The United States Department of Labor, Bureau of Labor Statistics (BLS) tracks unemployment information monthly for the U.S. government. The BLS releases a report on the total labor force, employed, and unemployed each month for the nation, states, and local geographic entities.

### **Methodology:**

The data is downloaded in text format from the Bureau of Labor Statistics' website. The text document is then uploaded into a SQL database. The unemployment indicator is mapped using population provided at the county level. Unemployed population, labor force, and rate are derived directly from data provided except where rates are calculated for combining geographies. Rates are then calculated using the formula: Total Unemployed / Total Labor Force \* 100 = Unemployment Rate.

## Uninsured Population

### **Data Background:**

The American Community Survey (ACS) is a nationwide, continuous survey designed to provide communities with reliable and timely demographic, housing, social, and economic data. The ACS samples nearly 3 million addresses each year, resulting in nearly 2 million final interviews. The ACS replaces the long-form decennial census; however, the number of household surveys reported annually for the ACS is significantly less than the number reported in the long-form decennial census. As a result, the ACS combines detailed population and housing data from multiple years to produce reliable estimates for small counties, neighborhoods, and other local areas. Negotiating between timeliness and accuracy, the ACS

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annually releases current, one-year estimates for geographic areas with large populations; three-year, and five-year estimates are also released each year for additional areas based on minimum population thresholds.

Citation: [\*U.S. Census Bureau: A Compass for Understanding and Using American Community Survey Data \(2008\)\*](#).

For more information about this source, including data collection methodology and definitions, refer to the [American Community Survey](#) website.

## Methodology:

Population counts for socio-economic groups and total area population data are acquired from the U.S. Census Bureau's American Community Survey. Data represent estimates for the 5 year period 2006-2010. Data are summarized to 2010 census tract boundaries. Health insurance coverage status is classified in the ACS according to yes/no responses to questions (16a - 16h) representing eight categories of health insurance, including: Employer-based, Directly-purchased, Medicare, Medicaid/Medical Assistance, TRICARE, VA health care, Indian Health Service, and Other. An eligibility edit was applied to give Medicaid, Medicare, and TRICARE coverage to individuals based on program eligibility rules. People were considered insured if they reported at least one "yes" to Questions 16a - 16f. Indicator statistics are measured as a percentage of the total population using the following formula:

$$\text{Percentage} = [\text{Subgroup Population}] / [\text{Total Population}] * 100$$

For more information on the data reported in the American Community Survey, please see the complete [American Community Survey 2010 Subject Definitions](#).

## Notes:

### Race and Ethnicity

Indicator race and ethnicity statistics are generated from self-identified survey responses. Race and ethnicity (Hispanic origin) are collected as two separate categories in the American Community Survey (ACS) based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. Using the OMB standard, the race categories reported in the ACS are: White, Black, American Indian/Alaskan Native, Asian, and Other. An ACS survey respondent may identify as one race alone, or may choose multiple races. Respondents selecting multiple categories are racially identified as "Two or More Races". The minimum ethnicity categories reported are: Hispanic or Latino, and Not Hispanic or Latino. Respondents may only choose one ethnicity. For more information, please review the documentation provided in the CHNA *Data and Indicators* FAQs.

### Data limitations

The universe for most health insurance coverage estimates is the civilian noninstitutionalized population, which excludes active-duty military personnel and the population living in correctional facilities and nursing homes. Some noninstitutionalized GQ populations have health insurance coverage distributions that are different from the household population (e.g., the prevalence of private health insurance among residents of college dormitories is higher than the household population). The proportion of the universe that is in the noninstitutionalized GQ populations could therefore have a noticeable impact on estimates of the health insurance coverage. Institutionalized GQ populations may also have health insurance coverage



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distributions that are different from the civilian noninstitutionalized population, the distributions in the published tables may differ slightly from how they would look if the total population were represented.

## Comparability

Health insurance coverage was added to the 2008 ACS and so no equivalent measure is available from previous ACS surveys or Census 2000. Health insurance estimates for geographies with less than 100,000 population will not be available until the 2012 ACS release, after 5-years of data have been collected on the subject. For more information, please review the documentation provided on pages 68 - 70 of the [American Community Survey 2010 Subject Definitions](#).

## Fast Food Restaurant Access

### Data Background:

County Business Patterns (CBP) is an annual series that provides sub-national economic data by industry. Data for establishments are presented by geographic area, 6-digit NAICS industry, legal form of organization (U.S. and state only), and employment size class. Information is available on the number of establishments, employment during the week of March 12, first quarter payroll, and annual payroll. ZIP Code Business Patterns data are available shortly after the release of County Business Patterns. It provides the number of establishments by employment-size classes by detailed industry in the U.S.

County Business Patterns basic data items are extracted from the Business Register (BR), a database of all known single and multi-establishment employer companies maintained and updated by the U.S. Census Bureau. The BR contains the most complete, current, and consistent data for business establishments. The annual Company Organization Survey provides individual establishment data for multi-establishment companies. Data for single-establishment companies are obtained from various Census Bureau programs, such as the Economic Census, Annual Survey of Manufactures and Current Business Surveys, as well as from administrative record sources.

*Citation: [U.S. Census Bureau: County Business Patterns \(2012\)](#).*

For more information about this source, including data collection methodology and definitions, refer to the [County Business Patterns](#) website.

### Methodology:

Industry counts for fast food restaurants\* (NAICS code 722211) are acquired from the U.S. Census Bureau, County Business Patterns (2010) data file. Population figures are acquired from the U.S. Census Bureau, 2010 Decennial Census, Summary File 1. Establishment rates for each county are derived using the following formula:

$$\text{Rate} = [\text{Establishment Count}] / [\text{Population}] * 100,000$$

*\*Fast food restaurants as defined by NAICS code 722211 are any "limited service" establishments where the customer typically orders or selects items and pay before eating. Establishments may include carryout restaurants, delicatessens, drive-ins, pizza delivery shops, sandwich shops, and other fast food restaurants.*

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A complete list of NAICS codes and definitions is available using the NAICS Association's [free lookup service](#).

## Grocery Store Access

### **Data Background:**

County Business Patterns (CBP) is an annual series that provides sub-national economic data by industry. Data for establishments are presented by geographic area, 6-digit NAICS industry, legal form of organization (U.S. and state only), and employment size class. Information is available on the number of establishments, employment during the week of March 12, first quarter payroll, and annual payroll. ZIP Code Business Patterns data are available shortly after the release of County Business Patterns. It provides the number of establishments by employment-size classes by detailed industry in the U.S.

County Business Patterns basic data items are extracted from the Business Register (BR), a database of all known single and multi-establishment employer companies maintained and updated by the U.S. Census Bureau. The BR contains the most complete, current, and consistent data for business establishments. The annual Company Organization Survey provides individual establishment data for multi-establishment companies. Data for single-establishment companies are obtained from various Census Bureau programs, such as the Economic Census, Annual Survey of Manufactures and Current Business Surveys, as well as from administrative record sources.

*Citation: [U.S. Census Bureau: County Business Patterns \(2012\)](#).*

For more information about this source, including data collection methodology and definitions, refer to the [County Business Patterns](#) website.

### **Methodology:**

Industry counts for grocery stores\* (NAICS codes 445110 and 445230) are acquired from the U.S. Census Bureau, County Business Patterns (2010) data file. Population figures are acquired from the U.S. Census Bureau, 2010 Decennial Census, Summary File 1. Establishment rates for each county are derived using the following formula:

$$\text{Rate} = [\text{Establishment Count}] / [\text{Population}] * 100,000$$

*\*Grocery stores as defined by NAICS codes 445110 are establishments engaged in selling a "general line of food, such as canned and frozen foods; fresh fruits and vegetables; and fresh and prepared meats, fish, and poultry". Examples include supermarkets, commissaries and food stores. Convenience stores are excluded. Fruit and vegetable grocers as defined by NAICS Code 445230 are those locations "primarily engaged in retailing fresh fruits and vegetables". Examples include permanent produce stands and fruit or vegetable markets.*

A complete list of NAICS codes and definitions is available using the NAICS Association's [free lookup service](#).

## Liquor Store Access

### **Data Background:**

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County Business Patterns (CBP) is an annual series that provides sub-national economic data by industry. Data for establishments are presented by geographic area, 6-digit NAICS industry, legal form of organization (U.S. and state only), and employment size class. Information is available on the number of establishments, employment during the week of March 12, first quarter payroll, and annual payroll. ZIP Code Business Patterns data are available shortly after the release of County Business Patterns. It provides the number of establishments by employment-size classes by detailed industry in the U.S.

County Business Patterns basic data items are extracted from the Business Register (BR), a database of all known single and multi-establishment employer companies maintained and updated by the U.S. Census Bureau. The BR contains the most complete, current, and consistent data for business establishments. The annual Company Organization Survey provides individual establishment data for multi-establishment companies. Data for single-establishment companies are obtained from various Census Bureau programs, such as the Economic Census, Annual Survey of Manufactures and Current Business Surveys, as well as from administrative record sources.

Citation: [\*U.S. Census Bureau: County Business Patterns \(2012\).\*](#)

For more information about this source, including data collection methodology and definitions, refer to the [County Business Patterns](#) website.

## Methodology:

Industry counts for alcoholic beverage retailers\* (NAICS code 445310) are acquired from the U.S. Census Bureau, County Business Patterns (2010) data file. Population figures are acquired from the U.S. Census Bureau, 2010 Decennial Census, Summary File 1. Establishment rates for each county are derived using the following formula:

$$\text{Rate} = [\text{Establishment Count}] / [\text{Population}] * 100,000$$

*\*Alcoholic beverage retailers as defined by NAICS code 445310 are establishments engaged in "retailing packaged alcoholic beverages, such as ale, beer, wine, and liquor". Bars and other venues serving alcoholic beverages intended for immediate consumption on the premises are not included.*

A complete list of NAICS codes and definitions is available using the NAICS Association's [free lookup service](#).

## Notes:

1. State laws regarding the retail sale of alcoholic beverages vary. Use caution when comparing data across States.

## Poor Air Quality (Ozone)

### Data Background:

The Centers for Disease Control and Prevention (CDC) provide access to data about the characteristics of the physical environment pertinent to population health through the [National Environmental Public Health Tracking Network](#). The Tracking Network is part of CDC's National Environmental Public Health Tracking Program. This congressionally mandated program requires "ongoing collection, integration, analysis, and interpretation of data about: (1)

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environmental hazards, (2) exposure to environmental hazards, and (3) health effects potentially related to exposure to environmental hazards". Environmental health data are produced as joint projects of the CDC, the Environmental Protection Agency, and state and local offices.

## Methodology:

Indicator data are acquired from the Centers for Disease Control and Prevention (CDC) and Environmental Protection Agency (EPA) National Environmental Public Health Tracking Network (NEPHTN) Air Quality Data web page. Utilized data includes the EPA's daily Ozone concentration estimates, a Hierarchical Bayesian Space Time Modeling System (HBM) coverage for the contiguous U.S., presented as centroid-coordinates representing a 12 x 12 km grid. Data was extracted for each coordinate, including:

**Average Ozone Concentration = SUM [ Concentration ] / 365**

**Number of Days Above Regulatory Standard\* = COUNT [ Days Where Ozone > 75 ]**

Coordinates were converted to raster and all data was summarized by US census tracts (2010). Final data includes the average annual Ozone concentration, as well as the number and percentage of days where Ozone concentrations exceed air quality standards. For more information about the data used in these estimates, please visit the EPA's [Air Quality Data](#) resource page.

## Notes:

1. The daily Ozone National Ambient Air Quality Standard (NAAQS) is 75 parts per billion (ppb).
2. The relationship between ambient concentrations and personal exposure is largely unknown, and it varies depending upon pollutant, activity patterns, and microenvironments.
3. This measure provides a general indication of the overall trend in annual Ozone concentrations. It does not directly reflect exposure. Certain geographic areas, such as those near busy roads, are likely to have higher values.

## Poor Air Quality (Particulate Matter 2.5)

### Data Background:

The Centers for Disease Control and Prevention (CDC) provide access to data about the characteristics of the physical environment pertinent to population health through the [National Environmental Public Health Tracking Network](#). The Tracking Network is part of CDC's National Environmental Public Health Tracking Program. This congressionally mandated program requires "ongoing collection, integration, analysis, and interpretation of data about: (1) environmental hazards, (2) exposure to environmental hazards, and (3) health effects potentially related to exposure to environmental hazards". Environmental health data are produced as joint projects of the CDC, the Environmental Protection Agency, and state and local offices.

## Methodology:

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Indicator data are acquired from the Centers for Disease Control and Prevention (CDC) and Environmental Protection Agency (EPA) National Environmental Public Health Tracking Network (NEPHTN) Air Quality Data web page. Utilized data includes the EPA's daily PM 2.5 concentration estimates, a Hierarchical Bayesian Space Time Modeling System (HBM) coverage for the contiguous U.S., presented as centroid-coordinates representing a 12 x 12 km grid. Data was extracted for each coordinate, including:

**Average Annual PM2.5 Concentration =  $\text{SUM [ Concentration ]} / 365$**

**Number of Days Above Regulatory Standard\* =  $\text{COUNT [ Days Where PM 2.5 > 35 ]}$**

Coordinates were converted to raster and all data was summarized by US census tracts (2000). Final data includes the average annual PM 2.5 concentration, as well as the number and percentage of days where PM 2.5 concentrations exceed air quality standards. For more information about the data used in these estimates, please visit the EPA's [Air Quality Data](#) resource page.

## Notes:

1. The daily PM2.5 National Ambient Air Quality Standard (NAAQS) is 35.0 micrograms per cubic meter.
2. The relationship between ambient concentrations and personal exposure is largely unknown, and it varies depending upon pollutant, activity patterns, and microenvironments.
3. This measure provides a general indication of the overall trend in annual PM2.5 concentrations. It does not directly reflect exposure. Certain geographic areas, such as those near busy roads, are likely to have higher values.

## Population Living in Food Deserts

### Data Background:

The Food Desert Locator is a service of the Health Food Financing Initiative (HFFI) which provides downloadable data for those census tracts that qualify as food deserts. The HFFI is a partnership between the Treasury Department, Health and Human Services (HHS), and the U.S. Department of Agriculture. The HFFI Working Group, in collaboration with the USDA's Economic Research Service (ERS), developed the official definition of food deserts to demonstrate those places in which Americans have limited access to healthy foods. Food desert data census tracts were released in 2009 using data from the 2000 Census of Population and Housing and supermarket locations from 2006. For more information about this source, please refer to the [Food Desert Locator](#) web page.

### Methodology:

Food desert census tracts were acquired from the U.S. Department of Agriculture Food Desert Locator tool. Food deserts are defined by the USDA's Economic Research Service (ERS) as low-income (by the Treasury Department's New Markets Tax Credit (NMTC) program eligibility criteria) areas where at least 33 percent of the total population, or a minimum of 500 people, have low access to supermarkets or large grocery stores. Low access is defined as living more than 1 mile from a supermarket or large grocery store in urban areas or living more than 10 miles from a supermarket or large grocery store in rural areas. All store data come from the

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2006 directory of Supplemental Nutrition Assistance Program retailers, augmented by data from the Nielsen company. All population and household income data come from the 2000 U.S. Decennial Census. For the 140 urban census tracts for which grid-level grocer data are not available, all people in the tract are assumed to have low-access to a supermarket or large grocery store. Indicator data report the percentage of the total population within an area living in a food desert using the following formula:

$$\text{Percentage} = \left[ \frac{\text{Population with Low Food Access}}{\text{Total Area Population}} \right] * 100$$

For more information, please review the [Food Desert Locator Documentation](#) webpage.

## Recreation and Fitness Facility Access

### **Data Background:**

County Business Patterns (CBP) is an annual series that provides sub-national economic data by industry. Data for establishments are presented by geographic area, 6-digit NAICS industry, legal form of organization (U.S. and state only), and employment size class. Information is available on the number of establishments, employment during the week of March 12, first quarter payroll, and annual payroll. ZIP Code Business Patterns data are available shortly after the release of County Business Patterns. It provides the number of establishments by employment-size classes by detailed industry in the U.S.

County Business Patterns basic data items are extracted from the Business Register (BR), a database of all known single and multi-establishment employer companies maintained and updated by the U.S. Census Bureau. The BR contains the most complete, current, and consistent data for business establishments. The annual Company Organization Survey provides individual establishment data for multi-establishment companies. Data for single-establishment companies are obtained from various Census Bureau programs, such as the Economic Census, Annual Survey of Manufactures and Current Business Surveys, as well as from administrative record sources.

Citation: [U.S. Census Bureau: County Business Patterns \(2012\).](#)

For more information about this source, including data collection methodology and definitions, refer to the [County Business Patterns](#) website.

### **Methodology:**

Industry counts for recreational facilities\* (NAICS code 713940) are acquired from the U.S. Census Bureau, County Business Patterns (2010) data file. Population figures are acquired from the U.S. Census Bureau, 2010 Decennial Census, Summary File 1. Establishment rates for each county are derived using the following formula:

$$\text{Rate} = \left[ \frac{\text{Establishment Count}}{\text{Population}} \right] * 100,000$$

*\*Recreational facilities as defined by NAICS code 713940 are establishments engaged in operating facilities which offer “exercise and other active physical fitness conditioning or recreational sports activities”. Examples include athletic clubs, gymnasiums, dance centers, tennis clubs, and swimming pools.*



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A complete list of NAICS codes and definitions is available using the NAICS Association's [free lookup service](#).

## WIC-Authorized Food Store Access

### **Methodology:**

County-level data was acquired from the USDA Food Environmental Atlas (FEA).

The FEA reports WIC-Authorized retailers as a rate per 1,000 population. The FEA reports WIC-store data from USDA's Food and Nutrition Service, Supplemental Food Programs Division, Program Analysis and Monitoring Branch. Population data are from the [U.S. Census Bureau Population Estimates](#). WIC-store access rates for each county are derived using the following formula:

$$\text{Rate} = [\text{Establishment Count}] / [\text{Population}] * 100,000$$

. For more information, please refer to the [Food Environmental Atlas Documentation](#).

### **Notes:**

1. Estimates do not include direct distribution contractors in Mississippi.
2. Vermont uses Home Delivery Contractors for most foods, and began authorizing WIC retail stores in 2009, but only for fruits and vegetables, which were added to the WIC food packages in FY 2010.
3. Data for Alaska are not available for 2011.

## Access to Primary Care

### **Data Background:**

The Area Resource File (ARF) is a database of information about the U.S. health care system, maintained and released annually by the U.S. Health and Human Services (HHS) Health Resources and Services Administration (HRSA). The ARF contains more than 6,000 variables, aggregated for each of the nation's counties. The ARF contains information on health facilities, health professions, health status, economic activity, health training programs, measures of resource scarcity, and socioeconomic and environmental characteristics. In addition, the basic file contains geographic codes and descriptors which enable it to be linked to many other files and to aggregate counties into various geographic groupings.

The ARF integrates data from numerous primary data sources including: the American Hospital Association, the American Medical Association, the American Dental Association, the American Osteopathic Association, the Bureau of the Census, the Centers for Medicare and Medicaid Services (formerly Health Care Financing Administration), Bureau of Labor Statistics, National Center for Health Statistics and the Veteran's Administration. For more information, please visit HRSA's [Area Resource File](#) website.

### **Methodology:**

Counts of primary care providers are acquired from the Health Resources and Services Administration (HRSA) 2011 [Area Resource File](#), and population data from the U.S. Census Bureau 2010 decennial census. Primary care provider rates are then calculated using the following formula:

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$$\text{Provider Rate} = \left[ \frac{\text{Number of Primary Care Physicians}}{\text{Total Population}} \right] * 100,000$$

For more information and to view the original data used for this calculation, please visit the HRSA [Area Resource File](#) website.

## Notes:

*\*Data represents county-level summaries only. When assessing rates, consider the following:*

- 1) Rates assume uniform distribution of both physicians and population throughout a county and may not detect disparities in access for rural or minority populations.
- 2) Rates may over-represent or under-represent county primary care rates when populations or physicians are highly concentrated on county border lines.
- 3) Rates do not describe quality of care or utilization practices.

## Breast Cancer Screening (Mammogram)

### Data Background:

The Dartmouth Atlas of Healthcare is an online repository of health data and maps based on information included in the massive Medicare database maintained by the Center for Medicare and Medicaid Services (CMS). The project uses Medicare claims data in conjunction with other demographic data to provide information and analysis about national, regional, and local markets, as well as hospitals and their affiliated physicians. The Dartmouth Atlas of Health Care is produced and maintained by The Dartmouth Institute for Health Policy and Clinical Practice.

Citation: [The Dartmouth Atlas of Healthcare \(2012\)](#).

The Centers for Medicare and Medicaid Services paid claims files contain information from adjudicated medical service related claims and capitation payments. Four types of claims files representing inpatient, long term care, prescription drugs and non-institutional services are submitted by the states. These are claims that have completed the state's payment processing cycle for which the state has determined it has a liability to reimburse the provider from Title XIX funds. Claims records contain information on the types of services provided, providers of services, service dates, costs, types of reimbursement, and epidemiological variables.

Citation: [Centers for Medicare and Medicaid Services: Medicaid Statistical Information Statistics \(2012\)](#).

### Methodology:

The data are drawn from the enrollment and claims data of the Medicare program and are restricted to the fee-for-service population over age 65; HMO patients are not included. The indicator is expressed as a proportion using the following formula:

$$\text{Percentage Screened} = \left[ \frac{\text{Number Females Tested}}{\text{Total Females}} \right] * 100$$

When appropriate, statistical adjustments are carried out to account for differences in age, race and sex.

Access to the complete methodology is available in the Dartmouth Institute's [Report of the Dartmouth Atlas Project](#).



# Community Health Needs Assessment

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## Cervical Cancer Screening (Pap Test)

### **Data Background:**

The Behavioral Risk Factor Surveillance System (BRFSS) is "... a collaborative project of the Centers for Disease Control and Prevention (CDC) and U.S. states and territories. The BRFSS, administered and supported by CDC's Behavioral Risk Factor Surveillance Branch, is an ongoing data collection program designed to measure behavioral risk factors for the adult population (18 years of age or older) living in households. The BRFSS was initiated in 1984, with 15 states collecting surveillance data on risk behaviors through monthly telephone interviews. Over time, the number of states participating in the survey increased, so that by 2001, 50 states, the District of Columbia, Puerto Rico, Guam, and the Virgin Islands were participating in the BRFSS."

*Citation: Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services. [Overview: BRFSS 2010](#).*

The health characteristics estimated from the BRFSS pertain to the adult non-institutionalized population (age 18 years or older and living in households) and includes data pertaining to health behaviors, chronic conditions, access and utilization of healthcare, and general health. Surveys are administered to populations at the state level and then delivered to the CDC. BRFSS survey data are analyzed by the CDC's National Center for Health Statistics (NCHS). Annual risk factor prevalence data are released for those geographic areas with 50 or more survey results and 10,000 or more total population (50 States, 170 Cities and Counties) in order to maintain the accuracy and confidentiality of the data. Multi-year estimates are produced by the NCHS to expand the coverage of data to approximately 2500 counties. These estimates are maintained in the [Health Indicator Warehouse](#), the official repository of the nation's health data. For more information on the BRFSS survey methods, or to obtain a copy of the 2010 questionnaire, please visit [the Behavioral Risk Factor Surveillance System](#) home page.

### **Methodology:**

Indicator percentages are acquired for years 2004-2010 from Behavioral Risk Factor Surveillance System (BRFSS) prevalence data, which is housed in the Health Indicator Warehouse. Percentages are generated based on the valid responses to the following questions:

*"A Pap test is a test for cancer of the cervix. Have you ever had a Pap test?"*

Respondents are considered to have had a Pap test if they answer that they had ever had a test. Percentages are age-adjusted and only pertain to the non-institutionalized female population aged 18 and up. Population numerators (number of adults) are not provided in the Health Indicator Warehouse data tables and were generated using the following formula:

**[Persons having a Pap test] = ([Indicator Percentage] / 100) \* [Total Population]**

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Adult population figures used in the data tables are acquired from the American Community Survey (ACS) 2006-2010 five year estimates. Additional detailed information about the BRFSS, including questionnaires, data collection procedures, and [data processing methodologies](#) are available on the BRFSS web site. For additional information about the multi-year estimates, please visit the [Health Indicator Warehouse](#).

## Colon Cancer Screening (Sigmoid/Colonoscopy)

# Community Health Needs Assessment

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## Data Background:

The Behavioral Risk Factor Surveillance System (BRFSS) is “... a collaborative project of the Centers for Disease Control and Prevention (CDC) and U.S. states and territories. The BRFSS, administered and supported by CDC's Behavioral Risk Factor Surveillance Branch, is an ongoing data collection program designed to measure behavioral risk factors for the adult population (18 years of age or older) living in households. The BRFSS was initiated in 1984, with 15 states collecting surveillance data on risk behaviors through monthly telephone interviews. Over time, the number of states participating in the survey increased, so that by 2001, 50 states, the District of Columbia, Puerto Rico, Guam, and the Virgin Islands were participating in the BRFSS.”

*Citation: Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services. [Overview: BRFSS 2010](#).*

The health characteristics estimated from the BRFSS pertain to the adult non-institutionalized population (age 18 years or older and living in households) and includes data pertaining to health behaviors, chronic conditions, access and utilization of healthcare, and general health. Surveys are administered to populations at the state level and then delivered to the CDC. BRFSS survey data are analyzed by the CDC's National Center for Health Statistics (NCHS). Annual risk factor prevalence data are released for those geographic areas with 50 or more survey results and 10,000 or more total population (50 States, 170 Cities and Counties) in order to maintain the accuracy and confidentiality of the data. Multi-year estimates are produced by the NCHS to expand the coverage of data to approximately 2500 counties. These estimates are maintained in the [Health Indicator Warehouse](#), the official repository of the nation's health data. For more information on the BRFSS survey methods, or to obtain a copy of the 2010 questionnaire, please visit [the Behavioral Risk Factor Surveillance System](#) home page.

## Methodology:

Indicator percentages are acquired for years 2004-2010 from Behavioral Risk Factor Surveillance System (BRFSS) prevalence data, which is housed in the Health Indicator Warehouse. Percentages are generated based on the valid responses to the following questions:

*"Sigmoidoscopy and colonoscopy are exams in which a tube is inserted in the rectum to view the colon for signs of cancer or other health problems. Have you ever had either of these exams? For a SIGMOIDOSCOPY, a flexible tube is inserted into the rectum to look for problems. A COLONOSCOPY is similar but uses a longer tube, and you are usually given medication through a needle in your arm to make you sleepy and told to have someone else drive you home after the test. Was your MOST RECENT exam a sigmoidoscopy or a colonoscopy? How long has it been since you had your last sigmoidoscopy or colonoscopy?"* Respondents are considered to have had a Sigmoidoscopy/Colonoscopy if they answer that they had ever had a test. Percentages are age-adjusted and only pertain to the non-institutionalized population aged 50 and up. Population numerators (number of adults) are not provided in the Health Indicator Warehouse data tables and were generated using the following formula:

**[Persons having a Sigmoidoscopy/Colonoscopy] = ([Indicator Percentage] / 100) \* [Total Population] .**

Adult population figures used in the data tables are acquired from the American Community Survey (ACS) 2006-2010 five year estimates. Additional detailed information about the BRFSS,

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including questionnaires, data collection procedures, and [data processing methodologies](#) are available on the BRFSS web site. For additional information about the multi-year estimates, please visit the [Health Indicator Warehouse](#).

## Dental Care Utilization (Adult)

### **Data Background:**

The Behavioral Risk Factor Surveillance System (BRFSS) is “... a collaborative project of the Centers for Disease Control and Prevention (CDC) and U.S. states and territories. The BRFSS, administered and supported by CDC's Behavioral Risk Factor Surveillance Branch, is an ongoing data collection program designed to measure behavioral risk factors for the adult population (18 years of age or older) living in households. The BRFSS was initiated in 1984, with 15 states collecting surveillance data on risk behaviors through monthly telephone interviews. Over time, the number of states participating in the survey increased, so that by 2001, 50 states, the District of Columbia, Puerto Rico, Guam, and the Virgin Islands were participating in the BRFSS.”

*Citation: Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services. [Overview: BRFSS 2010](#).*

The health characteristics estimated from the BRFSS pertain to the adult non-institutionalized population (age 18 years or older and living in households) and includes data pertaining to health behaviors, chronic conditions, access and utilization of healthcare, and general health. Surveys are administered to populations at the state level and then delivered to the CDC. For more information on the BRFSS survey methods, or to obtain a copy of the 2010 questionnaire, please visit [the Behavioral Risk Factor Surveillance System](#) home page.

### **Methodology:**

Indicator percentages are acquired from analysis of annual survey data from the Behavioral Risk Factor Surveillance System (BRFSS) for years 2006-2010. Percentages are generated based on valid responses to the following questions:

*>"How long has it been since you last visited a dentist or a dental clinic for any reason? Include visits to dental specialists, such as orthodontists." and "How long has it been since you had your teeth cleaned by a dentist or dental hygienist?"* This indicator represents the percentage of respondents who indicated that they had not seen any dentist or dental hygienist within the past year. Data only pertain to the non-institutionalized population aged 18 and up and are weighted to reflect the total county population, including non-respondents, using the methods described in the BRFSS Comparability of Data documentation. Population numerators (estimated number of adults exercising each risk behavior) are not provided in the annual survey data and were generated for the data tables using the following formula:

**Adults Without Recent Dental Exam = ([Indicator Percentage] / 100) \* [Total Population] .**

The population figures used for these estimates are acquired from the American Community Survey (ACS) 2006-2010 five year estimates.

Additional detailed information about the BRFSS, including questionnaires, data collection procedures, and [data processing methodologies](#) are available on the Behavioral Risk Factor Surveillance System home page.

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## Diabetes Management (Hemoglobin A1c Test)

### **Data Background:**

The Dartmouth Atlas of Healthcare is an online repository of health data and maps based on information included in the massive Medicare database maintained by the Center for Medicare and Medicaid Services (CMS). The project uses Medicare claims data in conjunction with other demographic data to provide information and analysis about national, regional, and local markets, as well as hospitals and their affiliated physicians. The Dartmouth Atlas of Health Care is produced and maintained by The Dartmouth Institute for Health Policy and Clinical Practice.

*Citation: [The Dartmouth Atlas of Healthcare \(2012\)](#).*

The Centers for Medicare and Medicaid Services paid claims files contain information from adjudicated medical service related claims and capitation payments. Four types of claims files representing inpatient, long term care, prescription drugs and non-institutional services are submitted by the states. These are claims that have completed the state's payment processing cycle for which the state has determined it has a liability to reimburse the provider from Title XIX funds. Claims records contain information on the types of services provided, providers of services, service dates, costs, types of reimbursement, and epidemiological variables.

*Citation: [Centers for Medicare and Medicaid Services: Medicaid Statistical Information Statistics \(2012\)](#).*

### **Methodology:**

The data are drawn from the enrollment and claims data of the Medicare program and are restricted to the fee-for-service population over age 65; HMO patients are not included. The indicator is expressed as a proportion using the following formula:

$$\text{Percentage Tested} = [\text{Number Diabetics Tested}] / [\text{Total Diabetics}] * 100$$

When appropriate, statistical adjustments are carried out to account for differences in age, race and sex.

Access to the complete methodology is available in the Dartmouth Institute's [Report of the Dartmouth Atlas Project](#).

## Facilities Designated as Health Professional Shortage Areas

### **Data Background:**

The U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA) track areas where there is a shortage of health professionals. Health Professional Shortage Areas (HPSAs) are designated as having shortages of primary medical care, dental or mental health providers and may be geographic, demographic, or institutional. medically underserved areas/populations are areas or populations designated by HRSA as having: too few primary care providers, high infant mortality, high poverty and/or high elderly population.

### **Methodology:**

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HRSA provides the locations of institutions it designates to be serving HPSAs. The point locations of these institutions, along with what type, were intersected with geographic service areas to provide a count of the total number of facilities in an area.

## Federally Qualified Health Centers

### **Data Background:**

The Centers for Medicare and Medicaid Services (CMS) tracks data on Providers of Service (POS) of health care. Included in this listing of health care agencies are the Federally Qualified Health Centers. These centers are significant for several health programs funded under the Health Center Consolidation Act.

### **Methodology:**

CMS provides the locations of Federally Qualified Health Centers. The point locations of these institutions were intersected with geographic service areas to provide a count of the total number of facilities in an area.

## High Blood Pressure Management

### **Data Background:**

The Behavioral Risk Factor Surveillance System (BRFSS) is "... a collaborative project of the Centers for Disease Control and Prevention (CDC) and U.S. states and territories. The BRFSS, administered and supported by CDC's Behavioral Risk Factor Surveillance Branch, is an ongoing data collection program designed to measure behavioral risk factors for the adult population (18 years of age or older) living in households. The BRFSS was initiated in 1984, with 15 states collecting surveillance data on risk behaviors through monthly telephone interviews. Over time, the number of states participating in the survey increased, so that by 2001, 50 states, the District of Columbia, Puerto Rico, Guam, and the Virgin Islands were participating in the BRFSS."

*Citation: Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services. [Overview: BRFSS 2010](#).*

The health characteristics estimated from the BRFSS pertain to the adult non-institutionalized population (age 18 years or older and living in households) and includes data pertaining to health behaviors, chronic conditions, access and utilization of healthcare, and general health. Surveys are administered to populations at the state level and then delivered to the CDC. For more information on the BRFSS survey methods, or to obtain a copy of the 2010 questionnaire, please visit [the Behavioral Risk Factor Surveillance System](#) home page.

### **Methodology:**

Indicator percentages are acquired from analysis of annual survey data from the Behavioral Risk Factor Surveillance System (BRFSS) for years 2006-2010. Percentages are generated based on valid responses to the following questions:

*"Have you EVER been told by a doctor, nurse or other health professional that you have high blood pressure?"* and *"Are you currently taking medicine for your high blood pressure?"* This indicator represents the percentage of those persons who answered that 'yes' they have high blood pressure who also answered 'no', that they are not currently taking medication to control it. Data only pertain to the non-institutionalized population aged 18 and up and are weighted to reflect the total county population, including non-respondents, using the methods

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described in the BRFSS Comparability of Data documentation. Population numerators (estimated number of adults exercising each risk behavior) are not provided in the annual survey data and were generated for the data tables using the following formula:

$$\text{Adults Not Taking Blood Pressure Medication} = ([\text{Indicator Percentage}] / 100) * [\text{Total Adult Population}]$$

The population figures used for these estimates are acquired from the American Community Survey (ACS) 2006-2010 five year estimates.

Additional detailed information about the BRFSS, including questionnaires, data collection procedures, and [data processing methodologies](#) are available on the Behavioral Risk Factor Surveillance System home page.

## HIV Screenings

### **Data Background:**

The Behavioral Risk Factor Surveillance System (BRFSS) is “... a collaborative project of the Centers for Disease Control and Prevention (CDC) and U.S. states and territories. The BRFSS, administered and supported by CDC's Behavioral Risk Factor Surveillance Branch, is an ongoing data collection program designed to measure behavioral risk factors for the adult population (18 years of age or older) living in households. The BRFSS was initiated in 1984, with 15 states collecting surveillance data on risk behaviors through monthly telephone interviews. Over time, the number of states participating in the survey increased, so that by 2001, 50 states, the District of Columbia, Puerto Rico, Guam, and the Virgin Islands were participating in the BRFSS.”

*Citation: Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services. [Overview: BRFSS 2010](#).*

The health characteristics estimated from the BRFSS pertain to the adult non-institutionalized population (age 18 years or older and living in households) and includes data pertaining to health behaviors, chronic conditions, access and utilization of healthcare, and general health. Surveys are administered to populations at the state level and then delivered to the CDC. For more information on the BRFSS survey methods, or to obtain a copy of the 2010 questionnaire, please visit [the Behavioral Risk Factor Surveillance System](#) home page.

### **Methodology:**

Indicator percentages are acquired from analysis of annual survey data from the Behavioral Risk Factor Surveillance System (BRFSS) for years 2006-2010. Percentages are generated based on valid responses to the following question:

*"Have you ever been tested for HIV? Do not count tests you may have had as part of a blood donation. Include testing fluid from your mouth."*

This indicator represents the percentage of those persons who answered “no”, indicating that they have never been tested for HIV/AIDS. Data only pertain to the non-institutionalized population aged 18 and up and are weighted to reflect the total county population, including non-respondents, using the methods described in the BRFSS Comparability of Data documentation. Population numerators (estimated number of adults exercising each risk behavior) are not provided in the annual survey data and were generated for the data tables using the following formula:

$$\text{Adults Never Tested for HIV/AIDS} = ([\text{Indicator Percentage}] / 100) * [\text{Total Adult}$$



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## Population]

The population figures used for these estimates are acquired from the American Community Survey (ACS) 2006-2010 five year estimates.

Additional detailed information about the BRFSS, including questionnaires, data collection procedures, and [data processing methodologies](#) are available on the Behavioral Risk Factor Surveillance System home page.

## Lack of a Consistent Source of Primary Care

### Data Background:

The Behavioral Risk Factor Surveillance System (BRFSS) is “... a collaborative project of the Centers for Disease Control and Prevention (CDC) and U.S. states and territories. The BRFSS, administered and supported by CDC's Behavioral Risk Factor Surveillance Branch, is an ongoing data collection program designed to measure behavioral risk factors for the adult population (18 years of age or older) living in households. The BRFSS was initiated in 1984, with 15 states collecting surveillance data on risk behaviors through monthly telephone interviews. Over time, the number of states participating in the survey increased, so that by 2001, 50 states, the District of Columbia, Puerto Rico, Guam, and the Virgin Islands were participating in the BRFSS.”

*Citation: Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services. [Overview: BRFSS 2010](#).*

The health characteristics estimated from the BRFSS pertain to the adult non-institutionalized population (age 18 years or older and living in households) and includes data pertaining to health behaviors, chronic conditions, access and utilization of healthcare, and general health. Surveys are administered to populations at the state level and then delivered to the CDC. For more information on the BRFSS survey methods, or to obtain a copy of the 2010 questionnaire, please visit [the Behavioral Risk Factor Surveillance System](#) home page.

### Methodology:

Indicator percentages are acquired from analysis of annual survey data from the Behavioral Risk Factor Surveillance System (BRFSS) for years 2006-2010. Percentages are generated based on valid responses to the following questions:

*"Do you have one person you think of as your personal doctor or health care provider? (If "No" ask "Is there more than one or is there no person who you think of as your personal doctor or health care provider?".)"*

This indicator represents the percentage of those persons who answered “no” to both parts of the question, indicating that they do not see any regular doctor. Data only pertain to the non-institutionalized population aged 18 and up and are weighted to reflect the total county population, including non-respondents, using the methods described in the BRFSS Comparability of Data documentation. Population numerators (estimated number of adults exercising each risk behavior) are not provided in the annual survey data and were generated for the data tables using the following formula:

**Adults Without Any Regular Doctor = ([Indicator Percentage] / 100) \* [Total Adult Population]**

The population figures used for these estimates are acquired from the American Community

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Survey (ACS) 2006-2010 five year estimates.

Additional detailed information about the BRFSS, including questionnaires, data collection procedures, and [data processing methodologies](#) are available on the Behavioral Risk Factor Surveillance System home page.

## Pneumonia Vaccinations (Age 65 )

### **Data Background:**

The Behavioral Risk Factor Surveillance System (BRFSS) is "... a collaborative project of the Centers for Disease Control and Prevention (CDC) and U.S. states and territories. The BRFSS, administered and supported by CDC's Behavioral Risk Factor Surveillance Branch, is an ongoing data collection program designed to measure behavioral risk factors for the adult population (18 years of age or older) living in households. The BRFSS was initiated in 1984, with 15 states collecting surveillance data on risk behaviors through monthly telephone interviews. Over time, the number of states participating in the survey increased, so that by 2001, 50 states, the District of Columbia, Puerto Rico, Guam, and the Virgin Islands were participating in the BRFSS."

*Citation: Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services. [Overview: BRFSS 2010](#).*

The health characteristics estimated from the BRFSS pertain to the adult non-institutionalized population (age 18 years or older and living in households) and includes data pertaining to health behaviors, chronic conditions, access and utilization of healthcare, and general health. Surveys are administered to populations at the state level and then delivered to the CDC. BRFSS survey data are analyzed by the CDC's National Center for Health Statistics (NCHS). Annual risk factor prevalence data are released for those geographic areas with 50 or more survey results and 10,000 or more total population (50 States, 170 Cities and Counties) in order to maintain the accuracy and confidentiality of the data. Multi-year estimates are produced by the NCHS to expand the coverage of data to approximately 2500 counties. These estimates are maintained in the [Health Indicator Warehouse](#), the official repository of the nation's health data. For more information on the BRFSS survey methods, or to obtain a copy of the 2010 questionnaire, please visit [the Behavioral Risk Factor Surveillance System](#) home page.

### **Methodology:**

Indicator percentages are acquired for years 2004-2010 from Behavioral Risk Factor Surveillance System (BRFSS) prevalence data, which is housed in the Health Indicator Warehouse. Percentages are generated based on the valid responses to the following questions:

*"Have you EVER had a pneumonia shot? A pneumonia shot or pneumococcal vaccine is usually given only once or twice in a person's lifetime and is different from the flu shot. Have you ever had a pneumonia shot?"*

Respondents are considered to have had a pneumonia vaccination if they answer that they had ever had a vaccine. Percentages are age-adjusted and only pertain to the non-institutionalized population aged 65 and up. Population numerators (number of adults) are not provided in the Health Indicator Warehouse data tables and were generated using the following formula:

**[Persons having a Pneumonia vaccination] = ([Indicator Percentage] / 100) \* [Total Population] .**



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Adult population figures used in the data tables are acquired from the American Community Survey (ACS) 2006-2010 five year estimates. Additional detailed information about the BRFSS, including questionnaires, data collection procedures, and [data processing methodologies](#) are available on the BRFSS web site. For additional information about the multi-year estimates, please visit the [Health Indicator Warehouse](#).

## Population Living in a Health Professional Shortage Area

### **Data Background:**

Health Professional Shortage Areas (HPSAs) are designated by the US Health Resources and Services Administration (HRSA) as having shortages of primary medical care, dental or mental health providers. HPSAs may refer to an entire geographic area (a county or service area), a demographic group within a geographic area (low income population) or an institution (comprehensive health center, federally qualified health center or other public facility).

HPSAs are designated using several criteria, depending on the type of designation. For example, a HPSA may be designated on the basis that medical professionals in contiguous areas are over-utilized, excessively distant, or inaccessible to the population under consideration. HPSAs are also designated based on population-to-clinician ratios. This ratio is usually 3,500 to 1 for primary care, 5,000 to 1 for dental health care, and 30,000 to 1 for mental health care. All Federally Qualified Health Centers and Rural Health Clinics that provide access to care, regardless of patient ability to pay, receive automatic facility HPSA designation.

HPSAs are updated on a continuous basis through the US Health and Human Services (HHS) Health Resources and Services Administration (HRSA) GIS data warehouse. For more information about HPSAs, please visit the HRSA [Health Professional Shortage Area \(HPSA\)](#) web page.

### **Methodology:**

Health Professional Shortage Area (HPSA) boundary files were acquired for 2012 from the US Health Resources and Services Administration (HRSA) GIS data warehouse. Data from HRSA contained estimates of the total designation population, and the population underserved in each service area. Total designation populations vary based on HPSA designation, and may refer to the total area population, or the population of a specific demographic (income, racial, ethnic) group. Population figures provided by HRSA represent the estimate at the time of last designation update, which in some cases is as early as 2008. The percentage of population underserved is based on the following formula:

$$\text{Percentage} = [\text{Underserved Population}] / [\text{Total Designation Population}] * 100$$

For additional information, including designation procedures and access to the original data, please visit the HRSA [Health Professional Shortage Area \(HPSA\)](#) web page.

## Preventable Hospital Events

### **Data Background:**

The Dartmouth Atlas of Healthcare is an online repository of health data and maps based on information included in the massive Medicare database maintained by the Center for Medicare and Medicaid Services (CMS). The project uses Medicare claims data in conjunction with other

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demographic data to provide information and analysis about national, regional, and local markets, as well as hospitals and their affiliated physicians. The Dartmouth Atlas of Health Care is produced and maintained by The Dartmouth Institute for Health Policy and Clinical Practice.

*Citation: [The Dartmouth Atlas of Healthcare \(2012\)](#).*

The Centers for Medicare and Medicaid Services paid claims files contain information from adjudicated medical service related claims and capitation payments. Four types of claims files representing inpatient, long term care, prescription drugs and non-institutional services are submitted by the states. These are claims that have completed the state's payment processing cycle for which the state has determined it has a liability to reimburse the provider from Title XIX funds. Claims records contain information on the types of services provided, providers of services, service dates, costs, types of reimbursement, and epidemiological variables.

*Citation: [Centers for Medicare and Medicaid Services: Medicaid Statistical Information Statistics \(2012\)](#).*

## Methodology:

The data are drawn from the enrollment and claims data of the Medicare program and are restricted to the fee-for-service population over age 65; HMO patients are not included. The indicator is expressed as a rate (per 1,000 Medicare enrollees) using the following formula:

$$\text{ACSC Rate} = \frac{[\text{Number Preventable Hospitalizations}]}{[\text{Total Medicare Enrollees}]} * 1,000$$

When appropriate, statistical adjustments are carried out to account for differences in age, race and sex.

Access to the complete methodology is available in the Dartmouth Institute's [Report of the Dartmouth Atlas Project](#).

## Heavy Alcohol Consumption

### Data Background:

The Behavioral Risk Factor Surveillance System (BRFSS) is "... a collaborative project of the Centers for Disease Control and Prevention (CDC) and U.S. states and territories. The BRFSS, administered and supported by CDC's Behavioral Risk Factor Surveillance Branch, is an ongoing data collection program designed to measure behavioral risk factors for the adult population (18 years of age or older) living in households. The BRFSS was initiated in 1984, with 15 states collecting surveillance data on risk behaviors through monthly telephone interviews. Over time, the number of states participating in the survey increased, so that by 2001, 50 states, the District of Columbia, Puerto Rico, Guam, and the Virgin Islands were participating in the BRFSS."

*Citation: Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services. [Overview: BRFSS 2010](#).*

The health characteristics estimated from the BRFSS pertain to the adult non-institutionalized population (age 18 years or older and living in households) and includes data pertaining to health behaviors, chronic conditions, access and utilization of healthcare, and general health. Surveys are administered to populations at the state level and then delivered to the CDC.

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BRFSS survey data are analyzed by the CDC's National Center for Health Statistics (NCHS). Annual risk factor prevalence data are released for those geographic areas with 50 or more survey results and 10,000 or more total population (50 States, 170 Cities and Counties) in order to maintain the accuracy and confidentiality of the data. Multi-year estimates are produced by the NCHS to expand the coverage of data to approximately 2500 counties. These estimates are maintained in the [Health Indicator Warehouse](#), the official repository of the nation's health data. For more information on the BRFSS survey methods, or to obtain a copy of the 2010 questionnaire, please visit [the Behavioral Risk Factor Surveillance System](#) home page.

## Methodology:

Indicator percentages are acquired for years 2004-2010 from Behavioral Risk Factor Surveillance System (BRFSS) prevalence data, which is housed in the Health Indicator Warehouse. Percentages are generated based on the valid responses to the following question:

*"One drink is equivalent to a 12-ounce beer, a 5-ounce glass of wine, or a drink with one shot of liquor. During the past 30 days, on the days when you drank, about how many drinks did you drink on the average?"*

Respondents are considered heavy drinkers if they were male and reported having more than 2 drinks per day, or females that reported having more than 1 drink per day. Percentages are age-adjusted and only pertain to the non-institutionalized population aged 18 and up.

Population numerators (number of adults) are not provided in the Health Indicator Warehouse data tables and were generated using the following formula:

$$[\text{Heavy Drinkers}] = ([\text{Indicator Percentage}] / 100) * [\text{Total Population}] .$$

Adult population figures used in the data tables are acquired from the American Community Survey (ACS) 2006-2010 five year estimates. Additional detailed information about the BRFSS, including questionnaires, data collection procedures, and [data processing methodologies](#) are available on the BRFSS web site. For additional information about the multi-year estimates, please visit the [Health Indicator Warehouse](#).

## Inadequate Fruit/Vegetable Consumption (Adult)

### Data Background:

The Behavioral Risk Factor Surveillance System (BRFSS) is

"... a collaborative project of the Centers for Disease Control and Prevention (CDC) and U.S. states and territories. The BRFSS, administered and supported by CDC's Behavioral Risk Factor Surveillance Branch, is an ongoing data collection program designed to measure behavioral risk factors for the adult population (18 years of age or older) living in households. The BRFSS was initiated in 1984, with 15 states collecting surveillance data on risk behaviors through monthly telephone interviews. Over time, the number of states participating in the survey increased, so that by 2001, 50 states, the District of Columbia, Puerto Rico, Guam, and the Virgin Islands were participating in the BRFSS."

*Citation: Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services. [Overview: BRFSS 2010](#).*

The health characteristics estimated from the BRFSS pertain to the adult non-institutionalized population (age 18 years or older and living in households) and includes data pertaining to health behaviors, chronic conditions, access and utilization of healthcare, and general health. Surveys are administered to populations at the state level and then delivered to the CDC.

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BRFSS survey data are analyzed by the CDC's National Center for Health Statistics (NCHS). Annual risk factor prevalence data are released for those geographic areas with 50 or more survey results and 10,000 or more total population (50 States, 170 Cities and Counties) in order to maintain the accuracy and confidentiality of the data. Multi-year estimates are produced by the NCHS to expand the coverage of data to approximately 2500 counties. These estimates are maintained in the [Health Indicator Warehouse](#), the official repository of the nation's health data. For more information on the BRFSS survey methods, or to obtain a copy of the 2010 questionnaire, please visit [the Behavioral Risk Factor Surveillance System](#) home page.

## Methodology:

Indicator percentages are acquired for years 2005-2009 from Behavioral Risk Factor Surveillance System (BRFSS) prevalence data, which is housed in the Health Indicator Warehouse. Data are based on the percentage of respondents who report regularly consuming five or more servings of fruits or vegetables each week. Fried potatoes and chips are excluded. Percentages are age-adjusted and only pertain to the non-institutionalized population aged 18 and up. Population numerators (number of adults consuming 5 servings) are not provided in the Health Indicator Warehouse data tables and were generated using the following formula:

**[Population Consuming 5 Servings] = ([Indicator Percentage] / 100) \* [Total Population].**

Adult population figures used in the data tables are acquired from the American Community Survey (ACS) 2006-2010 five year estimates. Additional detailed information about the BRFSS, including questionnaires, data collection procedures, and [data processing methodologies](#) are available on the BRFSS web site. For additional information about the multi-year estimates, please visit the [Health Indicator Warehouse](#).

## Physical Inactivity (Adult)

### Data Background:

The Behavioral Risk Factor Surveillance System (BRFSS) is "... a collaborative project of the Centers for Disease Control and Prevention (CDC) and U.S. states and territories. The BRFSS, administered and supported by CDC's Behavioral Risk Factor Surveillance Branch, is an ongoing data collection program designed to measure behavioral risk factors for the adult population (18 years of age or older) living in households. The BRFSS was initiated in 1984, with 15 states collecting surveillance data on risk behaviors through monthly telephone interviews. Over time, the number of states participating in the survey increased, so that by 2001, 50 states, the District of Columbia, Puerto Rico, Guam, and the Virgin Islands were participating in the BRFSS."

*Citation: Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services. [Overview: BRFSS 2010](#).*

The health characteristics estimated from the BRFSS pertain to the adult non-institutionalized population (age 18 years or older and living in households) and includes data pertaining to health behaviors, chronic conditions, access and utilization of healthcare, and general health. Surveys are administered to populations at the state level and then delivered to the CDC. BRFSS survey data are analyzed by the CDC's National Center for Health Statistics (NCHS). Annual risk factor prevalence data are released for those geographic areas with 50 or more survey results and 10,000 or more total population (50 States, 170 Cities and Counties) in order to maintain the accuracy and confidentiality of the data. Multi-year estimates are produced by

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the NCHS to expand the coverage of data to approximately 2500 counties. These estimates are maintained in the [Health Indicator Warehouse](#), the official repository of the nation's health data. For more information on the BRFSS survey methods, or to obtain a copy of the 2010 questionnaire, please visit [the Behavioral Risk Factor Surveillance System](#) home page.

## Methodology:

Indicator percentages are acquired for years 2005-2009 from Behavioral Risk Factor Surveillance System (BRFSS) prevalence data, which is housed in the Health Indicator Warehouse. Percentages are generated based on the valid responses to the following question:

*"During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise?"* Respondents are considered to be physically inactive if they answer no to the question. Percentages are age-adjusted and only pertain to the non-institutionalized population aged 18 and up. Population numerators (number of adults) are not provided in the Health Indicator Warehouse data tables and were generated using the following formula:

$$[\text{Inactive Persons}] = ([\text{Indicator Percentage}] / 100) * [\text{Total Population}] .$$

Adult population figures used in the data tables are acquired from the American Community Survey (ACS) 2006-2010 five year estimates. Additional detailed information about the BRFSS, including questionnaires, data collection procedures, and [data processing methodologies](#) are available on the BRFSS web site. For additional information about the multi-year estimates, please visit the [Health Indicator Warehouse](#).

## Tobacco Usage (Adult)

### Data Background:

The Behavioral Risk Factor Surveillance System (BRFSS) is "... a collaborative project of the Centers for Disease Control and Prevention (CDC) and U.S. states and territories. The BRFSS, administered and supported by CDC's Behavioral Risk Factor Surveillance Branch, is an ongoing data collection program designed to measure behavioral risk factors for the adult population (18 years of age or older) living in households. The BRFSS was initiated in 1984, with 15 states collecting surveillance data on risk behaviors through monthly telephone interviews. Over time, the number of states participating in the survey increased, so that by 2001, 50 states, the District of Columbia, Puerto Rico, Guam, and the Virgin Islands were participating in the BRFSS."

*Citation: Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services. [Overview: BRFSS 2010](#).*

The health characteristics estimated from the BRFSS pertain to the adult non-institutionalized population (age 18 years or older and living in households) and includes data pertaining to health behaviors, chronic conditions, access and utilization of healthcare, and general health. Surveys are administered to populations at the state level and then delivered to the CDC. BRFSS survey data are analyzed by the CDC's National Center for Health Statistics (NCHS). Annual risk factor prevalence data are released for those geographic areas with 50 or more survey results and 10,000 or more total population (50 States, 170 Cities and Counties) in order to maintain the accuracy and confidentiality of the data. Multi-year estimates are produced by the NCHS to expand the coverage of data to approximately 2500 counties. These estimates are maintained in the [Health Indicator Warehouse](#), the official repository of the nation's health



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data. For more information on the BRFSS survey methods, or to obtain a copy of the 2010 questionnaire, please visit [the Behavioral Risk Factor Surveillance System](#) home page.

## Methodology:

Indicator percentages are acquired for years 2004-2010 from Behavioral Risk Factor Surveillance System (BRFSS) prevalence data, which is housed in the Health Indicator Warehouse. Data are based on the percentage of respondents answering the following question:

*"Do you now smoke cigarettes every day, some days, or not at all?"*

Respondents are considered smokers if they reported smoking every day or some days. Percentages are age-adjusted and only pertain to the non-institutionalized population aged 18 and up. Population numerators (number of adult smokers) are not provided in the Health Indicator Warehouse data tables and were generated using the following formula:

$$[\text{Adults Smokers}] = ([\text{Indicator Percentage}] / 100) * [\text{Total Population}] .$$

Adult population figures used in the data tables are acquired from the American Community Survey (ACS) 2006-2010 five year estimates. Additional detailed information about the BRFSS, including questionnaires, data collection procedures, and [data processing methodologies](#) are available on the BRFSS web site. For additional information about the multi-year estimates, please visit the [Health Indicator Warehouse](#).

## Asthma Prevalence

### Data Background:

The Behavioral Risk Factor Surveillance System (BRFSS) is

"... a collaborative project of the Centers for Disease Control and Prevention (CDC) and U.S. states and territories. The BRFSS, administered and supported by CDC's Behavioral Risk Factor Surveillance Branch, is an ongoing data collection program designed to measure behavioral risk factors for the adult population (18 years of age or older) living in households. The BRFSS was initiated in 1984, with 15 states collecting surveillance data on risk behaviors through monthly telephone interviews. Over time, the number of states participating in the survey increased, so that by 2001, 50 states, the District of Columbia, Puerto Rico, Guam, and the Virgin Islands were participating in the BRFSS."

*Citation: Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services. [Overview: BRFSS 2010](#).*

The health characteristics estimated from the BRFSS pertain to the adult non-institutionalized population (age 18 years or older and living in households) and includes data pertaining to health behaviors, chronic conditions, access and utilization of healthcare, and general health. Surveys are administered to populations at the state level and then delivered to the CDC. For more information on the BRFSS survey methods, or to obtain a copy of the 2010 questionnaire, please visit [the Behavioral Risk Factor Surveillance System](#) home page.

## Methodology:

Indicator percentages are acquired from analysis of annual survey data from the Behavioral Risk Factor Surveillance System (BRFSS) for years 2006-2010. Percentages are generated based on valid responses to the following questions:

*"Have you ever been told by a doctor, nurse, or health professional that you have Asthma?"*

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This indicator represents the percentage of those persons who answered “yes”. Data only pertain to the non-institutionalized population aged 18 and up and are weighted to reflect the total county population, including non-respondents, using the methods described in the BRFSS Comparability of Data documentation. Population numerators (estimated number of adults exercising each risk behavior) are not provided in the annual survey data and were generated for the data tables using the following formula:

**Adults Diagnosed with Asthma = ([Indicator Percentage] / 100) \* [Total Population] .**

The population figures used for these estimates are acquired from the American Community Survey (ACS) 2006-2010 five year estimates.

Additional detailed information about the BRFSS, including questionnaires, data collection procedures, and [data processing methodologies](#) are available on the Behavioral Risk Factor Surveillance System home page.

## Breast Cancer Incidence

### **Data Background:**

The State Cancer Profiles website provides statistics to help guide and prioritize cancer control activities at the state and local levels. It is step one of Cancer Control P.L.A.N.E.T., a portal that provides access to data and research-tested resources for the design, implementation, and evaluation of evidence based cancer control programs. State Cancer Profiles are a collaborative effort of the National Cancer Institute and the Centers for Disease Control and Prevention. The incidence rates tables accessed through the State Cancer Profiles web site provide incidence statistics compiled from **state and local cancer registries**. Statistics are available for those states with cancer registries whose data have met the criteria required for inclusion in the US Cancer Statistics. Data is provided for use in assessing the burden and risk for a major cancer site for the US overall or for a selected state and its counties.

*Citation: [National Cancer Institute, State Cancer Profiles. \(2010\).](#)*

State-based cancer registries are data systems that collect, manage, and analyze data about cancer cases and cancer deaths. In each state, medical facilities (including hospitals, physicians' offices, therapeutic radiation facilities, freestanding surgical centers, and pathology laboratories) report these data to a central cancer registry. State cancer registries receive funding and program guidance through the CDC's National Program of Cancer Registries and the National Cancer Institute's Surveillance, Epidemiology and End Results (SEER) program.

For more information, please visit the [State Cancer Profiles](#) or the [National Program of Cancer Registries](#) websites.

### **Methodology:**

Annual incidence rates are acquired for all US states and counties as an average for years 2005-2009 from the [State Cancer Profiles: Incidence Rates](#) data tables. Incidence rates provided from this source are age adjusted to the 2000 US standard population. In order to perform aggregate (multi-county or service area) estimates with the data provided, adjusted cancer incidence rates are back-calculated using the following formula:

**SUM([Age-Adjusted Rate/100,000] \* SUM[Total Population]) / SUM[Total**

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**Population] \* 100,000.**

. In compliance with the State Cancer Profiles methodology, population figures are acquired from the U.S. Census Bureau.

The new case counts used to generate the State Cancer Profiles data tables are provided by the National Program of Cancer Registries Cancer Surveillance System (NPCR-CSS), the Centers for Disease Control and Prevention, and by the National Cancer Institute's Surveillance, Epidemiology, and End Results (SEER) Program. For more information about the State Cancer Profiles data, including age-adjustment and data suppression, please visit the [SEER\\*Stat](#) website.

## Notes:

1. Incidence rates provided are for invasive cancer only.
2. [Suppression](#) is used to avoid misinterpretation when rates are unstable. Data is suppressed when the number of cases is less than 16 for the time period monitored.
3. Because of the impact on Louisiana's population for the July - December 2005 time period due to Hurricanes Katrina/Rita, [SEER excluded Louisiana cases](#) diagnosed for that six month time period. The count has been suppressed due to data consistency issues.

## Cancer Mortality

### **Data Background:**

The CDC WONDER (Wide-ranging Online Data for Epidemiologic Research) is a query tool which provides public access to the information resources of the Centers for Disease Control and Prevention (CDC). The Underlying Cause of Death data available on WONDER are county-level mortality and population data spanning the years 1999-2010. Data are based on death certificates for U.S. residents. Each death certificate identifies a single underlying cause of death and demographic data. The number of deaths, crude death rates and age-adjusted death rates, can be obtained by place of residence, age group, race, Hispanic ethnicity, gender, and cause-of-death (when minimum sample size thresholds are met).

Underlying cause-of-death is defined by the World Health Organization (WHO) as *"the disease or injury which initiated the train of events leading directly to death, or the circumstances of the accident or violence which produced the fatal injury."* Underlying cause-of-death is selected from the conditions entered by the physician on the cause of death section of the death certificate. When more than one cause or condition is entered by the physician, the underlying cause is determined by the sequence of conditions on the certificate, provisions of the International Statistical Classification of Disease and Health Problems (ICD), and associated selection rules and modifications.

The Underlying Cause of Death data are produced and maintained by the Mortality Statistics Branch, Division of Vital Statistics, National Center for Health Statistics (NCHS), Centers for Disease Control and Prevention (CDC), United States Department of Health and Human Services (US DHHS).



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*Citation: Centers for Disease Control and Prevention: CDC WONDER, [Underlying Cause of Death 1999-2009 \(2012\)](#).*

For more information about this source, including data inclusion requirements and definitions, please refer to the [CDC WONDER website](#).

## Methodology:

County population figures and death statistics for malignant neoplasm (cancer) (**ICD-10 Codes\* C00 - C97**) are acquired for years 2006-2010 using CDC WONDER from the Underlying Cause of Death database. Mortality rates were acquired from the source already age-adjusted to the year 2000 U.S. standard since single-age mortality data was not available from the source. To recalculate age-adjusted mortality rates for unique service areas and aggregated county groupings, the following formula was used:

**Mortality Rate = [SUM(Total Population) \* ((Age-Adjusted Rate)/100,000)] / [SUM(Total Population)] \* 100,000.**

\*A searchable, detailed list of current ICD-10 Codes (Version 2010) is available from the [World Health Organization](#).

## Notes:

\*Data is suppressed when the rate is calculated with a numerator or denominator of 10 or less. [More Information](#).

\*Death rates are unreliable when the rate is calculated with a numerator of 20 or less. [More Information](#).

\*The method used to calculate standard age-adjusted rates are documented here: [More Information](#).

\*Deaths for persons of unknown age are included in counts and crude rates, but are not included in age-adjusted rates.

\*To accommodate geographic shifts of the Alabama, Louisiana, Mississippi, and Texas populations resulting from Hurricanes Katrina and Rita in 2005, the U.S. Census Bureau developed adjustments in the methodology for state and county population estimates. [More Information](#).

## Cervical Cancer Incidence

### Data Background:

The State Cancer Profiles website provides statistics to help guide and prioritize cancer control activities at the state and local levels. It is step one of Cancer Control P.L.A.N.E.T., a portal that provides access to data and research-tested resources for the design, implementation, and evaluation of evidence based cancer control programs. State Cancer Profiles are a collaborative effort of the National Cancer Institute and the Centers for Disease Control and Prevention. The incidence rates tables accessed through the State Cancer Profiles web site

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provide incidence statistics compiled from **state and local cancer registries**. Statistics are available for those states with cancer registries whose data have met the criteria required for inclusion in the US Cancer Statistics. Data is provided for use in assessing the burden and risk for a major cancer site for the US overall or for a selected state and its counties.

*Citation: [National Cancer Institute, State Cancer Profiles. \(2010\).](#)*

State-based cancer registries are data systems that collect, manage, and analyze data about cancer cases and cancer deaths. In each state, medical facilities (including hospitals, physicians' offices, therapeutic radiation facilities, freestanding surgical centers, and pathology laboratories) report these data to a central cancer registry. State cancer registries receive funding and program guidance through the CDC's National Program of Cancer Registries and the National Cancer Institute's Surveillance, Epidemiology and End Results (SEER) program.

For more information, please visit the [State Cancer Profiles](#) or the [National Program of Cancer Registries](#) websites.

## Methodology:

Annual incidence rates are acquired for all US states and counties as an average for years 2005-2009 from the [State Cancer Profiles: Incidence Rates](#) data tables. Incidence rates provided from this source are age adjusted to the 2000 US standard population. In order to perform aggregate (multi-county or service area) estimates with the data provided, adjusted cancer incidence rates are back-calculated using the following formula:

**$$\text{SUM}[\text{Age-Adjusted Rate}/100,000] * \text{SUM}[\text{Total Population}] / \text{SUM}[\text{Total Population}] * 100,000.$$**

. In compliance with the State Cancer Profiles methodology, population figures are acquired from the U.S. Census Bureau.

The new case counts used to generate the State Cancer Profiles data tables are provided by the National Program of Cancer Registries Cancer Surveillance System (NPCR-CSS), the Centers for Disease Control and Prevention, and by the National Cancer Institute's Surveillance, Epidemiology, and End Results (SEER) Program. For more information about the State Cancer Profiles data, including age-adjustment and data suppression, please visit the [SEER\\*Stat](#) website.

## Notes:

1. Incidence rates provided are for invasive cancer only.
2. [Suppression](#) is used to avoid misinterpretation when rates are unstable. Data is suppressed when the number of cases is less than 16 for the time period monitored.
3. Because of the impact on Louisiana's population for the July - December 2005 time period due to Hurricanes Katrina/Rita, [SEER excluded Louisiana cases](#) diagnosed for that six month time period. The count has been suppressed due to data consistency issues.

## Chlamydia Incidence

### Data Background:

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The Centers for Disease Control and Prevention (CDC) National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP) is the branch of government responsible for public health surveillance, prevention research, and programs to prevent and control HIV and AIDS, other STDs, viral hepatitis, and TB. Toward this effort, the CDC collects, analyzes, and disseminates data on the reported occurrence of nationally notifiable infectious diseases in the United States. Data are collected or submitted from state health agencies from all 50 states and the District of Columbia. Data are housed and accessible online through the CDC [NCHHSTP Atlas](#), and through the [Health Indicators Warehouse](#). Detailed information about the surveillance data is available through the NCHHSTP Atlas by clicking the “About these data and footnotes” link.

## Methodology:

Cases of a given STD refer to confirmed diagnoses during a given time period. For example, the 2010 data on gonorrhea infection would include persons with laboratory-confirmed infection diagnosed between January 1, 2010 and December 31, 2010, and reported to CDC through June 8, 2011. Rates per 100,000 population were calculated for each STD. The population denominators used to compute these rates for the 50 states and the District of Columbia were based on the National Center for Health Statistics (NCHS) bridged-race population counts for the 2000–2010. These estimates are a modification of the U.S. Census Bureau population estimates in which the 31 race categories used by the Census Bureau are bridged into the five race/ethnicity groups that have been historically used to report race data for STD cases. Each rate was calculated by dividing the number of cases for the calendar year by the population for that calendar year and then multiplying the number by 100,000.

For more information, visit the [NCHHSTP Atlas](#) and click on the “About these data and footnotes” link.

## Colon and Rectum Cancer Incidence

### Data Background:

The State Cancer Profiles website provides statistics to help guide and prioritize cancer control activities at the state and local levels. It is step one of Cancer Control P.L.A.N.E.T., a portal that provides access to data and research-tested resources for the design, implementation, and evaluation of evidence based cancer control programs. State Cancer Profiles are a collaborative effort of the National Cancer Institute and the Centers for Disease Control and Prevention. The incidence rates tables accessed through the State Cancer Profiles web site provide incidence statistics compiled from **state and local cancer registries**. Statistics are available for those states with cancer registries whose data have met the criteria required for inclusion in the US Cancer Statistics. Data is provided for use in assessing the burden and risk for a major cancer site for the US overall or for a selected state and its counties.

*Citation: [National Cancer Institute, State Cancer Profiles. \(2010\).](#)*

State-based cancer registries are data systems that collect, manage, and analyze data about cancer cases and cancer deaths. In each state, medical facilities (including hospitals, physicians' offices, therapeutic radiation facilities, freestanding surgical centers, and pathology laboratories) report these data to a central cancer registry. State cancer registries receive funding and program guidance through the CDC's National Program of Cancer Registries and the National Cancer Institute's Surveillance, Epidemiology and End Results (SEER) program.

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For more information, please visit the [State Cancer Profiles](#) or the [National Program of Cancer Registries](#) websites.

## Methodology:

Annual incidence rates are acquired for all US states and counties as an average for years 2005-2009 from the [State Cancer Profiles: Incidence Rates](#) data tables. Incidence rates provided from this source are age adjusted to the 2000 US standard population. In order to perform aggregate (multi-county or service area) estimates with the data provided, adjusted cancer incidence rates are back-calculated using the following formula:

**$$\text{SUM}[\text{Age-Adjusted Rate}/100,000] * \text{SUM}[\text{Total Population}] / \text{SUM}[\text{Total Population}] * 100,000.$$**

. In compliance with the State Cancer Profiles methodology, population figures are acquired from the U.S. Census Bureau.

The new case counts used to generate the State Cancer Profiles data tables are provided by the National Program of Cancer Registries Cancer Surveillance System (NPCR-CSS), the Centers for Disease Control and Prevention, and by the National Cancer Institute's Surveillance, Epidemiology, and End Results (SEER) Program. For more information about the State Cancer Profiles data, including age-adjustment and data suppression, please visit the [SEER\\*Stat](#) website.

## Notes:

1. Incidence rates provided are for invasive cancer only.
2. [Suppression](#) is used to avoid misinterpretation when rates are unstable. Data is suppressed when the number of cases is less than 16 for the time period monitored.
3. Because of the impact on Louisiana's population for the July - December 2005 time period due to Hurricanes Katrina/Rita, [SEER excluded Louisiana cases](#) diagnosed for that six month time period. The count has been suppressed due to data consistency issues.

## Diabetes Prevalence

### Data Background:

The Centers for Disease Control and Prevention's National Center for Chronic Disease Prevention and Health Promotion monitors the health of the Nation and produces publically available data to promote general health. The division maintains the Diabetes Data and Trends data system, which includes the National Diabetes Fact Sheet and the National Diabetes Surveillance System. These programs provide resources documenting the public health burden of diabetes and its complications in the United States. The surveillance system also includes county-level estimates of diagnosed diabetes and selected risk factors for all U.S. counties to help target and optimize the resources for diabetes control and prevention.

*Citation: [Centers for Disease Control and Prevention, Diabetes Data & Trends: Frequently Asked Questions \(FAQ\). \(2012\).](#)*

## Methodology:

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Data for total population and estimated population with diabetes are acquired from the County Level Estimates of Diagnosed Diabetes, a service of the Centers for Disease Control and Prevention's National Diabetes Surveillance Program. Diabetes prevalence is estimated using the following formula:

$$\text{Percent Prevalence} = [\text{Population with Diabetes}] / [\text{Total Population}] * 100.$$

All data are estimates modeled by the CDC using the methods described below:

The National Diabetes Surveillance system produces data estimating the prevalence of diagnosed diabetes and population obesity by county using data from [CDC's Behavioral Risk Factor Surveillance System](#) (BRFSS) and data from the [U.S. Census Bureau's Population Estimates Program](#). The BRFSS is an ongoing, monthly, state-based telephone survey of the adult population. The survey provides state-specific information on behavioral risk factors and preventive health practices. Respondents were considered to have diabetes if they responded "yes" to the question, "Has a doctor ever told you that you have diabetes?" Women who indicated that they only had diabetes during pregnancy were not considered to have diabetes.

Three years of data were used to improve the precision of the year-specific county-level estimates of diagnosed diabetes and selected risk factors. For example, 2003, 2004, and 2005 were used for the 2004 estimate and 2004, 2005, and 2006 were used for the 2005 estimate. Estimates were restricted to adults 20 years of age or older to be consistent with population estimates from the U.S. Census Bureau. The U.S. Census Bureau provides year-specific county population estimates by demographic characteristics—age, sex, race, and Hispanic origin. .

The county-level estimates were based on indirect model-dependent estimates. The model-dependent approach employs a statistical model that "borrows strength" in making an estimate for one county from BRFSS data collected in other counties. Bayesian multilevel modeling techniques were used to obtain these estimates. Separate models were developed for each of the four census regions: West, Midwest, Northeast and South. Multilevel Poisson regression models with random effects of demographic variables (age 20–44, 45–64, 65 ; race; sex) at the county-level were developed. State was included as a county-level covariate.

*Citation: [Centers for Disease Control and Prevention, Diabetes Data & Trends: Frequently Asked Questions \(FAQ\). \(2012\).](#)*

Rates were age adjusted by the CDC for the following three age groups: 20-44, 45-64, 65 . Additional information, including the complete methodology and data definitions, can be found at the CDC's [Diabetes Data and Trends](#) website.

## Heart Disease Mortality

### **Data Background:**

The CDC WONDER (Wide-ranging Online Data for Epidemiologic Research) is a query tool which provides public access to the information resources of the Centers for Disease Control and Prevention (CDC). The Underlying Cause of Death data available on WONDER are county-level mortality and population data spanning the years 1999-2010. Data are based on death certificates for U.S. residents. Each death certificate identifies a single underlying cause of death and demographic data. The number of deaths, crude death rates and age-adjusted death rates, can be obtained by place of residence, age group, race, Hispanic ethnicity, gender, and cause-of-death (when minimum sample size thresholds are met).

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Underlying cause-of-death is defined by the World Health Organization (WHO) as *"the disease or injury which initiated the train of events leading directly to death, or the circumstances of the accident or violence which produced the fatal injury."* Underlying cause-of-death is selected from the conditions entered by the physician on the cause of death section of the death certificate. When more than one cause or condition is entered by the physician, the underlying cause is determined by the sequence of conditions on the certificate, provisions of the International Statistical Classification of Disease and Health Problems (ICD), and associated selection rules and modifications.

The Underlying Cause of Death data are produced and maintained by the Mortality Statistics Branch, Division of Vital Statistics, National Center for Health Statistics (NCHS), Centers for Disease Control and Prevention (CDC), United States Department of Health and Human Services (US DHHS).

*Citation: Centers for Disease Control and Prevention: CDC WONDER, [Underlying Cause of Death 1999-2009 \(2012\)](#).*

For more information about this source, including data inclusion requirements and definitions, please refer to the [CDC WONDER website](#).

## Methodology:

County population figures and death statistics for coronary heart disease (**ICD-10 Codes\* I11, I20-I25**) are acquired for years 2006-2010 using CDC WONDER from the Underlying Cause of Death database. Mortality rates were acquired from the source already age-adjusted to the year 2000 U.S. standard since single-age mortality data was not available from the source. To recalculate age-adjusted mortality rates for unique service areas and aggregated county groupings, the following formula was used:

**Mortality Rate = [SUM(Total Population) \* ((Age-Adjusted Rate)/100,000)] / [SUM(Total Population)] \* 100,000.**

\*A searchable, detailed list of current ICD-10 Codes (Version 2010) is available from the [World Health Organization](#).

## Notes:

\*Data is suppressed when the rate is calculated with a numerator or denominator of 10 or less. [More Information](#).

\*Death rates are unreliable when the rate is calculated with a numerator of 20 or less. [More Information](#).

\*The method used to calculate standard age-adjusted rates are documented here: [More Information](#).

\*Deaths for persons of unknown age are included in counts and crude rates, but are not included in age-adjusted rates.



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\*To accommodate geographic shifts of the Alabama, Louisiana, Mississippi, and Texas populations resulting from Hurricanes Katrina and Rita in 2005, the U.S. Census Bureau developed adjustments in the methodology for state and county population estimates. [More Information.](#)

## Heart Disease Prevalence

### **Data Background:**

The Behavioral Risk Factor Surveillance System (BRFSS) is "... a collaborative project of the Centers for Disease Control and Prevention (CDC) and U.S. states and territories. The BRFSS, administered and supported by CDC's Behavioral Risk Factor Surveillance Branch, is an ongoing data collection program designed to measure behavioral risk factors for the adult population (18 years of age or older) living in households. The BRFSS was initiated in 1984, with 15 states collecting surveillance data on risk behaviors through monthly telephone interviews. Over time, the number of states participating in the survey increased, so that by 2001, 50 states, the District of Columbia, Puerto Rico, Guam, and the Virgin Islands were participating in the BRFSS."

*Citation: Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services. [Overview: BRFSS 2010.](#)*

The health characteristics estimated from the BRFSS pertain to the adult non-institutionalized population (age 18 years or older and living in households) and includes data pertaining to health behaviors, chronic conditions, access and utilization of healthcare, and general health. Surveys are administered to populations at the state level and then delivered to the CDC. For more information on the BRFSS survey methods, or to obtain a copy of the 2010 questionnaire, please visit [the Behavioral Risk Factor Surveillance System](#) home page.

### **Methodology:**

Indicator percentages are acquired from analysis of annual survey data from the Behavioral Risk Factor Surveillance System (BRFSS) for years 2006-2010. Percentages are generated based on valid responses to the following questions:

*"Has a doctor, nurse, or other health professional ever told you that you had any of the following:*

*-Ever told you had a heart attack, also called myocardial infarction?*

*-Ever told you had angina or coronary heart disease?*

*- Ever told you had a stroke?"*

This indicator represents the percentage of those persons who answered that "yes", they have been diagnosed with angina or coronary heart disease. Data only pertain to the non-institutionalized population aged 18 and up and are weighted to reflect the total county population, including non-respondents, using the methods described in the BRFSS Comparability of Data documentation. Population numerators (estimated number of adults exercising each risk behavior) are not provided in the annual survey data and were generated for the data tables using the following formula:

**Adults Diagnosed with Heart Disease = ([Indicator Percentage] / 100) \* [Total Population] .**

The population figures used for these estimates are acquired from the American Community Survey (ACS) 2006-2010 five year estimates.

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Additional detailed information about the BRFSS, including questionnaires, data collection procedures, and [data processing methodologies](#) are available on the Behavioral Risk Factor Surveillance System home page.

## HIV Prevalence

### **Data Background:**

The Centers for Disease Control and Prevention (CDC) National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP) is the branch of government responsible for public health surveillance, prevention research, and programs to prevent and control HIV and AIDS, other STDs, viral hepatitis, and TB. Toward this effort, the CDC collects, analyzes, and disseminates data on the reported occurrence of nationally notifiable infectious diseases in the United States. Data are collected or submitted from state health agencies from all 50 states and the District of Columbia. Data are housed and accessible online through the CDC [NCHHSTP Atlas](#), and through the [Health Indicators Warehouse](#). Detailed information about the surveillance data is available through the NCHHSTP Atlas by clicking the “About these data and footnotes” link.

### **Methodology:**

Cases of a given STD refer to confirmed diagnoses during a given time period. For example, the 2010 data on gonorrhea infection would include persons with laboratory-confirmed infection diagnosed between January 1, 2010 and December 31, 2010, and reported to CDC through June 8, 2011. Rates per 100,000 population were calculated for each STD. The population denominators used to compute these rates for the 50 states and the District of Columbia were based on the National Center for Health Statistics (NCHS) bridged-race population counts for the 2000–2010. These estimates are a modification of the U.S. Census Bureau population estimates in which the 31 race categories used by the Census Bureau are bridged into the five race/ethnicity groups that have been historically used to report race data for STD cases. Each rate was calculated by dividing the number of cases for the calendar year by the population for that calendar year and then multiplying the number by 100,000.

For more information, visit the [NCHHSTP Atlas](#) and click on the “About these data and footnotes” link.

## Homicide

### **Data Background:**

The CDC WONDER (Wide-ranging Online Data for Epidemiologic Research) is a query tool which provides public access to the information resources of the Centers for Disease Control and Prevention (CDC). The Underlying Cause of Death data available on WONDER are county-level mortality and population data spanning the years 1999-2010. Data are based on death certificates for U.S. residents. Each death certificate identifies a single underlying cause of death and demographic data. The number of deaths, crude death rates and age-adjusted death rates, can be obtained by place of residence, age group, race, Hispanic ethnicity, gender, and cause-of-death (when minimum sample size thresholds are met).

Underlying cause-of-death is defined by the World Health Organization (WHO) as *“the disease*



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*or injury which initiated the train of events leading directly to death, or the circumstances of the accident or violence which produced the fatal injury."* Underlying cause-of-death is selected from the conditions entered by the physician on the cause of death section of the death certificate. When more than one cause or condition is entered by the physician, the underlying cause is determined by the sequence of conditions on the certificate, provisions of the International Statistical Classification of Disease and Health Problems (ICD), and associated selection rules and modifications.

The Underlying Cause of Death data are produced and maintained by the Mortality Statistics Branch, Division of Vital Statistics, National Center for Health Statistics (NCHS), Centers for Disease Control and Prevention (CDC), United States Department of Health and Human Services (US DHHS).

*Citation: Centers for Disease Control and Prevention: CDC WONDER, [Underlying Cause of Death 1999-2009 \(2012\)](#).*

For more information about this source, including data inclusion requirements and definitions, please refer to the [CDC WONDER website](#).

## Methodology:

County population figures and death statistics for assault/homicide (**ICD-10 Codes\* U01-U02, X85-Y09, Y87.1**) are acquired for years 2006-2010 using CDC WONDER from the Underlying Cause of Death database. Mortality rates were acquired from the source already age-adjusted to the year 2000 U.S. standard since single-age mortality data was not available from the source. To recalculate age-adjusted mortality rates for unique service areas and aggregated county groupings, the following formula was used:

**Mortality Rate = [SUM(Total Population) \* ((Age-Adjusted Rate)/100,000)] / [SUM(Total Population)] \* 100,000.**

\*A searchable, detailed list of current ICD-10 Codes (Version 2010) is available from the [World Health Organization](#).

## Notes:

\*Data is suppressed when the rate is calculated with a numerator or denominator of 10 or less. [More Information](#).

\*Death rates are unreliable when the rate is calculated with a numerator of 20 or less. [More Information](#).

\*The method used to calculate standard age-adjusted rates are documented here: [More Information](#).

\*Deaths for persons of unknown age are included in counts and crude rates, but are not included in age-adjusted rates.

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\*To accommodate geographic shifts of the Alabama, Louisiana, Mississippi, and Texas populations resulting from Hurricanes Katrina and Rita in 2005, the U.S. Census Bureau developed adjustments in the methodology for state and county population estimates. [More Information.](#)

## Infant Mortality

### **Data Background:**

The Division of Vital Statistics is a branch of the Centers for Disease Control and Prevention (CDC) National Center for Health Statistics (NCHS) responsible for maintaining birth and death records for the nation. Data are compiled for the National Vital Statistics System (NVSS) through a joint effort between the NCHS and various state and local health agencies, who are responsible for registering vital events – births, deaths, marriages, divorces, and fetal deaths. In some states, additional information is recorded about each birth. This information includes child's gender and birth weight; mother's race, ethnicity and age; mother's education; gestation period; prenatal care, and more. Vital statistics are analyzed and released annually in various data warehouses, including [CDC WONDER](#), [VitalStats](#), and the [Health Indicator Warehouse](#).

The [Health Indicator Warehouse](#) is the official repository of the nation's health data, providing public access to the information resources of the Centers for Disease Control and Prevention (CDC), the Environmental Protection Agency (EPA), the Health Resources and Services Administration (HRSA), and others.

### **Methodology:**

Counts for this indicator represent the annual average births and deaths over the 7-year period 2003-2009. Original data was tabulated by the CDC based on information reported on birth and death certificates. Rates represent the number of deaths to infants under age 1 per 1,000 total live births, based on the following formula:

$$\text{Rate} = [\text{Total Deaths Under Age 1}] / [\text{Total Births}] * 1,000$$

Data are not linked (birth and death certificates have not been matched) and thus this indicator does not account for population migration. Mortality data was acquired from the CDC WONDER query system. Birth tabulations were acquired from the Health Indicators Warehouse. For more information, about these sources, including data inclusion requirements and subject definitions, please visit the [Health Indicator Warehouse indicator page](#) or refer to the [CDC WONDER Underlying Cause of Death documentation](#).

## Low Birth Weight

### **Data Background:**

The Division of Vital Statistics is a branch of the Centers for Disease Control and Prevention (CDC) National Center for Health Statistics (NCHS) responsible for maintaining birth and death records for the nation. Data are compiled for the National Vital Statistics System (NVSS) through a joint effort between the NCHS and various state and local health agencies, who are responsible for registering vital events – births, deaths, marriages, divorces, and fetal deaths. In some states, additional information is recorded about each birth. This information includes child's gender and birth weight; mother's race, ethnicity and age; mother's education; gestation period; prenatal care, and more. Vital statistics are analyzed and released annually in various

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data warehouses, including [CDC WONDER](#), [VitalStats](#), and the [Health Indicator Warehouse](#).

The [Health Indicator Warehouse](#) is the official repository of the nation's health data, providing public access to the information resources of the Centers for Disease Control and Prevention (CDC), the Environmental Protection Agency (EPA), the Health Resources and Services Administration (HRSA), and others.

## Methodology:

Counts for this indicator represent the annual average births over the 7-year period 2003-2009. Original data was tabulated by the CDC based on information reported on each birth certificate. Rates represent the number of births weighing less than 2,500 grams per 100 live births based on the following formula:

$$\text{Rate} = [\text{Births Weighting} < 2500\text{g}] / [\text{Total Births}] * 100$$

Data was acquired from the Health Indicators Warehouse. For more information about this source, including data inclusion requirements and subject definitions, please visit the [Health Indicator Warehouse indicator page](#) or refer to the NVSS [natality public use file documentation](#).

## Lung Cancer Incidence

### Data Background:

The State Cancer Profiles website provides statistics to help guide and prioritize cancer control activities at the state and local levels. It is step one of Cancer Control P.L.A.N.E.T., a portal that provides access to data and research-tested resources for the design, implementation, and evaluation of evidence based cancer control programs. State Cancer Profiles are a collaborative effort of the National Cancer Institute and the Centers for Disease Control and Prevention. The incidence rates tables accessed through the State Cancer Profiles web site provide incidence statistics compiled from **state and local cancer registries**. Statistics are available for those states with cancer registries whose data have met the criteria required for inclusion in the US Cancer Statistics. Data is provided for use in assessing the burden and risk for a major cancer site for the US overall or for a selected state and its counties.

*Citation: [National Cancer Institute, State Cancer Profiles. \(2010\).](#)*

State-based cancer registries are data systems that collect, manage, and analyze data about cancer cases and cancer deaths. In each state, medical facilities (including hospitals, physicians' offices, therapeutic radiation facilities, freestanding surgical centers, and pathology laboratories) report these data to a central cancer registry. State cancer registries receive funding and program guidance through the CDC's National Program of Cancer Registries and the National Cancer Institute's Surveillance, Epidemiology and End Results (SEER) program.

For more information, please visit the [State Cancer Profiles](#) or the [National Program of Cancer Registries](#) websites.

## Methodology:

Annual incidence rates are acquired for all US states and counties as an average for years 2005-2009 from the [State Cancer Profiles: Incidence Rates](#) data tables. Incidence rates provided from this source are age adjusted to the 2000 US standard population. In order to perform aggregate (multi-county or service area) estimates with the data provided, adjusted

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cancer incidence rates are back-calculated using the following formula:

**$$\text{SUM}([\text{Age-Adjusted Rate}/100,000] * \text{SUM}[\text{Total Population}]) / \text{SUM}[\text{Total Population}] * 100,000.$$**

. In compliance with the State Cancer Profiles methodology, population figures are acquired from the U.S. Census Bureau.

The new case counts used to generate the State Cancer Profiles data tables are provided by the National Program of Cancer Registries Cancer Surveillance System (NPCR-CSS), the Centers for Disease Control and Prevention, and by the National Cancer Institute's Surveillance, Epidemiology, and End Results (SEER) Program. For more information about the State Cancer Profiles data, including age-adjustment and data suppression, please visit the [SEER\\*Stat](#) website.

## Notes:

1. Incidence rates provided are for invasive cancer only.
2. [Suppression](#) is used to avoid misinterpretation when rates are unstable. Data is suppressed when the number of cases is less than 16 for the time period monitored.
3. Because of the impact on Louisiana's population for the July - December 2005 time period due to Hurricanes Katrina/Rita, [SEER excluded Louisiana cases](#) diagnosed for that six month time period. The count has been suppressed due to data consistency issues.

## Motor Vehicle Crash Death

### Data Background:

The Fatality Analysis Reporting System (FARS) data is a census of all police-reported qualifying fatal crashes that occur within the 50 States, the District of Columbia, and Puerto Rico. To be included in the file set, a crash must involve a motor vehicle traveling on a traffic way customarily open to the public, and must result in the death of a motorist or a non-motorist within 30 days of the crash. Police report data is collected by National Highway Traffic Safety Administration (NHTSA) analysts located in each state. There is no Federal mandate for crash reporting; however, on a voluntary basis most States collect a similar core set of information about fatal crashes. Incompatible data is recoded for inclusion in the FARS database.

More information is available in the [NHTSA's Crash Data Collection Programs report to congress](#), and online at the [Fatality Analysis Reporting System](#) website.

### Methodology:

Crash-related data was acquired using the Fatality Analysis Reporting System (FARS) web-based query tool. Fatalities for both vehicle occupants and non-occupants were aggregated by county for years 2008-2010 to obtain a total fatality count. Three years of data were averaged to produce an annual fatality figure for each county ( $[\text{Total Deaths}] / 3$ ). Population data was acquired from the U.S. Census Bureau's 2010 decennial census. Motor-vehicle mortality rates are reported as the average annual fatalities per 100,000 population using the following formula:

**$$\text{Mortality Rate} = [\text{Average Annual Deaths}] / [\text{Total Population}] * 100,000.$$**

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Original crash data may be accessed using the [FARS query tool](#).

## Obesity (Adult)

### **Data Background:**

The Centers for Disease Control and Prevention's National Center for Chronic Disease Prevention and Health Promotion monitors the health of the Nation and produces publically available data to promote general health. The division maintains the Diabetes Data and Trends data system, which includes the National Diabetes Fact Sheet and the National Diabetes Surveillance System. These programs provide resources documenting the public health burden of diabetes and its complications in the United States. The surveillance system also includes county-level estimates of diagnosed diabetes and selected risk factors for all U.S. counties to help target and optimize the resources for diabetes control and prevention.

*Citation: [Centers for Disease Control and Prevention, Diabetes Data & Trends: Frequently Asked Questions \(FAQ\). \(2012\).](#)*

### **Methodology:**

Data for total population and estimated obese population data are acquired from the County Level Estimates of Diagnosed Diabetes, a service of the Centers for Disease Control and Prevention's National Diabetes Surveillance Program. Obesity prevalence is estimated using the following formula:

$$\text{Percent Prevalence} = [\text{Obese Population}] / [\text{Total Population}] * 100.$$

All data are estimates modeled by the CDC using the methods described below:

The National Diabetes Surveillance system produces data estimating the prevalence of diagnosed diabetes and population obesity by county using data from [CDC's Behavioral Risk Factor Surveillance System](#) (BRFSS) and data from the [U.S. Census Bureau's Population Estimates Program](#). The BRFSS is an ongoing, monthly, state-based telephone survey of the adult population. The survey provides state-specific information on behavioral risk factors and preventive health practices. Respondents were considered obese if their body mass index was 30 or greater. Body mass index (weight [kg]/height [m]<sup>2</sup>) was derived from self-report of height and weight.

Three years of data were used to improve the precision of the year-specific county-level estimates of diagnosed diabetes and selected risk factors. For example, 2003, 2004, and 2005 were used for the 2004 estimate and 2004, 2005, and 2006 were used for the 2005 estimate. Estimates were restricted to adults 20 years of age or older to be consistent with population estimates from the U.S. Census Bureau. The U.S. Census Bureau provides year-specific county population estimates by demographic characteristics—age, sex, race, and Hispanic origin. .

The county-level estimates were based on indirect model-dependent estimates. The model-dependent approach employs a statistical model that “borrows strength” in making an estimate for one county from BRFSS data collected in other counties. Bayesian multilevel modeling techniques were used to obtain these estimates. Separate models were developed for each of the four census regions: West, Midwest, Northeast and South. Multilevel Poisson regression models with random effects of demographic variables (age 20–44, 45–64, 65 ; race; sex) at the county-level were developed. State was included as a county-level covariate.

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Citation: [Centers for Disease Control and Prevention, Diabetes Data & Trends: Frequently Asked Questions \(FAQ\). \(2012\).](#)

Rates were age adjusted by the CDC for the following three age groups: 20-44, 45-64, 65 . Additional information, including the complete methodology and data definitions, can be found at the CDC's [Diabetes Data and Trends](#) website.

## Overweight (Adult)

### **Data Background:**

The Behavioral Risk Factor Surveillance System (BRFSS) is "... a collaborative project of the Centers for Disease Control and Prevention (CDC) and U.S. states and territories. The BRFSS, administered and supported by CDC's Behavioral Risk Factor Surveillance Branch, is an ongoing data collection program designed to measure behavioral risk factors for the adult population (18 years of age or older) living in households. The BRFSS was initiated in 1984, with 15 states collecting surveillance data on risk behaviors through monthly telephone interviews. Over time, the number of states participating in the survey increased, so that by 2001, 50 states, the District of Columbia, Puerto Rico, Guam, and the Virgin Islands were participating in the BRFSS."

Citation: Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services. [Overview: BRFSS 2010.](#)

The health characteristics estimated from the BRFSS pertain to the adult non-institutionalized population (age 18 years or older and living in households) and includes data pertaining to health behaviors, chronic conditions, access and utilization of healthcare, and general health. Surveys are administered to populations at the state level and then delivered to the CDC. For more information on the BRFSS survey methods, or to obtain a copy of the 2010 questionnaire, please visit [the Behavioral Risk Factor Surveillance System](#) home page.

### **Methodology:**

Indicator percentages are acquired from analysis of annual survey data from the Behavioral Risk Factor Surveillance System (BRFSS) for years 2006-2010. Percentages are generated based on valid responses to the following questions:

*"About how much do you weigh without shoes?" and "About how tall are you without shoes?"*

These responses were combined to determine a respondent's Body Mass Index (BMI). BMI is calculated as weight in kilograms divided by height in meters squared. Persons with a BMI from 25.0-29.9 are considered overweight.

Data only pertain to the non-institutionalized population aged 18 and up and are weighted to reflect the total county population, including non-respondents, using the methods described in the BRFSS Comparability of Data documentation. Population numerators (estimated number of adults exercising each risk behavior) are not provided in the annual survey data and were generated for the data tables using the following formula:

$$\text{Adults Overweight} = ([\text{Indicator Percentage}] / 100) * [\text{Total Population}] .$$

The population figures used for these estimates are acquired from the American Community Survey (ACS) 2006-2010 five year estimates.

Additional detailed information about the BRFSS, including questionnaires, data collection



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procedures, and [data processing methodologies](#) are available on the Behavioral Risk Factor Surveillance System home page.

## Pedestrian Motor Vehicle Death

### **Data Background:**

The Fatality Analysis Reporting System (FARS) data is a census of all police-reported qualifying fatal crashes that occur within the 50 States, the District of Columbia, and Puerto Rico. To be included in the file set, a crash must involve a motor vehicle traveling on a traffic way customarily open to the public, and must result in the death of a motorist or a non-motorist within 30 days of the crash. Police report data is collected by National Highway Traffic Safety Administration (NHTSA) analysts located in each state. There is no Federal mandate for crash reporting; however, on a voluntary basis most States collect a similar core set of information about fatal crashes. Incompatible data is recoded for inclusion in the FARS database.

More information is available in the [NHTSA's Crash Data Collection Programs report to congress](#), and online at the [Fatality Analysis Reporting System](#) website.

### **Methodology:**

Crash-related data was acquired using the Fatality Analysis Reporting System (FARS) web-based query tool. Fatalities for non-vehicle occupants (pedestrians) were aggregated by county for years 2008-2010 to obtain a total fatality count. Pedestrian death figures do not include fatalities to bicyclists or persons on personal conveyances (scooters, skateboards). Three years of data were averaged to produce an annual fatality figure for each county ([Total Deaths] / 3 ). Population data was acquired from the U.S. Census Bureau's 2010 decennial census. Motor-vehicle mortality rates are reported as the average annual fatalities per 100,000 population using the following formula:

$$\text{Mortality Rate} = [\text{Average Annual Deaths}] / [\text{Total Population}] * 100,000.$$

Original crash data may be accessed using the [FARS query tool](#).

## Poor Dental Health

### **Data Background:**

The Behavioral Risk Factor Surveillance System (BRFSS) is “... a collaborative project of the Centers for Disease Control and Prevention (CDC) and U.S. states and territories. The BRFSS, administered and supported by CDC's Behavioral Risk Factor Surveillance Branch, is an ongoing data collection program designed to measure behavioral risk factors for the adult population (18 years of age or older) living in households. The BRFSS was initiated in 1984, with 15 states collecting surveillance data on risk behaviors through monthly telephone interviews. Over time, the number of states participating in the survey increased, so that by 2001, 50 states, the District of Columbia, Puerto Rico, Guam, and the Virgin Islands were participating in the BRFSS.”

*Citation: Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services. [Overview: BRFSS 2010](#).*

The health characteristics estimated from the BRFSS pertain to the adult non-institutionalized population (age 18 years or older and living in households) and includes data pertaining to health behaviors, chronic conditions, access and utilization of healthcare, and general health.

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Surveys are administered to populations at the state level and then delivered to the CDC. For more information on the BRFSS survey methods, or to obtain a copy of the 2010 questionnaire, please visit [the Behavioral Risk Factor Surveillance System](#) home page.

## Methodology:

Indicator percentages are acquired from analysis of annual survey data from the Behavioral Risk Factor Surveillance System (BRFSS) for years 2006-2010. Percentages are generated based on valid responses to the following questions:

*>" How many of your permanent teeth have been removed because of tooth decay or gum disease? Include teeth lost to infection, but do not include teeth lost for other reasons, such as injury or orthodontics. (If wisdom teeth are removed because of tooth decay or gum disease, they should be included in the count for lost teeth)."*

This indicator represents the percentage of respondents who indicated that they had 6 or more, including all of their permanent teeth extracted. Data only pertain to the non-institutionalized population aged 18 and up and are weighted to reflect the total county population, including non-respondents, using the methods described in the BRFSS Comparability of Data documentation. Population numerators (estimated number of adults exercising each risk behavior) are not provided in the annual survey data and were generated for the data tables using the following formula:

$$\text{Adults Poor Dental Health} = ([\text{Indicator Percentage}] / 100) * [\text{Total Population}] .$$

The population figures used for these estimates are acquired from the American Community Survey (ACS) 2006-2010 five year estimates.

Additional detailed information about the BRFSS, including questionnaires, data collection procedures, and [data processing methodologies](#) are available on the BRFSS web site.

## Poor General Health

### Data Background:

The Behavioral Risk Factor Surveillance System (BRFSS) is

"... a collaborative project of the Centers for Disease Control and Prevention (CDC) and U.S. states and territories. The BRFSS, administered and supported by CDC's Behavioral Risk Factor Surveillance Branch, is an ongoing data collection program designed to measure behavioral risk factors for the adult population (18 years of age or older) living in households. The BRFSS was initiated in 1984, with 15 states collecting surveillance data on risk behaviors through monthly telephone interviews. Over time, the number of states participating in the survey increased, so that by 2001, 50 states, the District of Columbia, Puerto Rico, Guam, and the Virgin Islands were participating in the BRFSS."

*Citation: Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services. [Overview: BRFSS 2010](#).*

The health characteristics estimated from the BRFSS pertain to the adult non-institutionalized population (age 18 years or older and living in households) and includes data pertaining to health behaviors, chronic conditions, access and utilization of healthcare, and general health. Surveys are administered to populations at the state level and then delivered to the CDC. BRFSS survey data are analyzed by the CDC's National Center for Health Statistics (NCHS). Annual risk factor prevalence data are released for those geographic areas with 50 or more survey results and 10,000 or more total population (50 States, 170 Cities and Counties) in order



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to maintain the accuracy and confidentiality of the data. Multi-year estimates are produced by the NCHS to expand the coverage of data to approximately 2500 counties. These estimates are maintained in the [Health Indicator Warehouse](#), the official repository of the nation's health data. For more information on the BRFSS survey methods, or to obtain a copy of the 2010 questionnaire, please visit [the Behavioral Risk Factor Surveillance System](#) home page.

## Methodology:

Indicator percentages are acquired for years 2004-2010 from Behavioral Risk Factor Surveillance System (BRFSS) prevalence data, which is housed in the Health Indicator Warehouse. Percentages are generated based on the valid responses to the following questions:

*"Would you say that in general your health is - Excellent, Very Good, Good, Fair, or Poor?"*

Respondents that indicated they had poor overall health are included in the count. Percentages are age-adjusted and only pertain to the non-institutionalized population over age 18.

Population numerators (number of adults) are not provided in the Health Indicator Warehouse data tables and were generated using the following formula:

$$[\text{Persons with Poor Health}] = ([\text{Indicator Percentage}] / 100) * [\text{Total Population}] .$$

Adult population figures used in the data tables are acquired from the American Community Survey (ACS) 2006-2010 five year estimates. Additional detailed information about the BRFSS, including questionnaires, data collection procedures, and [data processing methodologies](#) are available on the BRFSS web site. For additional information about the multi-year estimates, please visit the [Health Indicator Warehouse](#).

## Population with Any Disability

### Data Background:

The American Community Survey (ACS) is a nationwide, continuous survey designed to provide communities with reliable and timely demographic, housing, social, and economic data. The ACS samples nearly 3 million addresses each year, resulting in nearly 2 million final interviews. The ACS replaces the long-form decennial census; however, the number of household surveys reported annually for the ACS is significantly less than the number reported in the long-form decennial census. As a result, the ACS combines detailed population and housing data from multiple years to produce reliable estimates for small counties, neighborhoods, and other local areas. Negotiating between timeliness and accuracy, the ACS annually releases current, one-year estimates for geographic areas with large populations; three-year, and five-year estimates are also released each year for additional areas based on minimum population thresholds.

*Citation: [U.S. Census Bureau: A Compass for Understanding and Using American Community Survey Data \(2008\)](#).*

For more information about this source, including data collection methodology and definitions, refer to the [American Community Survey](#) website.

## Methodology:

Counts for population subgroups and total area population data are acquired from the U.S. Census Bureau's American Community Survey (ACS). Data represent estimates for the 5 year

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period 2006-2010. Data are summarized to 2010 census tract boundaries. Disability status is classified in the ACS according to yes/no responses to questions (17 - 19) about specific physical (hearing, vision, ambulatory) and cognitive statuses, and any other status which, if present, would make living in the absence of accommodations difficult or impossible. Indicator statistics are measured as a percentage of the total non-institutionalized population using the following formula:

$$\text{Percentage} = [\text{Subgroup Population}] / [\text{Total Population}] * 100$$

For more information on the data reported in the American Community Survey, please see the complete [American Community Survey 2010 Subject Definitions](#).

## Notes:

### Race and Ethnicity

Indicator race and ethnicity statistics are generated from self-identified survey responses. Race and ethnicity (Hispanic origin) are collected as two separate categories in the American Community Survey (ACS) based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. Using the OMB standard, the race categories reported in the ACS are: White, Black, American Indian/Alaskan Native, Asian, and Other. An ACS survey respondent may identify as one race alone, or may choose multiple races. Respondents selecting multiple categories are racially identified as "Two or More Races". The minimum ethnicity categories reported are: Hispanic or Latino, and Not Hispanic or Latino. Respondents may only choose one ethnicity. For more information, please review the documentation provided in the CHNA *Data and Indicators* FAQs.

### Data limitations

The universe for most disability data tabulations is the civilian noninstitutionalized population. Some types of GQ populations have disability distributions that are different from the household population. The inclusion of the noninstitutionalized GQ population could therefore have a noticeable impact on the disability distribution. This is particularly true for areas with a substantial noninstitutionalized GQ population.

### Comparability

Beginning in 2008, questions on disability represent a conceptual and empirical break from earlier years of the ACS. This change is based on research suggesting that combining the now separate measures of hearing and vision difficulty to generate a sensory difficulty measure does not create a comparable estimate to the old Sensory disability estimates in prior ACS products. The Census Bureau therefore does not recommend comparison of 2010 disability data to 2007 and earlier ACS disability data. For more information, please review the documentation provided on pages 56 - 59 of the [American Community Survey 2010 Subject Definitions](#).

## Premature Death

### Data Background:

The County Health Rankings (CHR) is a data service of the [University of Wisconsin Population Health Institute](#) which measures the health of nearly all counties in the nation and ranks them within states. CHR has been published for the nation's counties annually since 2010, expanding on similar work specific to Wisconsin since 2003. Rankings are compiled using

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county-level measures from a variety of national and state data sources. These measures are standardized and combined using scientifically-informed weights. County Health Rankings is a free public service, providing their wealth of their rankings and source data to the public for download. For more information and to explore the original data, please visit the [County Health Rankings](#) website.

## Methodology:

Years of potential life lost (YPLL) data was acquired from the University of Wisconsin's County Health Rankings (CHR). Potential life lost is defined by CHR as a death occurring before the age of 75. CHR uses 2006 - 2008 three year averages from the [National Vital Statistic System](#) (NVSS) as the basis for their calculation. NVSS data is compiled from state death records and maintained by the Centers for Disease Control and Prevention. Age-stratified NVSS data is used to calculate the total years of potential life lost to all persons under age 75, by county, using the following formula:

$$\text{YPLL} = [ 75 * (\text{Number of Deaths Under Age 75}) ] - [ \text{SUM (Age at Death)} ]$$

To further illustrate, a person dying at age 50 would contribute 25 years of life lost to the YPLL index. YPLL is age-adjusted to the 2000 U.S. population to allow comparison between counties and is reported as a rate per 100,000 people. For more information, please review the County Health Rankings [Premature Death](#) indicator information.

## Prostate Cancer Incidence

### Data Background:

The State Cancer Profiles website provides statistics to help guide and prioritize cancer control activities at the state and local levels. It is step one of Cancer Control P.L.A.N.E.T., a portal that provides access to data and research-tested resources for the design, implementation, and evaluation of evidence based cancer control programs. State Cancer Profiles are a collaborative effort of the National Cancer Institute and the Centers for Disease Control and Prevention. The incidence rates tables accessed through the State Cancer Profiles web site provide incidence statistics compiled from **state and local cancer registries**. Statistics are available for those states with cancer registries whose data have met the criteria required for inclusion in the US Cancer Statistics. Data is provided for use in assessing the burden and risk for a major cancer site for the US overall or for a selected state and its counties.

*Citation: [National Cancer Institute, State Cancer Profiles. \(2010\).](#)*

State-based cancer registries are data systems that collect, manage, and analyze data about cancer cases and cancer deaths. In each state, medical facilities (including hospitals, physicians' offices, therapeutic radiation facilities, freestanding surgical centers, and pathology laboratories) report these data to a central cancer registry. State cancer registries receive funding and program guidance through the CDC's National Program of Cancer Registries and the National Cancer Institute's Surveillance, Epidemiology and End Results (SEER) program.

For more information, please visit the [State Cancer Profiles](#) or the [National Program of Cancer Registries](#) websites.

## Methodology:

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Annual incidence rates are acquired for all US states and counties as an average for years 2005-2009 from the [State Cancer Profiles: Incidence Rates](#) data tables. Incidence rates provided from this source are age adjusted to the 2000 US standard population. In order to perform aggregate (multi-county or service area) estimates with the data provided, adjusted cancer incidence rates are back-calculated using the following formula:

**$$\text{SUM}([\text{Age-Adjusted Rate}/100,000] * \text{SUM}[\text{Total Population}]) / \text{SUM}[\text{Total Population}] * 100,000.$$**

. In compliance with the State Cancer Profiles methodology, population figures are acquired from the U.S. Census Bureau.

The new case counts used to generate the State Cancer Profiles data tables are provided by the National Program of Cancer Registries Cancer Surveillance System (NPCR-CSS), the Centers for Disease Control and Prevention, and by the National Cancer Institute's Surveillance, Epidemiology, and End Results (SEER) Program. For more information about the State Cancer Profiles data, including age-adjustment and data suppression, please visit the [SEER\\*Stat](#) website.

## Notes:

1. Incidence rates provided are for invasive cancer only.
2. [Suppression](#) is used to avoid misinterpretation when rates are unstable. Data is suppressed when the number of cases is less than 16 for the time period monitored.
3. Because of the impact on Louisiana's population for the July - December 2005 time period due to Hurricanes Katrina/Rita, [SEER excluded Louisiana cases](#) diagnosed for that six month time period. The count has been suppressed due to data consistency issues.

## Stroke Mortality

### Data Background:

The CDC WONDER (Wide-ranging Online Data for Epidemiologic Research) is a query tool which provides public access to the information resources of the Centers for Disease Control and Prevention (CDC). The Underlying Cause of Death data available on WONDER are county-level mortality and population data spanning the years 1999-2010. Data are based on death certificates for U.S. residents. Each death certificate identifies a single underlying cause of death and demographic data. The number of deaths, crude death rates and age-adjusted death rates, can be obtained by place of residence, age group, race, Hispanic ethnicity, gender, and cause-of-death (when minimum sample size thresholds are met).

Underlying cause-of-death is defined by the World Health Organization (WHO) as *"the disease or injury which initiated the train of events leading directly to death, or the circumstances of the accident or violence which produced the fatal injury."* Underlying cause-of-death is selected from the conditions entered by the physician on the cause of death section of the death certificate. When more than one cause or condition is entered by the physician, the underlying cause is determined by the sequence of conditions on the certificate, provisions of the International Statistical Classification of Disease and Health Problems (ICD), and associated selection rules and modifications.

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The Underlying Cause of Death data are produced and maintained by the Mortality Statistics Branch, Division of Vital Statistics, National Center for Health Statistics (NCHS), Centers for Disease Control and Prevention (CDC), United States Department of Health and Human Services (US DHHS).

*Citation: Centers for Disease Control and Prevention: CDC WONDER, [Underlying Cause of Death 1999-2009 \(2012\)](#).*

For more information about this source, including data inclusion requirements and definitions, please refer to the [CDC WONDER website](#).

## Methodology:

County population figures and death statistics for cerebrovascular disease (stroke) (**ICD-10 Codes\* 160-169**) are acquired for years 2006-2010 using CDC WONDER from the Underlying Cause of Death database. Mortality rates were acquired from the source already age-adjusted to the year 2000 U.S. standard since single-age mortality data was not available from the source. To recalculate age-adjusted mortality rates for unique service areas and aggregated county groupings, the following formula was used:

**Mortality Rate = [SUM(Total Population) \* ((Age-Adjusted Rate)/100,000)] / [SUM(Total Population)] \* 100,000.**

\*A searchable, detailed list of current ICD-10 Codes (Version 2010) is available from the [World Health Organization](#).

## Notes:

\*Data is suppressed when the rate is calculated with a numerator or denominator of 10 or less. [More Information](#).

\*Death rates are unreliable when the rate is calculated with a numerator of 20 or less. [More Information](#).

\*The method used to calculate standard age-adjusted rates are documented here: [More Information](#).

\*Deaths for persons of unknown age are included in counts and crude rates, but are not included in age-adjusted rates.

\*To accommodate geographic shifts of the Alabama, Louisiana, Mississippi, and Texas populations resulting from Hurricanes Katrina and Rita in 2005, the U.S. Census Bureau developed adjustments in the methodology for state and county population estimates. [More Information](#).

## Suicide

### Data Background:

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The CDC WONDER (Wide-ranging Online Data for Epidemiologic Research) is a query tool which provides public access to the information resources of the Centers for Disease Control and Prevention (CDC). The Underlying Cause of Death data available on WONDER are county-level mortality and population data spanning the years 1999-2010. Data are based on death certificates for U.S. residents. Each death certificate identifies a single underlying cause of death and demographic data. The number of deaths, crude death rates and age-adjusted death rates, can be obtained by place of residence, age group, race, Hispanic ethnicity, gender, and cause-of-death (when minimum sample size thresholds are met).

Underlying cause-of-death is defined by the World Health Organization (WHO) as *"the disease or injury which initiated the train of events leading directly to death, or the circumstances of the accident or violence which produced the fatal injury."* Underlying cause-of-death is selected from the conditions entered by the physician on the cause of death section of the death certificate. When more than one cause or condition is entered by the physician, the underlying cause is determined by the sequence of conditions on the certificate, provisions of the International Statistical Classification of Disease and Health Problems (ICD), and associated selection rules and modifications.

The Underlying Cause of Death data are produced and maintained by the Mortality Statistics Branch, Division of Vital Statistics, National Center for Health Statistics (NCHS), Centers for Disease Control and Prevention (CDC), United States Department of Health and Human Services (US DHHS).

*Citation: Centers for Disease Control and Prevention: CDC WONDER, [Underlying Cause of Death 1999-2009 \(2012\)](#).*

For more information about this source, including data inclusion requirements and definitions, please refer to the [CDC WONDER website](#).

## Methodology:

County population figures and death statistics for intentional self-harm/suicide (**ICD-10 Codes\***) are acquired for years 2006-2010 using CDC WONDER from the Underlying Cause of Death database. Mortality rates were acquired from the source already age-adjusted to the year 2000 U.S. standard since single-age mortality data was not available from the source. To recalculate age-adjusted mortality rates for unique service areas and aggregated county groupings, the following formula was used:

$$\text{Mortality Rate} = [\text{SUM}(\text{Total Population}) * ((\text{Age-Adjusted Rate})/100,000)] / [\text{SUM}(\text{Total Population})] * 100,000.$$

\*A searchable, detailed list of current ICD-10 Codes (Version 2010) is available from the [World Health Organization](#).

## Notes:

\*Data is suppressed when the rate is calculated with a numerator or denominator of 10 or less. [More Information](#).

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\*Death rates are unreliable when the rate is calculated with a numerator of 20 or less. [More Information.](#)

\*The method used to calculate standard age-adjusted rates are documented here: [More Information.](#)

\*Deaths for persons of unknown age are included in counts and crude rates, but are not included in age-adjusted rates.

\*To accommodate geographic shifts of the Alabama, Louisiana, Mississippi, and Texas populations resulting from Hurricanes Katrina and Rita in 2005, the U.S. Census Bureau developed adjustments in the methodology for state and county population estimates. [More Information.](#)

Report prepared by CHNA.org (<http://www.chna.org>) on April 05, 2013