



## **Community Health Needs Assessment**

**2013**

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## Executive Summary

Cheshire Medical Center (CMC) prepared this Community Health Needs Assessment (CHNA) in partial fulfillment of the State of New Hampshire regulations set forth in RSA 7:32-c-1 and the Federal IRS code Section 501(r). As required, this CHNA process included consultation with members of the public, community organizations, service providers, and local government officials in the CMC service area, in the identification and prioritization of community needs.

CMC is a not for profit community hospital located in Keene, NH, a part of the “Monadnock Region”, which includes the 23 towns in Cheshire County. Dartmouth-Hitchcock Keene (DHK), located on the same campus is a multi-specialty medical practice aligned with Dartmouth-Hitchcock Medical Center, the region’s leading teaching institution and tertiary care center. CMC and DHK share a common charitable community mission. We recognize the importance of working closely together to address unmet community health needs, improve community health status, enhance the quality of services and build community value.

This 2013 CHNA report summarizes the work of the CMC CHNA Leadership Team and the efforts of other local collaborative groups to assess the needs of our region. Several community partners recently completed community needs assessments. The results were used to strengthen and support this needs assessment process.

The CHNA Leadership Team reviewed health and social well-being information from existing sources, recent assessments and neighboring service area CHNAs. They identified additional issues to add to the data review and then prioritized needs using a nominal group voting process.

The CHNA Leadership Team prioritized four community needs above the other identified needs. These top four needs are:

- Behavioral health services – increasing the effectiveness of local services
- Urgent care – more timely and economical access to services instead of using emergency room care
- Transportation – increasing access to public and private transportation particularly in rural towns
- Improved coordination and communication between services – improving linkages between clinical services, faith-based organizations, and informal support network

The community health needs identified in this CHNA provide the basis for the development of the CMC Implementation Strategy required by Federal IRS code Section 501(r). For further information or questions contact Eileen Fernandes, Assistant Director of Population Health at [efernandes@cheshire-med.com](mailto:efernandes@cheshire-med.com).

## I. Introduction

As required by the State of New Hampshire RSA 7:32-c-1,

*“Every health care charitable trust shall, either alone or in conjunction with other health care charitable trusts in its community, conduct a community needs assessment to assist in determining the activities to be included in its community benefits plan. The needs assessment process shall include consultation with members of the public, community organizations, service providers, and local government officials in the trust’s service area, in the identification and prioritization of community needs that the health care charitable trust can address directly, or in collaboration with others.”*

“Section 501(r) of the Federal IRS code, added by the Affordable Care Act (ACA), imposes new requirements on organizations that operate one or more hospitals. Each 501(c)(3) hospital organization is required to...conduct a community health needs assessment (CHNA) and adopt an implementation strategy at least once every three years”<sup>1</sup>.

The last Cheshire Medical Center (CMC) CHNA completed in 2008 identified several priorities including: access to healthcare (affordability), transportation, enhancing system resources and navigating the maze. Community Benefit activities during the past five years have addressed these priorities by implementing a variety of services and collaborative efforts among community partners. These activities are documented in the Community Benefits Reports submitted to the State of New Hampshire Charitable Trusts Unit for the years 2008, 2009, 2010, 2011 and 2012.

This 2013 CHNA report summarizes the work of the CMC CHNA Leadership Team and the efforts of other local collaborative groups to assess the needs of our region. Several community partners recently completed community needs assessments. The results were used to strengthen and support this needs assessment process.

### A. Organization Description and Overview of Services

CMC is a not for profit community hospital located in Keene, NH, a part of the “Monadnock Region”, which includes the 23 towns in Cheshire County. Dartmouth-Hitchcock Keene (DHK), located on the same campus is a multi-specialty medical practice aligned with Dartmouth-Hitchcock Medical Center, the region’s leading teaching institution and tertiary care center. CMC and DHK share a vision to help our community become the nation's healthiest, through clinical and service excellence, collaboration, and compassion for every patient, every time. CMC and DHK share a common charitable community mission and recognize the importance of working closely together to address unmet community health needs, improve community health status, enhance the quality of services and build community value.

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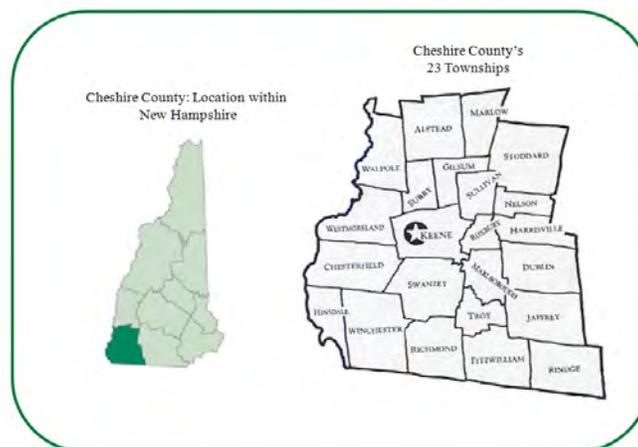
<sup>1</sup> United States of America, Internal Revenue Service, New Requirements for 501(c)(3) Hospitals Under the Affordable Care Act. [http://www.irs.gov/Charities-&-Non-Profits/Charitable-Organizations/New-Requirements-for-501\(c\)\(3\)-Hospitals-Under-the-Affordable-Care-Act](http://www.irs.gov/Charities-&-Non-Profits/Charitable-Organizations/New-Requirements-for-501(c)(3)-Hospitals-Under-the-Affordable-Care-Act)

The CMC/DHK campus functions as a unified physician hospital organization, combining hospital services, ambulatory care, surgical services, ancillary testing and emergency services. Approximately ninety (90%) of Cheshire County’s practicing physicians are affiliated with DHK. CMC/DHK primary care providers offer the majority of acute care services in the hospital service area. In 2011 CMC had 27,821 emergency room visits, 3,366 acute care admissions, 12,507 patient days, 596 inpatient surgeries and 3,379 outpatient surgeries.<sup>2</sup>

CMC/DHK is committed to serving the needs of the uninsured/underinsured low income citizens of our region. With no Federally Qualified Health Center in this rural county, CMC/DHK serves as the safety net provider for the area. Additionally, there are six private physician practices in the city of Keene and numerous dental practices across the region. Four (4) providers of home health services offer a broad array of services to assist people to recuperate or to stay independent at home; this includes adult day care and hospice services. There are nine (9) long-term care and assisted living facilities in Keene.

Cheshire County, a part of the “Monadnock Region”, has no designated county public health department (see Figure 1: Map of Cheshire County and Twenty-Three Towns). To fulfill the "ten essential services" of public health, the area relies on non-governmental organizations and the State of New Hampshire. CMC has historically played a key role in local public health infrastructure by assessing community needs and working with partners to meet regional needs. CMC’s Community Health Department offers numerous free educational programs, support groups and community support services addressing public safety, tobacco, health access, dental health and wellness. The CMC Community Health Department also operates the core project team that leads Healthy Monadnock 2020 (HM2020), a healthy community initiative, and engages in a variety of local, regional, and state environmental policy, advocacy and community-building activities.

**Figure 1 – Map of Cheshire County and Twenty-Three Towns**



<sup>2</sup> New Hampshire Hospital Association Data and Trending Report, 2011; <http://www.nhha.org/healthcare-data/nhha-data-reports>

## B. CHNA Leadership Team

The CMC/DHK Community Advisory Council (CAC) serves as the CHNA Leadership Team (see Attachment A: CAC Membership List). The CAC was created under the sponsorship of the Keene Health Alliance (Cheshire Medical Center (CMC) and Dartmouth Hitchcock-Keene (DHK) joint operating agreement). The primary purpose of the CAC is:

- To serve in an advisory capacity to governance and management of the Keene Health Alliance that is comprised of CMC and DHK.
- To provide comprehensive input, feedback, and counsel to management and governance of CMC and DHK regarding organizational issues, programs, and services.
- To communicate with governance and management of CMC and DHK on community healthcare issues, concerns, needs, and opportunities for improvement.
- To oversee the satisfaction and possible dissatisfaction of the communities served by CMC and DHK in terms of scope, services commitment, and quality of programs and services provided.
- To assist governance and management of CMC and DHK in effectively communicating with surrounding communities on programs, services, and organizational matters.

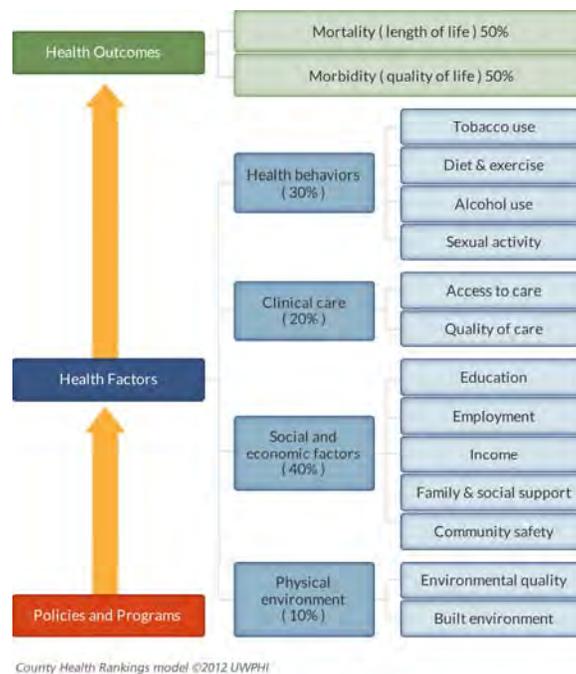
The members of the CHNA Leadership Team represent each town in the county. In addition, they represent, and are able to speak to the issues of our most vulnerable populations including the medically underserved and persons with low income.

## II. CHNA Methodology

### A. Social Determinant of Health Model

CMC and the CHNA Leadership Team used a broad definition of health when evaluating community need and identifying priorities. Therefore, as displayed in Figure 2, this CHNA is framed from a social determinants of health model and considers health status indicators in addition to larger issues that impact the broader social well-being needs of the community.

**Figure 2: Social Determinants of Health Model**



### B. Collaborating Organizations

For this CHNA, CMC collaborated with DHK, NH Department of Health and Human Services, Greater Monadnock Public Health Network (GMPHN), The NH Hospital Association Foundation for Healthy Communities, Antioch University New England, Monadnock United Way, New Hampshire Center for Public Policy Studies, Southwestern Regional Planning Commission, and Home Healthcare, Hospice, and Community Services. The contributions of each organization are summarized below in Table One: Role of Collaborating Organizations.

**Table One: Role of Collaborating Organizations**

Name	Description	Activity/Contribution
DHK	Dartmouth Hitchcock Keene: multispecialty physician group practice affiliated through joint operating agreement	Collaborates on health improvement activities, provided data support, and participated in HM2020 prioritization process
NH DHHS	New Hampshire Department of Health and Human Services: State agency that administers a wide array of services and programs to address the health and safety of the citizens of NH	Provides funding for local public health improvement activities and provided data through the Web Reporting and Query System
GMPHN	Greater Monadnock Public Health Network: coordinate communication, resources, and activities to ensure routine and emergency health and safety needs are met within the region	Participated in needs assessments, action planning, and public health improvement activities
NHHA FHA	New Hampshire Hospital Association and the NHHA Foundation for Healthy Communities: in partnership with diverse healthcare agencies, evaluates healthcare systems and provides funding for health improvement activities	Collaborates on health improvement activities and created statewide hospital working group to understand IRS CHNA guidance and link to state health department
AUNE	Antioch University New England: academic institution that partners with local organizations	Provided data analysis and evaluation of Health Monadnock 2020
MUW	Monadnock United Way: partners with and provides funding to local organizations to address needs in the region	Conducted recent community well-being needs assessment and participated in HM2020 prioritization process
NHCPPS	New Hampshire Center for Public Policy Studies: conducts policy research and provides information on public policy to policy-makers	Provided data analysis for MUW assessment
SWRPC	Southwest Regional Planning Commission: assists municipalities on a wide range of planning activities from writing master plans to facilitating community planning processes.	Developing the Monadnock Futures plan, and provided transportation data
HCS	Home Healthcare, Hospice, and Community Services: visiting nurse agency for the region	Key organizational partner that collaborated with CHNA focus group process

## C. Involvement of Public Health

New Hampshire began funding the New Hampshire Public Health Networks (NHPHN) in 2000 to improve local public health capacity throughout the state. The NHPHN was established to work to assure coordinated and comprehensive delivery of essential public health services at a regional level. Currently, there are thirteen Public Health Networks statewide; serving thirteen defined Public Health Regions that include all of New Hampshire's towns and residents. Each Public Health Network works to improve regional capacity to respond to public health emergencies to protect the lives of New Hampshire residents. Many of the public health networks are also working to address other public health issues in their communities, such as substance abuse, childhood lead poisoning, and obesity.

Cheshire County and CMC/DHK partner to sponsor and operate the Greater Monadnock Public Health Network (GMPHN). In addition to specific activities related to public health emergency preparedness and response, the GMPHN has been the local focus for public health system regionalization efforts.

The GMPHN was actively involved in this needs assessment process. The GMPHN Program Manager participated in data gathering and analysis for this report. The Program Manager also facilitated the prioritization process of the CHNA Leadership Team and, as required by guidance for Section 501(r) of the Federal IRS code, served as a critical link to the State Public Health Department. On behalf of the region, the GMPHN Program Manager serves as a member of the New Hampshire Public Health Improvement Council (PHIC), the group that actively makes policy recommendations to the New Hampshire Division of Public Health Services. From 2010 – 2013, the PHIC held a series of meetings with community health improvement and community benefit representatives of New Hampshire hospitals to identify data that could be used for hospital CHNAs. In addition, the PHIC prepared community demographic profiles of each NHPHN site, hospital service area and County.

## D. Data Sources

Using the social determinants of health framework, CMC Community Health Department and GMPHN staff gathered information to develop a demographic profile of the CMC service area. They assessed various indicators to measure the current status of health outcomes and health factors. Data was collected from the US Census, Behavioral Risk Factor Surveillance System (BRFSS), New Hampshire Department of Health and Human Services Health Web-based Reporting Query System (NH Health WRQS) and other locally conducted surveys (see Table Two: Summary of Data Sources). Available data was assessed for Cheshire County. While the County is not an exact match for the hospital service area (see Attachment B: Hospital Service Area), the PHIC profiles confirmed that the demographic profile of the County population is not statically different from the hospital service area and can therefore serve as a strong proxy for the hospital service area population.

**Table Two: Summary of Data Sources**

Source	Description	Website
BRFSS	Behavioral Risk Factor Surveillance System is a telephone survey collected every two years regarding health-related risk behaviors, chronic health conditions, and use of preventive services.	<a href="http://www.cdc.gov/brfss/">www.cdc.gov/brfss/</a>
Community Commons	Community Commons is a web-based platform designed to provide data from multiple sources resulting in a comprehensive needs assessment report	<a href="http://www.assessment.communitycommons.org/CHNA/">www.assessment.communitycommons.org/CHNA/</a>
Healthy Monadnock 2020 – Healthiest Community Initiative	This is a community change initiative designed to make Cheshire County, NH the healthiest in the nation by the year 2020. The indicators are used to monitor progress. Community survey completed in 2012.	<a href="http://www.healthiestcommunity.org">www.healthiestcommunity.org</a>
Monadnock United Way: Community Well-Being in the Monadnock Region	In 2013, an assessment of the determinants of social wellbeing and community needs in the Monadnock Region was completed. Several community forums held to secure community input.	<a href="http://www.muw.org">www.muw.org</a>
Granite State Future	Granite State Future is a state-wide process to develop comprehensive plans based upon local values and needs, to identify how we can improve our communities. Used community forum to gather input.	<a href="http://www.granitestatefuture.org">www.granitestatefuture.org</a>
NHHFA	New Hampshire Finance Authority provides information about the housing industry and current trends including rentals and purchases. It offers trended graphical data.	<a href="http://www.nhhfa.org/housing-data-demographics.cfm">http://www.nhhfa.org/housing-data-demographics.cfm</a>
U.S. Census Bureau	This provides data on people, business, and geography in cities, states, and the country.	<a href="http://www.census.gov/">www.census.gov/</a>
NH Department of Education	New Hampshire Department of Education maintains an inventory of data reports and data collection on the progress of schools.	<a href="http://www.education.nh.gov/data/index.htm">http://www.education.nh.gov/data/index.htm</a>
Kaiser Family Foundation	The Kaiser Family Foundation serves as a non-partisan source of facts, information,	<a href="http://www.kff.org">www.kff.org</a>

	analysis and journalism for policymakers, the media, the health care community, and the public.	
Southwest Region Planning Commission	SWRPC provides information on population, housing, employment, income, and taxes.	<a href="http://www.swrpc.org">www.swrpc.org</a>
NH DHHS	New Hampshire Department of Health and Human Services provides information on the health and well-being of residents. Some information includes behavior health, disease and conditions, birth, death and vital statistics, etc.	<a href="http://www.dhhs.nh.gov/data/index.htm">www.dhhs.nh.gov/data/index.htm</a>
NH Health WRQS	NH Health Web Reporting and Query System is a web-based data analysis system that has the ability to query data and view reports about the health of New Hampshire communities.	<a href="http://www.nhhealthwrqs.org">www.nhhealthwrqs.org</a>
MCH 2013 CHNA	Monadnock Community Hospital – a critical access hospital 25 miles away from CMC and within the GMPHN area. MCH completed a community needs assessment several months prior to this CMC CHNA. MCH and CMC share community health improvement programs that cover the entire region.	<a href="http://www.monadnockcommunityhospital.com">http://www.monadnockcommunityhospital.com</a>

This CHNA builds on ongoing and existing assessments and evaluations completed over the past two years. These assessments reviewed existing data and engaged a range of stakeholders through written and telephone surveys, small focus groups, and larger community forums. Information from the HM 2020 community surveys, MUW assessment and community listening sessions, and Granite State Future forum provided additional information to create a comprehensive picture of the assets and gaps in community well-being. These community needs assessments involved extensive community input:

- HM2020 had three Community Summits bring together over 150 people each time. The first Summit gathered community input about the Healthy Monadnock community indicators by identifying contributing factors and possible strategies for each indicator. The second Summit focused on healthy eating and active living indicators, identified community-level strategies for each indicator, and recruited partners for implementation efforts. The third Summit focused on social determinants of health and again identified strategies and recruited partners for implementation.

HM2020 also conducts a community survey every two years. The survey is a statistically significant randomized telephone survey of Cheshire County residents that assesses health behaviors, health access, health literacy, and social capital.

- In 2012 – 2013 the Monadnock United Way (MUW) worked with the New Hampshire Center for Public Policy Studies to conduct a comprehensive review of existing data sources. They convened a Steering Committee comprised of a variety of local leaders to review the data and identify three areas of focus: educational attainment, child welfare, and economic development (jobs at a livable wage). MUW then conducted community forums to gather broad-based input about these topical areas.
- Granite State Future is a state-wide planning process to develop comprehensive regional land use plans that are based on local values and needs, and presented with a vision for how to improve our communities. Lead by the Southwest Regional Planning Commission, the “Monadnock Region Future” project focused on integrated planning (land use, transportation, economic development, housing, environment, energy, community health, culture and arts). On April 2, 2013, Monadnock region residents participated in a facilitated dialogue to answer the question: “How can we make our community the best place to live, learn, work, and play?” The goal of the conversation was to gather input on their values and priorities related to:
  - Monadnock region’s unique beauty and character
  - Local assets important to a lasting prosperity for all
  - Public infrastructure investment and maintenance
  - Local needs for capital investments
  - Natural, social, and financial resources
  - Other relevant input to identify how we realize and accomplish shared priorities

## E. Prioritization Process

The CHNA Leadership Team agreed to begin their prioritization from known information rather than duplicate the community engagement efforts that were so recently conducted by well established partnerships. On February 14, 2013 the members of the CHNA Leadership Team convened to review existing information based on the determinants of health model including:

- Area Demographics
- Health Factors
  - Health behaviors
  - Clinical Care
  - Social and Economic Factors
  - Physical Environment
- Health Outcomes

The session began with a review of the 2012 Community Benefit report, highlighting activities and funding to support the needs identified in the 2008 CHNA. Next, current data from the HM2020 action planning process and the MUW Community Well-Being Assessment results were presented and discussed. Finally the results of MCH CHNA were shared.

After reviewing available data, the CHNA Leadership Team completed a process to identify needs and recommend priority needs to address in the implementation plan. An open discussion format was used initially, where CHNA Leadership Team members reflected on the relevance of each of the priority topics in the MCH CHNA. Members then offered additional community health needs based on the data presented at this session as well as their knowledge based on their role in the community. A nominal group voting process was used to identify the top four priorities.

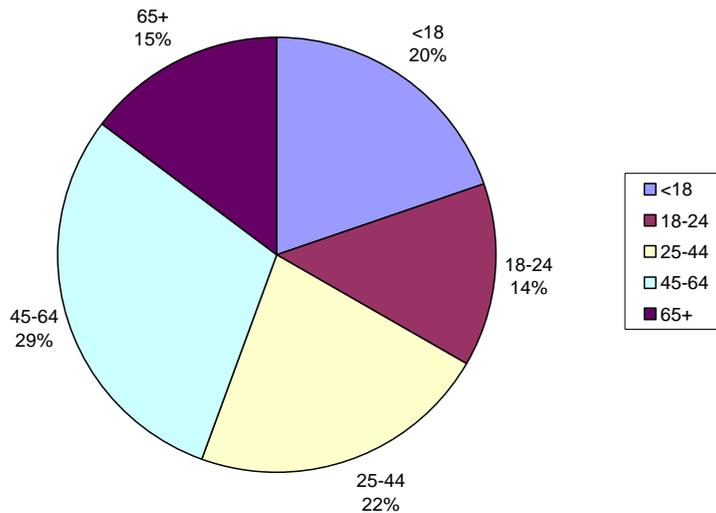
### III. Demographic, Economic, and Social Wellbeing Indicators

#### A. Demographics

Cheshire County is a rural county in southwestern New Hampshire with a population density of approximately 109.1 people per square mile (40 km<sup>2</sup>)<sup>3</sup>. The County has 77,200 residents and is 96.27% White, 0.51% Black or African American, 0.25% American Indian or Native Alaskan, 1.19% Asian, 0.02% Native Hawaiian or Pacific Islander, 0.36% from other races, and 1.40% from two or more races.

As summarized in Figure Three, 19.6% of the population is under 18 years of age, 13.9% are aged 18-24, 22.2% are aged 25-44, 29.7% are aged 45-64, and 14.7% are aged 65 and older. Cheshire County has a median age of 40.7 which is lower than the median age for the state of New Hampshire at 41.1 and higher than the United States median age of 37.2 years.<sup>4</sup>

**Figure Three: Cheshire County Age Distribution, 2010**



#### B. Income

The median household income for the Cheshire County is approximately \$55,241 which is lower than the median household income for the state of New Hampshire at \$64,664. However, both of these figures are higher than the \$52,762 median household income for the United States.<sup>5</sup>

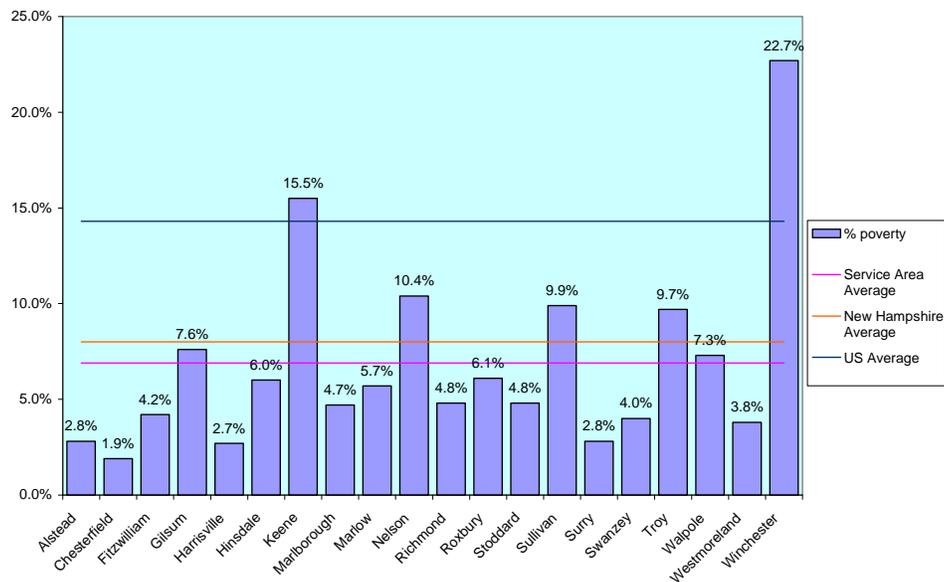
<sup>3</sup> U.S. Census Bureau 2010, Population Housing Units, Area, and Density: 2010 – County – Census Tract 2010

<sup>4</sup> US Census Bureau 2010, American FactFinder demographic profile

<sup>5</sup> US Census Bureau, American FactFinder, 2007-2011 community Survey 5 Year Estimates

Figure 4 summarizes the percent of people living below the federal poverty level for towns in Cheshire County. The percent of people living in poverty in Cheshire County as a whole is 6.9%, which is slightly below New Hampshire at 8.0%. This is less than half of the national level of 14.3%. It should be noted that the town of Winchester has a poverty level that is more than three times higher than the service area as a whole.<sup>6</sup>

**Figure 4: Population Living Below Poverty Level by Cheshire County Town**



According to the US Census Bureau 44.7% of the County’s residents had an income that was below 300% of poverty.<sup>7</sup> In addition, 60% of the elementary schools in the county have 40% or more enrolled students who are eligible for the Free and Reduced Lunch Program.<sup>8</sup>

### C. Employment / Unemployment

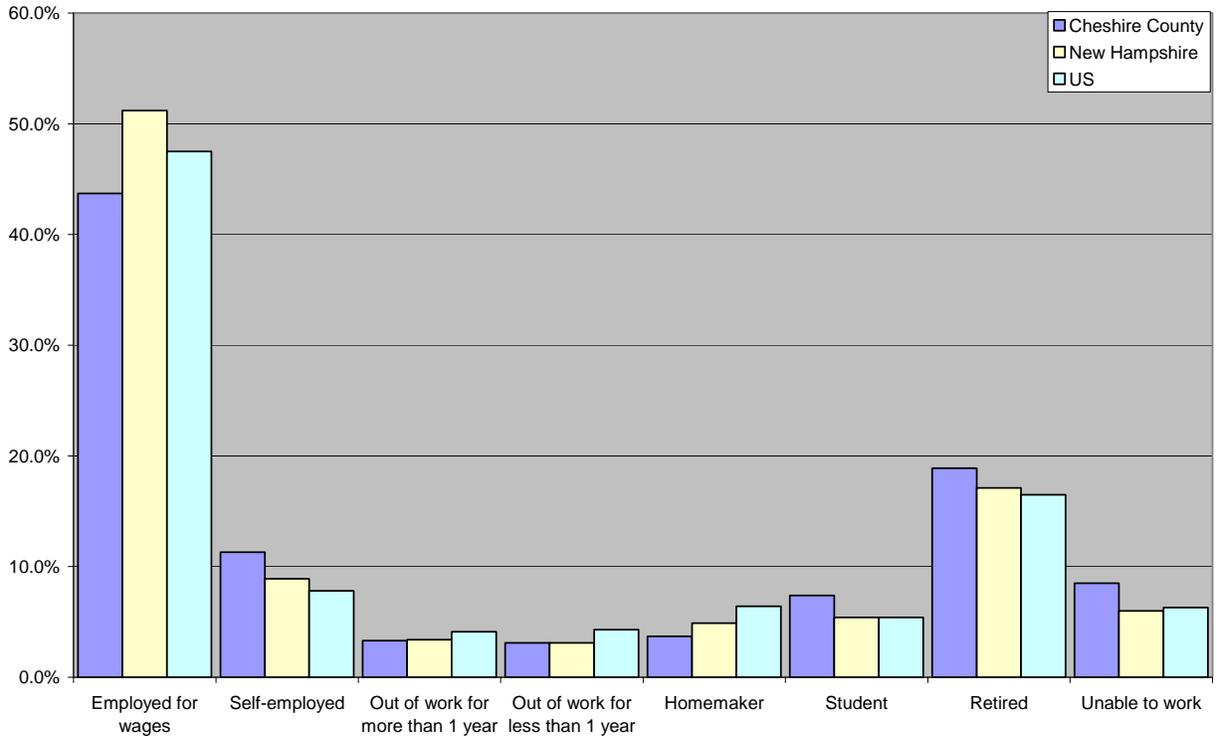
According to the U.S. Census Bureau in 2012, the unemployment rate of those age 16 and over for Cheshire County is 8.8%. This unemployment rate is above the state average of 6.3%, and it is slightly above the national unemployment rate which is 8.7%. Figure 5 summarizes employment status of Cheshire County residents compared to state and national for employed, self-employed, out of work, homemakers, students, retirees and those unable to work.

<sup>6</sup> US Census Bureau, American FactFinder, 2007-2011 community Survey 5 Year Estimates

<sup>7</sup> United States Census Bureau, American FactFinder, Ratio of Income to Poverty level 2009-2011

<sup>8</sup> NH Department of Education Free and Reduced Lunch Eligibility Report for FY 2011-2012

**Figure 5: Employment Status of Cheshire County Residents 2011**



## D. Housing

According to the New Hampshire Housing Finance Authority<sup>9</sup>, there are 31,876 total housing units in Cheshire County. Of these units, 87% are currently occupied, and 13% are currently vacant. Of the 87% that are occupied, 71% are owner occupied, and the other 29% are renter occupied. The New Hampshire Housing Finance Authority data also shows that the median gross monthly rent was approximately \$971/month in 2013. The median value of owner occupied housing units is approximately \$204,800.

The Monadnock Region Future process identified several important local housing issues including:<sup>10</sup>

- As a state, New Hampshire relies on property tax for revenue. This makes it difficult to incentivize homeowners to make improvements to their property. In addition, high property taxes can price young people out of the housing market, make it difficult for

<sup>9</sup> New Hampshire Housing Finance Authority, Housing and Demographic Data, <http://www.nhhfa.org/housing-data-demographics.cfm>

<sup>10</sup> Granite State Futures, <http://granitestatefuture.org/regions/southwest-region/>

young people to move to the area, and squeeze elderly living on a fixed income out of their homes.

- There is a local need to expand housing options and increase economic growth by repurposing buildings and encouraging mixed use of buildings. Local zoning laws create barriers to building multi-unit dwelling developments.

## E. Transportation

Access to basic and essential services can be challenging if the use of personal transportation services are compromised due to age, disability, income or for other reasons. Transportation challenges within the region include a lack of affordable transportation options, limited public transportation services, no weekend or evening public transportation, and limited wheelchair accessible transportation.<sup>11</sup> The City of Keene is the only municipality in Cheshire County with a fixed route bus system. Residents living beyond the city rely on volunteer driver programs, or family and friends.

The 2007-2011 American Community Service estimates that only 0.21% of the Cheshire County population commutes to work using public transportation. This compares to 4.96% of the nation. In addition, the Southwest Regional Planning Commission review of current public transportation reports that public transportation is 0.5% of all roads in the Monadnock Region.<sup>12</sup>

## F. Educational Attainment

Ninety-one percent (91%) of the CMC service area population holds a high school degree. This is approximately the same as the state of New Hampshire, but it is higher than the United States (85.4%). Figure 6 summarizes the percent of population with a college degree or higher by town in Cheshire County. As depicted, the service area has a lower percentage of the population with a college degree or higher than the state of New Hampshire, but both is higher than the United States average.<sup>13</sup>

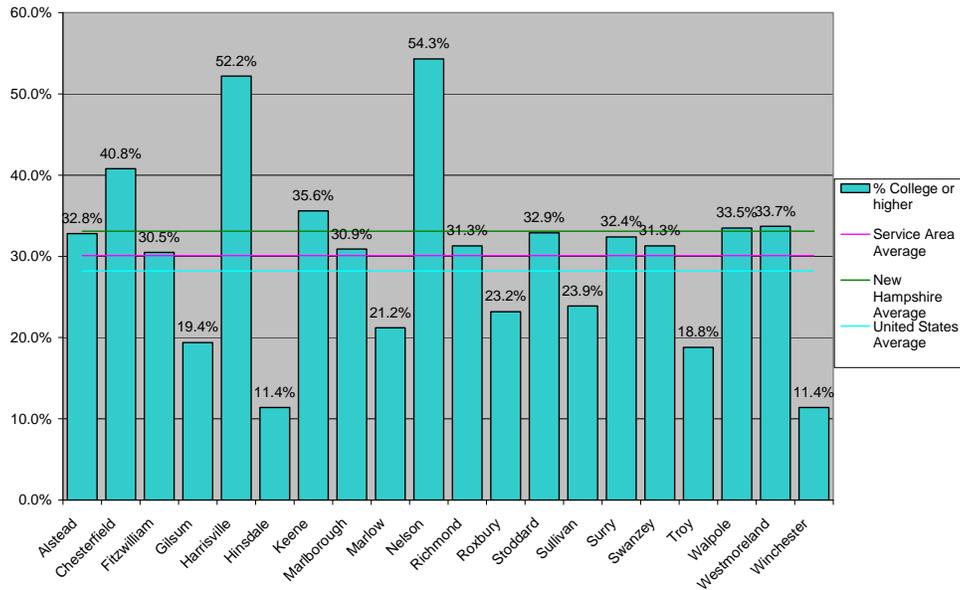
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<sup>11</sup> Southwest Regional Planning Commission, <http://www.swrpc.org/trans>

<sup>12</sup> Southwest Regional Planning Commission, <http://www.swrpc.org/trans>

<sup>13</sup> US Census, American FactFinder, Social characteristics, 2007-2011 American Community Survey 5-Year Estimates

**Figure 6: Percent of Population with a College Degree or Higher by Town**



The 2012 MUW Community Well-being Assessment ranked educational attainment among the top three issues of concern. The report notes that graduation rates, math and reading scores for 10 and 11 grade students in Monadnock communities generally scored below the top 25% of the rest of the state.<sup>14</sup>

<sup>14</sup> Monadnock United Way, Community Well-being in the Monadnock Region, p. 7, 2012.

## IV. Health Outcomes, Health Behaviors, and Clinical Care Indicators

As identified by information regularly gathered through the HM2020 Initiative (See Attachment C: HM2020 Dashboard), there are a variety of indicators of health for which Cheshire County performs very well or for which a prior need has been addressed. The following information highlights the most currently available information from existing data sources, which show an opportunity for improvement as compared to state and/or national levels. For additional indicators of health please refer to Attachment D: Community Commons CHNA Summary Cheshire County, NH.

### A. Health Outcomes

In Cheshire County the leading causes of death and illness are similar to the State as a whole. Table Three summarizes the percent of all deaths for the Top Ten Leading Causes as compared to the State. Heart disease, cancer, and chronic lower respiratory disease are the top three causes of death in Cheshire County.

<b>Table Three: Top Ten Leading Causes of Death in New Hampshire, 2008</b>					
<b>Cheshire County</b>			<b>New Hampshire</b>		
Rank	Cause of Death	% of All Deaths	Rank	Cause of Death	% of All Deaths
1	Heart Disease	21.6	1	Cancer	25.1
2	Cancer	21.4	2	Heart Disease	23.6
3	Chronic lower respiratory diseases	10.2	3	Chronic lower respiratory diseases	6.8
4	Alzheimer's disease	6.3	4	Cerebrovascular diseases	4.7
5	Cerebrovascular diseases	5.2	5	Accidents	4.7
6	Accidents	4.7	6	Alzheimer's disease	3.9
7	Diabetes mellitus	2.5	7	Diabetes mellitus	2.9
8	Intentional self-harm (suicide)	1.7	8	Influenza and pneumonia	2.0
9	Chronic liver disease and cirrhosis	1.1	9	Intentional self-harm (suicide)	1.8
10	Influenza and pneumonia	0.9	10	Nephritis, nephrotic syndrome, nephrosis	1.7

Source: NH Division of Vital Records Administration, death certificate data, 2008

Despite the evidence that heart disease is vastly preventable through lifestyle modifications, it is the leading cause of death in both men and women in Cheshire County. In Cheshire County

4.51% residents over the age of 18 have ever been told by their doctor that they have coronary heart disease or angina, both of which can lead to heart disease related death.<sup>15</sup>

While the overall cancer mortality rate per 100,000 population in Cheshire County (169.68) is lower than the state (177.2) and the nation (176.66), cancer remains the second leading cause of death in Cheshire County. Table Four offers a summary of cancer rates for different types of cancer and indicates that breast (female) and prostate cancer have the highest age adjusted rates per 100,000 people in Cheshire County. Prostate and breast (female) cancer also rank as the top two most frequently occurring sites for cancer throughout the state.

**Table Four: Age Adjusted Rate /100,000 Population by Primary Cancer Site**

Invasive Cancer Prime Site	Age Adjusted Rate/100,000 Reference
Breast (female)	129.6
Prostate	127.5
Lung & Bronchus	72.3
Colorectal	41.6
Uterine	38
Melanoma of the skin	32.8
Bladder	31.1
Non-Hodgkin's Lymphoma	19.1
Leukemia	14.3
Thyroid	13.1

Source: NH Health Web Reporting and Query System

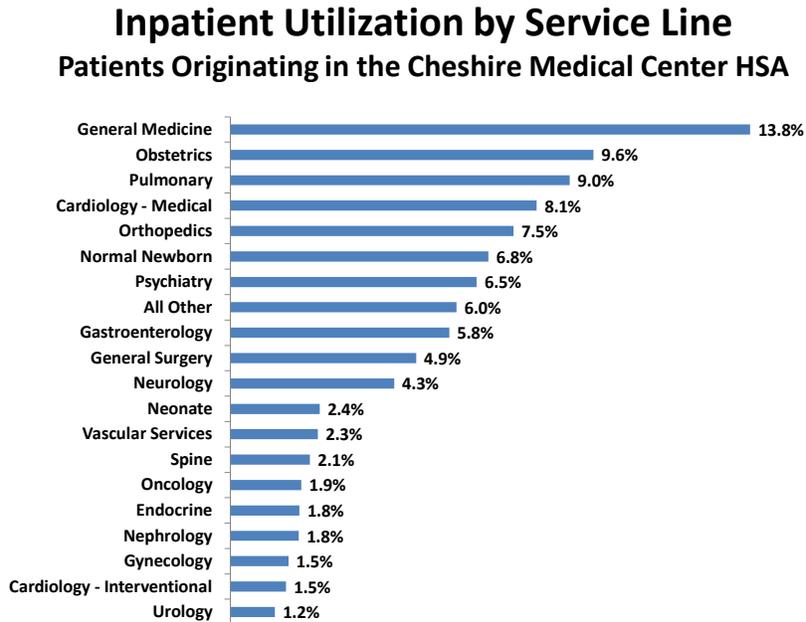
People living with Chronic Obstructive Pulmonary Disease (COPD) in NH have a higher likelihood of co-morbidities such as diabetes, depression, heart attack, coronary artery disease and cancer.<sup>16</sup> NH BFRSS data reveal that 5.6% of all Cheshire County adults self-disclose having (COPD). This rises to over 10% for those over 65. In 2011, COPD with major complications and co-morbidities was CMC's fourth highest Diagnostic Related Group (DRG) category.<sup>17</sup> This payment system allows for the grouping of similar clinical categories and assigning a pre-determined rate per case. As identified in Figure 7, pulmonary related diseases are the third highest reason for inpatient admissions for patients in the CMC service area.

<sup>15</sup> Community Commons report prepared by <http://assessment.communitycommons.org/CHNA>, on August 8, 2013

<sup>16</sup> Breathe New Hampshire; Issue Brief, August 2011

<sup>17</sup> DRG is a classification system based upon the patient's principal diagnosis, gender, age, sex, treatment procedure, discharge status, and the presence of complications or co-morbidities.

**Figure 7: Inpatient Utilization by CMC Service Area Patients**



Source: UHDDS

## B. Health Behaviors

### Healthy Eating and Active Living:

Dietary guidelines for Americans recommend eating at least five servings of fruits and vegetables each day. In 2009, only 27% of Cheshire County residents reported eating the recommended amount of fruits and vegetables daily. This compares to 28% of people in the State and 23% in the nation.

*“Fruits and vegetables when consumed in place of high-calorie foods, play an important role in achieving and maintaining healthy weight.”*

(NH State Health Report, p. 24)

The 2008 Physical Activity Guidelines for Americans state that adults should get at least 150 minutes of moderate intensity physical activity or 75 minutes of intensive physical activity every week.<sup>18</sup> In 2011, only 18% of Cheshire County residents reported meeting these guidelines. This compares to 22% of residents in the state and 21% across the nation.

In addition to lowering the risk for chronic illnesses, maintaining regular physical activity and eating a healthy diet contribute to overall weight management. Data from 2011 NH BRFSS indicates that only 39% of Cheshire County residents are maintaining a healthy weight. While this is a minority of people in the County, it is more than the 37% at a healthy weight across the state and 35% across the nation.

<sup>18</sup> US DHHS, 2008 Physical Activity Guidelines for Americans; <http://www.health.gov/paguidelines/guidelines/#toc>

### **Smoking and Tobacco Use:**

Tobacco use is important because it is linked to leading causes of death including cancer and cardiovascular disease. Tobacco use is also linked to high healthcare costs.<sup>19</sup> When averaged over the years 2005-2011, Cheshire County has an estimated 18.4% of the population who regularly smoke. However, data from 2011 alone shows Cheshire County smoking rates at 17.3%. Over the same averaging time period (2005 -2011), the percent of adults who have smoked 100 or more cigarettes in his/her lifetime is 48%, which is about equal to the State at 47% and higher than national levels of 43%.<sup>20</sup>

*“Each year an estimated 1,700 people die prematurely from smoking related illness in New Hampshire. An additional 200 die each year from second hand smoke.”*

(NH State Health Report, p.22)

### **Alcohol Consumption:**

Excessive alcohol consumption can cause harmful health effects including chronic diseases, cirrhosis, cancer, and unintended injuries. It may also be a sign of untreated behavioral health needs. In 2011, 19% of Cheshire County adults were binge drinking; defined as the percentage of men who had five/women who have had four or more drinks of alcohol in a row. This is similar to the State at 19% and just above the 18% national levels of adult binge drinkers.<sup>21</sup>

Alcohol is the most commonly used drug among youth in Cheshire County. The 2011 Youth Risk Behavior Survey of Keene High School students shows 69% of students reporting that they ever drank alcohol other than a few sips. Across the State, 65% of high school students report ever drinking more than a sip of alcohol. The survey also shows that 41% of Keene High School students had at least one drink of alcohol on one or more of the past 30 days. This compares to 38% for the State.

## **C. Clinical Care**

### **Access to Care:**

In general, insurance coverage in New Hampshire (89.67%) is better than the nation (84.78%). In Cheshire County, 10.36% (three year average from 2008-2010) of the population is uninsured. When focusing on the adult population the percent uninsured raises to 14.6%. The overall percent uninsured is similar to the state percent uninsured of 10.33%, but higher for adults at 13%.<sup>22</sup>

It is estimated that 13,386 individuals are uninsured in Cheshire County and 8,572 will gain coverage with proposed expansions under the Federal Affordable Care Act. However, 4,814 people are projected to remain uninsured, even with insurance coverage expansions.<sup>23</sup> As a safety net provider, CMC/DHK provides services to all residents of Cheshire County regardless

<sup>19</sup> Center for Disease control and Prevention, 2010; <http://www.cdc.gov/features/TobaccoControlData/>

<sup>20</sup> Community Commons CHNA Cheshire County Summary, 2013

<sup>21</sup> Healthy Monadnock 2020 Data Dashboard, 2012.

<sup>22</sup> Community Commons CHNA Cheshire County Summary, 2013

<sup>23</sup> The Lewin Group, An Evaluation of Medicaid Expansion in New Hampshire, January 2013

of ability to pay. The CMC patient insurance profile includes 40% persons with Medicare, 22% commercial insurance, 9% Medicaid, and 26% uninsured.

Having insurance is a strong indicator of access to health care, but access can be limited by the number of available primary care providers. In Cheshire County as of 2011, the rate of primary care providers per 100,000 population is 68.72. This is lower than the State rate of 97.6 and the national rate of 84.7. When asked in 2011 if they had a personal doctor, 78% of Cheshire County residents responded yes.<sup>24</sup> The HM2020 Community Survey in 2012 found 45.8% of respondents used the CMC Emergency Room (ER) in the last year. Of those that did 29.3% admitted that they used the ER for non-emergencies. In this survey, potentially avoidable emergency room visits were most commonly associated with ear, nose and throat infections (8%), back pain (6.8%), COPD (6.2%) and coronary artery disease (7.1%).

Oral health is an important part of overall health and poor oral health has been associated with acute and chronic disease.<sup>25</sup> In Cheshire County 25.78% (averaged from 2006 -2010) of adults had not had a recent dental exam. This compares to 23.14 % across the State and 30.15% nationally.<sup>26</sup> When asked in 2010 if they had visited a dentist for any reason, 73% of Cheshire County residents responded yes.<sup>27</sup> When Cheshire County adults were asked about their dental health, 16.05% (averaged from 2006-2010) reported having six or more of their permanent teeth removed due to tooth decay, gum disease, or infection. This compares to 14.51% across the State and 15.65% nationally.

### **Prevention Screening:**

Prevention screening allows for early detection of disease and early treatment if necessary. Low rates of preventive screening in a community may indicate a lack of knowledge about prevention services, lack of access to preventive care, poor outreach from providers, or other social barriers such as transportation to care. In Cheshire County, 70.5% of women age 40 and over had a mammogram in the past two years. This compares to 81% across the State. When asked about having a colonoscopy or sigmoidoscopy in the past five years, 56.7% of Cheshire County residents reported having the screening test. This compares to 58.2% across the State.<sup>28</sup>

### **Disease Management:**

Having diabetes is concerning in part because it carries a high cost. According to the 2011 New Hampshire State Health Profile, the average health care cost per person with diabetes is \$11,744 per year compared with \$2,935 for a person without diabetes.<sup>29</sup> In 2010, 9% of Cheshire County residents had a diagnosis of diabetes. This is similar to the 8% of state residents and 9% of people across the nation who has diabetes. As noted earlier in Table Three, diabetes is the seventh leading cause of death for both Cheshire County and the State.

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<sup>24</sup> Healthy Monadnock 2020 Data Dashboard, 2012

<sup>25</sup> New Hampshire State Health Profile, p. 40, 2011

<sup>26</sup> Community Commons CHNA Cheshire County Summary, 2013

<sup>27</sup> Healthy Monadnock 2020 Data Dashboard, 2012

<sup>28</sup> Snapshot of New Hampshire's Public Health Regions, Counties and the Cities of Manchester and Nashua, 2011, p.43

<sup>29</sup> New Hampshire State Health Profile, p. 79, 2011

Having hypertension/high blood pressure can lead to heart disease. Yet hypertension can most often be managed through medications, diet and exercise. In Cheshire County, 27.9 % of people with high blood pressure report that they do not take medication to manage their condition. This is higher than the percent of people throughout the state (23.75%) and nation (21.74%) who are not taking their medication. As with preventive screening, people may not take their medications because they lack knowledge about high blood pressure, lack access to health care providers, lack appropriate outreach from health care providers, or they may have other social problems such as inability to pay for medications.<sup>30</sup>

**Behavioral Health:**

Chronic stress, mental health distress, and more acute depression are linked with poor overall health and chronic disease.<sup>31</sup> In 2011, 14.6% of Cheshire County residents reported frequent days of mental health distress. This is higher than the State overall where 12.3% of residents reported frequent mental health distress.<sup>32</sup>

*Mental illnesses are disorders of the brain that, if left untreated, are among the most disabling diseases. Treatment can significantly improve the quality of life for people living with mental illness.*  
(NH State Health Report, p. 58)

In Cheshire County slightly more people commit suicide as compared to New Hampshire overall. Looking at a three year average from 2008 to 2010, Cheshire County experienced 14.6% (per 100,000 population) death rate from intentional self-harm. Over the same time period the suicide rate for the state was 12.3%.<sup>33</sup> In the 2011 Keene High School Youth Risk Behavior Survey 12% of students reported that they made a plan about how they would attempt suicide during the past 12 months. This is the same as the State (12%).

Social and emotional support is important for maintaining good mental health and it is also linked to educational attainment. In Cheshire County, 17.6% of residents lack adequate social or emotional support. This average over the years 2005 to 2011 is similar to the state overall value at 17.5% but lower than the nation at 20.93%.<sup>34</sup> However, recent survey information from the 2012 HM2020 County Survey found that 71% of Cheshire County residents had friends over to their home at least one time per month. This indicates a strong level of social capital in the County.

<sup>30</sup> Community Commons CHNA Cheshire County Summary, 2013

<sup>31</sup> Healthy People2020; <http://www.healthypeople.gov/2020/LHI/mentalhealth>

<sup>32</sup> Healthy Monadnock 2020Data Dashboard, 2012.

<sup>33</sup> Community Commons CHNA Cheshire County Summary, 2013

<sup>34</sup> Community Commons CHNA Cheshire County Summary, 2013

## V. Priority Community Needs

The priority community health needs identified through the review of existing data sources and by the CHNA Leadership Team are summarized in Table Five. As indicated in the social determinants model (Figure 1), these needs contribute to the poor health outcomes that were identified in the data review.

<b>Table Five: Identified Community Needs</b> <i>(Needs identified in data and by CHNA Leadership in bold)</i>		
Factor	Needs Identified Data Sources	Needs Identified CHNA Leadership Team
Health Behaviors	<ul style="list-style-type: none"> <li>✓ Alcohol consumption (adult and youth)</li> <li>✓ Tobacco use</li> <li>✓ Physical activity levels</li> <li>✓ Obesity</li> </ul>	<ul style="list-style-type: none"> <li>✓ Affordable physical fitness/wellness activities</li> <li>✓ Substance abuse prevention and treatment</li> <li>✓ Increase health education in schools</li> </ul>
Clinical Care	<ul style="list-style-type: none"> <li>✓ Health care access – insurance, affordable care and affordable prescriptions</li> <li>✓ Chronic disease management</li> <li>✓ Dental care services</li> <li>✓ Behavioral health services</li> <li>✓ Improved coordination between care providers</li> <li>✓ Improved communication between community service providers</li> <li>✓ End of life issues (palliative care)</li> </ul>	<ul style="list-style-type: none"> <li>✓ Access to care including primary care, specialty and community-based mental health services</li> <li>✓ Urgent care alternative to emergency room care</li> <li>✓ Affordable dental care</li> <li>✓ Behavioral health services</li> <li>✓ Improved coordination and communication between clinical care, social services, and formal and informal community supports (including faith-based organizations)</li> </ul>
Socio-Economic	<ul style="list-style-type: none"> <li>✓ Educational attainment</li> <li>✓ Livable wage jobs</li> <li>✓ Housing affordability and homelessness</li> <li>✓ Managing growing elder population</li> </ul>	<ul style="list-style-type: none"> <li>✓ Meet education needs for all level in the community</li> <li>✓ Child hunger during the summer when no school meals</li> </ul>
Physical Environment	<ul style="list-style-type: none"> <li>✓ Transportation</li> </ul>	<ul style="list-style-type: none"> <li>✓ Transportation particularly for outside of Keene residents</li> </ul>

The CHNA Leadership Team prioritized four community needs above the other identified needs. These top four needs are:

- Behavioral health services – increasing the effectiveness of local services
- Urgent care – more timely and economical access to services instead of using emergency room care
- Transportation – increasing access to public and private transportation particularly in rural towns
- Improved coordination and communication between services – improving linkages between clinical services, faith-based organizations, and informal support networks

The community health needs identified in this CHNA provide the basis for the development of the CMC Implementation Strategy required by Federal IRS code Section 501(r).

## Attachment A: Community Advisory Council Membership 2013

<b>Name</b>	<b>Town</b>	<b>Term of Office</b>
Abohatab, Lisa	Keene	2014
Baker, Robert	Marlborough	2014
Balnis, Karen	Richmond	2016
Bunce, John	Nelson	2015
Flagler, Sue	Richmond	2015
Harling, Lorna	Keene	2016
Hill, Carol	Keene	2016
Howe, Jane	Marlborough	2015
Lauer, Kim	Keene	2015
McAlpine, Bonnie	Winchester	2014
O'Connor, Dale	Keene	2014
O'Connor, Mike	Swanzey	2016
Palmisano, Laurie	Spofford	2016
Puleo, Joyce	Marlborough	2015
Raynor, Jason	Harrisville	2015
Summers, Barbara	Dublin	2016

## Attachment B: Hospital Service Area

<b>Town</b>	<b>Zip Code</b>
Acworth	03601
Alstead	03602
Chesterfield	03443
E. Swanzey	03446
Fitzwilliam	03447
Gilsum	03448
Harrisville/Chesham	03450
Keene	03431
Marlborough	03455
Marlow	03456
Nelson/Munsonville	03457
Richmond	03470
Roxbury	03431
Spofford	03462
Stoddard	03464
Sullivan	03445
Surry	03431
Swanzey	03431
Troy	03465
Walpole	03608
Westmoreland	03467
W. Chesterfield	03466
W. Swanzey	03469
Winchester	03470

## Attachment C: Healthy Monadnock 2020 Dashboard

HM2020 Indicator	Target Area	Healthiest Community Target	Cheshire County	N.H.	U.S.	Cheshire vs U.S.
Attended some college (2011)	Wellness	72%	57%	48%	46%	
Air quality (days good) (2011)	Wellness	300	295	N/A	N/A	N/A
Any physical activity w/in 30 days (2011)	Wellness	90%	80%	76%	74%	
Met physical activity guideline (2011)	Wellness	50%	18%	22%	21%	
Adults who eat 5+ fruits and vegetables daily (2009)	Wellness	50%	27%	28%	23%	
Residents with health insurance (2011)	Health Care Access	100%	79%	87%	82%	
Have personal doctor or provider (2012)	Health Care Access	100%	78%	N/A	N/A	
Adults visiting dentist (any reason) (2010)	Health Care Access	80%	73%	77%	70%	
Very confident getting health info (2012)	Health Literacy	94%	83%	N/A	N/A	
Health provider main source health info (2012)	Health Literacy	95%	88%	N/A	N/A	
Community rating (good or better) (2012)	Social Capital	100%	93%	N/A	N/A	
Volunteerism (2012)	Social Capital	75%	67%	N/A	N/A	
Friends over to home (at least once a month) (2012)	Social Capital	72%	71%	N/A	N/A	

HM2020 Indicator	Target Area	Healthiest Community Target	Cheshire County	N.H.	U.S.	Cheshire vs U.S.
Adults with good or better health (2011)	Health Status	95%	84.6%	86.3%	83.1%	
Frequent mental health distress (2011)	Health Status	6%	14.6%	12.3%	N/A	
All cardiovascular disease mortality (per 100,000) (2010)	Health Status	187	258	227.3	254.1	
Suicide mortality (per 100,000, 3-yr average) (2008-2010)	Health Status	4.8	14.7	13.7	12.1	
Adults at healthy weight (2011)	Health Status	50%	39%	37%	35%	
Adults with diabetes (2010)	Health Status	5,000%	9%	8%	9%	
Adults who smoke (2011)	Health Status	12%	17.3%	19.4%	21.2%	
Youth smoking (2011)	Health Status	10%	18.1	18.7	18.1	
Adult binge drinking (2011)	Health Status	14%	19%	19%	18%	
Chlamydia Rate (per 100,000) (2011)	Health Status	150	174	228.6	457.6	
Poverty rate (all ages) (2011)	Wellness	8%	11%	9%	16%	
Children In Poverty (2011)	Wellness	8%	14%	12%	21%	
Unemployment rate (2011)	Wellness	4%	5.3%	5.4%	8.9%	
Percent 9 <sup>th</sup> graders that graduate within 4 yrs (2009-2010)	Wellness	91%	86%	86%	N/A	

## Full Health Indicators Report

### Demographics

**Report Area:** Cheshire County, New Hampshire

Demographics	Social & Economic Factors	Physical Environment	Clinical Care	Health Behaviors	Health Outcomes
<ul style="list-style-type: none"> <li>■ Total Population</li> <li>■ Change in Total Population</li> <li>■ Male Population</li> <li>■ Female Population</li> </ul>	<ul style="list-style-type: none"> <li>■ Population Under Age 18</li> <li>■ Population Age 18-64</li> <li>■ Population Age 65</li> <li>■ Median Age</li> </ul>			<ul style="list-style-type: none"> <li>■ Population with Limited English Proficiency</li> <li>■ Urban and Rural Population</li> </ul>	

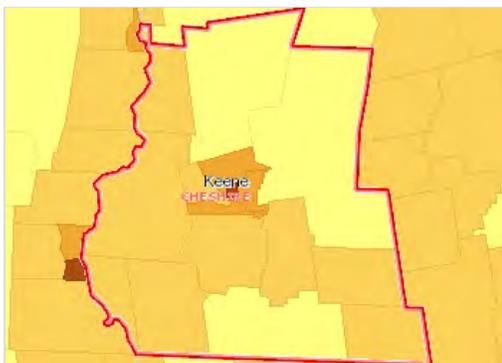
Current population demographics and changes in demographic composition over time play a determining role in the types of health and social services needed by communities.

### Total Population

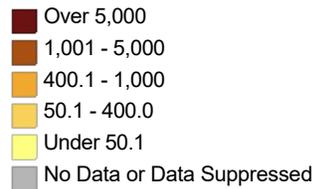
This indicator reports total population and the population density. Population density is defined as the number of persons per square mile.

Report Area	Total Population	Total Land Area (Square Miles)	Population Density (Per Square Mile)
Cheshire County, New Hampshire	77,301	706.47	109.42
New Hampshire	1,315,911	8,950.28	147.02
United States	310,346,360	3,530,997.60	87.89

Data Source: [U.S. Census Bureau, 2007-2011 American Community Survey 5-Year Estimates](#). Source geography: Tract.



**Population, Density (Persons per Sq Mile) by Tract, 2007-11**

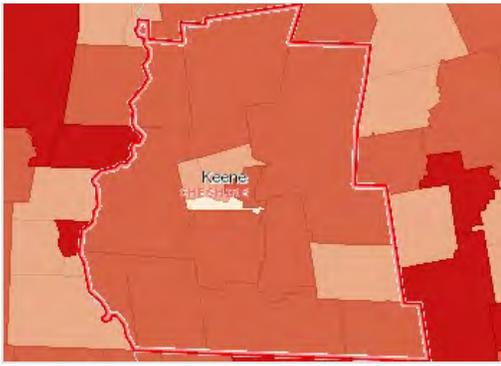


### Male Population

This indicator reports total male population.

Report Area	Total Population	Male Population	Percent Male Population
Cheshire County, New Hampshire	77,301	37,619	48.67%
New Hampshire	1,315,911	649,547	49.36%
United States	306,603,776	150,740,224	49.16%

Data Source: [U.S. Census Bureau, 2007-2011 American Community Survey 5-Year Estimates](#). Source geography: Tract.



**Male Population, Percent by Tract, 2007-11**

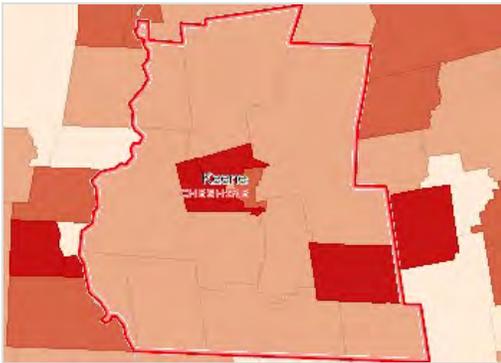


## Female Population

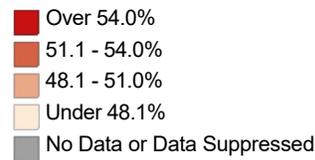
This indicator reports total female population.

Report Area	Total Population	Female Population	Percent Female Population
Cheshire County, New Hampshire	77,301	39,682	51.33%
New Hampshire	1,315,911	666,364	50.64%
United States	306,603,776	155,863,552	50.84%

Data Source: [U.S. Census Bureau, 2007-2011 American Community Survey 5-Year Estimates](#). Source geography: Tract.



**Female Population, Percent by Tract, 2007-11**

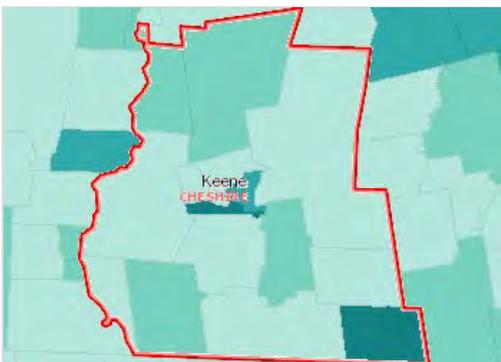


## Median Age

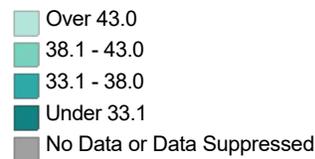
This indicator reports population median age based on the 5-year American Community Survey estimate.

Report Area	Total Population	Median Age
Cheshire County, New Hampshire	77,301	40.60
New Hampshire	1,315,911	40.70
United States	306,603,776	37

Data Source: [U.S. Census Bureau, 2007-2011 American Community Survey 5-Year Estimates](#). Source geography: Tract.



**Median Age, Median by Tract, 2007-11**

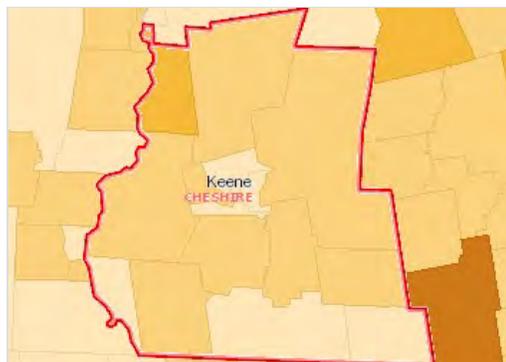


## Population Under Age 18

This indicator reports the percentage of population under age 18 in the designated geographic area. This indicator is relevant because it is important to understand the percentage of youth in the community, as this population has unique health needs which should be considered separately from other age groups.

Report Area	Total Population	Population Age 0-17	Percent Population Age 0-17
Cheshire County, New Hampshire	77,301	15,405	19.93%
New Hampshire	1,315,911	290,900	22.11%
United States	306,603,776	74,047,760	24.15%

Data Source: [U.S. Census Bureau, 2007-2011 American Community Survey 5-Year Estimates](#). Source geography: Tract.



**Population Age 0-17, Percent by Tract, 2007-11**

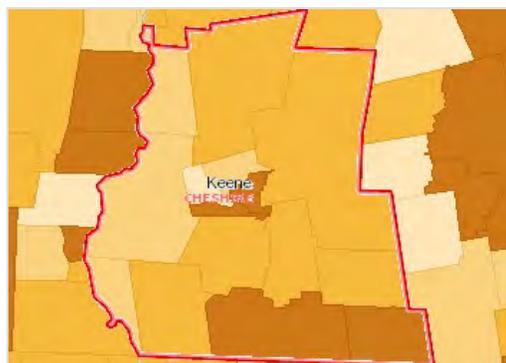
- Over 30.0%
- 25.1 - 30.0%
- 20.1 - 25.0%
- Under 20.1%
- No Data or Data Suppressed

### Population Age 18-64

This indicator reports the percentage of population age 18-64 in the designated geographic area. This indicator is relevant because it is important to understand the percentage of adults in the community, as this population has unique health needs which should be considered separately from other age groups.

Report Area	Total Population	Population Age 18-64	Percent Population Age 0-17
Cheshire County, New Hampshire	77,301	50,631	65.50%
New Hampshire	1,315,911	849,843	64.58%
United States	306,603,776	192,947,216	62.93%

Data Source: [U.S. Census Bureau, 2007-2011 American Community Survey 5-Year Estimates](#). Source geography: Tract.



**Population Age 18-64, Percent by Tract, 2007-11**

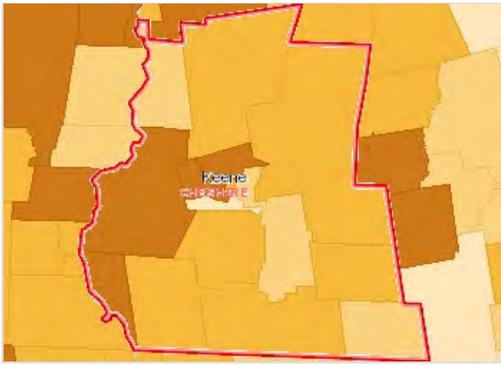
- Over 66.0%
- 62.1 - 66.0%
- 59.1 - 62.0%
- Under 59.1%
- No Data or Data Suppressed

### Population Age 65

This indicator reports the percentage of population age 65 and older in the designated geographic area. This indicator is relevant because it is important to understand the percentage of adults in the community, as this population has unique health needs which should be considered separately from other age groups.

Report Area	Total Population	Population Age 65	Percent Population Age 65
Cheshire County, New Hampshire	77,301	11,265	14.57%
New Hampshire	1,315,911	175,168	13.31%
United States	306,603,776	39,608,816	12.92%

Data Source: [U.S. Census Bureau, 2007-2011 American Community Survey 5-Year Estimates](#). Source geography: Tract.



**Population Age 65 , Percent by Tract, 2007-11**

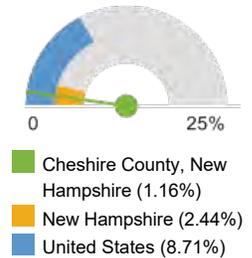


### Population with Limited English Proficiency

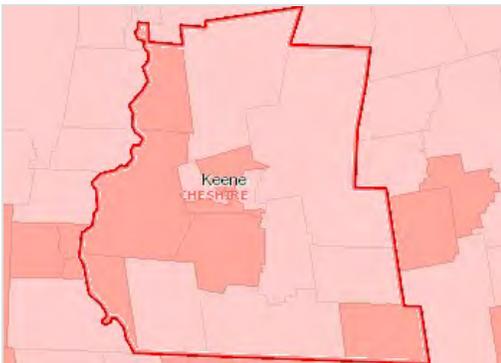
This indicator reports the percentage of the population aged 5 and older who speak a language other than English at home and speak English less than "very well." This indicator is relevant because an inability to speak English well creates barriers to healthcare access, provider communications, and health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

Report Area	Total Population	Population Age 5	Population Age 5 with Limited English Proficiency	Percent Population Age 5 with Limited English Proficiency
Cheshire County, New Hampshire	73,588	73,588	857	1.16%
New Hampshire	1,244,973	1,244,973	30,367	2.44%
United States	286,433,408	286,433,396	24,950,792	8.71%

**Percent Population Age 5 with Limited English Proficiency**



Note: This indicator is compared with the state average.  
 Data Source: [U.S. Census Bureau, 2007-2011 American Community Survey 5-Year Estimates](#). Source geography: Tract.



**Population with Limited English Proficiency, Percent by Tract, 2007-11**

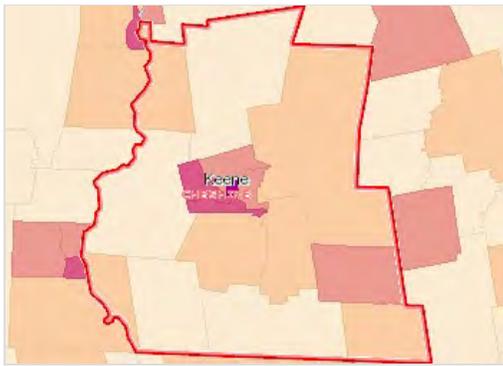


### Urban and Rural Population

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

Report Area	Total Population	Urban Population	Rural Population	Percent Urban	Percent Rural
Cheshire County, New Hampshire	77,117	26,979	50,138	34.98%	65.02%
New Hampshire	1,316,470	793,872	522,598	60.30%	39.70%
United States	312,471,327	252,746,527	59,724,800	80.89%	19.11%

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: Tract.



**Urban Population, Percent by Tract, 2010**

- 100% Urban Population
- 90.1 - 99.9%
- 50.1 - 90.0%
- Under 50.1%
- No Urban Population
- No Data or Data Suppressed

**Social & Economic Factors**

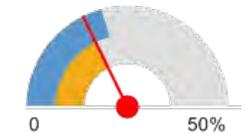
Economic and social insecurity often are associated with poor health. Poverty, unemployment, and lack of educational achievement affect access to care and a community's ability to engage in healthy behaviors. Without a network of support and a safe community, families cannot thrive. Ensuring access to 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 that they receive insufficient 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	Total Population Age 18	Estimated Population Without Adequate Social / Emotional Support	Percent Population Without Adequate Social / Emotional Support
Cheshire County, New Hampshire	61,700	10,859	<b>17.60%</b>
New Hampshire	1,017,987	178,148	17.50%
United States	229,932,154	48,120,965	20.93%

**Percent Population Without Adequate Social / Emotional Support**



- Cheshire County, New Hampshire (17.60%)
- New Hampshire (17.50%)
- United States (20.93%)

Note: This indicator is compared with the state average.

Data Source: [Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2005-2011](#). Source geography: County.



**Population Without Adequate Social or Emotional Support, Adults (Age 18), Percent by County, 2005-11**

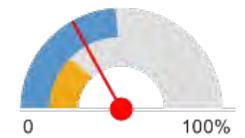
- Over 23.0%
- 19.1 - 23.0%
- 15.1 - 19.0%
- Under 15.1%
- No Data or Data Suppressed

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
Cheshire County, New Hampshire	9,654	3,262	33.79%
New Hampshire	194,242	48,966	25.21%
United States	49,692,766	24,021,069	48.34%

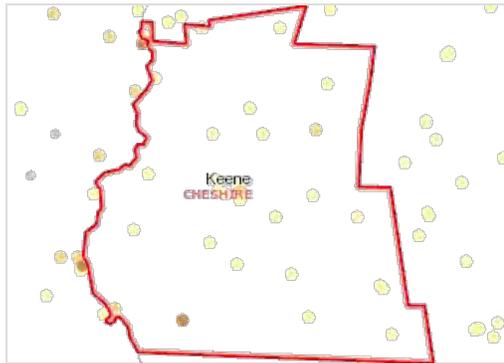
**Percent Free/Reduced Price Lunch Eligible**



- Cheshire County, New Hampshire (33.79%)
- New Hampshire (25.21%)
- United States (48.34%)

Note: This indicator is compared with the state average.

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.



**Students Eligible for Free or Reduced-Price Lunch by School, 2010-11**

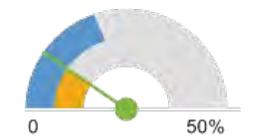
- Over 90.1%
- 75.1 - 90.0%
- 60.1 - 75.0%
- 45.1 - 60.0%
- Under 45.1%
- No Data or Data Suppressed

## Children in Poverty

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

Report Area	Total Population	Population Under Age 18	Population Under Age 18 in Poverty	Percent Population Under Age 18 in Poverty
Cheshire County, New Hampshire	72,242	15,029	1,442	9.59%
New Hampshire	1,275,969	286,345	28,291	9.88%
United States	298,788,000	72,906,664	14,550,805	19.96%

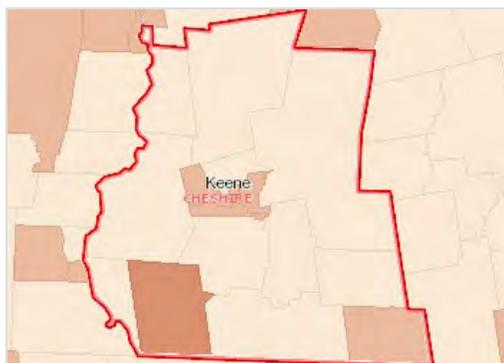
**Percent Population Under Age 18 in Poverty**



- Cheshire County, New Hampshire (9.59%)
- New Hampshire (9.88%)
- United States (19.96%)

Note: This indicator is compared with the state average.

Data Source: U.S. Census Bureau, 2007-2011 American Community Survey 5-Year Estimates. Source geography: Tract.



**Population Below the Poverty Level, Children (Age 0-17), Percent by Tract, 2007-11**

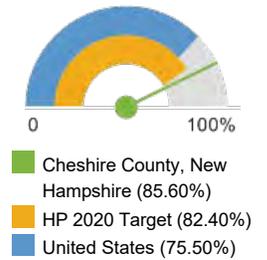
- Over 50.0%
- 30.1 - 50.0%
- 10.1 - 30.0%
- Under 10.1%
- No Data or Data Suppressed

## High School Graduation Rate

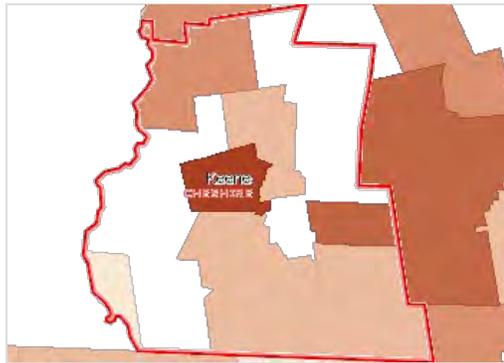
This indicator reports the average freshman graduate rate, which measures the percentage of students receiving their high school diploma within four years. This indicator is relevant because low levels of education are often linked to poverty and poor health.

Report Area	Average Freshman Base Enrollment	Estimated Number of Diplomas Issued	On-Time Graduation Rate
Cheshire County, New Hampshire	920	787	85.60
New Hampshire	17,510	14,757	84.30
United States	4,024,345	3,039,015	75.50
<a href="#">HP 2020 Target</a>			>82.4

On-Time Graduation Rate



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



Average Freshman Graduation Rate , Percent by School District, 2008-09

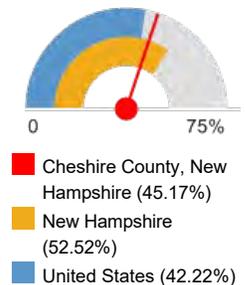
- Over 94.0%
- 87.1 - 94.0%
- 80.1 - 87.0%
- 72.1 - 80.0%
- Under 72.1%

### Income Over \$75,000 (Family)

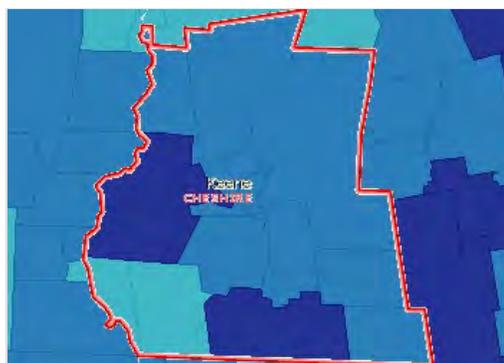
This indicator reports the percentage of families with total annual income of \$75,000 or greater. Total income includes all reported income from wages and salaries as well as income from self-employment, interest or dividends, public assistance, retirement, and other sources.

Report Area	Total Families	Families with Income Over \$75,000	Percent Families with Income Over \$75,000
Cheshire County, New Hampshire	19,157	8,654	45.17%
New Hampshire	348,040	182,779	52.52%
United States	76,507,232	32,303,920	42.22%

Percent Families with Income Over \$75,000



Note: This indicator is compared with the state average.  
 Data Source: [U.S. Census Bureau, 2007-2011 American Community Survey 5-Year Estimates](#). Source geography: Tract.



Family Households with Income Over \$75,000, Percent by Tract, 2007-11

- Over 55.0%
- 37.1 - 55.0%
- 23.1 - 37.0%
- Under 23.1%
- No Data or Data Suppressed

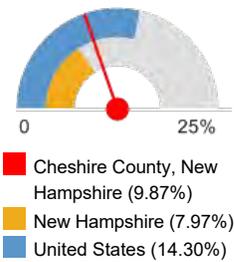
### Population in Poverty (100% FPL)

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

This indicator reports the percentage of the population living in households with income below 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.

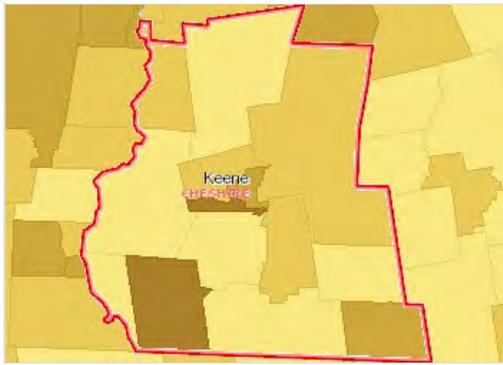
Report Area	Total Population	Population in Poverty	Percent Population in Poverty
Cheshire County, New Hampshire	72,242	7,131	<b>9.87%</b>
New Hampshire	1,275,969	101,634	7.97%
United States	298,788,000	42,739,924	14.30%

Percent Population in Poverty



Note: This indicator is compared with the state average.

Data Source: U.S. Census Bureau, 2007-2011 American Community Survey 5-Year Estimates. Source geography: Tract.



Population Below the Poverty Level, Percent by Tract, 2007-11

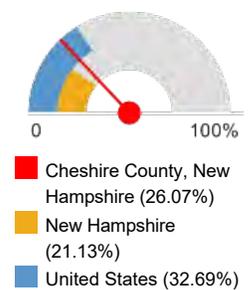
- Over 21.0%
- 12.1 - 21.0%
- 6.1 - 12.0%
- Under 6.1%
- No Data or Data Suppressed

### Population in Poverty (200% FPL)

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

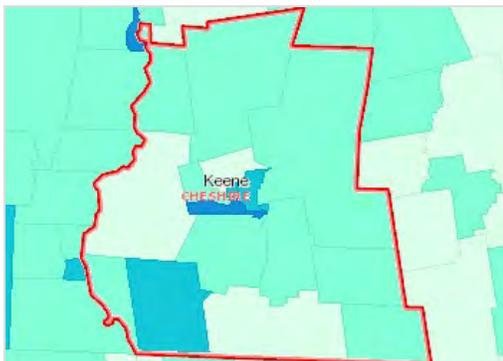
Report Area	Total Population	Population with Income at or Below 200% FPL	Percent Population with Income at or Below 200% FPL
Cheshire County, New Hampshire	72,242	18,833	<b>26.07%</b>
New Hampshire	1,275,969	269,557	21.13%
United States	298,788,000	97,686,536	32.69%

Percent Population with Income at or Below 200% FPL



Note: This indicator is compared with the state average.

Data Source: U.S. Census Bureau, 2007-2011 American Community Survey 5-Year Estimates. Source geography: Tract.



Population Below 200% Poverty Level, Percent by Tract, 2007-11

- Over 50.0%
- 35.1 - 50.0%
- 20.1 - 35.0%
- Under 20.1%
- No Data or Data Suppressed

### Population Receiving Medicaid

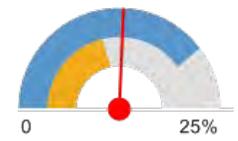
This indicator reports the percentage of the population that is enrolled in Medicaid. This indicator is relevant because it assesses vulnerable populations which are more likely to have multiple health access, health status, and social support needs; when combined with poverty data, providers can use 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
Cheshire County, New Hampshire	77,097	8,796	<b>12.84%</b>
New Hampshire	1,317,033	140,827	10.69%
United States	309,231,232	51,335,184	19.91%

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 Receiving Medicaid



- Cheshire County, New Hampshire (12.84%)
- New Hampshire (10.69%)
- United States (19.91%)



Insured, Medicaid / Means-Tested Coverage, Percent by PUMA, 2009-11

- Over 27.0%
- 20.1 - 27.0%
- 13.1 - 20.0%
- Under 13.1%

### Population with Associate's Level Degree or Higher

This indicator reports the percentage of the population aged 25 and older obtaining an Associate's level degree or higher. This indicator is relevant because educational attainment is a key driver of population health.

Report Area	Total Population Age 25	Population Age 25 with Associate's Degree or Higher	Percent Population Age 25 with Associate's Degree or Higher
Cheshire County, New Hampshire	51,291	19,285	<b>37.60%</b>
New Hampshire	4,211,526	1,618,476	38.43%
United States	202,048,128	72,317,672	35.79%

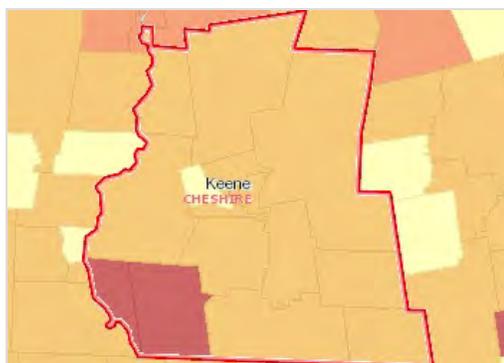
Note: This indicator is compared with the state average.

Data Source: U.S. Census Bureau, 2007-2011 American Community Survey 5-Year Estimates. Source geography: Tract.

Percent Population Age 25 with Associate's Degree or Higher



- Cheshire County, New Hampshire (37.60%)
- New Hampshire (38.43%)
- United States (35.79%)



Population with an Associate Level Degree or Higher, Percent by Tract, 2007-11

- Over 50.0%
- 30.1 - 50.0%
- 20.1 - 30.0%
- Under 20.1%
- No Data or Data Suppressed

### Population with No High School Diploma

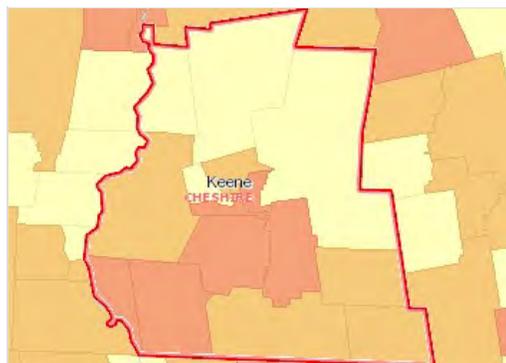
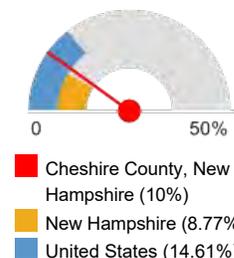
This indicator reports the percentage of the population aged 25 and older without a high school diploma (or equivalency) or higher. This indicator is relevant because educational attainment is a key driver of population health.

Report Area	Total Population Age 25	Population Age 25 with No High School Diploma	Percent Population Age 25 with No High School Diploma
Cheshire County, New Hampshire	51,291	5,127	<b>10%</b>
New Hampshire	901,420	79,097	8.77%
United States	202,048,128	29,518,934	14.61%

Note: This indicator is compared with the state average.

Data Source: U.S. Census Bureau, 2007-2011 American Community Survey 5-Year Estimates. Source geography: Tract.

Percent Population Age 25 with No High School Diploma



Population with No High School Diploma, Percent by Tract, 2007-11



## Teen Births

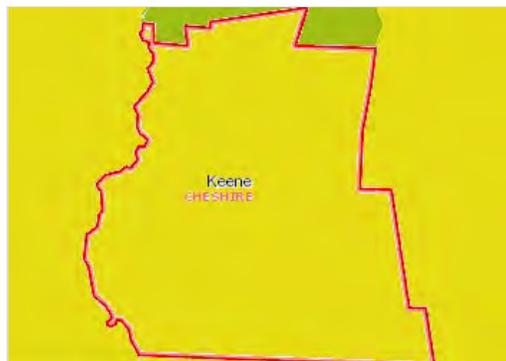
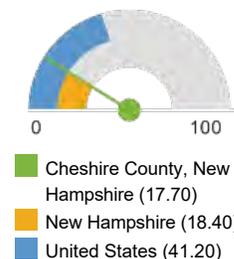
This indicator reports the rate of total births to women under the age of 15 - 19 per 1,000 female population age 15 - 19. This indicator is relevant because in many cases, teen parents have unique social, economic, and health support services. Additionally, high rates of teen pregnancy may indicate 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)
Cheshire County, New Hampshire	23,107	409	<b>17.70</b>
New Hampshire	324,837	5,977	18.40
United States	72,071,117	2,969,330	41.20

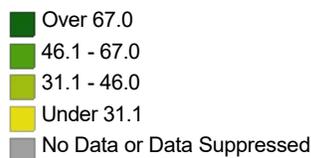
Note: This indicator is compared with the state average.

Data Source: Centers for Disease Control and Prevention, National Vital Statistics Systems, 2003-2009. Accessed through the Health Indicators Warehouse. Source geography: County.

Teen Birth Rate (Per 1,000 Births)



Teen Births, Females (Age 15-19), Rate (Per 100,000 Pop.) by County, 2003-09

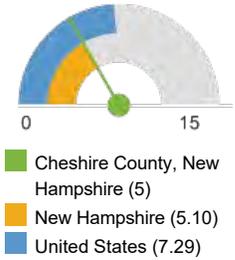


## Unemployment Rate

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	Labor Force	Number Employed	Number Unemployed	Unemployment Rate
Cheshire County, New Hampshire	40,893	38,867	2,026	5
New Hampshire	741,332	703,810	37,522	5.10
United States	1,071,701,624	993,590,308	78,111,316	7.29

**Unemployment Rate**



Note: This indicator is compared with the state average.

Data Source: U.S. Bureau of Labor Statistics, April 2013 Local Area Unemployment Statistics. Source geography: County.



**Unemployment, Rate by County, 2013-May**

- Over 12.0%
- 9.1 - 12.0%
- 6.1 - 9.0%
- 3.1 - 6.0%
- Under 3.1%

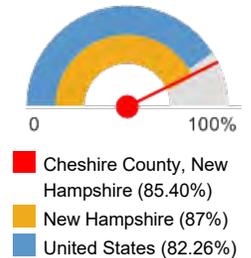
### Uninsured Population (Adults)

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.

Report Area	Total Population Under Age 65	Population Without Medical Insurance	Percent Population Without Medical Insurance	Population with Medical Insurance	Percent Population With Medical Insurance
Cheshire County, New Hampshire	61,551	8,977	14.60%	52,574	85.40%
New Hampshire	1,103,465	143,475	13%	959,991	87%
United States	262,403,381	46,556,803	17.74%	215,846,576	82.26%

**Percent Population With Medical Insurance**



Note: This indicator is compared with the state average.

Data Source: U.S. Census Bureau, Small Area Health Insurance Estimates (SAHIE), 2010. Source geography: County.



**Uninsured Population, Adults Age 18-64, Percent by County, 2010**

- Over 30.0%
- 25.1 - 30.0%
- 20.1 - 25.0%
- 15.1 - 20.0%
- Under 15.1%

### Uninsured Population (Children)

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

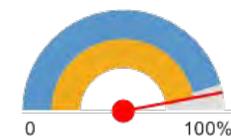
This indicator reports the percentage of the total civilian non-institutionalized population without health insurance coverage. This indicator is relevant because lack of insurance is a primary barrier to healthcare access including regular primary care, specialty care, and other health services that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

Report Area	Total Population Under Age 19	Population Without Medical Insurance	Percent Population Without Medical Insurance	Population with Medical Insurance	Percent Population With Medical Insurance
Cheshire County, New Hampshire	15,617	914	5.90%	14,703	<b>94.10%</b>
New Hampshire	296,429	15,459	5.22%	280,970	94.78%
United States	76,968,561	6,505,941	8.45%	70,462,624	91.55%

Note: This indicator is compared with the state average.

Data Source: U.S. Census Bureau, Small Area Health Insurance Estimates (SAHIE), 2010. Source geography: County.

Percent Population With Medical Insurance



- Cheshire County, New Hampshire (94.10%)
- New Hampshire (94.78%)
- United States (91.55%)



Uninsured Population, Children Age 0-17, Percent by County, 2010

- Over 14.0%
- 11.1 - 14.0%
- 8.1 - 11.0%
- 5.1 - 8.0%
- Under 5.1%

## Uninsured Population (Total)

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.

Report Area	Total Population (For Whom Insurance Status is Determined)	Number Uninsured	Percent Uninsured
Cheshire County, New Hampshire	77,097	7,921	<b>10.36%</b>
New Hampshire	1,317,033	136,089	10.33%
United States	309,231,232	46,282,216	15.22%

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 Uninsured



- Cheshire County, New Hampshire (10.36%)
- New Hampshire (10.33%)
- United States (15.22%)



Uninsured Population, Percent by PUMA, 2009-11

- Over 18.0%
- 14.1 - 18.0%
- 10.1 - 14.0%
- Under 10.1%

## Physical Environment

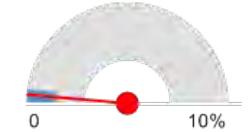
A community's health also is affected by the physical environment. A safe, clean environment that provides access to healthy food and recreational opportunities is important to maintaining and improving community health.

## Air Quality (Ozone)

This indicator reports the percentage of days per year with Ozone (O3) 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	Total Population	Average Daily Ambient Ozone Concentration	Number of Days Exceeding Emissions Standards	Percentage of Days Exceeding Standards, Crude Average	Percentage of Days Exceeding Standards, Pop. Adjusted Average
Cheshire County, New Hampshire	77,117	37.54	1	0.27%	<b>0.27%</b>
New Hampshire	1,316,470	36.89	0.15	0.04%	0.04%
United States	312,471,327	38.98	1.59	0.44%	0.47%

Percentage of Days Exceeding Standards, Pop. Adjusted Average



- Cheshire County, New Hampshire (0.27%)
- New Hampshire (0.04%)
- United States (0.47%)

Note: This indicator is compared with the state average.

Data Source: [Centers for Disease Control and Prevention, National Environmental Public Health Tracking Network, 2008](#). Source geography: Tract.



Days Above NAAQ Standards for Ozone (O3), Percent by Tract, 2008

- Over 6.0%
- 1.1 - 6.0%
- 0.51 - 1.0%
- Under 0.51%
- No Days Above NAAQS Standards
- No Data or Data Suppressed

### 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	Total Population	Average Daily Ambient Particulate Matter 2.5	Number of Days Exceeding Emissions Standards	Percentage of Days Exceeding Standards, Crude Average	Percentage of Days Exceeding Standards, Pop. Adjusted Average
Cheshire County, New Hampshire	77,117	6.62	0	0%	<b>0%</b>
New Hampshire	1,316,470	7.73	0.72	0.20%	0.20%
United States	312,471,327	10.65	4.17	1.14%	1.19%

Percentage of Days Exceeding Standards, Pop. Adjusted Average



- Cheshire County, New Hampshire (0%)
- New Hampshire (0.20%)
- United States (1.19%)

Note: This indicator is compared with the state average.

Data Source: [Centers for Disease Control and Prevention, National Environmental Public Health Tracking Network, 2008](#). Source geography: Tract.



Days Above NAAQ Standards for Particulate Matter (PM 2.5), Percent by Tract, 2008

- Over 6.0%
- 1.1 - 6.0%
- 0.51 - 1.0%
- Under 0.51%
- No Days Above NAAQS Standards
- No Data or Data Suppressed

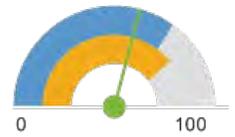
### Fast Food Restaurant Access

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	Number of Establishments	Establishment Rate per 100,000 Population
Cheshire County, New Hampshire	77,117	45	58.35
New Hampshire	1,316,470	1,034	78.54
United States	308,745,538	216,243	70.04

Establishment Rate per 100,000 Population



- Cheshire County, New Hampshire (58.35)
- New Hampshire (78.54)
- United States (70.04)

Note: This indicator is compared with the state average.

Data Source: [U.S. Census Bureau, County Business Patterns, 2011](#). Source geography: County.



Fast Food Restaurants, Rate (Per 100,000 Pop.) by County, 2011

- Over 100.0
- 75.1 - 100.0
- 50.1 - 75.0
- Under 50.1
- No Fast Food Restaurants

## Grocery Store Access

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	Number of Establishments	Establishment Rate per 100,000 Population
Cheshire County, New Hampshire	77,117	21	27.23
New Hampshire	1,316,470	260	19.75
United States	308,745,538	64,366	20.85

Establishment Rate per 100,000 Population



- Cheshire County, New Hampshire (27.23)
- New Hampshire (19.75)
- United States (20.85)

Note: This indicator is compared with the state average.

Data Source: [U.S. Census Bureau, County Business Patterns, 2011](#). Source geography: County.



Grocery Stores and Supermarkets, Rate (Per 100,000 Pop.) by County, 2011

- Over 35.0
- 25.1 - 35.0
- 15.1 - 25.0
- Under 15.1
- No Grocery Stores

## 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.

Report Area	Total Population	Number of Establishments	Establishment Rate per 100,000 Population
Cheshire County, New Hampshire	77,117	8	<b>10.37</b>
New Hampshire	1,316,470	96	7.29
United States	308,745,538	31,876	10.32

**Establishment Rate per 100,000 Population**



- Cheshire County, New Hampshire (10.37)
- New Hampshire (7.29)
- United States (10.32)

Note: This indicator is compared with the state average.

Data Source: [U.S. Census Bureau, County Business Patterns, 2011](#). Source geography: County.



**Beer, Wine and Liquor Stores, Rate (Per 100,000 Pop.) by County, 2011**

- Over 18.0
- 12.1 - 18.0
- 6.1 - 12.0
- Under 6.1
- No Beer, Wine, or Liquor Stores

### Low Income Population with Low Food Access

Report Area	Total Population	Low Income Population with Low Food Access	Percent Low Income Population with Low Food Access
Cheshire County, New Hampshire	77,117	3,094	<b>4.01%</b>
New Hampshire	1,316,470	57,796	4.39%
United States	308,745,538	19,347,047	6.27%

**Percent Low Income Population with Low Food Access**



- Cheshire County, New Hampshire (4.01%)
- New Hampshire (4.39%)
- United States (6.27%)

Note: This indicator is compared with the state average.

Data Source: [U.S. Department of Agriculture, Food Access Atlas, 2013](#). Source geography: Tract.



**Population with Limited Food Access, Low Income, Percent by Tract, 2010**

- Over 50.0%
- 20.1 - 50.0%
- 5.1 - 20.0%
- Under 5.1%
- No Low Food Access

### Park Access

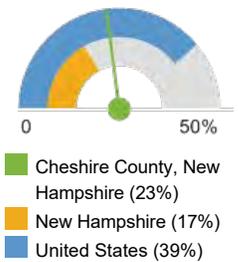
This indicator reports the percentage of population living within 1/2 mile of a park. This indicator is relevant because access to outdoor recreation encourages physical activity and other healthy behaviors.

Report Area	Total Population	Total Population Within 1/2 Mile of a Park	Percent Population Within 1/2 Mile of a Park
Cheshire County, New Hampshire	77,117	17,736	23%
New Hampshire	1,316,470	225,056	17%
United States	312,732,537	120,503,664	39%

Note: This indicator is compared with the state average.

Data Source: [Centers for Disease Control and Prevention, National Environmental Public Health Tracking Network, 2010](#). Source geography: County.

Percent Population Within 1/2 Mile of a Park



Population With Park Access (Within 1/2 Mile of a Park), Percent by County, 2010



### Population with Low Food Access

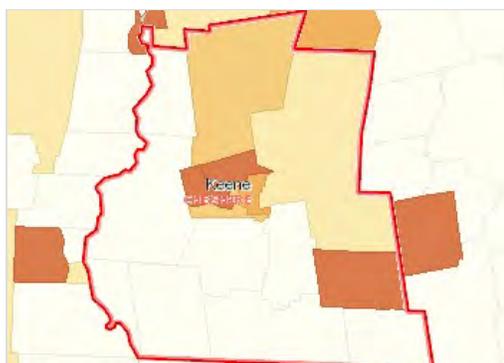
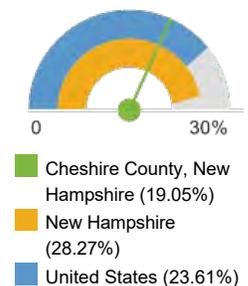
This indicator reports the percentage of the population living in census tracts designated as food deserts. A food desert is defined as a low-income census tract (where a substantial number or share of residents has low access to a supermarket or large grocery store. This indicator is relevant because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

Report Area	Total Population	Population with Low Food Access	Percent Population with Low Food Access
Cheshire County, New Hampshire	77,117	14,688	19.05%
New Hampshire	1,316,470	372,117	28.27%
United States	308,745,538	72,905,540	23.61%

Note: This indicator is compared with the state average.

Data Source: [U.S. Department of Agriculture, Food Access Atlas, 2013](#). Source geography: Tract.

Percent Population with Low Food Access



Population with Limited Food Access, Percent by Tract, 2010

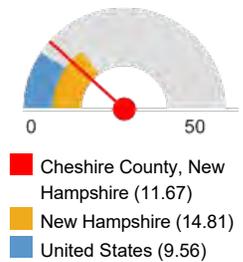


### Recreation and Fitness Facility Access

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	Number of Establishments	Establishment Rate per 100,000 Population
Cheshire County, New Hampshire	77,117	9	<b>11.67</b>
New Hampshire	1,316,470	195	14.81
United States	308,745,538	29,506	9.56

Establishment Rate per 100,000 Population

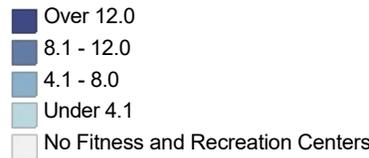


Note: This indicator is compared with the state average.

Data Source: U.S. Census Bureau, County Business Patterns, 2011. Source geography: County.



Recreation and Fitness Facilities, Rate (Per 100,000 Pop.) by County, 2011

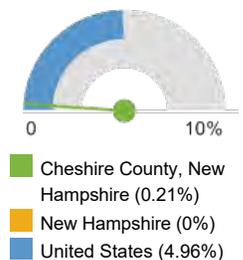


## Use of Public Transportation

This indicator reports the percentage of population using public transportation as their primary means of commute to work. Public transportation includes buses or trolley buses, streetcars or trolley cars, subway or elevated rails, and ferryboats.

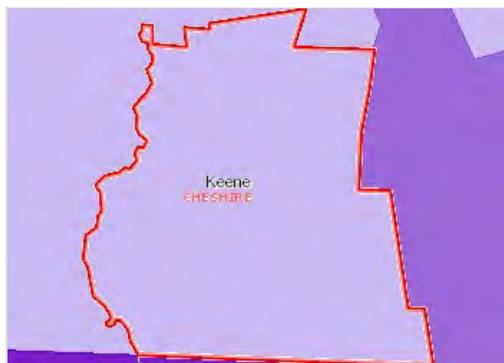
Report Area	Total Population Employed Age 16	Population Using Public Transit for Commute to Work	Population Using Public Transit for Commute to Work
Cheshire County, New Hampshire	39,076	81	<b>0.21</b>
New Hampshire	678,368	5,235	0
United States	139,488,208	6,915,130	4.96

Population Using Public Transit for Commute to Work



Note: This indicator is compared with the state average.

Data Source: U.S. Census Bureau, 2007-2011 American Community Survey 5-Year Estimates. Source geography: County.



Workers Traveling to Work Using Public Transit, Percent by County, 2007-11



## 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.)
Cheshire County, New Hampshire	77,117	53	<b>68.72</b>
New Hampshire	1,316,470	1,286	97.60
United States	312,471,327	264,897	84.70

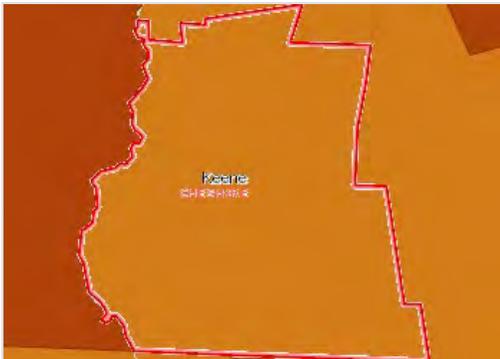
Note: This indicator is compared with the state average.

Data Source: [U.S. Health Resources and Services Administration Area Resource File, 2011](#). Source geography: County.

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



- Cheshire County, New Hampshire (68.72)
- New Hampshire (97.60)
- United States (84.70)



Primary Care Facilities, Rate (Per 100,000 Pop.) by County, 2011

- Over 120.0
- 60.1 - 120.0
- 30.1 - 60.0
- 10.1 - 30.0
- Under 10.1

### Breast Cancer Screening (Mammogram)

This indicator reports the percentage of female Medicare enrollees, age 67-69 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 Medicare Enrollees	Female Medicare Enrollees Age 67-69	Female Medicare Enrollees with Mammogram in Past 2 Years	Percent Female Medicare Enrollees with Mammogram in Past 2 Years
Cheshire County, New Hampshire	9,823	773	545	<b>70.63%</b>
New Hampshire	149,975	12,407	9,196	74.13%
United States	51,875,184	4,218,820	2,757,677	65.37%

Note: This indicator is compared with the state average.

Data Source: [Dartmouth Atlas of Healthcare, Selected Measures of Primary Care Access and Quality, 2010](#). Source geography: County.

Percent Female Medicare Enrollees with Mammogram in Past 2 Years



- Cheshire County, New Hampshire (70.63%)
- New Hampshire (74.13%)
- United States (65.37%)



Patients with Mammogram in Past 2 Years, Percent of Female Medicare Enrollees, Age 67-69 by County, 2010

- Over 72.0%
- 64.1 - 72.0%
- 56.1 - 64.0%
- Under 56.1%
- No Data or Data Suppressed

### 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

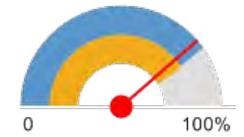
relevant because engaging in preventive behaviors allows for early detection and treatment of health problems. This indicator can also highlight a lack of access to preventive care, a lack of health knowledge, insufficient provider outreach, and/or social barriers preventing utilization of services.

Report Area	Female Population Age 18	Estimated Population with Regular Pap Test	Percent Population with Regular Pap Test
Cheshire County, New Hampshire	31,746	24,508	<b>77.20%</b>
New Hampshire	521,297	426,942	81.90%
United States	94,071,886	75,649,213	80.42%

Note: This indicator is compared with the state average.

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

Percent Population with Regular Pap Test



- Cheshire County, New Hampshire (77.20%)
- New Hampshire (81.90%)
- United States (80.42%)



Cervical Cancer Screening (Pap Test), Females Age 18 , Percent by County, 2004-10

- Over 84.0%
- 80.1 - 84.0%
- 76.1 - 80.0%
- Under 76.1%
- No Data or Data Suppressed

### 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	Male Population Age 50	Estimated Population Ever Screened for Colon Cancer	Percent Population Ever Screened for Colon Cancer
Cheshire County, New Hampshire	12,462	7,540	<b>60.50%</b>
New Hampshire	202,212	132,853	65.70%
United States	41,994,838	24,124,869	57.45%

Note: This indicator is compared with the state average.

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

Percent Population Ever Screened for Colon Cancer



- Cheshire County, New Hampshire (60.50%)
- New Hampshire (65.70%)
- United States (57.45%)



Colon Cancer Screening (Sigmoidoscopy / Colonoscopy), Adults Age 50 , Percent by County, 2004-10

- Over 62.0%
- 55.1 - 62.0%
- 48.1 - 55.0%
- Under 48.1%
- No Data or Data Suppressed

### 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

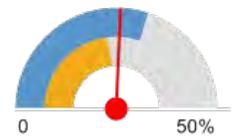
utilization of services.

Report Area	Total Population (Age 18 )	Total Adults Without Recent Dental Exam	Percent Adults with No Dental Exam
Cheshire County, New Hampshire	61,700	15,904	<b>25.78%</b>
New Hampshire	1,025,011	237,144	23.14%
United States	235,375,690	70,965,788	30.15%

Note: This indicator is compared with the state average.

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

Percent Adults with No Dental Exam



- Cheshire County, New Hampshire (25.78%)
- New Hampshire (23.14%)
- United States (30.15%)



6 or More Permanent Teeth Removed, Adults (Age 18 ), Percent by County, 2006-10

- Over 26.0%
- 20.1 - 26.0%
- 14.1 - 20.0%
- Under 14.1%
- No Data or Data Suppressed

### Diabetes Management (Hemoglobin A1c Test)

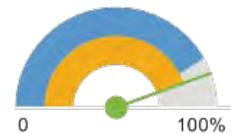
This indicator reports the percentage of diabetic Medicare patients who have had a hemoglobin A1c (hA1c) test, a blood test which measures blood sugar levels, administered by a health care professional in the past year. This indicator is relevant because engaging in preventive behaviors allows for early 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	Medicare Enrollees with Diabetes	Medicare Enrollees with Diabetes with Annual Exam	Percent Medicare Enrollees with Diabetes with Annual Exam
Cheshire County, New Hampshire	9,823	992	882	<b>89.01%</b>
New Hampshire	149,975	15,962	14,201	88.97%
United States	51,875,184	6,218,804	5,212,097	83.81%

Note: This indicator is compared with the state average.

Data Source: [Dartmouth Atlas of Healthcare, Selected Measures of Primary Care Access and Quality, 2010](#). Source geography: County.

Percent Medicare Enrollees with Diabetes with Annual Exam



- Cheshire County, New Hampshire (89.01%)
- New Hampshire (88.97%)
- United States (83.81%)



Patients with Annual HA1C Test (Diabetes), Percent of Medicare Enrollees with Diabetes by County, 2010

- Over 88.0%
- 84.1 - 88.0%
- 80.1 - 84.0%
- Under 80.1%
- No Data or Data Suppressed

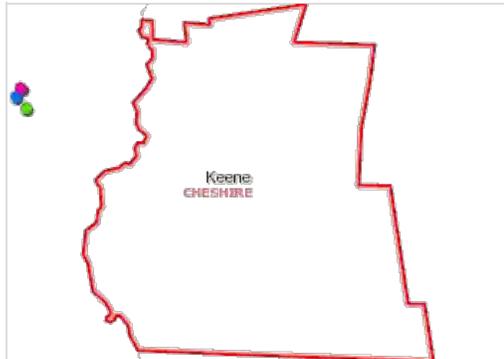
### Facilities Designated as Health Professional Shortage Areas

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	Primary Care Facilities	Mental Health Care Facilities	Dental Health Care Facilities	Total HPSA Facility Designations
Cheshire County, New Hampshire	0	0	0	0
New Hampshire	20	15	18	53
United States	3,163	2,630	2,547	8,340

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



**Facilities Designated as HPSAs by Location, 2013-April**

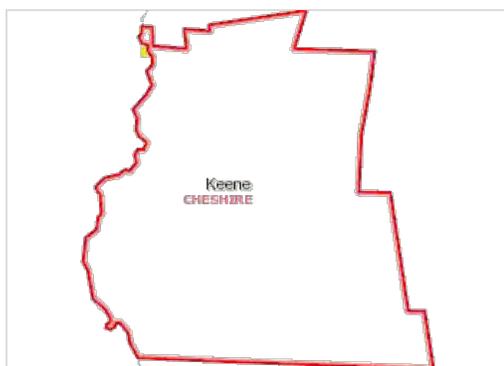
- Primary Care
- Mental Health
- Dental Care

### 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	Total Population	Number of Federally Qualified Health Centers	Rate of Federally Qualified Health Centers per 100,000 Population
Cheshire County, New Hampshire	77,117	0	0
New Hampshire	1,316,470	27	2.05
United States	312,471,327	5,402	1.73

Data Source: [U.S. Health Resources and Services Administration, Centers for Medicare & Medicaid Services, Provider of Service File, 2012](#). Source geography: Address.



**Federally Qualified Health Centers, Total 2012-Q4**

- 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 )	Total Adults Not Taking Blood Pressure Medication (When Needed)	Percent Adults Not Taking Medication
Cheshire County, New Hampshire	61,700	17,242	<b>27.94%</b>
New Hampshire	1,025,011	243,446	23.75%

**Percent Adults Not Taking Medication**



Report Area	Total Population (Age 18 )	Total Adults Not Taking Blood Pressure Medication (When Needed)	Percent Adults Not Taking Medication
United States	235,375,690	51,175,402	21.74%

- Cheshire County, New Hampshire (27.94%)
- New Hampshire (23.75%)
- United States (21.74%)

Note: This indicator is compared with the state average.

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



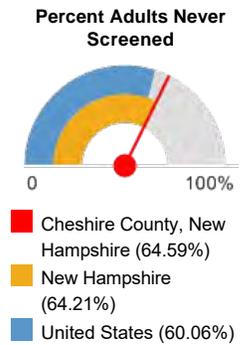
**Population with High Blood Pressure Not Taking Medication, Adults (Age 18 ), Percent by County, 2006-10**

- Over 85.0%
- 80.1 - 85.0%
- 75.1 - 80.0%
- Under 75.1%
- No Data or Data Suppressed

## HIV Screenings

This indicator reports the percentage of adults age 18-70 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 )	Total Adults Never Screened	Percent Adults Never Screened
Cheshire County, New Hampshire	61,700	39,850	<b>64.59%</b>
New Hampshire	1,025,011	658,140	64.21%
United States	235,375,690	141,358,484	60.06%



Note: This indicator is compared with the state average.

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



**Population Never Screened for HIV / AIDS, Adults (Age 18 ), Percent by County, 2006-10**

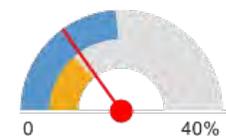
- Over 70.0%
- 64.1 - 70.0%
- 58.1 - 64.0%
- Under 58.1%
- No Data or Data Suppressed

## 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 )	Total Adults Without Any Regular Doctor	Percent Adults Without Any Regular Doctor
Cheshire County, New Hampshire	61,700	7,463	12.10%
New Hampshire	1,025,011	112,210	10.95%
United States	235,375,690	45,514,047	19.34%

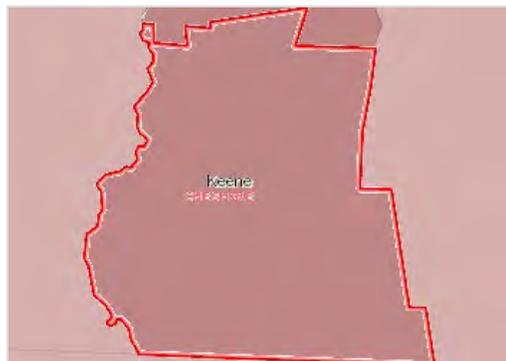
Percent Adults Without Any Regular Doctor



- Cheshire County, New Hampshire (12.10%)
- New Hampshire (10.95%)
- United States (19.34%)

Note: This indicator is compared with the state average.

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



Population Without Consistent Source of Primary Care, Adults (Age 18 ), Percent by County, 2006-10

- Over 35.0%
- 30.1 - 35.0%
- 25.1 - 30.0%
- Under 25.1%
- No Data or Data Suppressed

### 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 Age 65	Estimated Population with Annual Pneumonia Vaccination	Percent Population with Annual Pneumonia Vaccination
Cheshire County, New Hampshire	11,018	8,043	73%
New Hampshire	66,213	47,342	71.50%
United States	15,659,860	10,389,527	66.34%

Percent Population with Annual Pneumonia Vaccination



- Cheshire County, New Hampshire (73%)
- New Hampshire (71.50%)
- United States (66.34%)

Note: This indicator is compared with the state average.

Data Source: [Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2005-2011](#). Source geography: County.



Annual Pneumonia Vaccination, Adults (Age 65 ), Percent by County, 2005-11

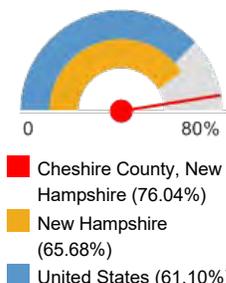
- Over 75.0%
- 70.1 - 75.0%
- 65.1 - 70.0%
- Under 65.1%
- No Data or Data Suppressed

### 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.

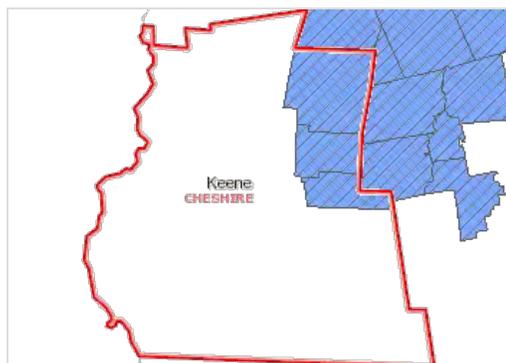
Report Area	Total Population	HPSA Designation Population	Underserved Population	Percent of Total Population Underserved	Percent of Designated Population Underserved
Cheshire County, New Hampshire	77,117	2,922	2,222	2.88%	<b>76.04%</b>
New Hampshire	1,316,470	36,915	24,245	1.84%	65.68%
United States	312,471,327	63,421,548	38,748,460	12.40%	61.10%

Percent of Designated Population Underserved



Note: This indicator is compared with the state average.

Data Source: [U.S. Health Resources and Services Administration Data Warehouse, Health Professional Shortage Area \(Components\), May 2013](#). Source geography: HPSA.



Health Professional Shortage Area Components, Percent Underserved (Primary Care) by Tract / County, May 2013

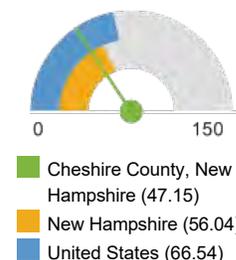
- Population Group; 100% Underserved
- Population Group; 50.1 - 99.9% Underserved
- Population Group; Under 50.1% Underserved
- Total Population; 100% Underserved
- Total Population; 50.1 - 99.9% Underserved
- Total Population; Under 50.1% Underserved

## 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 Part A Enrollees	Ambulatory Care Sensitive Condition Hospital Discharges	Ambulatory Care Sensitive Condition Discharge Rate
Cheshire County, New Hampshire	10,589	499	<b>47.15</b>
New Hampshire	161,962	9,076	56.04
United States	56,167,590	3,737,659	66.54

Ambulatory Care Sensitive Condition Discharge Rate



Note: This indicator is compared with the state average.

Data Source: [Dartmouth Atlas of Healthcare, Selected Measures of Primary Care Access and Quality, 2010](#). Source geography: County.



Ambulatory Care Sensitive Conditions, Rate (Per 1,000 Medicare Enrollees) by County, 2010

- Over 100.0
- 80.1 - 100.0
- 60.1 - 80.0
- Under 60.1
- No Data or Data Suppressed

## Health Behaviors

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

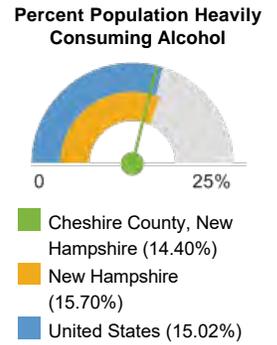
### Alcohol Consumption

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	Estimated Population Heavily Consuming Alcohol	Percent Population Heavily Consuming Alcohol
Cheshire County, New Hampshire	61,700	8,885	14.40%
New Hampshire	433,190	68,011	15.70%
United States	89,135,163	13,385,866	15.02%

Note: This indicator is compared with the state average.  
 Data Source: [Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2005-2011](#). Source geography: County.



**Heavy Alcohol Consumption, Adults (Age 18 ), Percent by County, 2005-11**

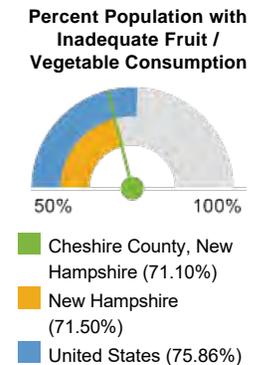


### Fruit/Vegetable Consumption

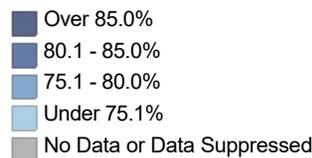
This indicator reports the percentage of adults aged 18 and older who self-report consuming less than 5 servings of fruits and vegetables each day. This indicator is relevant because current behaviors are determinants of future health, and because unhealthy eating habits may illustrate a cause of significant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

Report Area	Total Population Age 18	Estimated Population with Inadequate Fruit / Vegetable Consumption	Percent Population with Inadequate Fruit / Vegetable Consumption
Cheshire County, New Hampshire	61,337	43,611	71.10%
New Hampshire	258,492	184,822	71.50%
United States	116,676,632	88,508,989	75.86%

Note: This indicator is compared with the state average.  
 Data Source: [Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2005-2009](#). Source geography: County.



**Inadequate Fruit/Vegetable Consumption, Adults (Age 18 ), Percent by County, 2005-09**



### Physical Inactivity (Adult)

This indicator reports the percentage of adults aged 20 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

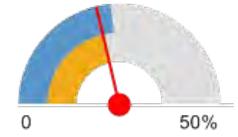
health issues, such as obesity and poor cardiovascular health.

Report Area	Total Population Age 20	Population with no Leisure Time Physical Activity	Percent Population with no Leisure Time Physical Activity
Cheshire County, New Hampshire	58,550	12,764	<b>21.30%</b>
New Hampshire	995,797	215,660	21.28%
United States	223,602,200	53,553,398	23.67%

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.

Percent Population with no Leisure Time Physical Activity



- Cheshire County, New Hampshire (21.30%)
- New Hampshire (21.28%)
- United States (23.67%)



Population Performing No Physical Activity, Adults (Age 20 ), Percent by County, 2009

- Over 31.0%
- 28.1 - 31.0%
- 24.1 - 28.0%
- Under 24.1%

### Tobacco Usage (Current Smokers)

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	Estimated Population Regularly Smoking Cigarettes	Percent Estimated Population Regularly Smoking Cigarettes
Cheshire County, New Hampshire	61,700	11,353	<b>18.40%</b>
New Hampshire	1,017,987	179,165	17.60%
United States	229,932,154	42,664,071	18.56%

Note: This indicator is compared with the state average.

Data Source: [Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2005-2011](#). Source geography: County.

Percent Estimated Population Regularly Smoking Cigarettes



- Cheshire County, New Hampshire (18.40%)
- New Hampshire (17.60%)
- United States (18.56%)



Smoking Cigarettes Some Days or Ever Day, Adults Age 18 , Percent by County, 2005-11

- Over 26.0%
- 22.1 - 26.0%
- 18.1 - 22.0%
- Under 18.1%
- No Data or Data Suppressed

### Tobacco Usage (Former or Current Smokers)

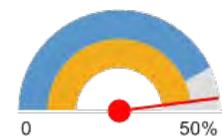
This indicator reports the percentage of adults smoking at least 100 cigarettes in his / her lifetimes.

Report Area	Total Population (Age 18 )	Total Adults Ever Smoking 100 or More Cigarettes	Percent Adults Ever Smoking 100 or More Cigarettes
Cheshire County, New Hampshire	61,700	29,629	<b>48.02%</b>
New Hampshire	1,025,011	489,797	47.78%
United States	235,375,690	101,180,961	42.99%

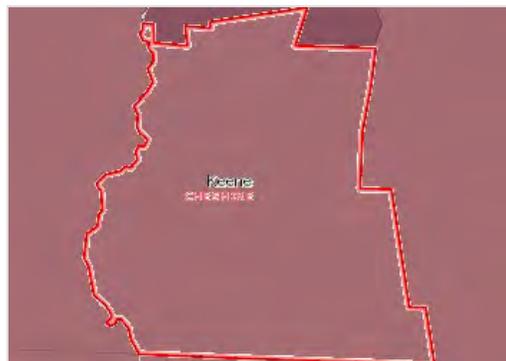
Note: This indicator is compared with the state average.

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

Percent Adults Ever Smoking 100 or More Cigarettes



- Cheshire County, New Hampshire (48.02%)
- New Hampshire (47.78%)
- United States (42.99%)



Population Ever Smoking > 99 Cigarettes, Adults (Age 18 ), Percent by County, 2006-10

- Over 52.0%
- 46.1 - 52.0%
- 40.1 - 46.0%
- Under 40.1%
- No Data or Data Suppressed

## Tobacco Usage (Quit Attempt)

This indicator reports the percentage of adult smokers who attempted to quit smoking for at least 1 day in the past 1 year.

Report Area	Total Population (Age 18 )	Total Smokers with Quit Attempt in Past 12 Months	Percent Smokers with Quit Attempt in Past 12 Months
Cheshire County, New Hampshire	61,700	39,545	<b>64.09%</b>
New Hampshire	1,025,011	618,574	60.35%
United States	235,375,690	137,674,809	58.49%

Note: This indicator is compared with the state average.

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

Percent Smokers with Quit Attempt in Past 12 Months



- Cheshire County, New Hampshire (64.09%)
- New Hampshire (60.35%)
- United States (58.49%)



Smokers Who Quit / Attempted to Quit in Past 12 Months, Adults (Age 18 ), Percent by County, 2006-10

- Over 64.0%
- 58.1 - 64.0%
- 52.1 - 58.0%
- Under 52.1%
- No Data or Data Suppressed

## 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 relationships may emerge, allowing a better understanding of how certain community health needs may be addressed.

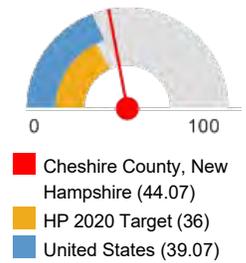
## Accident Mortality

This indicator reports the rate of death due to unintentional injury (accident) per 100,000 population. Figures are reported as crude rates, and as rates age-

adjusted to year 2000 standard. Rates are resummairized for report areas from county level data, only where data is available. This indicator is relevant because accidents are a leading cause of death in the U.S.

Report Area	Total Population	Average Annual Deaths, 2006-2010	Crude Death Rate (Per 100,000 Pop.)	Age-Adjusted Death Rate, Accident Mortality (Per 100,000 Pop.)
Cheshire County, New Hampshire	77,459	37	47.51	<b>44.07</b>
New Hampshire	1,313,881	495	37.66	<b>36.15</b>
United States	303,844,430	121,217	39.89	<b>39.07</b>
<a href="#">HP 2020 Target</a>				<b>&lt;= 36.0</b>

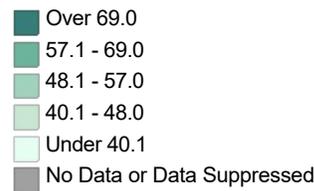
Age-Adjusted Death Rate, Accident Mortality (Per 100,000 Pop.)



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.



Unintentional Injury (Accident) Mortality, Age Adj. Rate (Per 100,000 Pop.) by County, 2006-10

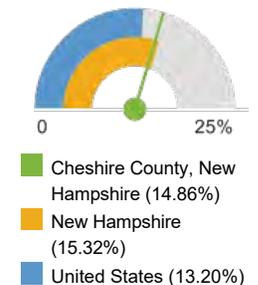


## Asthma Prevalence

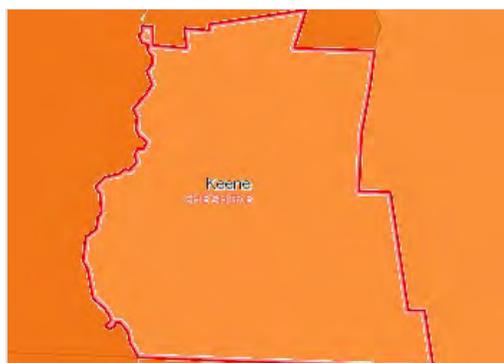
This indicator reports the percentage of adults aged 18 and older who self-report that they have ever been told by a doctor, nurse, or other health professional that they had asthma. This indicator is relevant because asthma is a prevalent problem in the U.S. that is often exacerbated by poor environmental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

Report Area	Total Population (Age 18 )	Total Adults with Asthma	Percent Adults with Asthma
Cheshire County, New Hampshire	61,700	9,171	<b>14.86%</b>
New Hampshire	1,025,011	157,051	15.32%
United States	235,375,690	31,061,484	13.20%

Percent Adults with Asthma



Note: This indicator is compared with the state average.  
 Data Source: [Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2006-2010](#). Source geography: County.



Population Ever Diagnosed with Asthma, Adults (Age 18 ), Percent by County, 2006-10



## 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

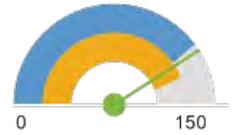
is important to identify cancers separately to better target interventions.

Report Area	Total Population, ACS 2006-2010	Annual Cancer Incidence, 2006-2010 Average	Annual Incidence Rate (Per 100,000 Pop.)
Cheshire County, New Hampshire	39,666	57	122.60
New Hampshire	99,192	1,046	132
United States	no data	207,458	119.70

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, 2006-2010](#). Source geography: County.

Annual Incidence Rate (Per 100,000 Pop.)



- Cheshire County, New Hampshire (122.60)
- New Hampshire (132)
- United States (119.70)



Breast Cancer, Incidence Rate (Per 100,000 Pop.) by County, 2006-10

- Over 135.0
- 115.1 - 135.0
- 95.1 - 115.0
- Under 95.1
- No Data or Data Suppressed

## 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	Average Annual Deaths, 2006-2010	Crude Death Rate (Per 100,000 Pop.)	Age-Adjusted Death Rate, Cancer Mortality (Per 100,000 Pop.)
Cheshire County, New Hampshire	77,459	153	198.04	169.68
New Hampshire	1,313,881	2,561	194.93	177.20
United States	303,844,430	566,121	186.32	176.66
<a href="#">HP 2020 Target</a>				<b>&lt;= 160.6</b>

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.

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



- Cheshire County, New Hampshire (169.68)
- HP 2020 Target (160.60)
- United States (176.66)



Cancer Mortality, Age Adj. Rate (Per 100,000 Pop.) by County, 2006-10

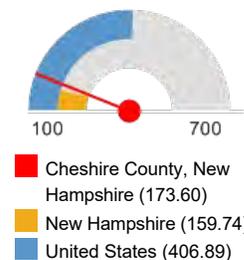
- Over 270.0
- 240.1 - 270.0
- 215.1 - 240.0
- 180.1 - 215.0
- Under 180.1
- No Data or Data Suppressed

## 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.)
Cheshire County, New Hampshire	77,117	134	<b>173.60</b>
New Hampshire	1,316,470	2,102	159.74
United States	308,730,677	1,236,680	406.89

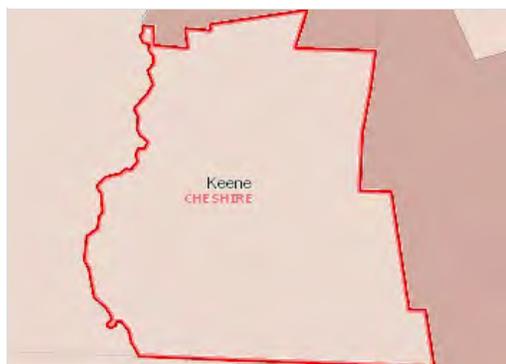
Chlamydia Rate (Per 100,000 Pop.)



Note: This indicator is compared with the state average.

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.



Chlamydia Infections, Rate (Per 100,000 Pop.) by County, 2010

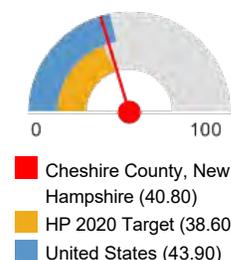


## Colon and Rectum Cancer Incidence

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 2006-2010	Annual Cancer Incidence, 2006-2010 Average	Annual Incidence Rate (Per 100,000 Pop.)
Cheshire County, New Hampshire	77,445	37	<b>40.80</b>
New Hampshire	196,833	611	<b>41.80</b>
United States	no data	141,281	<b>43.90</b>
<a href="#">HP 2020 Target</a>			<b>&lt;= 38.6</b>

Annual Incidence Rate (Per 100,000 Pop.)

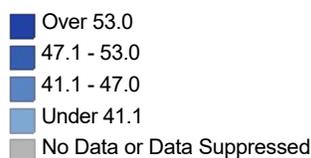


Note: This indicator is compared with the Healthy People 2020 Target.

Data Source: [The Centers for Disease Control and Prevention, and the National Cancer Institute: State Cancer Profiles, 2006-2010.](#) Source geography: County.



Colo-Rectal Cancer, Incidence Rate (Per 100,000 Pop.) by County, 2006-10



## Diabetes Prevalence

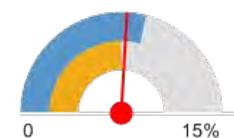
This indicator reports the percentage of adults aged 20 and older who have ever been told by a doctor that they have diabetes. This indicator is relevant because diabetes is a prevalent problem in the U.S.; it may indicate an unhealthy lifestyle and puts individuals at risk for further health issues.

Report Area	Total Population Age 20	Population with Diagnosed Diabetes	Percent Population with Diagnosed Diabetes
Cheshire County, New Hampshire	58,432	5,142	<b>7.80%</b>
New Hampshire	993,344	81,952	7.49%
United States	223,653,607	20,615,282	8.72%

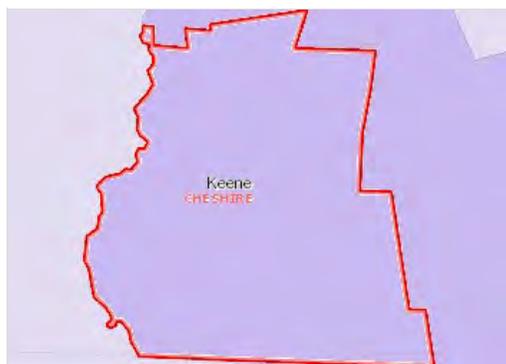
Note: This indicator is compared with the state average.

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

Percent Population with Diagnosed Diabetes



- Cheshire County, New Hampshire (7.80%)
- New Hampshire (7.49%)
- United States (8.72%)



Population Diagnosed With Diabetes, Adults (Age 20 ), Percent by County, 2009

- Over 10.5%
- 9.1 - 10.5%
- 7.6 - 9.0%
- Under 7.6%

## Gonorrhea Incidence

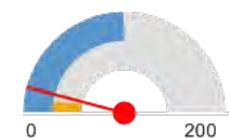
This indicator reports incidence rate of Gonorrhea cases per 100,000 population. This indicator is relevant because it is a measure of poor health status and indicates the prevalence of unsafe sex practices.

Report Area	Population Age 18	Gonorrhea Infections	Gonorrhea Infection Rate (Per 100,000 Pop.)
Cheshire County, New Hampshire	77,117	13	<b>16.90</b>
New Hampshire	1,316,470	151	11.47
United States	308,744,685	307,929	99.74

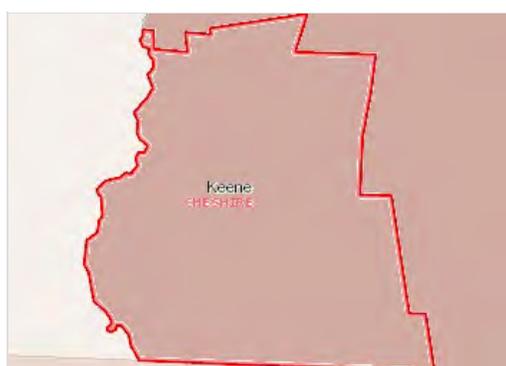
Note: This indicator is compared with the state average.

Data Source: [Centers for Disease Control and Prevention and the National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, 2010](#). Source geography: County.

Gonorrhea Infection Rate (Per 100,000 Pop.)



- Cheshire County, New Hampshire (16.90)
- New Hampshire (11.47)
- United States (99.74)



Gonorrhea Infections, Rate (Per 100,000 Pop.) by County, 2010

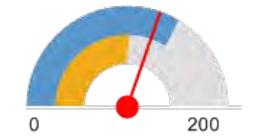
- Over 100.0
- 30.1 - 100.0
- 10.1 - 30.0
- Under 10.1
- No Cases

## Heart Disease Mortality

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 resummairized 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	Average Annual Deaths, 2006-2010	Crude Death Rate (Per 100,000 Pop.)	Age-Adjusted Death Rate, Heart Disease Mortality (Per 100,000 Pop.)
Cheshire County, New Hampshire	77,459	111	142.79	<b>120.98</b>
New Hampshire	1,313,881	1,667	126.91	<b>115.05</b>
United States	303,844,430	432,552	142.36	<b>134.65</b>
<a href="#">HP 2020 Target</a>				<b>&lt;= 100.8</b>

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



- Cheshire County, New Hampshire (120.98)
- HP 2020 Target (100.80)
- United States (134.65)

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.



Heart Disease Mortality, Age Adj. Rate (Per 100,000 Pop.) by County, 2006-10

- Over 220.0
- 180.1 - 220.0
- 150.1 - 180.0
- 120.1 - 150.0
- Under 120.1
- No Data or Data Suppressed

## 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.

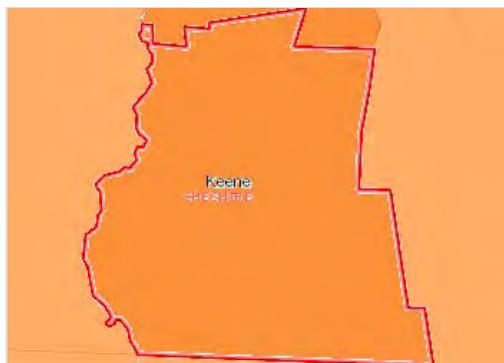
Report Area	Total Population (Age 18 )	Total Adults with Heart Disease	Percent Adults with Heart Disease
Cheshire County, New Hampshire	61,700	2,781	<b>4.51%</b>
New Hampshire	1,025,011	43,614	4.25%
United States	235,375,690	10,183,713	4.33%

Percent Adults with Heart Disease



- Cheshire County, New Hampshire (4.51%)
- New Hampshire (4.25%)
- United States (4.33%)

Note: This indicator is compared with the state average.  
 Data Source: [Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2006-2010](#). Source geography: County.



Population Ever Diagnosed with Angina or Heart Disease, Adults (Age 18 ), Percent by County, 2006-10

- Over 6.0%
- 4.6 - 6.0%
- 3.1 - 4.5%
- Under 3.1%
- No Data or Data Suppressed

## 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.

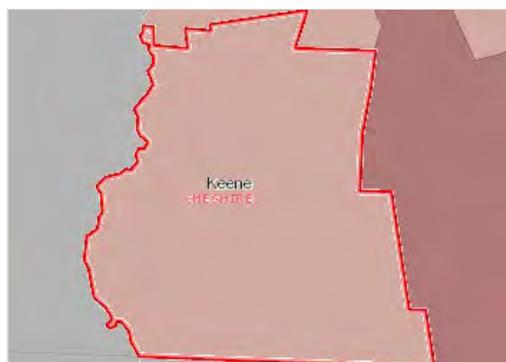
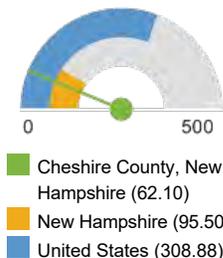
Report Area	Population Age 18	Population with HIV	HIV Prevalence Rate
Cheshire County, New Hampshire	62,005	39	<b>62.10</b>
New Hampshire	1,029,236	983	95.50
United States	234,564,075	724,515	308.88

Note: This indicator is compared with the state average.

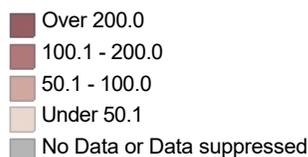
Data Source: [Centers for Disease Control and Prevention and the National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, 2009.](#)

Source geography: County.

HIV Prevalence Rate



HIV Prevalence, Rate (Per 100,000 Pop.) by County, 2009



## Infant Mortality

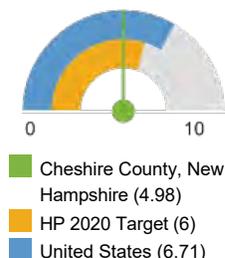
This indicator reports the rate of deaths to infants less than one year of age per 1,000 births. This indicator is relevant because high rates of infant mortality indicate the existence of broader issues pertaining to access to care and maternal and child health.

Report Area	Total Births	Total Infant Deaths	Infant Mortality Rate (Per 1,000 Births)
Cheshire County, New Hampshire	5,222	26	<b>4.98</b>
New Hampshire	98,984	496	<b>5.01</b>
United States	58,600,996	393,074	<b>6.71</b>
<a href="#">HP 2020 Target</a>			<b>&lt;= 6.0</b>

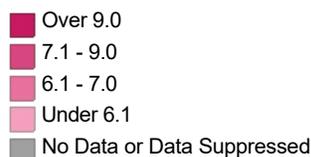
Note: This indicator is compared with the Healthy People 2020 Target.

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

Infant Mortality Rate (Per 1,000 Births)



Infant Mortality, Rate (Per 1,000 Live Births) by County, 2003-09

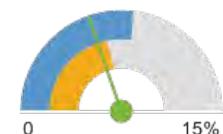


## Low Birth Weight

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
Cheshire County, New Hampshire	5,168	304	<b>5.88%</b>
New Hampshire	99,911	6,566	6.57%

Percent Low Birth Weight



Report Area	Total Births	Number Low Birth Weight (< 2500g)	Percent Low Birth Weight
United States	29,126,451	2,359,843	8.10%

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.

- Cheshire County, New Hampshire (5.88%)
- New Hampshire (6.57%)
- United States (8.10%)



Low Birth Weight, Rate by County, 2002-08

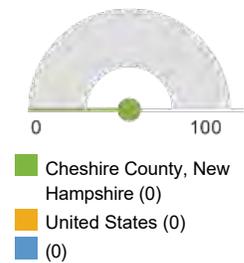
- Over 10.0%
- 8.6 - 10.0%
- 7.1 - 8.5%
- 5.6 - 7.0%
- Under 5.6%

## 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 2006-2010	Annual Cancer Incidence, 2006-2010 Average	Annual Incidence Rate (Per 100,000 Pop.)
Cheshire County, New Hampshire	77,445	61	68.10
New Hampshire	196,833	1,013	69.80
United States	no data	208,652	64.90

Data Source: [The Centers for Disease Control and Prevention, and the National Cancer Institute: State Cancer Profiles, 2006-2010](#). Source geography: County.



Lung Cancer, Incidence Rate (Per 100,000 Pop.) by County, 2006-10

- Over 84.0
- 72.1 - 84.0
- 60.1 - 72.0
- Under 60.1
- No Data or Data Suppressed

## Lung Disease Mortality

This indicator reports the rate of death due to chronic lower respiratory 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 lung disease is a leading cause of death in the United States.

Report Area	Total Population	Average Annual Deaths, 2006-2010	Crude Death Rate (Per 100,000 Pop.)	Age-Adjusted Death Rate, Lung Disease Mortality (Per 100,000 Pop.)
Cheshire County, New Hampshire	77,459	48	61.45	<b>53.04</b>
New Hampshire	1,313,881	633	48.15	45.01



Report Area	Total Population	Average Annual Deaths, 2006-2010	Crude Death Rate (Per 100,000 Pop.)	Age-Adjusted Death Rate, Lung Disease Mortality (Per 100,000 Pop.)
United States	303,844,430	133,806	44.04	42.40

Note: This indicator is compared with the state average.

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.

- Cheshire County, New Hampshire (53.04)
- New Hampshire (45.01)
- United States (42.40)



Lung Disease Mortality, Age Adj. Rate (Per 100,000 Pop.) by County, 2006-10

- Over 80.0
- 65.1 - 80.0
- 54.1 - 65.0
- 42.1 - 54.0
- Under 42.1
- No Data or Data Suppressed

## 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.

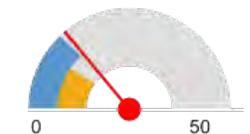
Report Area	Total Population	Annual Deaths, 2006-2010 Average	Crude Death Rate (Per 100,000 Pop.)	Age-Adjusted Death Rate, Motor Vehicle Crash Death (Per 100,000 Pop.)
Cheshire County, New Hampshire	77,459	11	14.72	<b>13.94</b>
New Hampshire	1,313,881	133	10.12	9.86
United States	303,844,430	40,120	13.20	13.04

Note: This indicator is compared with the state average.

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.

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



- Cheshire County, New Hampshire (13.94)
- New Hampshire (9.86)
- United States (13.04)



Motor Vehicle Accident Mortality, Age Adj. Rate (Per 100,000 Pop.) by County, 2006-10

- Over 30.0
- 23.1 - 30.0
- 18.1 - 23.0
- 13.1 - 18.0
- Under 13.1
- No Data or Data Suppressed

## Obesity (Adult)

This indicator reports the percentage of adults aged 20 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	Population with BMI > 30.0 (Obese)	Percent Population with BMI > 30.0 (Obese)
Cheshire County, New Hampshire	58,708	16,497	<b>28.20%</b>
New Hampshire	994,911	264,491	26.43%
United States	223,576,989	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.

Percent Population with BMI > 30.0 (Obese)



- Cheshire County, New Hampshire (28.20%)
- New Hampshire (26.43%)
- United States (27.35%)



Population Obese (BMI >= 30), Adults (Age 20 ), Percent by County, 2009

- Over 33.0%
- 30.6 - 33.0%
- 28.1 - 30.5%
- Under 28.1%

## Overweight (Adult)

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 )	Total Adults Overweight	Percent Adults Overweight
Cheshire County, New Hampshire	61,700	21,470	<b>34.80%</b>
New Hampshire	1,025,011	383,988	37.46%
United States	235,375,690	85,495,735	36.32%

Note: This indicator is compared with the state average.

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

Percent Adults Overweight



- Cheshire County, New Hampshire (34.80%)
- New Hampshire (37.46%)
- United States (36.32%)



Population Overweight (BMI 25.0-29.9) , Adults (Age 18 ) , Percent by County, 2006-10

- Over 39.0%
- 36.1 - 39.0%
- 33.1 - 36.0%
- Under 33.1%
- No Data or Data Suppressed

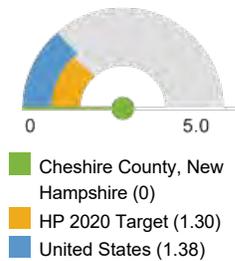
## Pedestrian Motor Vehicle Death

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.)
Cheshire County, New Hampshire	1	1	1.70
New Hampshire	10	10	1.70
United States	10	10	1.70

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

Report Area	Total Deaths, 2008-2010	Average Annual Deaths, 2008-2010	Average Annual Death Rate (Per 100,000 Pop.)
Cheshire County, New Hampshire	0	0	0
New Hampshire	24	8	0.60
United States	12,750	4,250	1.38
<a href="#">HP 2020 Target</a>			<= 1.3

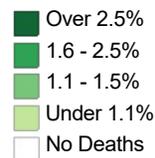


Note: This indicator is compared with the Healthy People 2020 Target.

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



**Pedestrian Motor Vehicle Accident Mortality, Age Adj. Rate (Per 100,000 Pop.) by County, 2008-10**

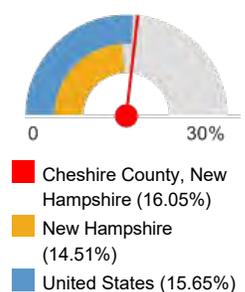


## Poor Dental Health

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.

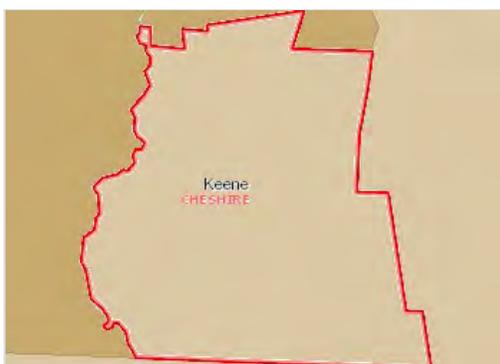
Report Area	Total Population (Age 18 )	Total Adults with Poor Dental Health	Percent Adults with Poor Dental Health
Cheshire County, New Hampshire	61,700	9,900	16.05%
New Hampshire	1,025,011	148,774	14.51%
United States	235,375,690	36,842,620	15.65%

**Percent Adults with Poor Dental Health**

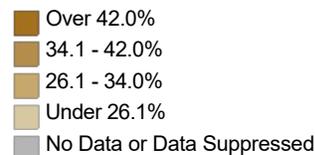


Note: This indicator is compared with the state average.

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



**Population Without Dental Exam in Past 12 Months, Adults (Age 18 ), Percent by County, 2006-10**



## 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.

Report Area	Total Population Age 18	Estimated Population with Poor or Fair Health	Percent Population with Poor or Fair Health
Cheshire County, New Hampshire	61,700	7,713	<b>12.50%</b>
New Hampshire	1,017,987	115,033	11.30%
United States	229,932,154	36,429,871	15.84%

Note: This indicator is compared with the state average.

Data Source: [Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2005-2011](#). Source geography: County.

Percent Population with Poor or Fair Health



- Cheshire County, New Hampshire (12.50%)
- New Hampshire (11.30%)
- United States (15.84%)



Population with Poor or Fair Health, Adults (Age 18 ), Percent by County, 2005-11

- Over 22.0%
- 16.1 - 22.0%
- 10.1 - 16.0%
- Under 10.1%
- No Data or Data Suppressed

## 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
Cheshire County, New Hampshire	77,097	9,169	<b>12%</b>
New Hampshire	1,317,033	147,129	11.17%
United States	309,231,232	36,499,048	12%

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 with a Disability



- Cheshire County, New Hampshire (12%)
- New Hampshire (11.17%)
- United States (12%)



Disabled Population, Percent by PUMA, 2009-11

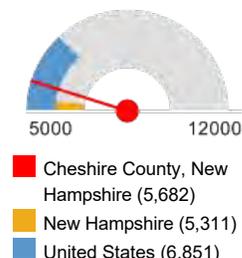
- Over 15.0%
- 12.1 - 15.0%
- 9.1 - 12.0%
- Under 9.1%

## 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, 2008-2010 Average	Total Premature Deaths, 2008-2010 Average	Total Years of Potential Life Lost, 2008-2010 Average	Years of Potential Life Lost, Rate per 100,000 Population
Cheshire County, New Hampshire	76,918	253	4,371	<b>5,682</b>
New Hampshire	1,318,194	4,050	70,009	5,311
United States	311,616,188	1,074,667	21,327,690	6,851

Years of Potential Life Lost, Rate per 100,000 Population

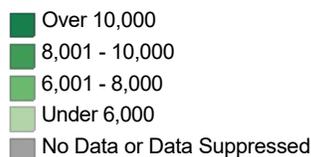


Note: This indicator is compared with the state average.

Data Source: Centers for Disease Control and Prevention, National Vital Statistics System, 2008-2010 (As Reported in the 2013 County Health Rankings). Source geography: County.



Premature Deaths, Years Lost Rate (Per 100,000 Pop.) by County, 2008-10



## 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.

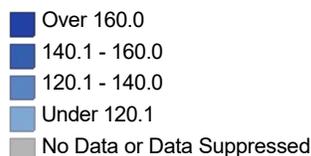
Report Area	Total Population, ACS 2006-2010	Annual Cancer Incidence, 2006-2010 Average	Annual Incidence Rate (Per 100,000 Pop.)
Cheshire County, New Hampshire	37,779	57	125.90
New Hampshire	97,641	1,108	155.30
United States	no data	215,232	143.70



Data Source: The Centers for Disease Control and Prevention, and the National Cancer Institute: State Cancer Profiles, 2006-2010. Source geography: County.



Prostate Cancer, Incidence Rate (Per 100,000 Pop.) by County, 2006-10

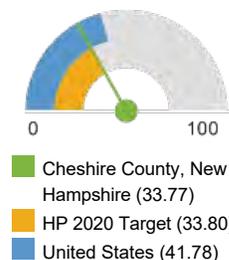


## Stroke Mortality

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 resummairized 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	Average Annual Deaths, 2006-2010	Crude Death Rate (Per 100,000 Pop.)	Age-Adjusted Death Rate, Stroke Mortality (Per 100,000 Pop.)
Cheshire County, New Hampshire	77,459	31	39.76	<b>33.77</b>
New Hampshire	1,313,881	493	37.54	<b>34.49</b>
United States	303,844,430	133,107	43.81	<b>41.78</b>
<a href="#">HP 2020 Target</a>				<b>&lt;= 33.8</b>

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

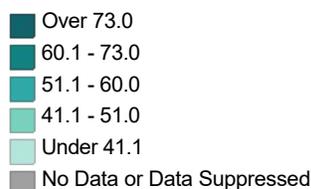


Note: This indicator is compared with the Healthy People 2020 Target.

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.



Stroke Mortality, Age Adj. Rate (Per 100,000 Pop.) by County, 2006-10

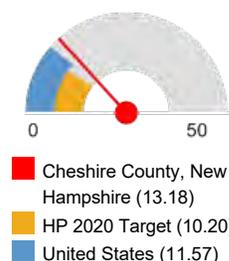


## Suicide

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	Average Annual Deaths, 2006-2010	Crude Death Rate (Per 100,000 Pop.)	Age-Adjusted Death Rate, Suicide (Per 100,000 Pop.)
Cheshire County, New Hampshire	77,459	10	13.17	<b>13.18</b>
New Hampshire	1,313,881	170	12.94	<b>12.30</b>
United States	303,844,430	35,841	11.80	<b>11.57</b>
<a href="#">HP 2020 Target</a>				<b>&lt;= 10.2</b>

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

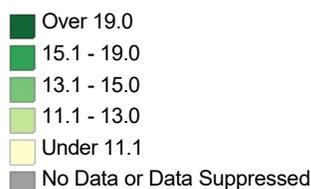


Note: This indicator is compared with the Healthy People 2020 Target.

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.



Suicide Mortality, Age Adj. Rate (Per 100,000 Pop.) by County, 2006-10



## FOOTNOTES

### Total 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 2007-2011. Mapped data are summarized to 2010 census tract boundaries. Area demographic statistics are measured as a percentage of the total population based on 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 2011 Subject Definitions](#).

#### **Notes**

##### **Race and Ethnicity**

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. Indicator race and ethnicity statistics are generated from self-identified survey responses. Using the OMB standard, the available race categories 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 are: Hispanic or Latino, and Not Hispanic or Latino. Respondents may only choose one ethnicity. Total population counts are reported in the ACS public use files by combined race and ethnicity; social and economic data are reported by race or ethnicity alone.

##### **Data Limitations**

Beginning in 2006, the population in group quarters (GQ) was included in the ACS. Some types of GQ populations have age and sex distributions that are very different from the household population. The inclusion of the GQ population could therefore have a noticeable impact on demographic distribution. This is particularly true for areas with a substantial GQ population (like areas with military bases, colleges, or jails).

### 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 \(2008\)](#).*

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

For more information on the data reported in the American Community Survey, please see the complete [American Community Survey 2011 Subject Definitions](#).

#### **Notes**

##### **Race and Ethnicity**

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. Indicator race and ethnicity statistics are generated from self-identified survey responses. Using the OMB standard, the available race categories 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 are: Hispanic or Latino, and Not Hispanic or Latino. Respondents may only choose one ethnicity. All social and economic data are reported in the ACS public use files by race alone, ethnicity alone, and for the white non-Hispanic population.

#### **Data Limitations**

Beginning in 2006, the population in group quarters (GQ) was included in the ACS. Some types of GQ populations have age and sex distributions that are very different from the household population. The inclusion of the GQ population could therefore have a noticeable impact on demographic distribution. This is particularly true for areas with a substantial GQ population (like areas with military bases, colleges, or jails).

### 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 2007-2011. Mapped data are summarized to 2010 census tract boundaries. Area demographic statistics are measured as a percentage of the total population based on the following formula:

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

For more information on the data reported in the American Community Survey, please see the complete [American Community Survey 2011 Subject Definitions](#).

#### **Notes**

##### **Race and Ethnicity**

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. Indicator race and ethnicity statistics are generated from self-identified survey responses. Using the OMB standard, the available race categories 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 are: Hispanic or Latino, and Not Hispanic or Latino. Respondents may only choose one ethnicity. All social and economic data are reported in the ACS public use files by race alone, ethnicity alone, and for the white non-Hispanic population.

##### **Data Limitations**

Beginning in 2006, the population in group quarters (GQ) was included in the ACS. Some types of GQ populations have age and sex distributions that are very different from the household population. The inclusion of the GQ population could therefore have a noticeable impact on demographic distribution. This is particularly true for areas with a substantial GQ population (like areas with military bases, colleges, or jails).

### 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 2007-2011. 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

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. Indicator race and ethnicity statistics are generated from self-identified survey responses. Using the OMB standard, the available race categories 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 are: Hispanic or Latino, and Not Hispanic or Latino. Respondents may only choose one ethnicity. All social and economic data are reported in the ACS public use files by race alone, ethnicity alone, and for the white non-Hispanic population.

### Data Limitations

Beginning in 2006, the population in group quarters (GQ) was included in the ACS. Some types of GQ populations have age and sex distributions that are very different from the household population. The inclusion of the GQ population could therefore have a noticeable impact on demographic distribution. This is particularly true for areas with a substantial GQ population (like areas with military bases, colleges, or jails).

## Population Under Age 18

### 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 2007-2011. Mapped data are summarized to 2010 census tract boundaries. Area demographic statistics are measured as a percentage of the total population based on 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 2011 Subject Definitions](#).

## Notes

### Race and Ethnicity

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. Indicator race and ethnicity statistics are generated from self-identified survey responses. Using the OMB standard, the available race categories 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 are: Hispanic or Latino, and Not Hispanic or Latino. Respondents may only choose one ethnicity. All social and economic data are reported in the ACS public use files by race alone, ethnicity alone, and for the white non-Hispanic population.

### Data Limitations

Beginning in 2006, the population in group quarters (GQ) was included in the ACS. Some types of GQ populations have age and sex distributions that are very different from the household population. The inclusion of the GQ population could therefore have a noticeable impact on demographic distribution. This is particularly true for areas with a substantial GQ population (like areas with military bases, colleges, or jails).

## Population Age 18-64

### 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 2007-2011. Mapped data are summarized to 2010 census tract boundaries. Area demographic statistics are measured as a percentage of the total population based on the following formula:

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

For more information on the data reported in the American Community Survey, please see the complete [American Community Survey 2011 Subject Definitions](#).

### Notes

#### Race and Ethnicity

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. Indicator race and ethnicity statistics are generated from self-identified survey responses. Using the OMB standard, the available race categories 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 are: Hispanic or Latino, and Not Hispanic or Latino. Respondents may only choose one ethnicity. All social and economic data are reported in the ACS public use files by race alone, ethnicity alone, and for the white non-Hispanic population.

#### Data Limitations

Beginning in 2006, the population in group quarters (GQ) was included in the ACS. Some types of GQ populations have age and sex distributions that are very different from the household population. The inclusion of the GQ population could therefore have a noticeable impact on demographic distribution. This is particularly true for areas with a substantial GQ population (like areas with military bases, colleges, or jails).

## Population Age 65

### 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 2007-2011. Mapped data are summarized to 2010 census tract boundaries. Area demographic statistics are measured as a percentage of the total population based on the following formula:

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

For more information on the data reported in the American Community Survey, please see the complete [American Community Survey 2011 Subject Definitions](#).

### Notes

#### Race and Ethnicity

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. Indicator race and ethnicity statistics are generated from self-identified survey responses. Using the OMB standard, the available race categories 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 are: Hispanic or Latino, and Not Hispanic or Latino. Respondents may only choose one ethnicity. All social and economic data are reported in the ACS public use files by race alone, ethnicity alone, and for the white non-Hispanic population.

#### Data Limitations

Beginning in 2006, the population in group quarters (GQ) was included in the ACS. Some types of GQ populations have age and sex distributions that are very different from the household population. The inclusion of the GQ population could therefore have a noticeable impact on demographic distribution. This is particularly true for areas with a substantial GQ population (like areas with military bases, colleges, or jails).

## Population with Limited English Proficiency

### **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 2007-2011. Mapped data are summarized to 2010 census tract boundaries. Area demographic statistics are measured as a percentage of the total population based on the following formula:

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

For more information on the data reported in the American Community Survey, please see the complete [American Community Survey 2011 Subject Definitions](#).

### **Notes**

#### **Race and Ethnicity**

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. Indicator race and ethnicity statistics are generated from self-identified survey responses. Using the OMB standard, the available race categories 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 are: Hispanic or Latino, and Not Hispanic or Latino. Respondents may only choose one ethnicity. All social and economic data are reported in the ACS public use files by race alone, ethnicity alone, and for the white non-Hispanic population.

#### **Data Limitations**

Beginning in 2006, the population in group quarters (GQ) was included in the ACS. The part of the group quarters population in the language universe (for example, people living in group homes or those living in agriculture workers' dormitories) may have different levels of English proficiency than the general population. Direct comparisons of the data would likely result in erroneous conclusions about the English language proficiency of all people living in the area.

## Urban and Rural Population

### **Data Background**

The U.S. Census counts every resident in the United States. It is mandated by Article I, Section 2 of the Constitution and takes place every 10 years. The census collects information about the age, sex, race, and ethnicity of every person in the United States. The data collected by the decennial census determine the number of seats each state has in the U.S. House of Representatives and is also used to distribute billions in federal funds to local communities. For more information about this source, refer to the [United States Census 2010](#) website.

### **Methodology**

Data are from the US 2010 Decennial Census, which provides urban and rural attributes for all geographic areas. by the 2010 Census definition, urban areas are comprised of a densely settled core of census tracts and/or census blocks that meet minimum population density requirements and/or land use requirements. The Census Bureau identifies two types of urban areas:

- Urbanized Areas (UAs) of 50,000 or more people;
- Urban Clusters (UCs) of at least 2,500 and less than 50,000 people.

To qualify as an urban area, the territory identified according to criteria must encompass at least 2,500 people, at least 1,500 of which reside outside institutional group quarters. Areas adjacent to urban areas and cores are also designated as urban when they are non-residential, but contain urban land uses, or when they contain low population, but link outlying densely settled territory with the densely settled core.

"Rural" areas consist of all territory, population, and housing units located outside UAs and UCs. Geographic entities, such as metropolitan areas, counties, minor civil divisions, places, and census tracts, often contain both urban and rural territory, population, and housing units. Indicator data tables display the percentage of population in areas designated either urban or rural based on the following formula:

$$\text{Percentage} = \frac{[\text{Urban or Rural Population}]}{[\text{Total Population}]} * 100$$

For more information, please visit the US Census Bureau's [2010 Urban and Rural Classification](#) web page.

## Notes

### Race and Ethnicity

Race and ethnicity (Hispanic origin) are collected as two separate categories in the US Decennial Census based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. Indicator race and ethnicity statistics are generated from self-identified survey responses. Using the OMB standard, the available race categories in the 2010 Census 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 are: Hispanic or Latino, and Not Hispanic or Latino. Respondents may only choose one ethnicity.

## 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."

*Citation: Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services.*

[Overview: BRFSS 2010.](#)

The health characteristics estimated from the BRFSS include 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 survey questionnaires, please visit [the Behavioral Risk Factor Surveillance System](#) home page.

### Methodology

Indicator percentages are acquired for years 2005-2011 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 do not receive adequate 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:

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

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](#).

## Notes

### Race and Ethnicity

Statistics by race and ethnicity are not provided for this indicator from the data source. Detailed race/ethnicity data may be available at a broader geographic level, or from a local source.

### Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of persons sampled (for each geographic area / population group combination) over the survey period is less than 50, or when the standard error of the estimate exceeds 10% of the calculated value.

## 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 releases a dataset containing detailed information about every public school in the United States in their annual Common Core of Data (CCD) files. The information from which this data is compiled is supplied by state education agency officials. The CCD reports information about both schools and school districts, including name, address, and phone number; descriptive information about students and staff demographics; and fiscal data, including revenues and current expenditures.

For more information, please visit the [Common Core of Data](#) web page.

## Methodology

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:

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

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.

## Notes

### Race and Ethnicity

Statistics by race and ethnicity are not provided for this indicator from the data source. Detailed race/ethnicity data may be available at a broader geographic level, or from a local source.

## 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 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 2007-2011. Mapped data are summarized to 2010 census tract boundaries. Area demographic statistics are measured as a percentage of the total population based on the following formula:

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

For more information on the data reported in the American Community Survey, please see the complete [American Community Survey 2011 Subject Definitions](#).

## Notes

### Race and Ethnicity

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. Indicator race and ethnicity statistics are generated from self-identified survey responses. Using the OMB standard, the available race categories 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 are: Hispanic or Latino, and Not Hispanic or Latino. Respondents may only choose one ethnicity. All social and economic data are reported in the ACS public use files by race alone, ethnicity alone, and for the white non-Hispanic population.

### Data Limitations

Beginning in 2006, the population in group quarters (GQ) was 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.

## High School Graduation Rate

### 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 releases a dataset containing detailed information about every public school in the United States in their annual Common Core of Data (CCD) files. The information from which this data is compiled is supplied by state education agency officials. The CCD reports information about both schools and school districts, including name, address, and phone number;

descriptive information about students and staff demographics; and fiscal data, including revenues and current expenditures.

For more information, please visit the [Common Core of Data](#) web page.

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

$$\text{Graduation Rate} = \frac{[\text{Estimated Number of Graduates}]}{[\text{Average Base Freshman Enrollment}]} * 100.$$

\*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

### Race and Ethnicity

Statistics by race and ethnicity are not provided for this indicator from the data source. Detailed race/ethnicity data may be available at a broader geographic level, or from a local source.

## Income Over \$75,000 (Family)

### 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 2007-2011. Mapped data are summarized to 2010 census tract boundaries. Area demographic statistics are measured as a percentage of the total population based on the following formula:

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

For more information on the data reported in the American Community Survey, please see the complete [American Community Survey 2011 Subject Definitions](#).

## Notes

### Race and Ethnicity

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. Indicator race and ethnicity statistics are generated from self-identified survey responses. Using the OMB standard, the available race categories 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 are: Hispanic or Latino, and Not Hispanic or Latino. Respondents may only choose one ethnicity. All social and economic data are reported in the ACS public use files by race alone, ethnicity alone, and for the white non-Hispanic population.

## Population in Poverty (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 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 2007-2011. Mapped data are summarized to 2010 census tract boundaries. Area demographic statistics are measured as a percentage of the total population based on the following formula:

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

For more information on the data reported in the American Community Survey, please see the complete [American Community Survey 2011 Subject Definitions](#).

## Notes

### Race and Ethnicity

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. Indicator race and ethnicity statistics are generated from self-identified survey responses. Using the OMB standard, the available race categories 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 are: Hispanic or Latino, and Not Hispanic or Latino. Respondents may only choose one ethnicity. All social and economic data are reported in the ACS public use files by race alone, ethnicity alone, and for the white non-Hispanic population.

### Data Limitations

Beginning in 2006, the population in group quarters (GQ) was 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.

## Population in Poverty (200% 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 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 2007-2011. Mapped data are summarized to 2010 census tract boundaries. Area demographic statistics are measured as a percentage of the total population based on the following formula:

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

For more information on the data reported in the American Community Survey, please see the complete [American Community Survey 2011 Subject Definitions](#).

## Notes

### Race and Ethnicity

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. Indicator race and ethnicity statistics are generated from self-identified survey responses. Using the OMB standard, the available race categories 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 are: Hispanic or Latino, and Not Hispanic or Latino. Respondents may only choose one ethnicity. All social and economic data are reported in the ACS public use files by race alone, ethnicity alone, and for the white non-Hispanic population.

### Data Limitations

Beginning in 2006, the population in group quarters (GQ) was 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.

## 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 \(2008\)](#).*

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 3 year period 2009-2011. Data are summarized to 2010 Public Use Micro Area (PUMA) 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**

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. Indicator race and ethnicity statistics are generated from self-identified survey responses. Using the OMB standard, the available race categories 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 are: Hispanic or Latino, and Not Hispanic or Latino. Respondents may only choose one ethnicity. All social and economic data are reported in the ACS public use files by race alone, ethnicity alone, and for the white non-Hispanic population.

#### **Data Limitations**

The population '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 group quarters (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.

## Population with Associate's Level Degree or Higher

### **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 2007-2011. Mapped data are summarized to 2010 census tract boundaries. Area demographic statistics are measured as a percentage of the total population based on 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 2011 Subject Definitions](#).

## Notes

### Race and Ethnicity

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. Indicator race and ethnicity statistics are generated from self-identified survey responses. Using the OMB standard, the available race categories 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 are: Hispanic or Latino, and Not Hispanic or Latino. Respondents may only choose one ethnicity. All social and economic data are reported in the ACS public use files by race alone, ethnicity alone, and for the white non-Hispanic population.

### Data Limitations

Beginning in 2006, the population in group quarters (GQ) was 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.

## 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 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 2007-2011. Mapped data are summarized to 2010 census tract boundaries. Area demographic statistics are measured as a percentage of the total population based on 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 2011 Subject Definitions](#).

## Notes

### Race and Ethnicity

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. Indicator race and ethnicity statistics are generated from self-identified survey responses. Using the OMB standard, the available race categories 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 are: Hispanic or Latino, and Not Hispanic or Latino. Respondents may only choose one ethnicity. All social and economic data are reported in the ACS public use files by race alone, ethnicity alone, and for the white non-Hispanic population.

### Data Limitations

Beginning in 2006, the population in group quarters (GQ) was 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.

## 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. NVSS statistics are released annually in various data warehouses, including [CDC WONDER](#), [VitalStats](#), and the [Health Indicator Warehouse](#).

## 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](#).

## Notes

### Race and Ethnicity

Race and ethnicity (Hispanic origin) are collected as two separate categories by state vital statistics registries based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. All mortality statistics from the CDC WONDER databases are available by race alone (White, Black, Amer. Indian/AK Native, and Asian) ethnicity alone (Hispanic, Non-Hispanic), or by combined race and ethnicity. Data is reported separately for race alone and for ethnicity alone in order to maintain large enough sample sizes for the inclusion of small counties in the disaggregated data tables.

## Unemployment Rate

### Data Background

The Bureau of Labor Statistics (BLS) is the principal Federal agency responsible for measuring labor market activity, working conditions, and price changes in the economy. Its mission is to collect, analyze, and disseminate essential economic information to support public and private decision-making. As an independent statistical agency, BLS serves its diverse user communities by providing products and services that are objective, timely, accurate, and relevant.

### Methodology

Unemployment statistics are downloaded from the US Bureau of Labor Statistics (BLS) Local Area Unemployment Statistics (LAUS) database. The LAUS dataset consists of modeled unemployment estimates. It is described by the BLS as follows:

*The concepts and definitions underlying LAUS data come from the Current Population Survey (CPS), the household survey that is the official measure of the labor force for the nation. State monthly model estimates are controlled in "real time" to sum to national monthly labor force estimates from the CPS. These models combine current and historical data from the CPS, the Current Employment Statistics (CES) program, and State unemployment insurance (UI) systems. Estimates for seven large areas and their respective balances of State are also model-based. Estimates for the remainder of the substate labor market areas are produced through a building-block approach known as the "Handbook method." This procedure also uses data from several sources, including the CPS, the CES program, State UI systems, and the decennial census, to create estimates that are adjusted to the statewide measures of employment and unemployment. Below the labor market area level, estimates are prepared using disaggregation techniques based on inputs from the decennial census, annual population estimates, and current UI data.*

From the LAUS estimates, unemployment is recalculated as follows:

$$\text{Unemployment Rate} = [\text{Total Unemployed}] / [\text{Total Labor Force}] * 100$$

For more information, please visit the Bureau of Labor Statistics [Local Area Unemployment Statistics](#) web page.

## Notes

### Race and Ethnicity

Statistics by race and ethnicity are not provided for this indicator from the data source. Detailed race/ethnicity data may be available at a broader geographic level, or from a local source.

## Uninsured Population (Adults)

### Data Background

The Small Area Health Insurance Estimates (SAHIE) program was created to develop model-based estimates of health insurance coverage for counties and states. It is currently the only dataset providing complete health-insurance coverage estimates at the county level. The models predict county level insurance estimates for total populations, as well as population groups defined by age, sex, race and income.

The SAHIE program models health insurance coverage by combining survey data with population estimates and administrative records. SAHIE estimates are a product of the US Census Bureau with funding from the Centers for Disease Control and Prevention.

The SAHIE health insurance models use data from the following sources:

- American Community Survey
- Internal Revenue Service: Federal Tax Returns
- Supplemental Nutrition Assistance Program (SNAP): Participation Records
- County Business Patterns
- Medicaid and Children's Health Insurance Program (CHIP): Participation Records
- US Census 2010

### Methodology

Counts of the number of persons without medical insurance are modeled for the Small Area Income and Health Insurance Estimates (SAHIE) datasets by the Census Bureau using both survey and census data. In this reporting platform, indicator percentages are

summarized from the SAHIE estimates based on the following formula:

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

For more information about the data used in these estimates, please visit the [Small Area Health Insurance Estimates](#) website and view the provided [Data Inputs](#) page.

## Notes

### Race and Ethnicity

Statistics by race and ethnicity are not provided for this indicator from the data source. Detailed race/ethnicity data may be available at a broader geographic level, or from a local source.

## Uninsured Population (Children)

### Data Background

The Small Area Health Insurance Estimates (SAHIE) program was created to develop model-based estimates of health insurance coverage for counties and states. It is currently the only dataset providing complete health-insurance coverage estimates at the county level. The models predict county level insurance estimates for total populations, as well as population groups defined by age, sex, race and income.

The SAHIE program models health insurance coverage by combining survey data with population estimates and administrative records. SAHIE estimates are a product of the US Census Bureau with funding from the Centers for Disease Control and Prevention.

The SAHIE health insurance models use data from the following sources:

- *American Community Survey*
- *Internal Revenue Service: Federal Tax Returns*
- *Supplemental Nutrition Assistance Program (SNAP): Participation Records*
- *County Business Patterns*
- *Medicaid and Children's Health Insurance Program (CHIP): Participation Records*
- *US Census 2010*

### Methodology

Counts of the number of persons without medical insurance are modeled for the Small Area Income and Health Insurance Estimates (SAHIE) datasets by the Census Bureau using both survey and census data. In this reporting platform, indicator percentages are summarized from the SAHIE estimates based on the following formula:

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

For more information about the data used in these estimates, please visit the [Small Area Health Insurance Estimates](#) website and view the provided [Data Inputs](#) page.

## Notes

### Race and Ethnicity

Statistics by race and ethnicity are not provided for this indicator from the data source. Detailed race/ethnicity data may be available at a broader geographic level, or from a local source.

## Uninsured Population (Total)

### 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 3 year period 2009-2011. Data are summarized to 2010 Public Use Micro Area (PUMA) 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**

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. Indicator race and ethnicity statistics are generated from self-identified survey responses. Using the OMB standard, the available race categories 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 are: Hispanic or Latino, and Not Hispanic or Latino. Respondents may only choose one ethnicity. All social and economic data are reported in the ACS public use files by race alone, ethnicity alone, and for the white non-Hispanic population.

#### **Data Limitations**

The population '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 group quarters (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.

## Air Quality (Ozone)

### **Data Background**

The National Environmental Public Health Tracking Network (Tracking Network) is a system of integrated health, exposure, and hazard information and data from a variety of national, state, and city sources.

### **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

#### **Race and Ethnicity**

Statistics by race and ethnicity are not provided for this indicator.

## Air Quality (Particulate Matter 2.5)

### **Data Background**

The National Environmental Public Health Tracking Network (Tracking Network) is a system of integrated health, exposure, and hazard information and data from a variety of national, state, and city sources.

### **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

#### **Race and Ethnicity**

Statistics by race and ethnicity are not provided for this indicator.

## 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](#)

## Methodology

Population figures are acquired for this indicator from the U.S. Census Bureau, 2010 Decennial Census, Summary File 1. Industry counts are acquired from the U.S. Census Bureau, County Business Patterns (2010) data file. Industries are stratified based on the North American Industry Classification System (NAICS) a coding system used by Federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. business economy. Establishment rates for each county are derived using the following formula:

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

The specific codes used indicators reported from the Census Bureau's County Business Patterns (CBP) are listed below.

- Grocery stores and supermarkets: 445110 and 445230  
*Grocery stores 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 are those locations "primarily engaged in retailing fresh fruits and vegetables". Examples include permanent produce stands and fruit or vegetable markets.*
- Fast food restaurants: 722211  
*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*
- Alcoholic beverage retailers: 445310  
*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.*
- Recreational Facilities: 713940  
*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.*

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

## Notes

### Data Limitations

1. Data are reported based on the primary NAICS code of the establishment. By definition, the primary NAICS code should reflect 50% or more of the establishment's activity. This definition may exclude some establishments from a particular industry classification. For example, a convenience store which also sells liquor may be classified only as a convenience store (445120) and not a beer, wine and liquor store (445310).

### Race and Ethnicity

Statistics by race and ethnicity are not provided for this indicator.

## 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](#)

## Methodology

Population figures are acquired for this indicator from the U.S. Census Bureau, 2010 Decennial Census, Summary File 1. Industry counts are acquired from the U.S. Census Bureau, County Business Patterns (2010) data file. Industries are stratified based on the North American Industry Classification System (NAICS) a coding system used by Federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. business economy. Establishment rates for each county are derived using the following formula:

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

The specific codes used indicators reported from the Census Bureau's County Business Patterns (CBP) are listed below.

- Grocery stores and supermarkets: 445110 and 445230  
*Grocery stores 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 are those locations "primarily engaged in retailing fresh fruits and vegetables". Examples include permanent produce stands and fruit or vegetable markets.*
- Fast food restaurants: 722211  
*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*
- Alcoholic beverage retailers: 445310  
*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.*
- Recreational Facilities: 713940  
*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.*

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

## Notes

### Data Limitations

1.Data are reported based on the primary NAICS code of the establishment. By definition, the primary NAICS code should reflect 50% or more of the establishment's activity. This definition may exclude some establishments from a particular industry classification. For example, a convenience store which also sells liquor may be classified only as a convenience store (445120) and not a beer, wine and liquor store (445310).

### Race and Ethnicity

Statistics by race and ethnicity are not provided for this indicator.

## Liquor 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](#)

## Methodology

Population figures are acquired for this indicator from the U.S. Census Bureau, 2010 Decennial Census, Summary File 1. Industry counts are acquired from the U.S. Census Bureau, County Business Patterns (2010) data file. Industries are stratified based on the North American Industry Classification System (NAICS) a coding system used by Federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. business economy. Establishment rates for each county are derived using the following formula:

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

The specific codes used indicators reported from the Census Bureau's County Business Patterns (CBP) are listed below.

- Grocery stores and supermarkets: 445110 and 445230  
*Grocery stores 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 are those locations "primarily engaged in retailing fresh fruits and vegetables". Examples include permanent produce stands and fruit or vegetable markets.*
- Fast food restaurants: 722211  
*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*

- Alcoholic beverage retailers: 445310  
*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.*
- Recreational Facilities: 713940  
*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.*

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

## Notes

### Race and Ethnicity

Statistics by race and ethnicity are not provided for this indicator.

### Data Limitations

- 1.Data are reported based on the primary NAICS code of the establishment. By definition, the primary NAICS code should reflect 50% or more of the establishment's activity. This definition may exclude some establishments from a particular industry classification. For example, a convenience store which also sells liquor may be classified only as a convenience store (445120) and not a beer, wine and liquor store (445310).
- 2.State laws regarding the retail sale of alcoholic beverages vary. Use caution when comparing data across States.

## Low Income Population with Low Food Access

### Data Background

The Food Access Research Atlas (FARA) presents a spatial overview of food access indicators for populations using different measures of supermarket accessibility. The FARA is a compliment to the USDA's [Food Environment Atlas, which houses county-level food related data](#). The FARA provides census-tract level detail of the food access measures, including food desert census tracts. Estimates in the Food Access Research Atlas draw from various sources, including the 2010 STARS list of supermarkets, the Supplemental Nutrition Assistance Program (SNAP) Retailer Directory, the 2010 Decennial Census, and the 2006-10 American Community Survey.

For more information about this source, including the methodology and data definitions please visit the [Food Access Research Atlas](#) web page.

### Methodology

Census tract-level data was acquired from the USDA Food Access Research Atlas (FARA) and aggregated to generate county and state-level estimates.

The FARA hosts data derived through the analysis of multiple sources. First, a directory of supermarkets and large grocery stores within the United States, including Alaska and Hawaii, was derived from merging the 2010 STARS directory of stores authorized to accept SNAP benefits and the 2010 Trade Dimensions TDLinx directory of stores. Stores met the definition of a supermarket or large grocery store if they reported at least \$2 million in annual sales and contained all the major food departments found in a traditional supermarket, including fresh meat and poultry, dairy, dry and packaged foods, and frozen foods. The combined list of supermarkets and large grocery stores was converted into a GIS-usable format by geocoding the street address into store-point locations. Population data are reported at the block level from the 2010 Census of Population and Housing, while data on income are drawn at the block group-level from the 2006-10 American Community Survey. Distance to nearest supermarket was determined for population blocks. Blocks were determined to be "low-access" based on the distance of the block centroid to the nearest grocery store. For blocks within urban census tracts, the low-access cut off was 1 mile; for blocks within rural census tracts, the cut off was 10 miles. Rural or urban status is designated by the Census Bureau's Urban Area definition. Low-income is defined as annual family income of less than or equal to 200 percent of the Federal poverty threshold given family size.

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

## Notes

### Race and Ethnicity

Statistics by race and ethnicity are not provided for this indicator from the data source. Detailed race/ethnicity data may be available at a broader geographic level, or from a local source.

## Park Access

### Data Background

The National Environmental Public Health Tracking Network (Tracking Network) is a system of integrated health, exposure, and hazard information and data from a variety of national, state, and city sources.

## Population with Low Food Access

### Data Background

The Food Access Research Atlas (FARA) presents a spatial overview of food access indicators for populations using different measures of supermarket accessibility. The FARA is a compliment to the USDA's [Food Environment Atlas, which houses county-level food related data](#). The FARA provides census-tract level detail of the food access measures, including food desert census tracts. Estimates in the Food Access Research Atlas draw from various sources, including the 2010 STARS list of supermarkets, the Supplemental Nutrition Assistance Program (SNAP) Retailer Directory, the 2010 Decennial Census, and the 2006-10 American Community Survey.

For more information about this source, including the methodology and data definitions please visit the [Food Access Research Atlas](#) web page.

## Methodology

Census tract-level data was acquired from the USDA Food Access Research Atlas (FARA) and aggregated to generate county and state-level estimates.

The FARA hosts data derived through the analysis of multiple sources. First, a directory of supermarkets and large grocery stores within the United States, including Alaska and Hawaii, was derived from merging the 2010 STARS directory of stores authorized to accept SNAP benefits and the 2010 Trade Dimensions TDLinx directory of stores. Stores met the definition of a supermarket or large grocery store if they reported at least \$2 million in annual sales and contained all the major food departments found in a traditional supermarket, including fresh meat and poultry, dairy, dry and packaged foods, and frozen foods. The combined list of supermarkets and large grocery stores was converted into a GIS-usable format by geocoding the street address into store-point locations. Population data are reported at the block level from the 2010 Census of Population and Housing, while data on income are drawn at the block group-level from the 2006-10 American Community Survey. Distance to nearest supermarket was determined for population blocks. Blocks were determined to be "low-access" based on the distance of the block centroid to the nearest grocery store. For blocks within urban census tracts, the low-access cut off was 1 mile; for blocks within rural census tracts, the cut off was 10 miles. Rural or urban status is designated by the Census Bureau's Urban Area definition. Low-income is defined as annual family income of less than or equal to 200 percent of the Federal poverty threshold given family size.

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

## Notes

### Race and Ethnicity

Statistics by race and ethnicity are not provided for this indicator from the data source. Detailed race/ethnicity data may be available at a broader geographic level, or from a local source.

## 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](#)

## Methodology

Population figures are acquired for this indicator from the U.S. Census Bureau, 2010 Decennial Census, Summary File 1. Industry counts are acquired from the U.S. Census Bureau, County Business Patterns (2010) data file. Industries are stratified based on the North American Industry Classification System (NAICS) a coding system used by Federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. business economy. Establishment rates for each county are derived using the following formula:

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

The specific codes used indicators reported from the Census Bureau's County Business Patterns (CBP) are listed below.

- Grocery stores and supermarkets: 445110 and 445230  
*Grocery stores 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 are those locations "primarily engaged in retailing fresh fruits and vegetables". Examples include permanent produce stands and fruit or vegetable markets.*
- Fast food restaurants: 722211  
*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*
- Alcoholic beverage retailers: 445310  
*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.*
- Recreational Facilities: 713940  
*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.*

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

## Notes

### Data Limitations

1. Data are reported based on the primary NAICS code of the establishment. By definition, the primary NAICS code should reflect 50% or more of the establishment's activity. This definition may exclude some establishments from a particular industry classification. For example, a convenience store which also sells liquor may be classified only as a convenience store (445120) and not a beer, wine and liquor store (445310).

### Race and Ethnicity

Statistics by race and ethnicity are not provided for this indicator.

## Use of Public Transportation

### 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 2007-2011. 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 specific data elements reported in the American Community Survey, please see the complete [American Community Survey 2011 Subject Definitions](#).

## Notes

### Race and Ethnicity

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. Indicator race and ethnicity statistics are generated from self-identified survey responses. Using the OMB standard, the available race categories 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 are: Hispanic or Latino, and Not Hispanic or Latino. Respondents may only choose one ethnicity. All social and economic data are reported in the ACS public use files by race alone, ethnicity alone, and for the white non-Hispanic population.

## 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:

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

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

## Notes

### Race and Ethnicity

Statistics by race and ethnicity are not provided for this indicator.

## 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.

For more information about this source, including methodologies and definitions, refer to the [Dartmouth Atlas of Healthcare](#) website.

### Methodology

The Dartmouth Institute analyzes data drawn from enrollment and claims files from the Medicare program. Analysis is restricted to the fee-for-service population over age 65; HMO patients are not included. Indicator data tables express the proportion of Medicare Part B patients screened for medical conditions based on the following formula:

$$\text{Percentage} = \frac{[\text{Number Screened}]}{[\text{Total Patients}]} * 100$$

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](#).

## 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.”

*Citation: Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services.*

[Overview: BRFSS 2010.](#)

The health characteristics estimated from the BRFSS include 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 survey questionnaires, 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:

$$[\text{Persons having a Pap test}] = \frac{[\text{Indicator Percentage}]}{100} * [\text{Total Population}] .$$

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](#).

## Notes

### Race and Ethnicity

Statistics by race and ethnicity are not provided for this indicator from the data source. Detailed race/ethnicity data may be available at a broader geographic level, or from a local source.

### Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of persons sampled (for each geographic area / population group combination) over the survey period is less than 50, or when the standard error of the estimate exceeds 10% of the calculated value.

## Colon Cancer Screening (Sigmoid/Colonoscopy)

### 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.”

*Citation: Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services.*

[Overview: BRFSS 2010.](#)

The health characteristics estimated from the BRFSS include 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 survey questionnaires, 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:

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

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](#).

### Notes

#### Race and Ethnicity

Statistics by race and ethnicity are not provided for this indicator from the data source. Detailed race/ethnicity data may be available at a broader geographic level, or from a local source.

#### Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of persons sampled (for each geographic area / population group combination) over the survey period is less than 50, or when the standard error of the estimate exceeds 10% of the calculated value.

## 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.”

*Citation: Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services.*

[Overview: BRFSS 2010.](#)

The health characteristics estimated from the BRFSS include 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 annual survey data are publically available and maintained on the CDC's BRFSS [Annual Survey Data](#) web page.

For more information on the BRFSS survey methods, or to obtain a copy of the survey questionnaires, 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:

$$\text{Adults Without Recent Dental Exam} = \left( \frac{\text{Indicator Percentage}}{100} \right) * [\text{Total Population}] .$$

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 Behavioral Risk Factor Surveillance System home page.

## Notes

### Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of persons sampled (for each geographic area / population group combination) over the survey period is less than 20. Data are unreliable when the total number of persons sampled over the survey period is less than 50. Confidence intervals are available when exploring the data through the map viewer.

### Race and Ethnicity

Race and ethnicity (Hispanic origin) are collected as two separate categories in the Behavioral Risk Factor Surveillance System (BRFSS) interview surveys based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. Before the raw survey data files are released, self-identified race and ethnicity variables are recoded by National Center for Health Statistics (NCHS) analysts into the following categories: White, Non-Hispanic; Black, Non-Hispanic; Multiple Race, Non-Hispanic; Other Race, Non-Hispanic; and Hispanic or Latino. Due to sample size constraints, race and ethnicity statistics are only reported at the state and national levels.

## 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.

For more information about this source, including methodologies and definitions, refer to the [Dartmouth Atlas of Healthcare](#) website.

### Methodology

The Dartmouth Institute analyzes data drawn from enrollment and claims files from the Medicare program. Analysis is restricted to the fee-for-service population over age 65; HMO patients are not included. Indicator data tables express the proportion of Medicare Part B patients screened for medical conditions based on the following formula:

$$\text{Percentage} = \frac{\text{Number Screened}}{\text{Total Patients}} * 100$$

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

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) facility files were acquired from the US Health Resources and Services Administration (HRSA) GIS data warehouse. The point locations of these institutions, along with their designation type, were intersected with geographic areas to provide a count of the total number of facilities in an area.

## Notes

### Race and Ethnicity

Statistics by race and ethnicity are not provided for this indicator from the data source. Detailed race/ethnicity data may be available at a broader geographic level, or from a local source.

## Federally Qualified Health Centers

### **Data Background**

Providers of Service (POS) data is compiled quarterly by Research and Planning Consultants, LP (RPC) for the Centers for Medicare and Medicaid Services (CMS). The Provider of Services (POS) Extract is created from the QIES (Quality Improvement Evaluation System) database. These data include provider number, name, and address and characterize the participating institutional providers. The data are collected through the Centers for Medicare & Medicaid Services (CMS) Regional Offices. The file contains an individual record for each Medicare-approved provider and is updated quarterly.

### **Methodology**

Addresses for all active federally qualified health centers (FQHCs) were acquired from the Centers for Medicare and Medicaid Services (CMS) Providers of Service (POS) data file. FQHC addresses were geocoded using the Google Geocoding API to obtain the coordinates (point-location) of each facility. The resulting point location file was intersected with standard geographic areas (tracts, counties, and states) to generate a count of the total FQHCs in each area.

### **Notes**

#### **Race and Ethnicity**

Statistics by race and ethnicity are not provided for this indicator.

## 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.”

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

The health characteristics estimated from the BRFSS include 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 annual survey data are publically available and maintained on the CDC’s BRFSS [Annual Survey Data](#) web page.

For more information on the BRFSS survey methods, or to obtain a copy of the survey questionnaires, 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 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:

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

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.

### **Notes**

#### **Data Suppression**

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of persons sampled (for each geographic area / population group combination) over the survey period is less than 20. Data are unreliable when the total number of persons sampled over the survey period is less than 50. Confidence intervals are available when exploring the data through the map viewer.

#### **Race and Ethnicity**

Race and ethnicity (Hispanic origin) are collected as two separate categories in the Behavioral Risk Factor Surveillance System (BRFSS) interview surveys based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. Before the raw survey data files are released, self-identified race and ethnicity variables are recoded by National Center for Health Statistics (NCHS) analysts into the following categories: White, Non-Hispanic; Black, Non-Hispanic; Multiple Race, Non-Hispanic; Other Race, Non-Hispanic; and Hispanic or Latino. Due to sample size constraints, race and ethnicity statistics are only reported at the state and national levels.

## 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.”

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

The health characteristics estimated from the BRFSS include 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 annual survey data are publically available and maintained on the CDC’s BRFSS [Annual Survey Data](#) web page.

For more information on the BRFSS survey methods, or to obtain a copy of the survey questionnaires, 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:

$$\text{Adults Never Tested for HIV/AIDS} = \left( \frac{\text{Indicator Percentage}}{100} \right) * \text{Total Adult Population}$$

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.

## Notes

### Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of persons sampled (for each geographic area / population group combination) over the survey period is less than 20. Data are unreliable when the total number of persons sampled over the survey period is less than 50. Confidence intervals are available when exploring the data through the map viewer.

### Race and Ethnicity

Race and ethnicity (Hispanic origin) are collected as two separate categories in the Behavioral Risk Factor Surveillance System (BRFSS) interview surveys based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. Before the raw survey data files are released, self-identified race and ethnicity variables are recoded by National Center for Health Statistics (NCHS) analysts into the following categories: White, Non-Hispanic; Black, Non-Hispanic; Multiple Race, Non-Hispanic; Other Race, Non-Hispanic; and Hispanic or Latino. Due to sample size constraints, race and ethnicity statistics are only reported at the state and national levels.

## 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.”

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

The health characteristics estimated from the BRFSS include 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 annual survey data are publically available and maintained on the CDC’s BRFSS [Annual Survey Data](#) web page.

For more information on the BRFSS survey methods, or to obtain a copy of the survey questionnaires, 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:

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

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.

## Notes

### Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of persons sampled (for each geographic area / population group combination) over the survey period is less than 20. Data are unreliable when the total number of persons sampled over the survey period is less than 50. Confidence intervals are available when exploring the data through the map viewer.

### Race and Ethnicity

Race and ethnicity (Hispanic origin) are collected as two separate categories in the Behavioral Risk Factor Surveillance System (BRFSS) interview surveys based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. Before the raw survey data files are released, self-identified race and ethnicity variables are recoded by National Center for Health Statistics (NCHS) analysts into the following categories: White, Non-Hispanic; Black, Non-Hispanic; Multiple Race, Non-Hispanic; Other Race, Non-Hispanic; and Hispanic or Latino. Due to sample size constraints, race and ethnicity statistics are only reported at the state and national levels.

## 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."

*Citation: Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services.*

[Overview: BRFSS 2010.](#)

The health characteristics estimated from the BRFSS include 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 survey questionnaires, please visit [the Behavioral Risk Factor Surveillance System](#) home page.

### Methodology

Indicator percentages are acquired for years 2005-2011 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:

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

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](#).

## Notes

### Race and Ethnicity

Statistics by race and ethnicity are not provided for this indicator from the data source. Detailed race/ethnicity data may be available at a broader geographic level, or from a local source.

### Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of persons sampled (for

each geographic area / population group combination) over the survey period is less than 50, or when the standard error of the estimate exceeds 10% of the calculated value.

## 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 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.

### **Notes**

#### **Race and Ethnicity**

Statistics by race and ethnicity are not provided for this indicator from the data source. Detailed race/ethnicity data may be available at a broader geographic level, or from a local source.

## 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 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.

For more information about this source, including methodologies and definitions, refer to the [Dartmouth Atlas of Healthcare](#) website.

### **Methodology**

The Dartmouth Institute analyzes data drawn from enrollment and claims files from the Medicare program. Analysis is restricted to the fee-for-service population over age 65; HMO patients are not included. Indicator data tables express the rate of Medicare Part A patients discharged from the hospital for preventable / ambulatory care sensitive (ACS) conditions like asthma, diabetes, pneumonia, or COPD, based on the following formula:

$$\text{Rate} = [\text{ACS Condition Discharges}] / [\text{Total Patients}] * 10,000$$

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](#).

## 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.”

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

The health characteristics estimated from the BRFSS include 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 survey questionnaires, please visit [the Behavioral Risk Factor Surveillance System](#) home page.

## Methodology

Indicator percentages are acquired for years 2005-2011 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](#).

## Notes

### Race and Ethnicity

Statistics by race and ethnicity are not provided for this indicator from the data source. Detailed race/ethnicity data may be available at a broader geographic level, or from a local source.

### Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of persons sampled (for each geographic area / population group combination) over the survey period is less than 50, or when the standard error of the estimate exceeds 10% of the calculated value.

## Fruit/Vegetable 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."*

*Citation: Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services.*

[Overview: BRFSS 2010.](#)

The health characteristics estimated from the BRFSS include 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 survey questionnaires, 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:

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

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](#).

## Notes

## Race and Ethnicity

Statistics by race and ethnicity are not provided for this indicator from the data source. Detailed race/ethnicity data may be available at a broader geographic level, or from a local source.

## Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of persons sampled (for each geographic area / population group combination) over the survey period is less than 50, or when the standard error of the estimate exceeds 10% of the calculated value.

## Physical Inactivity (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. Diabetes and other risk factor prevalence is estimated using the following formula:

$$\text{Percent Prevalence} = [\text{Risk Factor Population}] / [\text{Total Population}] * 100.$$

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 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. 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. Respondents were considered to be physically inactive if they answered "no" to 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?"

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.

### Notes

#### Race and Ethnicity

Statistics by race and ethnicity are not provided for this indicator from the data source. Detailed race/ethnicity data may be available at a broader geographic level, or from a local source.

## Tobacco Usage (Current Smokers)

### 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."

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

The health characteristics estimated from the BRFSS include 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 survey questionnaires, please visit [the Behavioral Risk Factor Surveillance System](#) home page.

## Methodology

Indicator percentages are acquired for years 2005-2011 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](#).

## Notes

### Race and Ethnicity

Statistics by race and ethnicity are not provided for this indicator from the data source. Detailed race/ethnicity data may be available at a broader geographic level, or from a local source.

### Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of persons sampled (for each geographic area / population group combination) over the survey period is less than 50, or when the standard error of the estimate exceeds 10% of the calculated value.

## Tobacco Usage (Former or Current Smokers)

### 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.”

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

The health characteristics estimated from the BRFSS include 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 annual survey data are publically available and maintained on the CDC's BRFSS [Annual Survey Data](#) web page.

For more information on the BRFSS survey methods, or to obtain a copy of the survey questionnaires, 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:

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

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.

## Notes

### Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of persons sampled (for each geographic area / population group combination) over the survey period is less than 20. Data are unreliable when the total number of persons sampled over the survey period is less than 50. Confidence intervals are available when exploring the data through the map viewer.

### **Race and Ethnicity**

Race and ethnicity (Hispanic origin) are collected as two separate categories in the Behavioral Risk Factor Surveillance System (BRFSS) interview surveys based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. Before the raw survey data files are released, self-identified race and ethnicity variables are recoded by National Center for Health Statistics (NCHS) analysts into the following categories: White, Non-Hispanic; Black, Non-Hispanic; Multiple Race, Non-Hispanic; Other Race, Non-Hispanic; and Hispanic or Latino. Due to sample size constraints, race and ethnicity statistics are only reported at the state and national levels.

## Tobacco Usage (Quit Attempt)

### **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.”

*Citation: Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services.*

[Overview: BRFSS 2010.](#)

The health characteristics estimated from the BRFSS include 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 annual survey data are publically available and maintained on the CDC’s BRFSS [Annual Survey Data](#) web page.

For more information on the BRFSS survey methods, or to obtain a copy of the survey questionnaires, 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:

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

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.

### **Notes**

#### **Data Suppression**

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of persons sampled (for each geographic area / population group combination) over the survey period is less than 20. Data are unreliable when the total number of persons sampled over the survey period is less than 50. Confidence intervals are available when exploring the data through the map viewer.

#### **Race and Ethnicity**

Race and ethnicity (Hispanic origin) are collected as two separate categories in the Behavioral Risk Factor Surveillance System (BRFSS) interview surveys based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. Before the raw survey data files are released, self-identified race and ethnicity variables are recoded by National Center for Health Statistics (NCHS) analysts into the following categories: White, Non-Hispanic; Black, Non-Hispanic; Multiple Race, Non-Hispanic; Other Race, Non-Hispanic; and Hispanic or Latino. Due to sample size constraints, race and ethnicity statistics are only reported at the state and national levels.

## Accident 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. NVSS statistics are released annually in various data warehouses, including [CDC WONDER](#), [VitalStats](#), and the [Health Indicator Warehouse](#).

### **Methodology**

County population figures and death statistics are acquired using CDC WONDER from the Underlying Cause of Death database. Conditions were queried for years 2006-2010 based on a selection of codes from the International Classification of Diseases (ICD),

Version 10. The ICD-10 is the current global health information standard for mortality and morbidity statistics. The ICD has been maintained by the World Health Organization since its conception in 1948. A searchable, detailed list of current ICD-10 Codes (Version 2010) is available from the [World Health Organization](#).

Mortality rates were acquired from the source age-adjusted to the year 2000 U.S. standard. To recalculate age-adjusted mortality rates for unique service areas and aggregated county groupings, the following formula was used:

$$\text{Mortality Rate} = [\text{SUM}(\text{Total Population}) * ((\text{Age-Adjusted Rate})/100,000)] / [\text{SUM}(\text{Total Population})] * 100,000.$$

The specific codes used for reported mortality indicators are listed below.

- Assault (homicide): U01-U02, X85-Y09, Y87.1
- Cerebrovascular disease (stroke): I60-I69
- Coronary heart disease: I11, I20-I25
- Chronic lower respiratory disease: J40-J47
- Intentional self-harm (suicide): X60-X84, Y870
- Malignant neoplasm (cancer): C00-C97
- Unintentional injury (accident): V01-X59, Y85-Y86

## Notes

### Race and Ethnicity

Race and ethnicity (Hispanic origin) are collected as two separate categories by state vital statistics registries based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. All mortality statistics from the CDC WONDER databases are available by race alone (White, Black, Amer. Indian/AK Native, and Asian) ethnicity alone (Hispanic, Non-Hispanic), or by combined race and ethnicity. Data is reported separately for race alone and for ethnicity alone in order to maintain large enough sample sizes for the inclusion of small counties in the disaggregated data tables.

### Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of cases is less than 10 (for each county/cause of death/population group) over the time period monitored. Rates should be considered unreliable when calculated with a numerator (number of cases) less than 20.

## 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.”

*Citation: Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services.*

[Overview: BRFSS 2010.](#)

The health characteristics estimated from the BRFSS include 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 annual survey data are publically available and maintained on the CDC's BRFSS [Annual Survey Data](#) web page.

For more information on the BRFSS survey methods, or to obtain a copy of the survey questionnaires, 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?"*

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:

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

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 Behavioral Risk Factor Surveillance System home page.

## Notes

### Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of persons sampled (for each geographic area / population group combination) over the survey period is less than 20. Data are unreliable when the total number of persons sampled over the survey period is less than 50. Confidence intervals are available when exploring the data through the map viewer.

### Race and Ethnicity

Race and ethnicity (Hispanic origin) are collected as two separate categories in the Behavioral Risk Factor Surveillance System (BRFSS) interview surveys based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. Before the raw survey data files are released, self-identified race and ethnicity variables are recoded by National Center for Health Statistics (NCHS) analysts into the following categories: White, Non-Hispanic; Black, Non-Hispanic; Multiple Race, Non-Hispanic; Other Race, Non-Hispanic; and Hispanic or Latino. Due to sample size constraints, race and ethnicity statistics are only reported at the state and national levels.

## 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. State Cancer Profiles are a collaborative effort of the National Cancer Institute (NCI) and the Centers for Disease Control and Prevention (CDC). 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.

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](#) website.

### **Methodology**

Annual incidence rates are acquired for all US states and counties as an average for years 2006-2010 from the [State Cancer Profiles: Incidence Rates](#) data tables. This source provides the average annual incidence of new cancer cases, as well as incidence rates, age adjusted to the 2000 US standard population. In order to perform aggregate (multi-county or service area) estimates with the data provided, age-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 American Community Survey.

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**

#### **Data Limitations**

- 1.Data is not available for the state of Kansas because of state legislation and regulations which prohibit the release of county level data to outside entities.
- 2.Data is not available for the state of Minnesota.
- 3.Data for Ohio counties are acquired from [CDC WONDER](#). Data are estimates based on metropolitan areas which consist of multiple counties.
- 4.Data for the state of Michigan do not include cases diagnosed in other states because data exchange agreements prohibit the release of data to third parties.

#### **Race and Ethnicity**

Cancer statistics from the State Cancer Profiles database are reported by race alone (White, Black, Amer. Indian/AK Native, and Asian) or by ethnicity alone (Hispanic), or for the white Hispanic and white non-Hispanic population. NHIA (NAACCR Hispanic Identification Algorithm) was used to determine Hispanic ethnicity. See the *Technical Notes* section of the [2003 United States Cancer Statistics Report](#) for more information.

#### **Data Suppression**

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the number of cases is less than 16 (for each county/cancer/population group combination) over the time period monitored, or when the total population (per race-ethnicity-sex grouping) of the report area is less than 50,000

## Cancer 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. NVSS statistics are released annually in various data warehouses, including [CDC WONDER](#), [VitalStats](#), and the [Health Indicator Warehouse](#).

### **Methodology**

County population figures and death statistics are acquired using CDC WONDER from the Underlying Cause of Death database. Conditions were queried for years 2006-2010 based on a selection of codes from the International Classification of Diseases (ICD),

Version 10. The ICD-10 is the current global health information standard for mortality and morbidity statistics. The ICD has been maintained by the World Health Organization since its conception in 1948. A searchable, detailed list of current ICD-10 Codes (Version 2010) is available from the [World Health Organization](#).

Mortality rates were acquired from the source age-adjusted to the year 2000 U.S. standard. To recalculate age-adjusted mortality rates for unique service areas and aggregated county groupings, the following formula was used:

$$\text{Mortality Rate} = [\text{SUM}(\text{Total Population}) * ((\text{Age-Adjusted Rate})/100,000)] / [\text{SUM}(\text{Total Population})] * 100,000.$$

The specific codes used for reported mortality indicators are listed below.

- Assault (homicide): U01-U02, X85-Y09, Y87.1
- Cerebrovascular disease (stroke): I60-I69
- Coronary heart disease: I11, I20-I25
- Chronic lower respiratory disease: J40-J47
- Intentional self-harm (suicide): X60-X84, Y870
- Malignant neoplasm (cancer): C00-C97
- Unintentional injury (accident): V01-X59, Y85-Y86

## Notes

### Race and Ethnicity

Race and ethnicity (Hispanic origin) are collected as two separate categories by state vital statistics registries based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. All mortality statistics from the CDC WONDER databases are available by race alone (White, Black, Amer. Indian/AK Native, and Asian) ethnicity alone (Hispanic, Non-Hispanic), or by combined race and ethnicity. Data is reported separately for race alone and for ethnicity alone in order to maintain large enough sample sizes for the inclusion of small counties in the disaggregated data tables.

### Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of cases is less than 10 (for each county/cause of death/population group) over the time period monitored. Rates should be considered unreliable when calculated with a numerator (number of cases) less than 20.

## Chlamydia Incidence

### Data Background

The National Center for HIV/AIDS, Viral Hepatitis, Sexually Transmitted Disease (STD), and Tuberculosis (TB) Prevention (NCHHSTP) is the branch of the Centers for Disease Control and Prevention (CDC) responsible for public health surveillance, prevention research, and programs to prevent and control HIV and AIDS, other STDs, viral hepatitis, and TB. NCHHSTP developed a set of indicators to monitor the prevalence and track its progress toward ending these diseases in each state, and regularly reports its progress. The NCHHSTEP program includes data from new patient case reports from 56 areas (all 50 states, the District of Columbia, American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, and the U.S. Virgin Islands).

### 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.

## Notes

### Race and Ethnicity

Statistics by race and ethnicity are not provided for this indicator from the data source. Detailed race/ethnicity data may be available at a broader geographic level, or from a local source.

## 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. State Cancer Profiles are a collaborative effort of the National Cancer Institute (NCI) and the Centers for Disease Control and Prevention (CDC). 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.

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](#) website.

## Methodology

Annual incidence rates are acquired for all US states and counties as an average for years 2006-2010 from the [State Cancer Profiles: Incidence Rates](#) data tables. This source provides the average annual incidence of new cancer cases, as well as incidence rates, age adjusted to the 2000 US standard population. In order to perform aggregate (multi-county or service area) estimates with the data provided, age-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 American Community Survey.

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

### Data Limitations

- 1.Data is not available for the state of Kansas because of state legislation and regulations which prohibit the release of county level data to outside entities.
- 2.Data is not available for the state of Minnesota.
- 3.Data for Ohio counties are acquired from [CDC WONDER](#). Data are estimates based on metropolitan areas which consist of multiple counties.
- 4.Data for the state of Michigan do not include cases diagnosed in other states because data exchange agreements prohibit the release of data to third parties.

### Race and Ethnicity

Cancer statistics from the State Cancer Profiles database are reported by race alone (White, Black, Amer. Indian/AK Native, and Asian) or by ethnicity alone (Hispanic), or for the white Hispanic and white non-Hispanic population. NHIA (NAACCR Hispanic Identification Algorithm) was used to determine Hispanic ethnicity. See the *Technical Notes* section of the [2003 United States Cancer Statistics Report](#) for more information.

### Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the number of cases is less than 16 (for each county/cancer/population group combination) over the time period monitored, or when the total population (per race-ethnicity-sex grouping) of the report area is less than 50,000

## 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

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. Diabetes and other risk factor prevalence is estimated using the following formula:

$$\text{Percent Prevalence} = [\text{Risk Factor Population}] / [\text{Total Population}] * 100.$$

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 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. 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. Respondents were considered to be physically inactive if they answered "no" to 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?"

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.

## Notes

### Race and Ethnicity

Statistics by race and ethnicity are not provided for this indicator from the data source. Detailed race/ethnicity data may be available at a broader geographic level, or from a local source.

## Gonorrhea Incidence

### Data Background

The National Center for HIV/AIDS, Viral Hepatitis, Sexually Transmitted Disease (STD), and Tuberculosis (TB) Prevention (NCHHSTP) is the branch of the Centers for Disease Control and Prevention (CDC) responsible for public health surveillance, prevention research, and programs to prevent and control HIV and AIDS, other STDs, viral hepatitis, and TB. NCHHSTP developed a set of indicators to monitor the prevalence and track its progress toward ending these diseases in each state, and regularly reports its progress. The NCHHSTEP program includes data from new patient case reports from 56 areas (all 50 states, the District of Columbia, American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, and the U.S. Virgin Islands).

### 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.

## Notes

### Race and Ethnicity

Statistics by race and ethnicity are not provided for this indicator from the data source. Detailed race/ethnicity data may be available at a broader geographic level, or from a local source.

## Heart Disease 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. NVSS statistics are released annually in various data warehouses, including [CDC WONDER](#), [VitalStats](#), and the [Health Indicator Warehouse](#).

### Methodology

County population figures and death statistics are acquired using CDC WONDER from the Underlying Cause of Death database. Conditions were queried for years 2006-2010 based on a selection of codes from the International Classification of Diseases (ICD), Version 10. The ICD-10 is the current global health information standard for mortality and morbidity statistics. The ICD has been maintained by the World Health Organization since its conception in 1948. A searchable, detailed list of current ICD-10 Codes (Version 2010) is available from the [World Health Organization](#).

Mortality rates were acquired from the source age-adjusted to the year 2000 U.S. standard. To recalculate age-adjusted mortality rates for unique service areas and aggregated county groupings, the following formula was used:

$$\text{Mortality Rate} = [\text{SUM}(\text{Total Population}) * ((\text{Age-Adjusted Rate})/100,000)] / [\text{SUM}(\text{Total Population})] * 100,000.$$

The specific codes used for reported mortality indicators are listed below.

- Assault (homicide): U01-U02, X85-Y09, Y87.1
- Cerebrovascular disease (stroke): I60-I69
- Coronary heart disease: I11, I20-I25
- Chronic lower respiratory disease: J40-J47
- Intentional self-harm (suicide): X60-X84, Y870
- Malignant neoplasm (cancer): C00-C97
- Unintentional injury (accident): V01-X59, Y85-Y86

## Notes

## Race and Ethnicity

Race and ethnicity (Hispanic origin) are collected as two separate categories by state vital statistics registries based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. All mortality statistics from the CDC WONDER databases are available by race alone (White, Black, Amer. Indian/AK Native, and Asian) ethnicity alone (Hispanic, Non-Hispanic), or by combined race and ethnicity. Data is reported separately for race alone and for ethnicity alone in order to maintain large enough sample sizes for the inclusion of small counties in the disaggregated data tables.

## Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of cases is less than 10 (for each county/cause of death/population group) over the time period monitored. Rates should be considered unreliable when calculated with a numerator (number of cases) less than 20.

## 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.”

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

The health characteristics estimated from the BRFSS include 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 annual survey data are publicly available and maintained on the CDC's BRFSS [Annual Survey Data](#) web page.

For more information on the BRFSS survey methods, or to obtain a copy of the survey questionnaires, 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:

$$\text{Adults Diagnosed with Heart Disease} = ([\text{Indicator Percentage}] / 100) * [\text{Total Population}] .$$

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 Behavioral Risk Factor Surveillance System home page.

### Notes

#### Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of persons sampled (for each geographic area / population group combination) over the survey period is less than 20. Data are unreliable when the total number of persons sampled over the survey period is less than 50. Confidence intervals are available when exploring the data through the map viewer.

#### Race and Ethnicity

Race and ethnicity (Hispanic origin) are collected as two separate categories in the Behavioral Risk Factor Surveillance System (BRFSS) interview surveys based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. Before the raw survey data files are released, self-identified race and ethnicity variables are recoded by National Center for Health Statistics (NCHS) analysts into the following categories: White, Non-Hispanic; Black, Non-Hispanic; Multiple Race, Non-Hispanic; Other Race, Non-Hispanic; and Hispanic or Latino. Due to sample size constraints, race and ethnicity statistics are only reported at the state and national levels.

## HIV Prevalence

### Data Background

The National Center for HIV/AIDS, Viral Hepatitis, Sexually Transmitted Disease (STD), and Tuberculosis (TB) Prevention (NCHHSTP) is the branch of the Centers for Disease Control and Prevention (CDC) responsible for public health surveillance, prevention research, and programs to prevent and control HIV and AIDS, other STDs, viral hepatitis, and TB. NCHHSTP developed a set of indicators to monitor the prevalence and track its progress toward ending these diseases in each state, and regularly reports its progress. The NCHHSTEP program includes data from new patient case reports from 56 areas (all 50 states, the District of Columbia, American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, and the U.S. Virgin Islands).

## 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.

## Notes

### Race and Ethnicity

Statistics by race and ethnicity are not provided for this indicator from the data source. Detailed race/ethnicity data may be available at a broader geographic level, or from a local source.

## 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. NVSS statistics are released annually in various data warehouses, including [CDC WONDER](#), [VitalStats](#), and the [Health Indicator Warehouse](#).

### 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](#).

## Notes

### Race and Ethnicity

Race and ethnicity (Hispanic origin) are collected as two separate categories by state vital statistics registries based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. All mortality statistics from the CDC WONDER databases are available by race alone (White, Black, Amer. Indian/AK Native, and Asian) ethnicity alone (Hispanic, Non-Hispanic), or by combined race and ethnicity. Data is reported separately for race alone and for ethnicity alone in order to maintain large enough sample sizes for the inclusion of small counties in the disaggregated data tables.

## 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. NVSS statistics are released annually in various data warehouses, including [CDC WONDER](#), [VitalStats](#), and the [Health Indicator Warehouse](#).

### 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](#).

## Notes

### Race and Ethnicity

Race and ethnicity (Hispanic origin) are collected as two separate categories by state vital statistics registries based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. All mortality statistics from the CDC WONDER databases are available by race alone (White, Black, Amer. Indian/AK Native, and Asian) ethnicity alone (Hispanic, Non-Hispanic), or by combined race and ethnicity. Data is reported separately for race alone and for ethnicity alone in order to maintain large enough sample sizes for the inclusion of small counties in the disaggregated data tables.

## 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. State Cancer Profiles are a collaborative effort of the National Cancer Institute (NCI) and the Centers for Disease Control and Prevention (CDC). 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.

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](#) website.

### **Methodology**

Annual incidence rates are acquired for all US states and counties as an average for years 2006-2010 from the [State Cancer Profiles: Incidence Rates](#) data tables. This source provides the average annual incidence of new cancer cases, as well as incidence rates, age adjusted to the 2000 US standard population. In order to perform aggregate (multi-county or service area) estimates with the data provided, age-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 American Community Survey.

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**

#### **Data Limitations**

- 1.Data is not available for the state of Kansas because of state legislation and regulations which prohibit the release of county level data to outside entities.
- 2.Data is not available for the state of Minnesota.
- 3.Data for Ohio counties are acquired from [CDC WONDER](#). Data are estimates based on metropolitan areas which consist of multiple counties.
- 4.Data for the state of Michigan do not include cases diagnosed in other states because data exchange agreements prohibit the release of data to third parties.

#### **Race and Ethnicity**

Cancer statistics from the State Cancer Profiles database are reported by race alone (White, Black, Amer. Indian/AK Native, and Asian) or by ethnicity alone (Hispanic), or for the white Hispanic and white non-Hispanic population. NHIA (NAACCR Hispanic Identification Algorithm) was used to determine Hispanic ethnicity. See the *Technical Notes* section of the [2003 United States Cancer Statistics Report](#) for more information.

#### **Data Suppression**

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the number of cases is less than 16 (for each county/cancer/population group combination) over the time period monitored, or when the total population (per race-ethnicity-sex grouping) of the report area is less than 50,000

## Lung Disease 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. NVSS statistics are released annually in various data warehouses, including [CDC WONDER](#), [VitalStats](#), and the [Health Indicator Warehouse](#).

### **Methodology**

County population figures and death statistics are acquired using CDC WONDER from the Underlying Cause of Death database. Conditions were queried for years 2006-2010 based on a selection of codes from the International Classification of Diseases (ICD), Version 10. The ICD-10 is the current global health information standard for mortality and morbidity statistics. The ICD has been maintained by the World Health Organization since its conception in 1948. A searchable, detailed list of current ICD-10 Codes (Version 2010) is available from the [World Health Organization](#).

Mortality rates were acquired from the source age-adjusted to the year 2000 U.S. standard. To recalculate age-adjusted mortality rates for unique service areas and aggregated county groupings, the following formula was used:

$$\text{Mortality Rate} = [\text{SUM}(\text{Total Population}) * ((\text{Age-Adjusted Rate})/100,000)] / [\text{SUM}(\text{Total Population})] * 100,000.$$

The specific codes used for reported mortality indicators are listed below.

- Assault (homicide): U01-U02, X85-Y09, Y87.1
- Cerebrovascular disease (stroke): I60-I69
- Coronary heart disease: I11, I20-I25
- Chronic lower respiratory disease: J40-J47
- Intentional self-harm (suicide): X60-X84, Y870
- Malignant neoplasm (cancer): C00-C97
- Unintentional injury (accident): V01-X59, Y85-Y86

## Notes

### Race and Ethnicity

Race and ethnicity (Hispanic origin) are collected as two separate categories by state vital statistics registries based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. All mortality statistics from the CDC WONDER databases are available by race alone (White, Black, Amer. Indian/AK Native, and Asian) ethnicity alone (Hispanic, Non-Hispanic), or by combined race and ethnicity. Data is reported separately for race alone and for ethnicity alone in order to maintain large enough sample sizes for the inclusion of small counties in the disaggregated data tables.

### Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of cases is less than 10 (for each county/cause of death/population group) over the time period monitored. Rates should be considered unreliable when calculated with a numerator (number of cases) less than 20.

## Motor Vehicle Crash Death

### 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. NVSS statistics are released annually in various data warehouses, including [CDC WONDER](#), [VitalStats](#), and the [Health Indicator Warehouse](#).

### Methodology

County population figures and death statistics are acquired using CDC WONDER from the Underlying Cause of Death database. Conditions were queried for years 2006-2010 based on a selection of codes from the International Classification of Diseases (ICD), Version 10. The ICD-10 is the current global health information standard for mortality and morbidity statistics. The ICD has been maintained by the World Health Organization since its conception in 1948. A searchable, detailed list of current ICD-10 Codes (Version 2010) is available from the [World Health Organization](#).

Mortality rates were acquired from the source age-adjusted to the year 2000 U.S. standard. To recalculate age-adjusted mortality rates for unique service areas and aggregated county groupings, the following formula was used:

$$\text{Mortality Rate} = [\text{SUM}(\text{Total Population}) * ((\text{Age-Adjusted Rate})/100,000)] / [\text{SUM}(\text{Total Population})] * 100,000.$$

The specific codes used for reported mortality indicators are listed below.

- Assault (homicide): U01-U02, X85-Y09, Y87.1
- Cerebrovascular disease (stroke): I60-I69
- Coronary heart disease: I11, I20-I25
- Chronic lower respiratory disease: J40-J47
- Intentional self-harm (suicide): X60-X84, Y870
- Malignant neoplasm (cancer): C00-C97
- Unintentional injury (accident): V01-X59, Y85-Y86

## Notes

### Race and Ethnicity

Race and ethnicity (Hispanic origin) are collected as two separate categories by state vital statistics registries based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. All mortality statistics from the CDC WONDER databases are available by race alone (White, Black, Amer. Indian/AK Native, and Asian) ethnicity alone (Hispanic, Non-Hispanic), or by combined race and ethnicity. Data is reported separately for race alone and for ethnicity alone in order to maintain large enough sample sizes for the inclusion of small counties in the disaggregated data tables.

### Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of cases is less than 10 (for each county/cause of death/population group) over the time period monitored. Rates should be considered unreliable when calculated with a numerator (number of cases) less than 20.

## 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. Diabetes and other risk factor prevalence is estimated using the following formula:

$$\text{Percent Prevalence} = \frac{[\text{Risk Factor Population}]}{[\text{Total Population}]} * 100.$$

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 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. 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. Respondents were considered to be physically inactive if they answered "no" to 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?"

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.

## Notes

### Race and Ethnicity

Statistics by race and ethnicity are not provided for this indicator from the data source. Detailed race/ethnicity data may be available at a broader geographic level, or from a local source.

## 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. "

Citation: *Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services.*

[Overview: BRFSS 2010.](#)

The health characteristics estimated from the BRFSS include 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 annual survey data are publically available and maintained on the CDC's BRFSS [Annual Survey Data](#) web page.

For more information on the BRFSS survey methods, or to obtain a copy of the survey questionnaires, 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 procedures, and [data processing methodologies](#) are available on the Behavioral Risk Factor Surveillance System home page.

## Notes

### Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of persons sampled (for each geographic area / population group combination) over the survey period is less than 20. Data are unreliable when the total number of persons sampled over the survey period is less than 50. Confidence intervals are available when exploring the data through the map viewer.

### Race and Ethnicity

Race and ethnicity (Hispanic origin) are collected as two separate categories in the Behavioral Risk Factor Surveillance System (BRFSS) interview surveys based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. Before the raw survey data files are released, self-identified race and ethnicity variables are recoded by National Center for Health Statistics (NCHS) analysts into the following categories: White, Non-Hispanic; Black, Non-Hispanic; Multiple Race, Non-Hispanic; Other Race, Non-Hispanic; and Hispanic or Latino. Due to sample size constraints, race and ethnicity statistics are only reported at the state and national levels.

## Pedestrian Motor Vehicle Death

### Data Background

The National Highway Traffic Safety Administration (NHTSA) is a branch of the Department of Transportation and is dedicated to achieving the highest standards of excellence in motor vehicle and highway safety. The NHTSA is responsible for enforcing Federal Motor Vehicle Safety Standards as well as regulations for motor vehicle theft resistance and fuel economy. With the help of various reporting systems, the NHTSA provides annual reports and data releases on transportation related fatalities, crash statistics, driver registration, and other information.

### 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 ( $[\text{Total Deaths}] / 3$ ). 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:

$$\text{Mortality Rate} = [\text{Average Annual Deaths}] / [\text{Total Population}] * 100,000.$$

Original motor vehicle 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.”

*Citation: Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services.*

[Overview: BRFSS 2010.](#)

The health characteristics estimated from the BRFSS include 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 annual survey data are publically available and maintained on the CDC's BRFSS [Annual Survey Data](#) web page.

For more information on the BRFSS survey methods, or to obtain a copy of the survey questionnaires, 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.

## Notes

### Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of persons sampled (for each geographic area / population group combination) over the survey period is less than 20. Data are unreliable when the total number of persons sampled over the survey period is less than 50. Confidence intervals are available when exploring the data through the map viewer.

### Race and Ethnicity

Race and ethnicity (Hispanic origin) are collected as two separate categories in the Behavioral Risk Factor Surveillance System (BRFSS) interview surveys based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. Before the raw survey data files are released, self-identified race and ethnicity variables are recoded by National Center for Health Statistics (NCHS) analysts into the following categories: White, Non-Hispanic; Black, Non-Hispanic; Multiple Race, Non-Hispanic; Other Race, Non-Hispanic; and Hispanic or Latino. Due to sample size constraints, race and ethnicity statistics are only reported at the state and national levels.

## 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.”

*Citation: Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services.*

[Overview: BRFSS 2010.](#)

The health characteristics estimated from the BRFSS include 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 survey questionnaires, please visit [the Behavioral Risk Factor Surveillance System](#) home page.

## Methodology

Indicator percentages are acquired for years 2005-2011 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](#).

## Notes

### Race and Ethnicity

Statistics by race and ethnicity are not provided for this indicator from the data source. Detailed race/ethnicity data may be available at a broader geographic level, or from a local source.

### Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of persons sampled (for each geographic area / population group combination) over the survey period is less than 50, or when the standard error of the estimate exceeds 10% of the calculated value.

## 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 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

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. Indicator race and ethnicity statistics are generated from self-identified survey responses. Using the OMB standard, the available race categories 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 are: Hispanic or Latino, and Not Hispanic or Latino. Respondents may only choose one ethnicity. All social and economic data are reported in the ACS public use files by race alone, ethnicity alone, and for the white non-Hispanic population.

### Data Limitations

Beginning in 2006, the population in group quarters (GQ) was included in the ACS. Some types of GQ populations have age and sex distributions that are very different from the household population. The inclusion of the GQ population could therefore have a noticeable impact on demographic distribution. This is particularly true for areas with a substantial GQ population (like areas with military bases, colleges, or jails).

## 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 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 2008 - 2010 three year averages from the [National Vital Statistics 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:

$$\text{YPLL} = [ 75 * (\text{Number of Deaths Under Age 75}) ] - [ \text{SUM} (\text{Age at Death}) ]$$

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.

## Notes

### Race and Ethnicity

Statistics by race and ethnicity are not provided for this indicator from the data source. Detailed race/ethnicity data may be available at a broader geographic level, or from a local source.

## 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. State Cancer Profiles are a collaborative effort of the National Cancer Institute (NCI) and the Centers for Disease Control and Prevention (CDC). 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.

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](#) website.

## Methodology

Annual incidence rates are acquired for all US states and counties as an average for years 2006-2010 from the [State Cancer Profiles: Incidence Rates](#) data tables. This source provides the average annual incidence of new cancer cases, as well as incidence rates, age adjusted to the 2000 US standard population. In order to perform aggregate (multi-county or service area) estimates with the data provided, age-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 American Community Survey.

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

### Data Limitations

- 1.Data is not available for the state of Kansas because of state legislation and regulations which prohibit the release of county level data to outside entities.
- 2.Data is not available for the state of Minnesota.
- 3.Data for Ohio counties are acquired from [CDC WONDER](#). Data are estimates based on metropolitan areas which consist of multiple counties.
- 4.Data for the state of Michigan do not include cases diagnosed in other states because data exchange agreements prohibit the release of data to third parties.

### Race and Ethnicity

Cancer statistics from the State Cancer Profiles database are reported by race alone (White, Black, Amer. Indian/AK Native, and Asian) or by ethnicity alone (Hispanic), or for the white Hispanic and white non-Hispanic population. NHIA (NAACCR Hispanic Identification Algorithm) was used to determine Hispanic ethnicity. See the *Technical Notes* section of the [2003 United States Cancer Statistics Report](#) for more information.

### Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the number of cases is less than 16 (for each county/cancer/population group combination) over the time period monitored, or when the total population (per race-ethnicity-sex grouping) of the report area is less than 50,000

## Stroke 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. NVSS statistics are released annually in various data warehouses, including [CDC WONDER](#), [VitalStats](#), and the [Health Indicator Warehouse](#).

### Methodology

County population figures and death statistics are acquired using CDC WONDER from the Underlying Cause of Death database. Conditions were queried for years 2006-2010 based on a selection of codes from the International Classification of Diseases (ICD), Version 10. The ICD-10 is the current global health information standard for mortality and morbidity statistics. The ICD has been maintained by the World Health Organization since its conception in 1948. A searchable, detailed list of current ICD-10 Codes (Version 2010) is available from the [World Health Organization](#).

Mortality rates were acquired from the source age-adjusted to the year 2000 U.S. standard. To recalculate age-adjusted mortality rates for unique service areas and aggregated county groupings, the following formula was used:

$$\text{Mortality Rate} = [\text{SUM}(\text{Total Population}) * ((\text{Age-Adjusted Rate})/100,000)] / [\text{SUM}(\text{Total Population})] * 100,000.$$

The specific codes used for reported mortality indicators are listed below.

- Assault (homicide): U01-U02, X85-Y09, Y87.1
- Cerebrovascular disease (stroke): I60-I69
- Coronary heart disease: I11, I20-I25
- Chronic lower respiratory disease: J40-J47
- Intentional self-harm (suicide): X60-X84, Y870
- Malignant neoplasm (cancer): C00-C97
- Unintentional injury (accident): V01-X59, Y85-Y86

## Notes

### Race and Ethnicity

Race and ethnicity (Hispanic origin) are collected as two separate categories by state vital statistics registries based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. All mortality statistics from the CDC WONDER databases are available by race alone (White, Black, Amer. Indian/AK Native, and Asian) ethnicity alone (Hispanic, Non-Hispanic), or by combined race and ethnicity. Data is reported separately for race alone and for ethnicity alone in order to maintain large enough sample sizes for the inclusion of small counties in the disaggregated data tables.

### Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of cases is less than 10 (for each county/cause of death/population group) over the time period monitored. Rates should be considered unreliable when calculated with a numerator (number of cases) less than 20.

## Suicide

### 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. NVSS statistics are released annually in various data warehouses, including [CDC WONDER](#), [VitalStats](#), and the [Health Indicator Warehouse](#).

### Methodology

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Report prepared by <http://assessment.communitycommons.org> on August 08, 2013

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