

# **Community Health Needs Assessment**

2016

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#### **Executive Summary**

Cheshire Medical Center (CMC) prepared this Community Health Needs Assessment (CHNA) in fulfillment of the State of New Hampshire regulations set forth in RSA 7:32-c-*l* 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 non-profit community hospital located in Keene, NH, a part of the "Monadnock Region", which includes the 23 towns in Cheshire County.

This 2016 CHNA report summarizes the work of the Council for a Healthier Community (CHC) and the collaborative efforts of other local groups to assess the needs of our region. This report is the compilation of work that occurred over the last three years, beginning in September of 2014 when the CHC reviewed the State Health Improvement Plan and identified regional assets and needs. The first Greater Monadnock Community Health Improvement Plan was finalized in September 2015, which serves as the foundation of this Community Health Needs Assessment. In addition, to ensure a comprehensive assessment and avoid duplication of efforts, the results of other community partner's needs assessments were used to strengthen and support our process.

The CHNA Leadership Team reviewed health and social well-being information from existing sources, recent assessments and neighboring service area CHNAs. They identified secondary data to review and then prioritized needs using a nominal group voting process. The results revealed five priority areas:

- Behavioral Health: covering the full range of mental and emotional well-being- from daily stress and satisfaction to the treatment of mental illness
- Substance & Alcohol Misuse: pose some of the greatest risks to individuals and community health and safety
- Tobacco use: the most preventable cause of death
- Obesity: increases the risk for many chronic diseases and impacts 25% of the region's adult population
- Emergency Preparedness: Natural, accidental, or even intentional public health threats are all around us. The more prepared we are as a community; the more resilient we will be to recover from a disaster or emergency.

Though not articulated as a stand-alone priority area, the need to address the social determinants of health will be a focus in the Implementation Strategy that is embedded within each of these priority areas. We know that education, jobs, income, family stability, safety and transportation will contribute to health and wellbeing and require special attention given our rural location and socioeconomic pressures. 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, Director of Operations for the Center for Population Health Strategy and Practice at <u>efernandes@cheshire-med.com</u>.

# I. Introduction

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

"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 Affordable Care Act requires that hospitals identify activities taken since the last CHNA, ensure that the CHNA is made available to the public and report on any requests from community members regarding the CHNA or annual reports. The 2013 CHNA and annual Community Benefit reports are made available to the public and posted on the CMC website at http://www.cheshire-med.com/about\_us/communityben\_report.html. Over the course of the previous three years there have not been any requests from community members regarding our CHNA or annual reports. The CHNA completed in 2013 identified four top priorities: increasing the effectiveness of local Behavioral Health services, creation of a Walk-In Clinic to allow more timely and economical access to services instead of using emergency room care, increasing access to public and private transportation particularly in rural towns, and improved coordination and communication between services by way of improving linkages between clinical services, faith-based organizations, and informal support networks. Community Benefit activities during the past three 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 2014, 2015, and 2016. The following table includes highlights of completed activities designed to support the priorities areas identified as well as additional implementation activities over the three-year period.

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

#### Table 1: 2013 Implementation Plan Highlights

Increasing the effectiveness of local Behavioral Health services

Provide staff support on local coalitions & committees to address integration of primary care with behavioral health services

Provide subsidized care for behavioral health services

Improve access to care

Provide staffing support to assist community members to access health insurance, medical assistance, oral health care, and other social service supports in the region

Pilot tested use of shared web-based platform for sharing information across three programs to increase coordinated efforts

Provide free or discounted healthcare services

Provide in-kind financial and support to Dental Health Works to ensure oral health care access for youth and pregnant women

Expanded pediatric services by extending clinic hours for unscheduled needs

Creation of a Walk-In Clinic to allow more timely and economical access to services instead of using emergency room care

Improved coordination and communication between services

Support staff to participate in regional collaboration: Community Network Team, Benefits Specialist meetings, and other regional task forces addressing coordinated care

Work in collaboration with community partners to address diabetes, high blood pressure, and obesity

Improve drug and alcohol prevention (adults and youth), including tobacco prevention and cessation counseling

Provide staff support on local coalitions & committees to address substance use

Offer community members supports to quit using tobacco

Subsidize free and reduced prevention and treatment services for low income population

Address health behaviors that impact health

Provide backbone support for Healthy Monadnock 2020

Provide staff support to build regional capacity to address specific healthy behaviors through coalition involvement

Work with community partners to implement programs to address physical activity and healthy eating Address social and economic factors that impact health

Provide volunteer opportunities for retired people in the region

Support opportunity for vocational training through Project Search

Provide affordable health meals and physical activity for elderly community members through Senior Passport and Cheshire Walkers

Offer free education program on a variety of health and wellness promotion topics

Actively participated in community conversation and action to address issues of living wage, educational attainment, homelessness, and housing affordability

Other Mission Aligned Community Needs

Provide medical staff to serve as Medical Directors of area nursing homes

Offer higher education opportunities for people pursuing nursing and other healthcare training

Support staff to serve on Board of Directors for local non-profits and state-wide committees and coalitions

This 2016 CHNA report summarizes the work of the Council for a Healthier Community (the public health advisory council for the Monadnock region and the CMC CHNA Leadership

Team) and the collaborative efforts of other local groups to assess the needs of our region. This report is the compilation of work that occurred over the last three years, beginning in September of 2014 when the Council for a Healthier Community reviewed the State Health Improvement Plan and identified regional assets and needs. This resulted in the first Greater Monadnock Community Health Improvement Plan in September 2015. In addition, to ensure a comprehensive assessment and avoid duplication of efforts, the results of other community partner's needs assessments were used to strengthen and support our process.

# A. Organization Description and Overview of Services

CMC/DHK is a unified physician-hospital organization that combines hospital services, ambulatory care, surgical services, ancillary testing and emergency services. CMC/DHK is now an affiliate of the Dartmouth Hitchcock Health system, the state's leading medical teaching institution and tertiary care center. CMC/DHK is a non-profit community hospital located in Keene, NH, a part of the "Monadnock Region", which includes the 23 towns in Cheshire County. CMC/DHK vision is to help our community become the nation's healthiest, through clinical and service excellence, collaboration, and compassion for every patient, every time. CMC / DHK has a charitable community mission and recognizes 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.

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 2015, CMC/DHK had 24,194 emergency department visits, 3,911 surgical cases (581 inpatient surgeries and 3,330 outpatient surgeries), and 1,540,815 laboratory tests. In 2014 CMC/DHK had 24,608 emergency room visits, 3,928 surgical cases (566 inpatient surgeries and 3,362 outpatient surgeries). In response to access needs identified in the 2013 CHNA, CMC developed a Walk-In clinic. Utilization of the Walk-In clinic for the period of April 2015 – April 2016 revealed a total of 20,961 visits representing an average of 393 visits per week/55.9 per day, with no corresponding decrease in visits to traditional primary care (see Table 2 below).

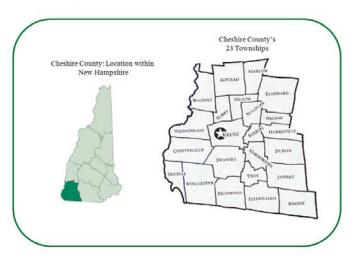
CMC/DHK is committed to serving the needs of the uninsured/underinsured low income citizens of our region. With no Federally Qualified Health Center in this rural county, CMC/DHK serves as the safety net provider for the area. Additionally, there are six private physician practices in the city of Keene 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.



 Table 2: Walk-In Clinic Utilization

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/DHK has historically played a key role in ensuring a local public health infrastructure by assessing community needs and working with partners to meet these needs. As the housing agent for the Greater Monadnock Public Health Network, CMC/DHK led the development of the region's first Community Health Improvement Plan in 2015. CMC's Center for Population Health Strategy and Practice offers numerous free educational programs, support groups and community support services addressing public safety, tobacco, health access, dental health and wellness. The CMC/DHK Center for Population Health Strategy and Practice also operates the core project team that serves as the backbone staff of Healthy Monadnock 2020 (HM2020), a healthy community initiative framed in the collective impact model, and engages in a variety of local, regional, and state environmental policy, advocacy and community-building activities.





# B. CHNA Leadership Team

The Council for a Healthier Community (CHC) serves as the CHNA Leadership Team (see Attachment A: CHC Membership List). The CHC is the Public Health Advisory Council for the Greater Monadnock region. The primary purpose of the CHC is to provide a community framework that supports open communication and sets priorities for community collaboration and funding that encourages the health and wellness of the Greater Monadnock region. As such, their responsibilities include:

- Identifying and encouraging action planning to ensure community public health needs are met without unnecessary duplication
- Supporting the needs assessments and data collection activities for the region
- Advising and making recommendations, as appropriate, on funding opportunities.
- Making recommendations within the Greater Monadnock region and to the state regarding priorities for service delivery based on needs assessments and data collection.

The members of the CHNA Leadership Team represent the 33 towns in the Monadnock region. 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

Every person in any community has her/his own perspective and approach as we define health and look and value health outcomes from different perspectives. The same difference in perception exists depending on the mental model we use. The medical perspective on leading causes of death is very different than the point of view of risk factors or social determinants of health. The following table highlights the different perspectives.

Medical Perspective (disease treatment)	Risk Factors Perspective (lifestyle and prevention)	Population Health and Social Determinants of Health Perspective	
Leading Causes of Death	Leading Causes of Death	Leading Causes of Death	
Heart Disease	Tobacco	Access to Care	
Cancer	Unhealthy Diet	Health Literacy	
Stroke	Inadequate Activity	Social Engagement	
COPD	Excessive Alcohol	Education	
Diabetes	Motor Vehicle and Firearms	Income	
Mental Illness	Isolation	Build Environment	

#### Table 3: Differences in Perspective on Causes of Death

Scientific literature has shown that conditions in the places where people live, learn, work, and play affect a wide range of health risks and outcomes. These conditions are known as social

determinants of health (SDOH). We know that poverty limits access to healthy foods and safe neighborhoods and that more education is a predictor of better health. We also know that differences in health are striking in communities with poor SDOH such as unstable housing, low income, unsafe neighborhoods, or substandard education. By applying what we know about SDOH, we can not only improve each individual CMC/DHK patient health but impact the broader population that CMC/DHK serves in our region.

Because of these facts CMC/DHK and the CHNA Leadership Team used a broad definition of health when evaluating community need and identifying priorities and this CHNA is framed from a social determinant of health model as exemplified on Figure 2.

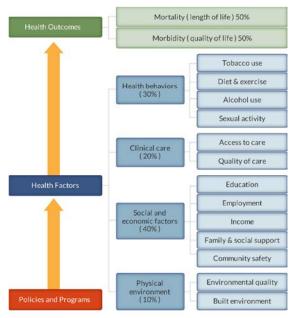


Figure 2: Social Determinants of Health Model

County Health Rankings model ©2012 UWPHI

# B. Collaborating Organizations

For this CHNA, CMC/DHK collaborated with the members of the Council for a Healthier Community. In addition, CMC/DHK collaborated with NH Department of Health and Human Services, Greater Monadnock Public Health Network (GMPHN), the NH Hospital Association, the Foundation for Healthy Communities, Antioch University New England, and Southwest Region Planning Commission. The contributions of each organization are summarized below in Table 4: Role of Collaborating Organizations.

	Table 4: Role of Collaborating Orga	anizations
Name	Description	Activity/Contribution
NH DHHS	New Hampshire Department of Health	Provides funding for local
	and Human Services: State agency that	health improvement activities
	administers a wide array of services and	and provided data through the
	programs to address the health and safety	Web Reporting Query System
	of the citizens of NH	and NH Health WISDOM
GMPHN	Greater Monadnock Public Health	Participated in needs
	Network: coordinates communication,	assessments, action planning,
	resources, and activities to ensure routine	and public health
	and emergency health and safety needs	improvement activities
	are met within the region	
NHHA FHA	New Hampshire Hospital Association	Collaborates on health
	and the Foundation for Healthy	improvement activities and
	Communities: in partnership with diverse	created statewide hospital
	healthcare agencies, evaluates healthcare	working group to understand
	systems and provides funding for health	IRS CHNA guidance and link
	improvement activities	to state health department
AUNE	Antioch University New England:	Provided data analysis and
	academic institution that partners with	evaluation of Health
	local organizations	Monadnock 2020 as well as
		other community health
		improvement initiatives in the
		region
SWRPC	Southwest Region Planning Commission:	Developing the Monadnock
	assists municipalities on a wide range of	Futures plan, provided
	planning activities from writing master	transportation data, and
	plans to facilitating community planning	behavioral health gap
	processes.	analysis, produced the
		Greater Monadnock
		Community Health
		Improvement Plan

# C. Involvement of Public Health

The Division of Public Health at the New Hampshire Department of Health and Human Services established and 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 ensure coordinated and comprehensive delivery of essential public health services at a regional level. Even though their number and geography has changed over the years 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 primarily focused on 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 with 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 Services Council (PHISC), the group that actively makes policy recommendations to the New Hampshire Division of Public Health Services. From 2013 – 2016, the PHISC held a series of meetings with community health improvement and community benefit representatives of New Hampshire hospitals to identify data that would be used in the development of Community Profiles in WISDOM, an interactive website aggregating public health data and producing customized reports, maps and time trend analysis. Developed by the Division of Public Health Services (DPHS), this site draws from many different source datasets containing hundreds of health related indicators.

#### D. Data Sources

The CHNA Leadership Team agreed that to properly follow and apply social determinants of health framework to the process it was paramount to collect and disseminate a standardized set of data and information. The multiple sources consulted are listed on table 5. Following this approach, CMC/DHK Center for Population Health Strategy and Practice and GMPHN staff gathered information to develop a demographic profile of the CMC service area, presented in Section III of this document. They assessed various indicators to measure the current status of health outcomes and heath factors, shown in sections IV and V. 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 (WRQS), WISDOM, and other locally conducted surveys. Depending on the geographic availability, data was assessed for either Cheshire County or the Greater Monadnock Public Health Network region. While the County and Public Health Network region are not an exact match for the hospital service area (see Attachment B: Hospital Service Area), the PHISC profiles confirmed that the demographic profile of the County and PHN region population are not statically different from the hospital service area and can therefore serve as strong proxies for the hospital service area population.

Table 5: 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.	www.cdc.gov/brfss/	
Community Commons	Community Commons is a web-based platform designed to provide data from multiple sources into a comprehensive needs assessment report	www.assessment.community commons.org/CHNA/	
Economic Innovation Group	The 2016 Distressed Communities Index: An Analysis of Community Well-Being Across the United States	http://eig.org/dci/report	
HM2020	Healthy Monadnock 2020-is a community change initiative with specific indicators that are used to monitor progress.	http://www.healthymonadnock.org/	
Healthy Monadnock Community Survey	The survey is a statistically valid randomized telephone survey of Cheshire County residents that assesses health behaviors, health access, health literacy, and social capital		
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.	www.muw.org	
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.	www.granitestatefuture.org	
NHHFA	New Hampshire Finance Authority provides information about the housing industry and current trends including rentals and purchases.	www.nhhfa.org/housing- data-demographics.cfm	
U.S. Census Bureau	The US Government provides data on people, business, and geography in cities, states, and the country.	www.census.gov/	
NH Department of Education	New Hampshire Department of Education maintains an inventory of data reports and data collection on the progress of schools.	www.education.nh.gov/ data/index.htm	
SWRPC	Southwest Region Planning Commission provides information on population, housing, employment, income, and taxes.	www.swrpc.org	
NH DHHS	New Hampshire Department of Health and Human Services provides information on the health and well- being of residents including: behavioral health, disease and conditions, birth, death and vital statistics, etc.	www.dhhs.nh.gov/data/index.htm	
WISDOM	Developed and maintained by the NH-DHHS, this site compiles information from many different datasets on hundreds of health related indicators.	https://wisdom.dhhs.nh.gov/wisdom/	
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.	www.nhhealthwrqs.org	
MCH 2015 CHNA	Monadnock Community Hospital – a critical access hospital 25 miles away from CMC and within the GMPHN area 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.	www.monadnockcommunity hospital.com	
CVTC	Contoocook Valley Transportation provides no-fee transportation services for people who do not have access to transportation because of age, ability, economic situation or other limiting circumstance.	www.cvtc-nh.org	
Youth Risk Behavior Survey	The YRBS is conducted biennially by the high schools in the region.	www.dhhs.nh.gov/dphs/hsdm/yrbs.htm	

In addition, this CHNA builds on ongoing and existing assessments and evaluations completed over the past three years. These assessments reviewed existing data and engaged a range of stakeholders through written and telephone surveys, small focus groups, and larger community forums. These community needs assessments involved extensive community input:

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.

In 2015, the Monadnock Region Future Plan, the regional component of Granite State Future (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) was completed. Lead by the Southwest Region Planning Commission, the "Monadnock Region Future" project focused on integrated planning (land use, transportation, economic development, housing, environment, energy, community health, culture and arts), creating a comprehensive plan that addresses community vitality, economic prosperity, stewardship, and preparedness. The plan provides action items for the region, be it municipalities, nonprofit organizations, businesses or others to use. For more information, the full plan can be seen at <a href="https://www.swrpc.org/regionalplan">www.swrpc.org/regionalplan</a>.

**Southwestern Community Services' Community Needs Assessment**: The 2015 Cheshire County and Sullivan County Community Needs Assessment capture the health, demographics, needs, and trends within 38 municipalities. Southwestern Community Services (SCS) is one of New Hampshire's five community action agencies which serve the needs of Cheshire and Sullivan county citizens. SCS's Community Needs Assessment committee conducted a multifaceted survey during the month of March 2015. Utilizing Survey Monkey, personal e-mail, and face-to-face interviews, the committee members amassed over 400 survey responses. The top five community needs identified from this question are, in order of most responses:

- 1. Substance abuse/addiction
- 2. Lack of mental health services
- 3. Lack of affordable housing
- 4. Lack of good paying jobs
- 5. Homelessness

For more information, the full assessment can be seen at <u>www.scshelps.org</u>.

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

### A. Demographics

Cheshire County is a rural county in southwestern New Hampshire with a population density of approximately 108.38 people per square mile. The County has 76,596 residents and is 95.71% white, 0.78% black or African American, 0.28% Native American or Alaskan Native, 1.15%

Asian, 0.03% Native Hawaiian or Pacific Islander, 0.41% from other races, and 1.64% from two or more races.

As shown in Figures 3 and 4, 18.92% of the population is under 18 years of age, 13.08% are aged 18-24, 10.96% are aged 25-34, 11.23% are aged 35-44, 15.19% are aged 45-54, 14.76% are aged 55-64, and 15.86% are aged 65 and older. Cheshire County has a median age of 41.7, which is lower than the median age for the state of New Hampshire at 41.8 and higher than the United States median age of 37.4. (US Census Bureau, American Community Survey, 2010-14)

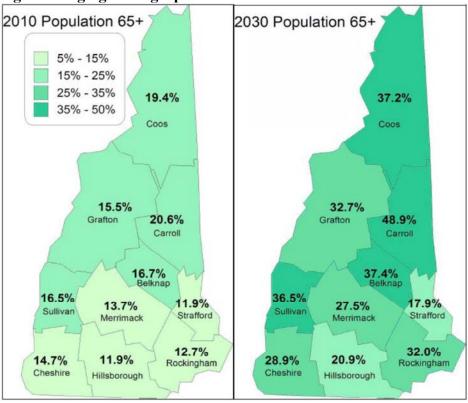
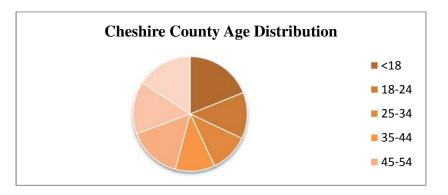


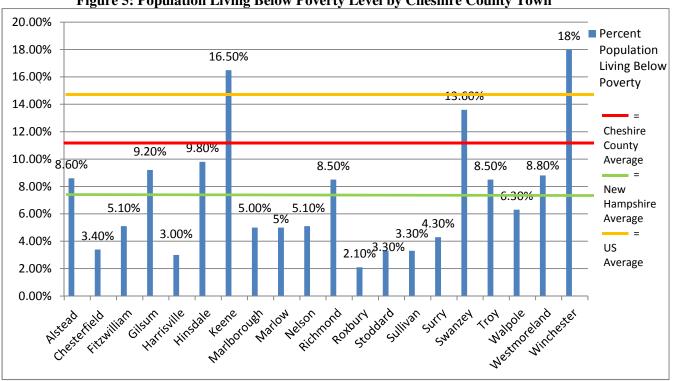
Figure 3: Aging Demographic

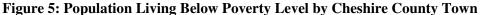
Figure 4: Cheshire County Age Distribution, 2010



### B. Income

The median household income for Cheshire County is approximately \$70,787, which is lower than the median household income for the state of New Hampshire at \$80,812. However, both of these figures are higher than the \$65,443 median household income for the United States. Figure 5 summarizes the percent of people living below the federal poverty level for towns in Cheshire County.





The percent of the population living in poverty in Cheshire County as a whole is 11.74%, which is higher than the New Hampshire average of 8.85%, but lower than the national average of 15.59%. According to the US Census Bureau, 27.32% of the County's households had an income at or below 200% of the Federal Poverty Limit. In addition, 36.28% of public school students in Cheshire County are eligible for free/reduced price lunch. The behavioral Risk factor survey data, as well as other data sources show a clear correlation between poverty and health risk, risk behaviors and health outcomes. Examples of these correlations are shown on the health outcomes section of this report.

# C. Employment / Unemployment

According to the US Department of Labor's Bureau of Labor Statistics, the unemployment rate for the non-institutionalized population over age 16 was 2.5% as of May 2016. This is a significant decrease in unemployment since 2012 when 8.8% of Cheshire County residents were

unemployed. The current unemployment rate is below both the state average unemployment rate of 2.7% and the average national unemployment rate of 4.7%. The Social Determinants of Health framework shows that lack of stable or satisfying employment is correlated with poor health outcomes. Examples of these correlations are shown on the health outcomes section of this report.

# D. Housing

According to the US Department of Housing and Urban Development, there are 34,773 total available housing units in Cheshire County. Of these, 30,659 (88%) are occupied, and 4,123 (12%) are vacant. Data from The New Hampshire Housing Finance Authority shows that the median cost to purchase a home in 2015 was \$163,933, and the median gross monthly rent in 2015 was \$1,015/month.

The US Census American Community Surveys 2010-2014 5-year estimates 39.04% of households in Cheshire County are considered cost-burdened households, meaning that housing costs exceed 30% of total household income. This is a greater percentage than both the state average (36.44%) and the national average (34.86%). Additionally, the ACS for 2010-2014 found that 38.25% of occupied units in Cheshire County have one or more substandard condition, such as an incomplete kitchen facility, incomplete plumbing facilities, or lack of telephone services.

The Monadnock Region Future process identified several important local housing issues including:<sup>2</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 young people to move to the area, and force 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 is 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>3</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 family and friends or the

<sup>&</sup>lt;sup>2</sup> Granite State Futures, <u>http://granitestatefuture.org/regions/southwest-region/</u>

<sup>&</sup>lt;sup>3</sup> Southwest Regional Planning Commission, <u>http://www.swrpc.org/trans</u>

volunteer driver programs offered by Contoocook Valley Transportation or the American Red Cross. For calendar year 2015, CVTC provided 442 trips (legs of each ride) to the CMC/DHK campus and other DH affiliates or off campus sites. Data from the American Red Cross is for July – July 2016 period of time is 555 trips representing 8 months of data plus 4 mouths of monthly averages. During this reporting period CVTC and the Red Cross have collaborated to address transportation needs in the region in a more efficient manner. Thus mid-year began a process to move all transportation services currently provided by the Red Cross to CVTC.

The 2010-2014 American Community Service estimates that only 0.48% of the Cheshire County population commutes to work using public transportation. This compares to 5.06% of the nation. In addition, the Southwest Region Planning Commission review of current public transportation reports that public transportation covers just 0.5% of all roads in the Monadnock Region.<sup>4</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 are higher than the United States average.<sup>5</sup> Education above high school degree level is highly correlated with lower risk behaviors, health risk factors and improved health outcomes.

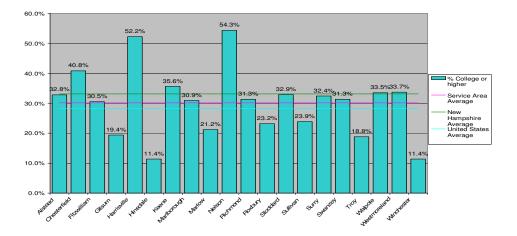


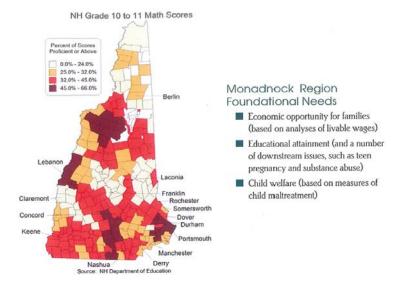
Figure 6: Percent of Population with a College Degree or Higher by Town

The 2012 MUW Community Well-being Assessment ranked educational attainment among its top three issues of concern. The report notes that graduation rates in 2011 and math and reading

<sup>&</sup>lt;sup>4</sup> Southwest Regional Planning Commission, <u>http://www.swrpc.org/trans</u>

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

scores for 10 and 11 grade students in Monadnock communities generally scored below the top 25% of the rest of the state.<sup>6</sup>



#### Figure 7: NH Map for Grades 10 & 11 Math Scores

# G. Physical Environment's Impact on Health

The health of our community is also affected by the physical environment. Climate change is making a significant impact on the environment, impacting the growing season, increase in extreme weather events, and increase in vector-borne illness to name a few. The changing climate will increase the summertime minimum and maximum average temperatures in our region. In addition, over the next 25 years the growing season will likely extend by nine to twelve days across the state. By the end of the century, the growing season is projected to be three to seven weeks longer depending on the emissions scenario. The combination of warmer temperatures, a longer growing season, and increased CO2 levels, will likely lead to more pollen in our region (Wake, Bucci & Aytur, 2014).

Since 1970, we have seen the average annual maximum temperatures warm between 1.1F to 2.6 F in southern NH. Historical data show that Southern New Hampshire has experienced about 6.7 days per year over 90 degrees and about 1 day per year over 95 degrees (1980-2009). In the short term, the number of days over 90 are expected to increase by 4.2 days/year and 5.2 days/year under low and high carbon emissions scenarios, respectively (2010-2039). Days over 95 are expected to increase by 0.8 days/year and 1.2 days/year under low and high carbon emissions scenarios, over the same time period. Changes in temperature, precipitation and humidity can greatly impact the incidence, transmission, and geographic range of vector borne diseases. As our region becomes warmer and wetter, it expands the habitat that is suitable for the vector species. In addition, the warmer winters also reduce cold temperature restraints that currently limit distribution of some over-wintering pests.

<sup>&</sup>lt;sup>6</sup> Monadnock United Way, Community Well-being in the Monadnock Region, p. 7, 2012.

An air pollutant of concern in the Monadnock Region in general, and the city of Keene specifically, is particulate matter (PM <sub>2.5</sub>). Over the past few years there have been documented increases in PM <sub>2.5</sub> in the Keene area during the winter months. NH Department of Environmental Services has targeted some from wood burning as a significant contributor to this issue. While the Keene area currently meets national air quality standards, there have been instances when these standards are exceeded particularly on calm, cold winter nights. PM <sub>2.5</sub> is linked to both the respiratory and circulatory negative health impacts. Table 6 shows the percentage of days with particulate matter <sub>2.5</sub> 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.

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, NH	77,117	7.28	0	0	0%
New Hampshire	1,316,470	7.81	0	0	0%
United States	312,471,327	9.10	0.35	0.10	0.10%

#### Table 6: Air Quality – Particulate Matter 2.5

Data Source: Centers for Disease Control and Prevention, National Environmental Public Health Tracking Network. 2012. Source geography: Tract

# 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 is being 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 7 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.

	Table 7: Top Ten Leading Causes of Death in New Hampshire, 2014				
Cheshire County		New Hampshire			
Rank	Cause of Death	Rank	Cause of Death		
1	Heart Disease	1	Cancer		
2	Cancer	2	Heart Disease		
3	Chronic lower respiratory diseases	3	Chronic lower respiratory diseases		
4	Accidents	4	Accidents		
5	Alzheimer's Disease	5	5 Cerebrovascular Diseases		
6	Cerebrovascular Diseases	6	Alzheimer's disease		
7	Diabetes mellitus	7	Diabetes mellitus		
8	Influenza & Pneumonia	8	Influenza and pneumonia		
9	Intentional self-harm (suicide)	9	Intentional self-harm (suicide)		
10	Chronic liver disease and cirrhosis	10	Nephritis, nephrotic syndrome, nephrosis		

Source: Center for Disease Control and Prevention, http://wonder.cdc.gov/wonder/help/ucd

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>7</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 8 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.

Invasive Cancer Prime Site	Age Adjusted Rate/100,000
	Reference
Breast (female)	130.40
Prostate	109.20
Lung & Bronchus	66.88
Colorectal	39.87
Non-Hodgkin's Lymphoma	26.67
Bladder	26.17
Melanoma of the skin	23.20
Uterine	20.01
Leukemia	14.34

#### Table 8: Age Adjusted Rate /100,000 Population by Primary Cancer Site

Source: NH Health Web Reporting and Query System

<sup>&</sup>lt;sup>7</sup> Community Commons report prepared by <u>http://assessment.communitycommons.org/CHNA</u>, on August 8, 2013

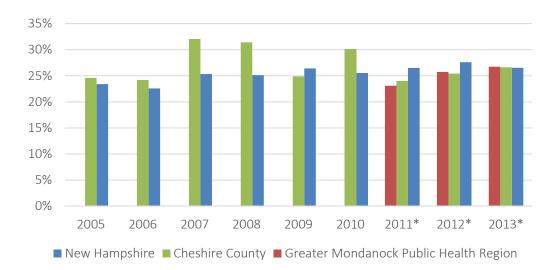
### B. Health Behaviors

#### Healthy Eating and Active Living:

Dietary guidelines for Americans recommend eating at least five servings of fruits and vegetables each day. In 2009, 71.1% of the residents in Cheshire County reported not consuming the recommended daily number of fruits and vegetables. This compares to 71.5% of residents in the state and 75.7% across the nation. The current 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. In 2012, only 19.4% of Cheshire County residents reported meeting these guidelines. This compares to 20.17% of residents in the state and 22.64% across the nation.

Over recent decades, the number of obese individuals in the United States has increased to an epidemic level. In 2012, 43 states had obesity rates of 25%, up 10% in less than 20 years. Cheshire County's obesity rates are comparable to the national numbers, and in 2012 only 37.9% of the County's population was at a healthy weight. In the 2013-2014 school year, 25% of third graders in Cheshire County were overweight or obese. Obesity is a major contributor to some of the leading causes of death in the region, including heart disease, some types of cancer, and diabetes. Being overweight is a key factor for diabetes. Without intervention, the prevalence of diabetes is expected to continue to rise due to changes in age, overall population growth, and increasing number of people who are overweight, obese, or less physically active. Diabetes is currently the 7th leading cause of death in the region. In 2012, the percent of adults who have diabetes as well as coronary heart disease in Cheshire County was 23.85% compared to 16.09% statewide.

CMC has addressed this need via a variety of strategies by partnering with schools, non-profit organizations and the business community to provide healthy eating and physical activity programs, policies, and environmental change recommendations.



#### Table 9: Obesity among Adults (2005-2013)

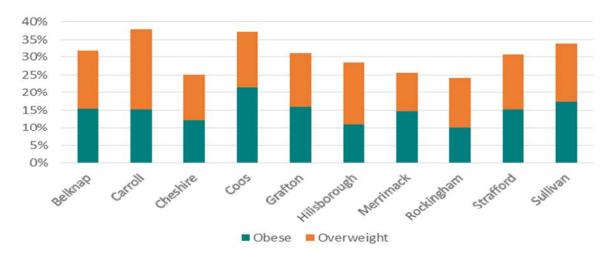
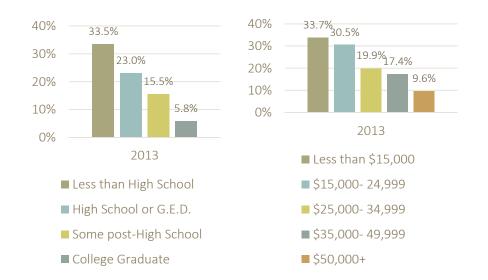


Table 10: Percent of NH Third Graders who are Overweight or Obese, 2013-2014

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

According to the CDC, tobacco use is the single most preventable cause of death in the United States. In New Hampshire, smoking results in death for approximately 1,900 individuals each year. According to WISDOM, the Greater Monadnock Region has an adult smoking rate of 18.6%, while the state of New Hampshire reported 17.6% of the population smoking in 2014. The primary challenge to reducing smoking rates is the highly addictive nature of nicotine, a chemical found in all tobacco products. Tobacco use, if prevented, has huge positive implications on the health of the community. Tobacco use leads to chronic health conditions, all of which could be avoided. CMC's efforts to reduce smoking and create smoke free environments in the region (restaurants, rental housing units, public settings) support avoiding these chronic health conditions.



#### Table 11: NH Smokers by Education & Income

It is clear that smoking rates (and many other health risks and conditions) are correlated to educational attainment and income level, so that lower incomes and less education correlate with poorer health and less healthy lifestyles.

The use of smokeless tobacco among adults in the region is about 3.4%, but it is on the rise among youth grades 9-12, where rates are up at 7.3%. Preventing tobacco use among youth is particularly important as data shows that 80% of users start by the age of 13 and 99% start by age 26. According to the U.S. Department of Health and Human Services, smoking tobacco leads to disease and disability, harming nearly every organ of the body. On average adults who smoke die 10 years earlier than nonsmokers. Lost work productivity attributable to death from tobacco use in New Hampshire accounts for more than \$419 million per year.

### **Alcohol and Other Drug Misuse:**

Excessive alcohol consumption and other drug misuse are some of the greatest risks to an individual or community, with both short and long term health and safety consequences. In 2010, the National Survey on Drug use and Health reported an estimated 22.6 million Americans aged 12 or older used illicit drugs in the past month and 131 million people reported being current alcohol drinkers.

New Hampshire's substance use rates are statistically higher than the rest of the country; New Hampshire's 12 to 17 year olds are one and one half times more likely than those nationwide to smoke marijuana. One in four New Hampshire high school aged children engages in regular binge drinking and marijuana smoking. The rate of young adult drinking (18-25 year olds) in New Hampshire is the highest in the country. Cheshire County ranks highest in the state in regular use, binge drinking, and heavy use of alcohol.

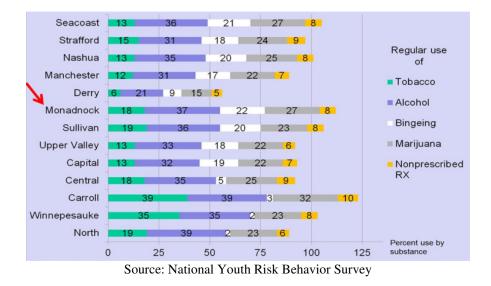
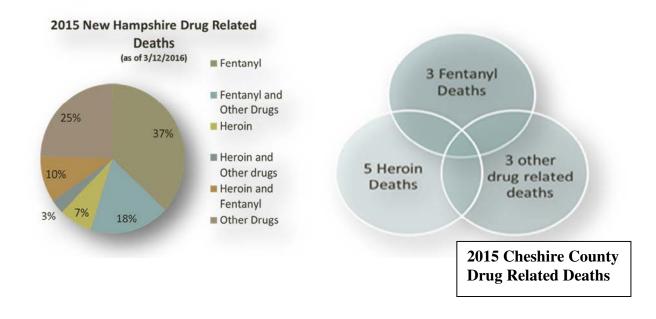


Figure 8: Comparison of Substance Use Rates by NH Public Health Regions, 2013

There has been a rapid increase in heroin and synthetic drug use in the state of New Hampshire. In 2014, the Cheshire Department of Corrections evaluated a sampling of inmates; of the 351 inmates, 89% presented with alcohol or drug issues. Of the 89%, 53% said their primary drug of choice was heroin, followed by alcohol at 19%. Between 2001 and 2006, the percentage of car crashes in the state related to alcohol ranged from 35-45%. In 2014, there were 326 overdose deaths in NH, 13 of which were in Cheshire County. This number continues to rise with a total of 428 deaths in NH and 11 in Cheshire County in 2015. For five months in 2016 there have been a total of 122 deaths in NH and 4 in Cheshire County. CMC staff has been actively involved in addressing this epidemic through participation in regional coalitions, providing education about Naloxone, and changing our prescribing patterns for opioid medications.



#### Figure 9: NH and Cheshire County Drug Related Deaths 2015

The Youth Risk Behavior Survey is conducted biennially by the high schools in the region. The following data was provided by the NH Department of Health and Human Services who manages the data for the state. As you can see from this data, substance use continues to be a significant concern in the Monadnock region. While the state of NH is ranked as one of the healthiest in the country, our rates of substance use are one of the worst nationwide. Below in table 12 are some key findings from the combined data collected from the schools in the region that are involved in this project:

Percentage	YRBS Survey Topic Area
24%	Of students use electronic vapor products
18%	Were offered, sold, or given drugs on school property
34%	Of students had at least one drink of alcohol on one or more of the past 30 days
	Of students started drinking before age 13
32%	Of students smoking smoked their first cigarette before age 13
	Of students had 5 or more alcoholic drinks in a row on one or more of the past 30 days
	Of students used marijuana at least once on one or more of the past 30 days
	Of students took prescription drugs without a doctor's prescription one or more times
	Of students find it easy to obtain alcohol or marijuana
6%	Of students used cocaine at least once
34%	Of students lived with someone with a drug or alcohol problem
21%	Of students have purposely hurt themselves without intending to die in past year
	Of students have attempted suicide
30%	Of students attempting suicide needed medical treatment for their injuries

#### Table 12 Youth Risk Behavior Survey 2015

#### **Emergency Preparedness:**

A critical element for protecting the public's health is being prepared to prevent, respond to, and rapidly recover from natural, accidental, or intentional public health threats. Preparedness efforts are instrumental in assuring that community partners are aware of their potential risks in the Region and have the appropriate public health emergency response plans to address the needs of their community. With the ease of transportation across the globe, outbreaks in other parts of the world are of concern here. Recent outbreaks of Zika, for example demonstrate the importance of early communication and prevention efforts to ensure the safety and wellbeing of the residents of the Monadnock region.

Public health threats and natural or manmade disasters can have direct and indirect impacts on the health of individuals and communities. While these impacts vary depending on the event type and its severity, potential resulting health problems could include physical or emotional trauma, acute disease, increased morbidity and mortality, chronic stress, increased potential for disease transmission and the risk of epidemic outbreaks of communicable diseases. Although public health emergencies and natural disasters do not discriminate, some events might affect certain populations disproportionately:

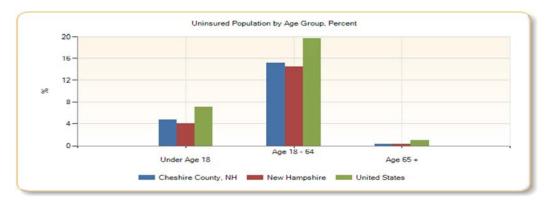
- Children
- Elderly populations.
- Persons living below the poverty level
- Individuals with limited English proficiency
- Persons with disabilities
- Individuals experiencing homelessness

With the staff of the Greater Monadnock Public Health Network housed at CMC, priority is given to working with the citizens of the regions, towns, educational institutions and business to create, adapt, and test our regional all health hazard preparedness and response plan.

### C. Clinical Care

#### Access to Care:

In general, insurance coverage in New Hampshire (89.72%) is better than the nation (85.80%). In Cheshire County, 10.87% (three-year average from 2010-2014) of the population is uninsured. When focusing on the adult population the percent uninsured raises to 15.14%. The overall percent uninsured is similar to the state percent uninsured of 14.50%.<sup>8</sup> As a safety net provider, CMC/DHK provides services to all residents of Cheshire County regardless of ability to pay. CMC provides staffing supports to assist residents of the region to access care; including assistance to local, state, and federal resources. The staff helps individuals determine eligibility for health insurance, medication assistance, and a variety of entitlement programs. The CMC patient insurance profile includes 50% persons with Medicare, 20% commercial insurance, 10% Medicaid, and 20% uninsured.



#### **Table 13: Uninsured Population Comparison by Age**

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 2014, the rate of primary care providers per 100,000 population is 75.7. This is lower than the State rate of 94.0 and similar to the national rate of 75.8. When asked if they had a personal doctor, 78.3% of Cheshire County residents responded yes.<sup>9</sup>

Oral health is an important part of overall heath and poor oral health has been associated with acute and chronic disease.<sup>10</sup> In Cheshire County 25.8% (averaged from 2006 -2010) of adults had not had a recent dental exam. This compares to 23.14 % across the State and 30.2% nationally.<sup>11</sup> When asked in 2015 if they had visited a dentist for any reason, 71.9% of Cheshire County

<sup>&</sup>lt;sup>8</sup> Community Commons CHNA Cheshire County Summary, 2016

<sup>&</sup>lt;sup>9</sup> Healthy Monadnock 2020 Data Dashboard, 2016

<sup>&</sup>lt;sup>10</sup> New Hampshire State Health Profile, p. 40, 2011

<sup>&</sup>lt;sup>11</sup> Community Commons CHNA Cheshire County Summary, 2016

residents responded yes.<sup>12</sup> CMC has a long history of prioritizing oral health for adults and children in the region, supporting school-based screenings, the traveling adult dental service and supporting a local non-profit dental practice.

#### **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.

	Cheshire County	New Hampshire	United States
% of female's enrolled in Medicare received Mammography in past 2 years	70.8%	70.7%	63%
% of female's who receive regular Pap Test (age adjusted)	77% 79.5% 78.59		78.5%
% of adults 50 and older had a sigmoidoscopy or colonoscopy (age adjusted)	66%         69.7%         61.3%		61.3%
% of adults 18-70 never been screened for HIV	68.83%         69.02%         62		62.79%
% of adults aged 65 or older who received a pneumonia vaccine	ia 70.5% 72%		67.5%
% of adults enrolled in Medicare who have had hemoglobin A1c tested in past year – Diabetes Management	89.6% 90% 84.		84.6%
% of adults who report not taking necessary high blood pressure medication	27.9%	23.8%	21.7%
% of adults who haven't visited a dentist in the past year	25.8%	23.1%	30.2%

#### **Table 14: Medical Screenings**

Data Source: Community Commons: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, accessed via the Health Indicators Warehouse. US Department of Health & Human Services, Health Indicators Warehouse. 2006-12. Source geography: County

#### **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>13</sup> According to WISDOM, in 2014, 8.2% of Cheshire County residents had a diagnosis of diabetes. This is less than the 9.1% of state residents who has diabetes. As noted earlier in Table 6, diabetes is the seventh leading cause of death for both Cheshire County and the State.

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, 27.6 % of people have high blood pressure. This is higher than the percent of people throughout the state (26.2%) and lower than the nation (28.16%).

<sup>&</sup>lt;sup>12</sup> Healthy Monadnock 2020 Data Dashboard, 2016

<sup>&</sup>lt;sup>13</sup> New Hampshire State Health Profile, p. 79, 2011

#### **Table 15: Prevalence of Various Diagnoses**

	Cheshire County	New Hampshire	United States
Asthma	11.2%	14.7%	13.4%
Depression (Medicare Population)	17.9%	18.1%	15.4%
Diabetes	7.4%	8.09%	9.11%
Heart Disease	4.4%	3.9%	4.4%
High Blood Pressure	27.6%	26.2%	28.16%
High Cholesterol	34.39%	39.15%	38.52%

Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Additional data analysis by CARES. 2011-12. Source geography: County

#### **Behavioral Health:**

Behavioral Health covers the full range of mental and emotional well-being; it is an essential part of a person's overall health, as it affects how we think, feel, and act. Behavioral health includes mental disorders, such as depressions, bipolar disorder, schizophrenia, and Alzheimer's disease, as well as a person's ability to cope with normal life stresses, work productively, and make a contribution to his/her community. An estimated 26.2% of adults in the United States suffer from a diagnosable mental disorder in a given year. Among children ages 5-19 in New Hampshire, an estimated 55,756 individuals have a diagnosable mental health disorder and almost 14,000 have experienced a serious emotional disturbance.

Mental illness is associated with increased occurrence of chronic diseases. Of the 3,655 clients with a behavioral health diagnosis served by CMC/DHK in 2014, 88% have at least one or more chronic diseases. In the Monadnock Region, Monadnock Family Services reported an 87% increase in adults served between 2007 and 2014. Despite this increase in demand, budget cuts and lack of public awareness have caused a decrease in available services. In 2009, the NH Department of Health Human Services Hospital Discharge Data Collection System showed that the Monadnock Region experienced significantly higher mental health discharges than the overall state.

According to Community Commons, 2016, 17.6% of adults in Cheshire County lack social or emotional support. According to the 2014 Healthy Monadnock Community Survey, more than 50% of the respondents have participated in a community and/or religious group over the lasts year, about 70% feel some connection to their immediate neighborhood, and more than 95% confide in at least one trusted other on a weekly basis. 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. CMC staff is actively involved in community efforts to address behavioral health and substance misuse concerns in the region. Staff holds leadership roles in local coalitions, lead efforts to collaborate on integrated efforts to effectively provide services, and provide clinical behavioral health care.

Report Area	Total Population Age 18 & Older	Estimated Population without Adequate Social/Emotional Support	Age-Adjusted Percentage
Cheshire County	61,896	11,079	17.6%
New Hampshire	1,025,011	176,302	17.1%
United States	232,556,016	48,104,656	20.7%

Table 16: Lack of Social or Emotional Support

# V. Selected Healthy Monadnock Activities and Results

- HM2020 had five Community Summits (2010-2016) that brought 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. The fourth summit, "Why Living Wages Matter to the Health of Our Community," shed new light on how living wages are directly linked to the overall health of a community. The fifth summit in the spring of 2016, titled "Tapestry of Hope: Preventing and Treating Addiction focused on building resilience and social connection to prevent and treat drug addiction.
- HM2020 also conducts a community survey every two years. The survey is a statistically valid randomized telephone survey of Cheshire County residents that assesses health behaviors, health access, health literacy, and social capital. The 2014 Community Survey (CS) was designed to obtain information in order to inform the needs assessment for the Healthy Monadnock 2020 (HM2020) as well as track the health characteristics, needs, and practices of Cheshire County residents. A random digit dial survey of 625 Cheshire County residents performed in May 2014 was used to create a representative sample of the county and to assess the following as they compare to past HM2020 measures and overarching goals:

**1. HM2020 awareness and participation:** Since 2010, awareness and participation in HM2020 has increased from 30% to 52%.

**2. Healthy Eating:** Overall, healthy eating indicators fell below the HM2020 target in 2014 with the rate of fruit consumption decreasing and the rate of vegetable consumption increasing since 2010.

**3. Active Living:** Respondents who participated in any exercise in the past 30 days exceeded the HM2020 target of 80%, however, this indicator is mostly unchanged since 2010. Screen time seems to be on the rise in Cheshire County.

**4. Social Connections:** More than 50% of respondents have participated in a community and/or religious group over the last year, about 70% feel some connection to

their immediate neighborhood, and more than 95% confide in at least one trusted other on a weekly basis. Social Connection is a major Monadnock Region strength.

**5. Social Determinants of Health:** Internet access continues to accelerate. The percentage of residents with at least a college degree was about the same as it was in 2010 and still does not meet the HM2020 target.

**6. Health Literacy:** The percentage of respondents who feel "very comfortable" in seeking or obtaining health information as well as the percentage of respondents with a reliable source of health information have been relatively stable since 2010. Both remain below the HM2020 target.

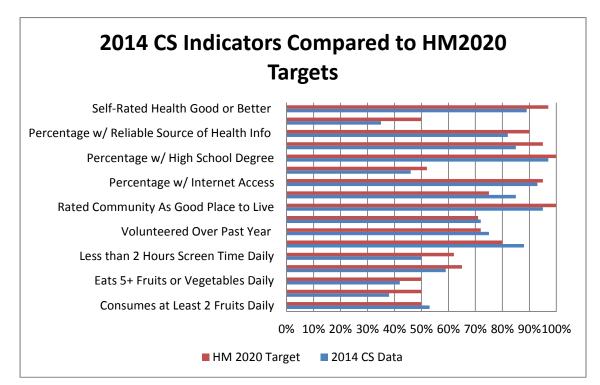
**7. Health Status:** The percentage both of adults who are at a healthy weight and adults who reported good or better health is essentially unchanged since 2010, and is still below the HM2020 target.

The following table summarizes indicators that are currently meeting or exceeding HM2020 targets according to the 2014 Community Survey:

Meeting/ Exceeding HM2020 Target
Consuming at Least 2 Fruits Daily
Any Exercise in the past 30 Days
Volunteered Over Past year
Percentage with High Speed Internet

The following graph represents the current HM2020 targets for each indicator (red) and how the 2014 CS compares with these targets:

### Figure 10: Healthy Monadnock Target Comparison



# VI. Priority Community Needs

### A. Prioritization Process

To guide the process, the CHNA leadership followed published guidelines on principles for community health needs assessment and prioritization:

- 1. Multi-sector collaboration that supports shared ownership of all phases of community health improvement, including assessment, planning, investment, implementation and evaluation
- 2. Proactive, broad, and diverse community engagement to improve results
- 3. Define the community wide enough to allow for population-wide interventions and measurable results, and include a targeted focus to address disparities among subpopulations
- 4. Maximum transparency to improve community engagement and accountability
- 5. Use of evidence-based interventions and encouragement of innovative practices with thorough evaluation
- 6. Evaluation to inform a continuous improvement process
- 7. Use of highest quality data pooled from, and shared among, diverse public and private sources

The CHNA Leadership Team agreed to begin their prioritization from known information rather than duplicate the community engagement efforts that were so recently conducted through well-established partnerships. Beginning on September 19, 2014 and ending on August 26, 2015 the CHNA Leadership Team convened several meetings to review existing information based on the social determinants of health model and using the NH State Health Improvement Plan framework including the information shown in section III, IV and, V of this document.

The sessions began with a review of regional assets currently addressing the priorities in the NH State Health Improvement Plan, followed by an assessment of gaps. The following steps included a review of regionally relevant data, incorporating in data captured from national sources (US Census, BRFSS) and current data from the HM2020 action planning process, Southwestern Community Services Needs Assessment, Impact Monadnock Assessment and the Granite Futures Plan.

After reviewing available data, the CHNA Leadership Team completed a process to identify needs and then recommend those of highest priority 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 areas in the NH State Health Improvement Plan. Members then offered additional community health needs based on the data presented at the sessions as well as their knowledge based on their role in the community. A nominal group voting process was used to identify the top five priorities. The results revealed five priority areas:

- Behavioral Health: Behavioral Health covering the full range of mental and emotional well-being- from daily stress and satisfaction to the treatment of mental illness
- Substance & Alcohol Misuse: Alcohol and other drug misuse pose one of the greatest risks to individuals and community health and safety.

- Tobacco use: Tobacco use is the most preventable cause of death
- Obesity: Obesity increases the risk for many chronic diseases and impacts 25% of the region's adult population
- Emergency Preparedness: Natural, accidental, or even intentional public health threats are all around us. The more prepared we are as a community; the more resilient we will be to recover from a disaster or emergency.

The group also selected other areas of great importance, but did not elevate them to the same priority level. Those are:

- Cancer prevention
- Healthy mothers, babies and children.
- Heart disease and stroke
- Infectious disease
- Injury Prevention
- Asthma

It is noteworthy to point out that the CHNA Leadership Team selected Behavioral Health as a top priority, though it was not included in the NH State Health Improvement Plan. Though not articulated as a stand-alone priority area, it will be demonstrated in the Implementation Strategy that embedded within each of these priority areas is the need to address the social determinants of health.

To engage a broad cross section of the community that could reasonably represent the diversity of our community and our most vulnerable populations, the Patient and Family Advisory Council (PFAC) was engaged to review existing data and the results of the Greater Monadnock Community Health Improvement Plan. The PFAC was established in 2015 as a way to enhance the delivery of healthcare to patients, families and the community. The council seeks the patient and family perspective to promote a culture of patient and family centered care and provides an avenue for the voice of the patient. The council does this by providing a mechanism for the community to work in partnership with hospital staff to promote safety, high quality care and positive patient and family experiences. The goals of the council are:

- To promote and support culturally sensitive patient and family centered care
- To expand the voices of patients and families
- To identify opportunities for improving the patient and family experience
- Advise on policies and practices to support patient and family-centered care
- Establish a multicultural and diverse generational membership

The session began with a review of the Community Benefit process, including results of the most recent CHNA in 2013, activities CMC engaged in during the past three years and the process undertaken by our community that resulted in the Greater Monadnock Community Health Improvement Plan (CHIP). After reviewing all the data, the PFAC reflected on the relevance of each of the priority areas identified in the CHIP. 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.

# B. Community Priorities

The CHNA Leadership Team (Council for a Healthier Community) prioritized five community needs above the other identified needs. These top five needs are:

- Behavioral Health: Behavioral Health covering the full range of mental and emotional well-being- from daily stress and satisfaction to the treatment of mental illness
- Substance & Alcohol Misuse: Alcohol and other drug misuse pose one of the greatest risks to individuals and community health and safety
- Tobacco use: Tobacco use is the most preventable cause of death
- Obesity: Obesity increases the risk for many chronic diseases and impacts 25% of the region's adult population
- Emergency Preparedness: Natural, accidentally, or even intentional public health threats are all around us. The more prepared we are as a community; the more resilient we will be to recover from a disaster or emergency

Successful strategies and activities from the current implementation plan should be continued and integrated in ways that the 5 areas mentioned above are prioritized. Some of those strategies and activities related to improved access to care, improved coordination and communication between services and those actions and activities that translate on continued support for organizations engaged on health improvement.

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). Such plan should prioritize an approach based on impacting the social determinants of health and apply strategies that allow leveraging the community benefits investments to achieve true population health improvement.

#### **Attachment A: Council for a Healthier Community Members 2016**

Organization All Saints Church Antioch University New England Cedarcrest Cheshire County Drug Court Cheshire County government Cheshire County government Cheshire County System of Care Citizen of the Monadnock Region Citizen of the Monadnock Region Citizen of the Monadnock Region City of Keene CMC/DHK CMC/DHK CMC/DHK Contoocook Valley Transportation Company (CVTC) ConVal School District (SAU 1) ConVal School District (SAU 1) Dental Health Works Franklin Pierce University Girl Scouts of Green & White Mountain Greater Monadnock Public Health Network Greater Monadnock Public Health Network Home Healthcare, Hospice, and Community Services Home Healthcare, Hospice, and Community Services Impact Monadnock Keene Family YMCA Keene Housing Keene Housing Kids Collaborative Keene School District (SAU 29) Keene State College MAPS Counselling Services Monadnock Alcohol & Drug Abuse Coalition Monadnock at Home Monadnock at Home Monadnock Center for Violence Prevention Monadnock Community Hospital

Name Rev. Jamie Hamilton George Tremblay Cathy Grey Alison Welsh Suzanne Bansley Chris Coates Dennis Calcutt Anne Marie Warren Tom Link Erik Willis Kendall Lane Don Caruso, MD Jose Montero Linda Rubin Ellen Avery Kim Chandler Holly Bly Steve Hoffman, DMD Lee Potter Patricia Mack Eileen Fernandes Tricia Wadleigh Cathy Sorenson Susan Ashworth Marj Droppa Helene Mogridge April Buzby Liz Chipman Diane Meagher Karrie Kalich Gary Barnes Mary Drew Cindy Bowen Russ Armstrong Robin Christopherson Lee Ann Clark

Monadnock Community Hospital Monadnock Developmental Services Monadnock Family Services Monadnock Peer Support Agency Monadnock ServiceLink Monadnock United Way Monadnock Voices for Prevention Monadnock Voices for Prevention Monadnock Worksource Monadnock Worksource NH Catholic Charities NH Department of Health and Human Services **Reality Check** Southern NH Services Southwest Regional Planning Commission Southwestern Community Services **Team Jaffrey** The River Center **Touchstone Farm** Town of Harrisville

**Travis Kumph** Mary-Anne Wisell Phil Wyzik Damien Licata Jen Seher Kelly Steiner Hope Driscoll Natalie Neilson Janis King Robert Gillis Sr. Kathleen Haight Mary Lee Greaves Mary Drew Erika Alusic-Bingham Tim Murphy Erica Frank Mary Drew Margaret Nelson Boo Martin Andrew Maneval

# Attachment B: Hospital Service Area

Town	Zip Code
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	Data Source	Target Area	Baseline	Healthiest Community Target	Cheshire County	N.H.	U.S.
Adults who smoke (2013)	BRFSS/ NH WISDOM	Health Behaviors	21.0% (2005)	12.0%	18.6%	16.2%	19.0%
Youth smoking (2011)	NH YRBS	Health Behaviors	20.8% (2009)	10.0%	18.1%	19.8%	18.1%
Adult binge drinking (2012)	BRFSS/NH WRQS	Health Behaviors	21.8% (2011)	14.0%	18.2%	17.3%	16.9%
Chlamydia Rate (per 100,000) (2013)	NH YRBS	Health Behaviors	135.9 (2005)	150	243.3	236.2	446.6
Any physical activity w/n 30 days (2012)	NCHHSTP (CDC)	Health Behaviors	82.3% (2005)	90.0%	82.5%	80.0%	76.9%
Met physical activity guideline (2011)	BRFSS & NH WRQS	Health Behaviors	25.6% (2011)	50.0%	25.6%	22.3%	21.0%
Adults who eat 5+ fruits and vegetables daily (2009) *Indicator may be discontinued*	BRFSS	Health Behaviors	29.1% (2005)	50.0%	27.0%	28.0%	23.0%
Very confident getting health info (2014)	Community Survey	Health Behaviors	86.0% (2010)	94.0%	85.5%	Not Available	Not Available
Health provider main source health info (2014)	Community Survey	Health Behaviors	81.0% (2010)	95.0%	82.3%	Not Available	Not Available
Residents with health care coverage (2012)	BRFSS	Health Care Access & Quality	87.7% (2005)	100.0%	84.7%	84.2%	79.6%
Have personal doctor or provider (2012)	NH WRQS	Health Care Access & Quality	83.4% (2011)	100.0%	78.3%	Not Available	Not Available
Adults visiting dentist (any reason) (2012)	BRFSS	Health Care Access & Quality	75.6% (2006)	80.0%	71.9%	73.1%	67.2%
Adults with good or better health (2012)	BRFSS	Health Status	91.6% (2005)	95.0%	83.5%	86.5%	82.9%
Frequent mental health distress (2012)	BRFSS/NH WRQS	Health Status	7.9% (2005)	6.0%	8.4%	11.6%	Not Available yet
All cardiovascular disease mortality (per 100,000) (2013)	CDC Mortality File	Health Status	220.0 (2005)	187.0	176.3	176.5	206
Suicide mortality (3 year average, per 100,000) (2013)	CDC Mortality File	Health Status	10.31 (2005)	4.8	13.1	12.8	12.6
Adults at healthy weight (2012)	BRFSS	Health Status	41.1% (2005)	50.0%	37.9%	36.5%	34.2%
Adults with diabetes (2012)	BRFSS/NH WISDOM	Health Status	6.7% (2005)	5.0%	8.7%	9.5%	Not Available yet
Community rating (good or better) (2014)	Community Survey	Social Capital	93.0% (2010)	100.0%	93.9%	Not Available	Not Available
Volunteerism (2014)	Community Survey	Social Capital	67.0% (2010)	75.0%	75.0%	Not Available	Not Available
Friends over to home (at least once a month) (2014)	Community Survey	Social Capital	66.0% (2010)	72.0%	71.6%	Not Available	Not Available
Poverty rate (all ages) (2013)	Census	Socio-economic and Environmental	10.6% (2011)	8.0%	11.4%	9.0%	15.8%
Children In Poverty (2013)	Census	Socio-economic and Environmental	14.3% (2011)	8.0%	13.7%	10.9%	22.6%
Unemployment rate (2013)	BLS	Socio-economic and Environmental	3.2% (2005)	4.0%	5.1%	5.3%	7.4%
Percent 9 <sup>th</sup> graders that graduate within 4 yrs (2015)	County Health Rankings	Socio-economic and Environmental	86.0% (2009)	91.0%	88.0%	86.0%	Not Available
Attended some college (2013)	Census	Socio-economic and Environmental	56.7% (2011)	72.0%	50.8%	46.1%	46.0%
Air quality (days good) (2014)	EPA	Socio-economic and Environmental	185 (2005)	300	276	Not Available	Not Available

### Attachment D: Community Commons CHNA Summary:

#### **Cheshire County Report long**

Report Area Cheshire County, NH Data Category Demographics | Social Economic Factors | Physical Environment | Clinical Care | Health Behaviors | Health Outcomes Demographics Current population demographics and changes in demographic composition over time play a determining role in the types of

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.

Data Indicators	
<ul> <li>Total Danulation</li> </ul>	• Dopulation A go 19 64

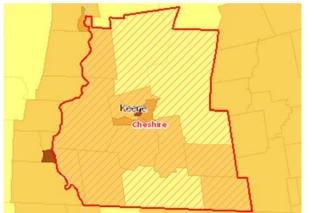
- Total PopulationMedian Age
- Population Age 18-64Population Age 65
- Population Under Age 18
   Urban and Rural Population

#### **Total Population**

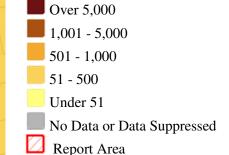
A total of 76,596 people live in the 706.71 square mile report area defined for this assessment according to the U.S. Census Bureau American Community Survey 2010-14 5-year estimates. The population density for this area, estimated at 108.38 persons per square mile, is greater than the national average population density of 88.93 persons per square mile.

Report Area	Total Population		Population Density (Per Square Mile)
Cheshire County, NH	76,596	706.71	108.38
New Hampshire	1,321,069	8,952.92	147.56
United States	314,107,083	3,531,932.26	88.93

Data Source: US Census Bureau, American Community Survey. 2010-14. Source geography: Tract

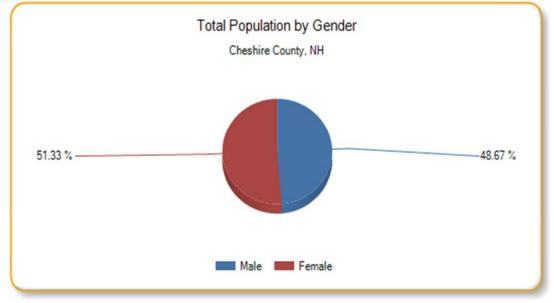


#### Population, Density (Persons per Sq. Mile) by Tract, ACS 2010-14



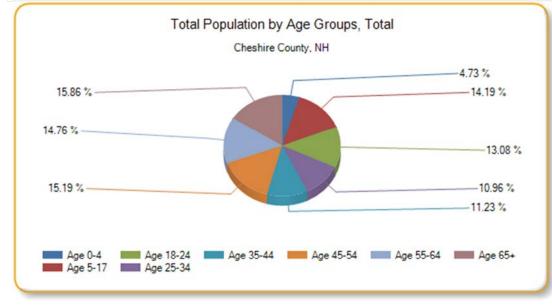
#### **Total Population by Gender**

Report Area	Male	Female	Percent Male	Percent Female
Cheshire County, NH	37,283	39,313	48.67%	51.33%
New Hampshire	651,809	669,260	49.34%	50.66%
United States	154,515,152	159,591,920	49.19%	50.81%



#### **Total Population by Age Groups, Total**

Report Area	Age 0-4	Age 5-17	Age 18-24	Age 25-34	Age 35-44	Age 45-54	Age 55-64	Age 65
Cheshire County, NH	3,626	10,867	10,019	8,397	8,604	11,632	11,303	12,148
New Hampshire	66,576	209,150	126,310	149,321	167,647	218,547	189,634	193,884
United States	19,973,712	53,803,944	31,273,296	42,310,184	40,723,040	44,248,184	38,596,760	43,177,960



### **Total Population by Age Groups, Percent**

Report Area	Age 0-4	Age 5-17	Age 18-24	Age 25-34	Age 35-44	Age 45-54	Age 55-64	Age 65
Cheshire County, NH	4.73%	14.19%	13.08%	10.96%	11.23%	15.19%	14.76%	15.86%
New Hampshire	5.04%	15.83%	9.56%	11.3%	12.69%	16.54%	14.35%	14.68%
United States	6.36%	17.13%	9.96%	13.47%	12.96%	14.09%	12.29%	13.75%

#### **Total Population by Race Alone, Total**

Report Area	1	White		Black	Asi	an	Native Americ Alaska Native	can / 1	Native Hawaiian / Pacific Islander	Son Oth Rac	ner	Multiple Races
Cheshire Co	ounty, NH	73,308		601	880	)	217		22	311		1,257
New Hamps	shire	1,239,543		16,293	30,5	560	2,510		280	7,80	05	24,078
United States 23	1,849,712	39,564,784	15,710,659	2,565,5	20	535	5,761	14,754	,895		9,12	25,751

### **Total Population by Race Alone, Percent**

Report Area	White	Black	Asian	Native American / Alaska Native	Native Hawaiian / Pacific Islander	Some Other Race	Multiple Races
Cheshire County, NH	95.71%	0.78%	1.15%	0.28%	0.03%	0.41%	1.64%
New Hampshire	93.83%	1.23%	2.31%	0.19%	0.02%	0.59%	1.82%
United States	73.81%	12.6%	5%	0.82%	0.17%	4.7%	2.91%

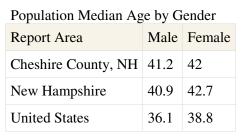
#### **Total Population by Ethnicity Alone**

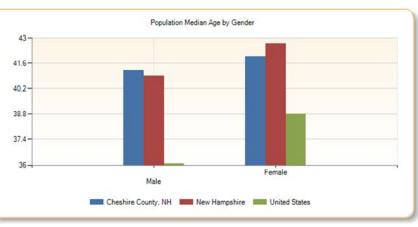
Report Area	Total Population	Hispanic or Latino Population	Percent Population Hispanic or Latino	Non-Hispanic Population	Percent Population Non-Hispanic
Cheshire County, NH	76,596	1,195	1.56%	75,401	98.44%
New Hampshire	1,321,069	40,301	3.05%	1,280,768	96.95%
United States	314,107,072	53,070,096	16.9%	261,036,992	83.1%



#### Median Age by Tract, ACS 2010-14

Over 45.0
 40.1 - 45.0
 35.1 - 40.0
 Under 35.1
 No Data or Data Suppressed
 Report Area





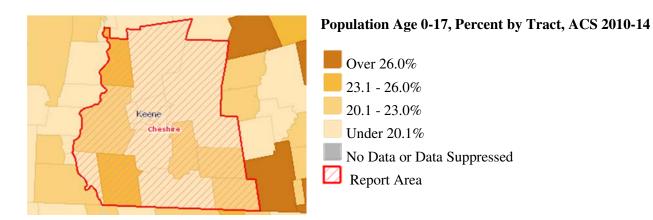
#### Population Under Age 18

An estimated 18.92% percent of the population

in the report area is under the age of 18 according to the U.S. Census Bureau American Community Survey 2010-14 5-year estimates. An estimated total of 14,493 youths resided in the area during this time period. The number of persons under age 18 is relevant because 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, NH	76,596	14,493	18.92%
New Hampshire	1,321,069	275,726	20.87%
United States	314,107,072	73,777,656	23.49%

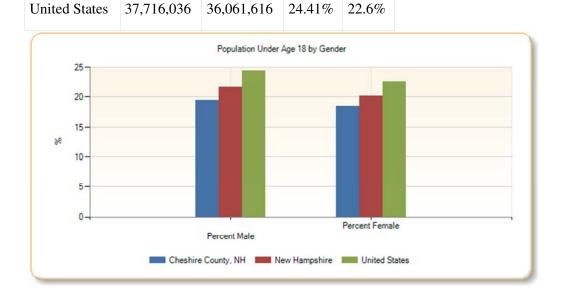
Data Source: US Census Bureau, American Community Survey. 2010-14. Source geography: Tract



#### Population Under Age 18 by Gender

This indicator reports the percentage of population that is under age 18 by gender.

Report Area	Total Male	Total Female	Percent Male	Percent Female
Cheshire County, NH	7,240	7,253	19.42%	18.45%
New Hampshire	140,689	135,037	21.58%	20.18%

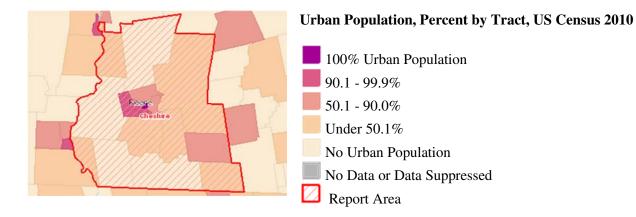


#### Urban and Rural Population

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, NH	77,117	26,979	50,138	34.98%	65.02%
New Hampshire	1,316,470	793,872	522,598	60.3%	39.7%
United States	312,471,327	252,746,527	59,724,800	80.89%	19.11%

Data Source: US Census Bureau, Decennial Census. 2010. Source geography: Tract



#### **Social Economic Factors**

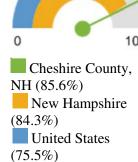
Economic and social insecurity often are associated with poor health. Poverty, unemployment, and lack of educational achievement affect access to care and a community's ability to engage in healthy behaviors. Without a network of support and a safe community, families cannot thrive. Ensuring access to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

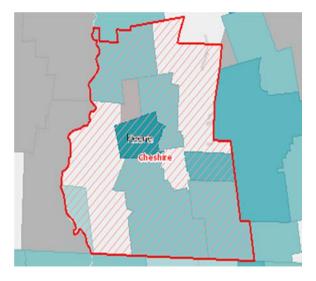
#### High School Graduation Rate (NCES)

Within the report area 85.6% of students are receiving their high school diploma within four years. This is greater than the Healthy People 2020 target of 82.4%. This indicator is relevant because research suggests education is one the strongest predictors of health (Freudenberg Ruglis, 2007).

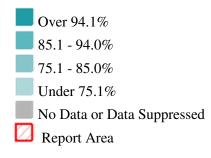
Report Area	Average Freshman Base Enrollment	Estimated Number of Diplomas Issued	On-Time Graduation Rate	On-Time Graduation Rate
Cheshire County, NH	920	787	85.6	
New Hampshire	17,510	14,757	84.3	0 100%
United States	4,024,345	3,039,015	75.5	Cheshire County,
HP 2020 Target			> =82.4	NH (85.6%)

Data Source: National Center for Education Statistics, NCES - Common Core of Data. 2008-09. Source geography: County





#### **On-Time Graduation, Rate by School** (Secondary), NCES CCD 2008-09

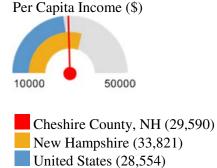


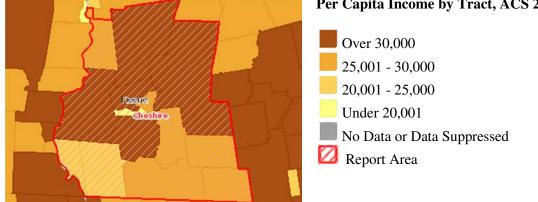
#### **Income - Per Capita Income**

The per capita income for the report area is \$29,590. This includes all reported income from wages and salaries as well as income from self-employment, interest or dividends, public assistance, retirement, and other sources. The per capita income in this report area is the average (mean) income computed for every man, woman, and child in the specified area

Report Area	Total Population	Total Income (\$)	Per Capita Income (\$)
Cheshire County, NH	76,596	\$2,266,526,208	\$29,590
New Hampshire	1,321,069	\$44,680,388,608	\$33,821
United States	314,107,072	\$8,969,237,037,056	\$28,554

Data Source: US Census Bureau, American Community Survey. 2010-14. Source geography: Tract





### Per Capita Income by Tract, ACS 2010-14

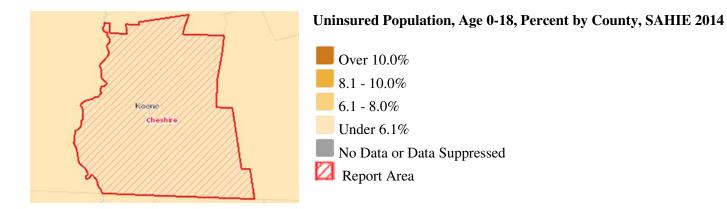
#### **Insurance - Uninsured Children**

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

This indicator reports the percentage of children under age 19 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.

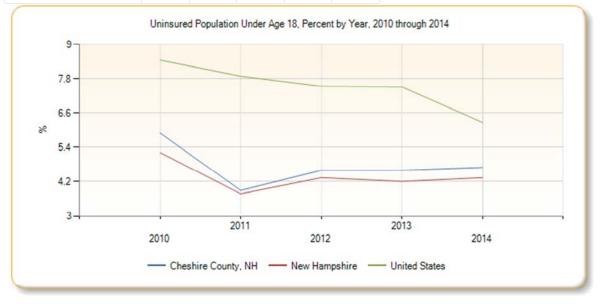
						Percent Population Without
Report Area	Total Population Under Age 19	Population with Medical Insurance	Percent Population With Medical Insurance	Population Without Medical Insurance	Percent Population Without Medical Insurance	Medical Insurance
Cheshire County, NH	14,748	14,051	95.27%	697	4.73%	0 50%
New Hampshire	278,048	265,972	95.66%	12,076	4.34%	Cheshire County, NH (4.73%) New Hampshire
United States	76,146,139	71,365,802	93.72%	4,780,337	6.28%	(4.34%) United States (6.28%)

Data Source: US Census Bureau, Small Area Health Insurance Estimates. 2014. Source geography: Count



#### Uninsured Population Under Age 18, Percent by Year, 2010 through 2014

Report Area	2010	2011	2012	2013	2014
Cheshire County, NH	5.9%	3.9%	4.6%	4.6%	4.7%
New Hampshire	5.22%	3.78%	4.34%	4.21%	4.34%
United States	8.45%	7.89%	7.54%	7.51%	6.28%



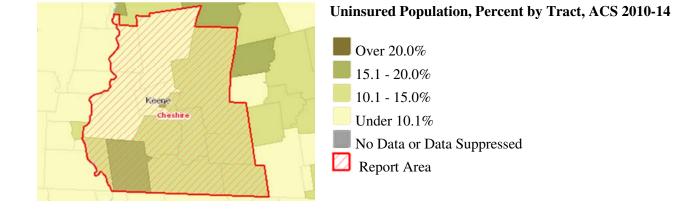
#### **Insurance - Uninsured Population**

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

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

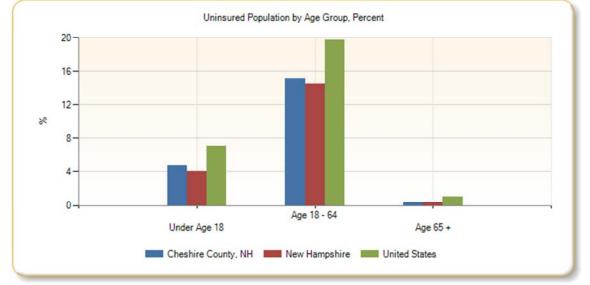
Report Area	Total Population (For Whom Insurance Status is Determined)	Total Uninsured Population	Percent Uninsured Population	
Cheshire County, NH	75,847	8,248	10.87%	0 25%
New Hampshire	1,306,315	134,254	10.28%	Cheshire County, NH
United States	309,082,272	43,878,140	14.2%	(10.87%)
Data Source: US Census	Bureau, American Community Survey. 20	010-14. Source geography: Tr	ract	New Hampshire (10.28%) United States (14.2%)

Percent Uninsured Population



#### Uninsured Population by Age Group, Percent

Report Area	Under Age 18	Age 18 - 64	Age 65
Cheshire County, NH	4.71%	15.14%	0.34%
New Hampshire	4.03%	14.5%	0.37%
United States	7.08%	19.76%	0.98%

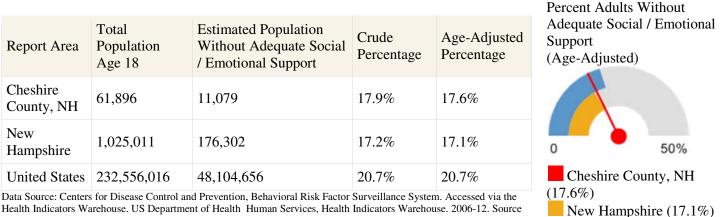


#### **Uninsured Population by Age Group, Total**

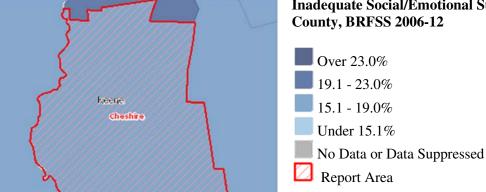
Report Area	Under Age 18	Age 18 - 64	Age 65
Cheshire County, NH	683	7,525	40
New Hampshire	11,081	122,487	686
United States	5,217,055	38,249,012	412,062

#### Lack of 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 or 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.



Health Indicators Warehouse. US Department of Health Human Services, Health Indicators Warehouse. 2006-12. Source geography: County



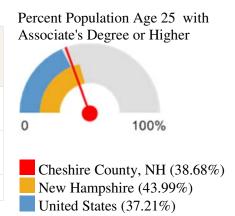
#### Inadequate Social/Emotional Support, Percent of Adults Age 18 by County, BRFSS 2006-12

United States (20.7%)

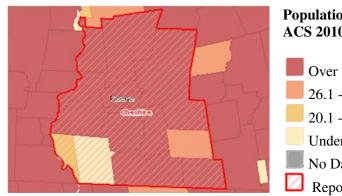
#### Population with Associate's Level Degree or Higher

38.68% of the population aged 25 and older, or 20,147 have obtained an Associate's level degree or higher. This indicator is relevant because educational attainment has been linked to positive health outcomes.

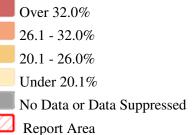
Report Area	Total Population Age 25	Population Age 25 with Associate's Degree or Higher	Percent Population Age 25 with Associate's Degree or Higher
Cheshire County, NH	52,084	20,147	38.68%
New Hampshire	919,033	404,258	43.99%
United States	209,056,128	77,786,232	37.21%



Data Source: US Census Bureau, American Community Survey. 2010-14. Source geography: Tract



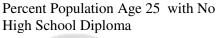
## Population with an Associate Level Degree or Higher, Percent by Tract, ACS 2010-14

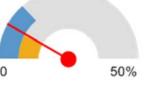


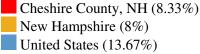
#### Population with No High School Diploma

Within the report area there are 4,339 persons aged 25 and older without a high school diploma (or equivalency) or higher. This represents 8.33% of the total population aged 25 and older. This indicator is relevant because educational attainment is linked to positive health outcomes (Freudenberg Ruglis, 2007)

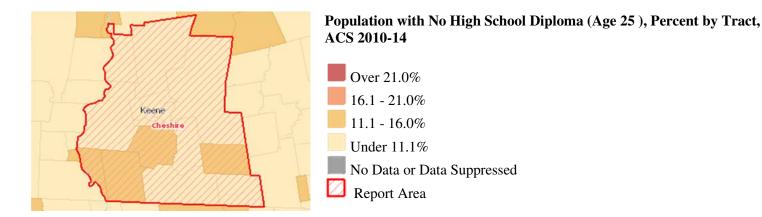
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Report Area	Total Population Age 25	Population Age 25 with No High School Diploma	Percent Population Age 25 with No High School Diploma	Hig
Cheshire County, NH	52,084	4,339	8.33%	0
New Hampshire	919,033	73,490	8%	
United States	209,056,128	28,587,748	13.67%	1





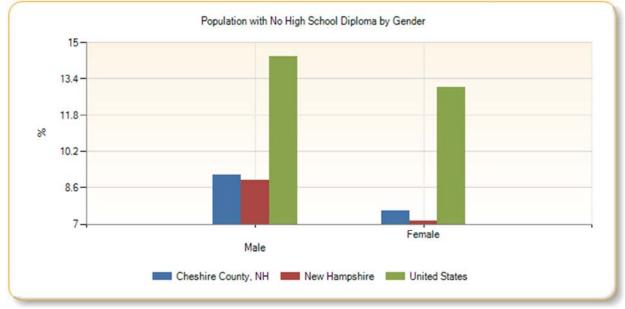


Data Source: US Census Bureau, American Community Survey. 2010-14. Source geography: Tract



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

Report Area	Total Male	Total Female	Percent Male	Percent Female
Cheshire County, NH	2,300	2,039	9.15%	7.57%
New Hampshire	39,899	33,591	8.93%	7.12%
United States	14,483,210	14,104,538	14.37%	13.03%



#### Poverty - Children

In the report area 15.25% or 2,164 children aged 0-17 are living in households with income below the Federal Poverty Level (FPL). In the report area 33.24% or 4,717 children are 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 – below 100%	Population Under Age 18 in Poverty – below 200%
Cheshire County, NH	71,764	14,189	2,164	4,717
New Hampshire	1,280,899	271,465	31,363	74,788
United States	306,226,400	72,637,888	15,907,395	32,116,426

Data Source: US Census Bureau, American Community Survey. 2010-14. Source geography: Tract

#### **Poverty - Population**

Poverty is considered a key driver of health status.

Within the report area 11.74% or 8,427 individuals are living in households with income below the Federal Poverty Level (FPL). In the report area 27.32% or 19,607 individuals are living in households with income below 200% of the Federal Poverty Level (FPL). In the report area 5.54% or 3,979 individuals are living in households with income below 50% 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 in Poverty	Population in Poverty- below 200%	Population in Poverty – below 50%
Cheshire County, NH	71,764	8,427	19,607	3,979
New Hampshire	1,280,899	113,374	289,341	50,395
United States	306,226,400	47,755,608	105,773,408	21,117,986

Data Source: US Census Bureau, American Community Survey. 2010-14. Source geography: Tract

#### **Teen Births**

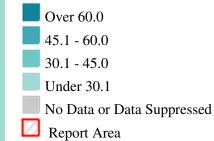
This indicator reports the rate of total births to women age of 15 - 19 per 1,000 female population age 15 - 19. This indicator is relevant because in many cases, teen parents have unique social, economic, and health support services. Additionally, high rates of teen pregnancy may indicate the prevalence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

				Teen Birth Rate (Per 1,000
Report Area	Female Population Age 15 - 19	Births to Mothers Age 15 - 19	Teen Birth Rate (Per 1,000 Population)	Population)
Cheshire County, NH	3,353	51	15.2	0 100
New Hampshire	45,852	761	16.6	Cheshire County, NH
United States	10,736,677	392,962	36.6	(15.2)
Data Source: US Departm	New Hampshire (16.6)			

Data Source: US Department of Health Human Services, Health Indicators Warehouse. Centers for Disease Control and Prevention, National Vital Statistics System. Accessed via CDC WONDER. 2006-12. Source geography: County

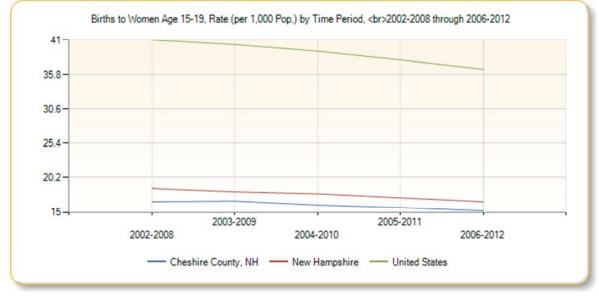


Births to Females Age 15-19, Rate (Per 1,000 Pop.) by County, NVSS 2006-12



# Births to Women Age 15-19, Rate (per 1,000 Pop.) by Time Period, 2002-2008 through 2006-2012

Report Area	2002-2008	2003-2009	2004-2010	2005-2011	2006-2012
Cheshire County, NH	16.6	16.7	16.1	15.7	15.2
New Hampshire	18.6	18.1	17.8	17.2	16.6
United States	41	40.3	39.3	38	36.6



#### **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

Within the report area, 0.31, or 0.08% of days exceeded the emission standard of 75 parts per billion (ppb). 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	Percentage of Days Exceeding Standards, Pop. Adjusted Average
Cheshire County, NH	77,117	36.76	0.31	0.09%	0.08%	0 10% Cheshire County, NH
New Hampshire	1,316,470	37.19	0.66	0.18%	0.19%	(0.08%) New Hampshire (0.19%) United States (1.24%)
United States	312,471,327	38.95	4.46	1.22%	1.24%	

Data Source: Centers for Disease Control and Prevention, National Environmental Public Health Tracking Network. 2012. Source geography: Tract

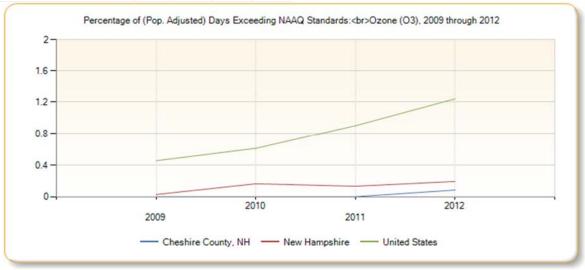


#### Ozone Levels (O3), Percentage of Days Above NAAQ Standards by Tract, NEPHTN 2012

	Over 3.0%
	1.1 - 3.0%
-	0.51 - 1.0%
	Under - 0.51%
4	No Days Above NAAQS Standards
	No Data or Data Suppressed
1	🖾 Report Area

#### Percentage of (Pop. Adjusted) Days Exceeding NAAQ Standards: Ozone (O3), 2009 through 2012

Report Area	2009	2010	2011	2012
Cheshire County, NH	0	0	0	0.08
New Hampshire	0.03	0.16	0.13	0.19
United States	0.46	0.62	0.90	1.24

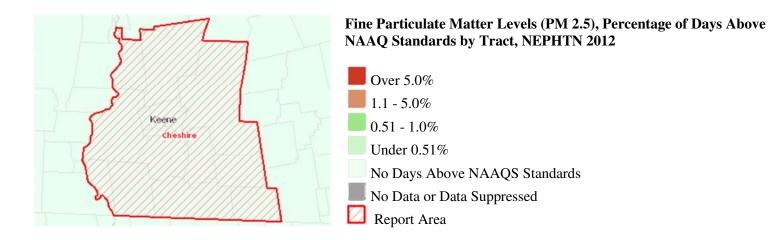


#### Air Quality - Particulate Matter 2.5

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.

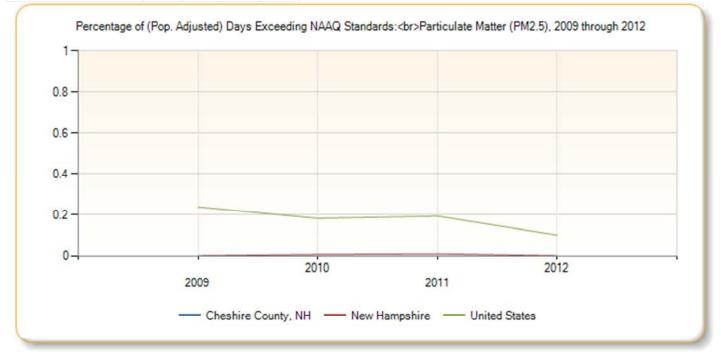
Report Area	Total Population	Average Daily Ambient Particulate Matter 2.5	Number of Days Exceeding Emissions Standards	Percentage of Days Exceeding Standards, Crude Average	Percentage of Days Exceeding Standards, Pop. Adjusted Average	Percentage of E Exceeding Stan Adjusted Avera	dards, Pop. age
Cheshire County, NH	77,117	7.28	0	0	0%	0 Cheshire Co	10% ounty, NH
New Hampshire	1,316,470	7.81	0	0	0%	(0%)	
United States	312,471,327	9.10	0.35	0.10	0.10%		

Data Source: Centers for Disease Control and Prevention, National Environmental Public Health Tracking Network. 2012. Source geography: Tract



#### Percentage of (Pop. Adjusted) Days Exceeding NAAQ Standards: Particulate Matter (PM2.5), 2009 through 2012

Report Area	2009	2010	2011	2012
Cheshire County, NH	0	0	0	0
New Hampshire	0	0.01	0.01	0
United States	0.24	0.18	0.19	0.10

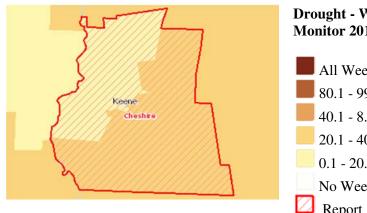


#### **<u>Climate Health - Drought Severity</u>**

This indicator reports the population-weighted percentage of weeks in drought between January 1, 2012 and December 31, 2014.

Report Area	Percentage of Weeks in D0 (Abnormally Dry)	Percentage of Weeks in D1 (Moderate Drought)	Percentage of Weeks in D2 (Severe Drought)	Percentage of Weeks in D3 (Extreme Drought)	Percentage of Weeks in D4 (Exceptional Drought)	Percentage of Weeks in Drought (Any)	0 100%
Cheshire County, NH	18.6%	5.41%	0%	0%	0%	24.01%	Cheshire County, NH (24.01%) New Hampshire
New Hampshire	22.35%	6.36%	0.04%	0%	0%	28.75%	(28.75%) United States
United States	16.96%	12.59%	8.84%	4.92%	2.54%	45.85%	(45.85%)

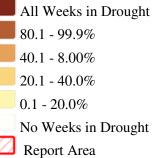
Data Source: US Drought Monitor. 2012-14. Source geography: County



#### Drought - Weeks in Drought (Any), Percent by Tract, US Drought Monitor 2012-14

Percentage of Weeks in

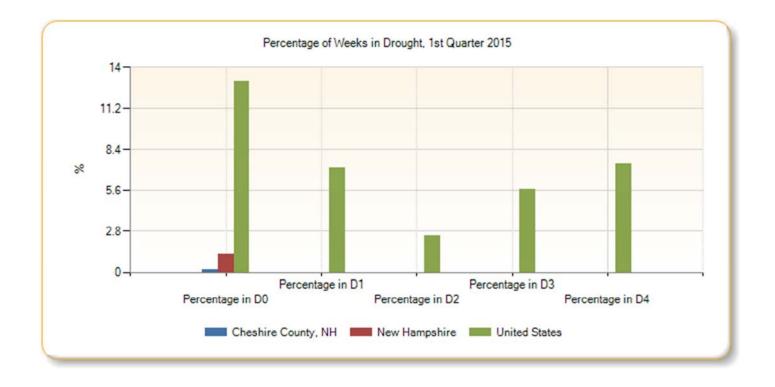
Drought (Any)



#### Percentage of Weeks in Drought, 1st Quarter 2015

Data reported is the population-weighted percentage of weeks in drought for the first quarter of 2015 (January 1, 2015 and March 31, 2015).

Report Area	Percentage of Weeks in D0 (Abnormally Dry)	Percentage of Weeks in D1 (Moderate Drought)	Percentage of Weeks in D2 (Severe Drought)	Percentage of Weeks in D3 (Extreme Drought)	Percentage of Weeks in D4 (Exceptional Drought)	Percentage of Weeks in Drought (Any)
Cheshire County, NH	0.19%	0%	0%	0%	0%	0.19%
New Hampshire	1.27%	0%	0%	0%	0%	1.27%
United States	13.03%	7.1%	2.47%	5.69%	7.42%	35.72%



#### **<u>Climate Health - High Heat Index Days</u>**

**Total Weather** 

Observations

4,380

Report Area

Cheshire

County, NH

This indicator reports the percentage of recorded weather observations with heat index values over 103 degrees Fahrenheit. The "heat index" is a single value that takes both temperature and humidity into account. The higher the heat index, the hotter the weather feels, since sweat does not readily evaporate and cool the skin. The heat index is a better measure than air temperature alone for estimating the risk to workers from environmental heat sources.

Average

Value

88.68

Heat Index

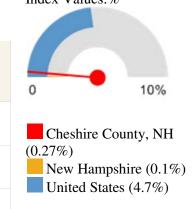
Observations with

High Heat Index

Values

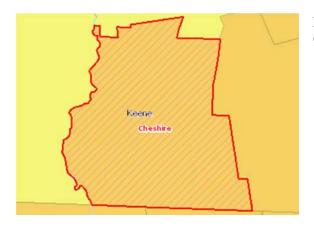
12

Percentage of Weather Observations with High Heat Index Values:%



New<br/>Hampshire61,32087.79870.1%United States19,094,61091.82897,1554.7%

Data Source: National Oceanic and Atmospheric Administration, North America Land Data Assimilation System (NLDAS) . Accessed via CDC WONDER. Additional data analysis by CARES. 2014. Source geography: County



# High Heat Index Days, Percentage of Observations Over $103^\circ F$ by County, NLDAS 2014

Observations with

Values, Percentage

High Heat Index

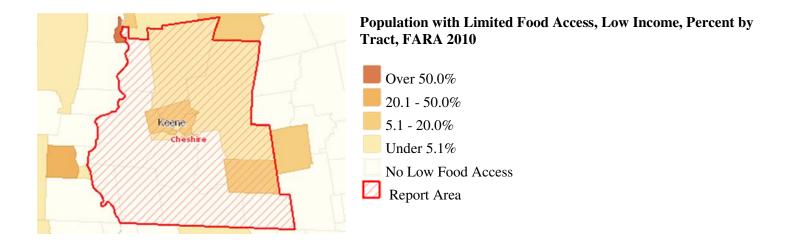
0.27%



#### Food Access - Low Income Low Food Access

				Percent Low Income Population
Report Area	Total Population	Low Income Population with Low Food Access	Percent Low Income Population with Low Food Access	with Low Food Access
Cheshire County, NH	77,117	3,094	4.01%	0 50%
New Hampshire	1,316,470	57,796	4.39%	Cheshire County, NH (4.01%)
United States	308,745,538	19,347,047	6.27%	New Hampshire (4.39%)
Data Source: US Dep	artment of Agricultur	e, Economic Research Service, USD	A - Food Access Research Atlas. 2010.	United States (6.27%)

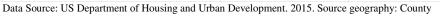
Data Source: US Department of Agriculture, Economic Research Service, USDA - Food Access Research Atlas. 2010. Source geography: Tract

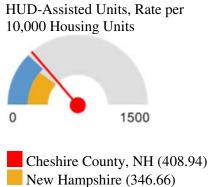


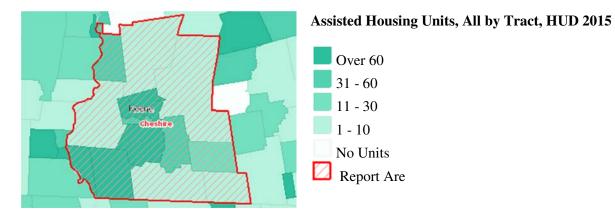
#### Housing - Assisted Housing

This indicator reports the total number of HUD-funded assisted housing units available to eligible renters as well as the unit rate (per 10,000 total households).

				HUD-Assisted Units, Rate
Report Area	Total Housing Units (2010)	Total HUD- Assisted Housing Units	HUD-Assisted Units, Rate per 10,000 Housing Units	10,000 Housing Units
Cheshire County, NH	34,773	1,422	408.94	0 1500
New Hampshire	614,754	21,311	346.66	Cheshire County, NH (4
United States	133,341,676	5,038,578	377.87	New Hampshire (346.66
Data Source: US Depa	rtment of Housing and Urba	an Development. 2015. Source	e geography: County	United States (377.87)

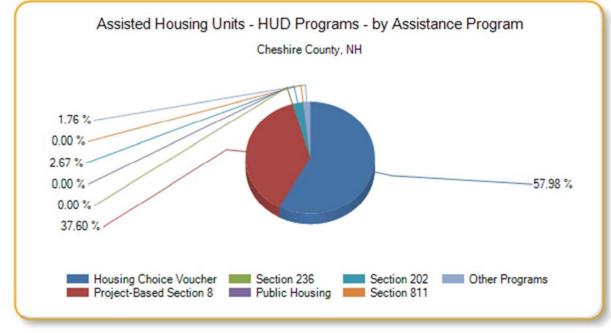






#### Assisted Housing Units - HUD Programs - by Assistance Program

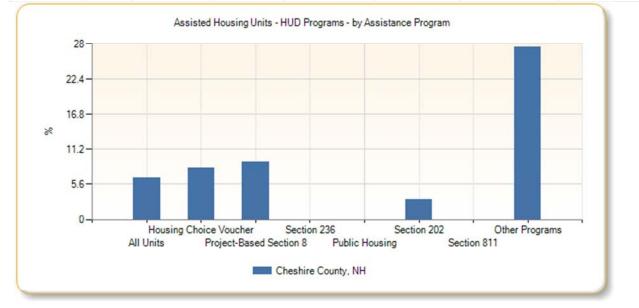
Report Area	Housing Choice Voucher Units	Project- Based Section 8 Units	Section 236 Units (Federal Housing Authority Projects)	Public Housing Authority Units	Section 202 Units (Supportive Housing for the Elderly)	Section 811 Units (Supportive Housing for Persons with Disabilities)	Other Multi- Family Program Units (RAP, SUP, Moderate Rehab, Etc.)
Cheshire County, NH	825	535	0	0	38	0	25
New Hampshire	10,070	5,821	0	4,106	1,190	33	91
United States	2,447,016	1,231,377	45,514	1,119,864	123,980	34,299	36,527



#### Assisted Housing Units - HUD Programs - by Assistance Program

This indicator reports the number of assisted units in each program type as a proportion of the total state share.

Report Area	All Units	Housing Choice Voucher Units	Project- Based Section 8 Units	Section 236 Units (Federal Housing Authority Projects)	Public Housing Authority Units	Section 202 Units (Supportive Housing for the Elderly)	Section 811 Units (Supportive Housing for Persons with Disabilities)	Other Multi- Family Program Units (RAP, SUP, Moderate Rehab, Etc.)
Cheshire County, NH	6.67%	8.19%	9.19%	no data	0%	3.19%	0%	27.47%

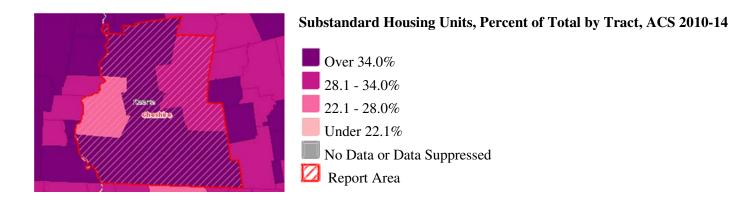


#### Housing - Substandard Housing

This indicator reports the number and percentage of owner- and renter-occupied housing units having at least one of the following conditions: 1) lacking complete plumbing facilities, 2) lacking complete kitchen facilities, 3) with 1.01 or more occupants per room, 4) selected monthly owner costs as a percentage of household income greater than 30 percent, and 5) gross rent as a percentage of household income greater than 30 percent. Selected conditions provide information in assessing the quality of the housing inventory and its occupants. This data is used to easily identify homes where the quality of living and housing can be considered substandard.

				Percent Occupied Housing Units
Report Area	Total Occupied Housing Units	Occupied Housing Units with One or More Substandard Conditions	Percent Occupied Housing Units with One or More Substandard Conditions	with One or More Substandard Conditions
Cheshire County, NH	30,659	11,726	38.25%	0 50%
New Hampshire	519,580	186,001	35.8%	Cheshire County, NH (38.25%)
United States	116,211,088	41,333,888	35.57%	New Hampshire (35.8%) United States (35.57%)

Data Source: US Census Bureau, American Community Survey. 2010-14. Source geography: Tract



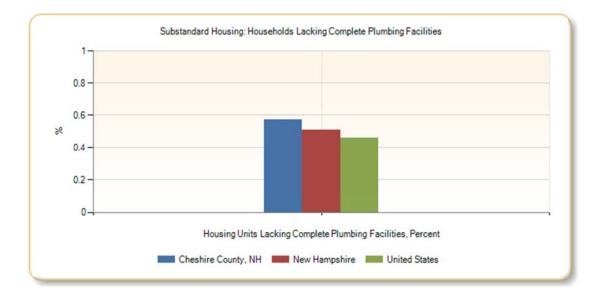
#### Substandard Housing: Number of Substandard Conditions Present

Report Area	No Conditions	One Condition	Two or Three Conditions	Four Conditions
Cheshire County, NH	61.75%	37.17%	1.08%	0%
New Hampshire	64.2%	34.7%	1.1%	0%
United States	64.43%	33.44%	2.12%	0.01%

#### Substandard Housing: Households Lacking Complete Plumbing Facilities

Complete plumbing facilities include: (a) hot and cold running water, (b) a flush toilet, and (c) a bathtub or shower. All three facilities must be located inside the house, apartment, or mobile home, but not necessarily in the same room. Housing units are classified as lacking complete plumbing facilities when any of the three facilities is not present.

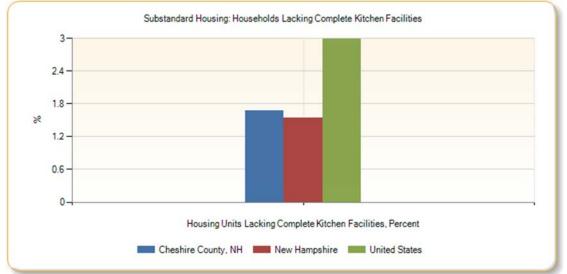
Report Area	Total Occupied Housing Units	Housing Units Lacking Complete Plumbing Facilities	Housing Units Lacking Complete Plumbing Facilities, Percent
Cheshire County, NH	30,659	175	0.57%
New Hampshire	519,580	2,664	0.51%
United States	116,211,088	537,459	0.46%



#### Substandard Housing: Households Lacking Complete Kitchen Facilities

A unit has complete kitchen facilities when it has all three of the following facilities: (a) a sink with a faucet, (b) a stove or range, and (c) a refrigerator. All kitchen facilities must be located in the house, apartment, or mobile home, but they need not be in the same room. A housing unit having only a microwave or portable heating equipment such as a hot plate or camping stove should not be considered as having complete kitchen facilities. An icebox is not considered to be a refrigerator.

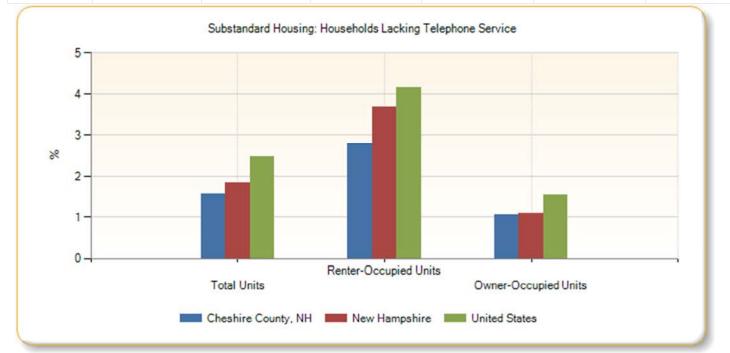
Report Area	Total Occupied Housing Units	Housing Units Lacking Complete Kitchen Facilities	Housing Units Lacking Complete Kitchen Facilities, Percent
Cheshire County, NH	34,782	580	1.67%
New Hampshire	617,286	9,491	1.54%
United States	132,741,032	3,966,466	2.99%



#### Substandard Housing: Households Lacking Telephone Service

A telephone must be in working order and service available in the house, apartment, or mobile home that allows the respondent to both make and receive calls. Households that have cell-phones (no land-line) are counted as having telephone service available. Households whose service has been discontinued for nonpayment or other reasons are not counted as having telephone service available.

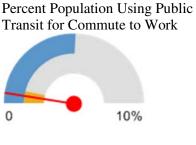
Report Area	Total Housing Units Lacking Telephone Service	Total Housing Units Lacking Telephone Service	Owner-Occupied Units Lacking Telephone Service	Owner-Occupied Units Lacking Telephone Service	Renter-Occupied Units Lacking Telephone Service	Renter-Occupied Units Lacking Telephone Service
Cheshire County, NH	481	1.57%	229	1.06%	252	2.78%
New Hampshire	9,638	1.85%	4,083	1.11%	5,555	3.69%
United States	2,875,544	2.47%	1,157,901	1.55%	1,717,643	4.15%

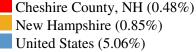


#### Use of Public Transportation

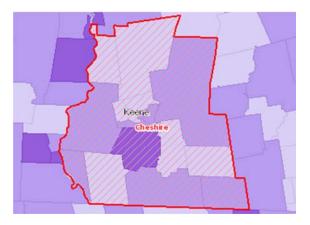
This indicator reports the percentage of population using public transportation as their primary means of commute to work. Public transportation includes buses or trolley buses, streetcars or trolley cars, subway or elevated rails, and ferryboats.

Report Area	Total Population Employed Age 16	Population Using Public Transit for Commute to Work	Percent Population Using Public Transit for Commute to Work	ŗ
Cheshire County, NH	38,710	186	0.48%	
New Hampshire	676,708	5,752	0.85%	
United States	141,337,152	7,157,671	5.06%	

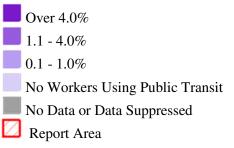




Data Source: US Census Bureau, American Community Survey. 2010-14. Source geography: Tract



# Workers Traveling to Work Using Public Transit, Percent by Tract, ACS 2010-14



#### **Clinical Care**

A lack of access to care presents barriers to good health. The supply and accessibility of facilities and physicians, the rate of un-insurance, 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 Care

This indicator reports the rate of access to certain providers per 100,000 population. Doctors classified as "primary care physicians" by the AMA include: General Family Medicine MDs and DOs, General Practice MDs and DOs, General Internal Medicine MDs and General Pediatrics MDs. Physicians age 75 and over and physicians practicing sub-specialties within the listed specialties are excluded. This indicator includes all dentists - qualified as having a doctorate in dental surgery (D.D.S.) or dental medicine (D.M.D.), who are licensed by the state to practice dentistry and who are practicing within the scope of

that license. This indicator reports the rate of the county population to the number of mental health providers including psychiatrists, psychologists, clinical social workers, and counsellors that specialize in mental health care. This indicator is relevant because a shortage of health professionals contributes to access and health status issues.

Report Area	Cheshire County, NH	New Hampshire	United States
Total Population	76,610	1,323,459	316,128,839
Primary Care	75.7	94	75.8
Dental Care	56.1	67.4	63.2
Mental Health Care	303.4	258.1	202.8

Data Source: US Department of Health Human Services, Health Resources and Services Administration, Area Health Resource File. 2013. Source geography: County

#### **Medical Screenings**

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.

	Cheshire County	New Hampshire	United States
% of female's enrolled in Medicare received Mammography in past 2 years	70.8%	70.7%	63%
% of female's who receive regular Pap Test (age adjusted)	77%	79.5%	78.5%
% of adults 50 and older had a sigmoidoscopy or colonoscopy (age adjusted)	66%	69.7%	61.3%
% of adults 18-70 never been screened for HIV	68.83%	69.02%	62.79%
% of adults aged 65 or older who received a pneumonia vaccine	70.5%	72%	67.5%
% of adults enrolled in Medicare who have had hemoglobin A1c tested in past year – Diabetes Management	89.6%	90%	84.6%
% of adults who report not taking necessary high blood pressure medication	27.9%	23.8%	21.7%
% of adults who haven't visited a dentist in the past year	25.8%	23.1%	30.2%

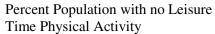
#### **Health Behaviors**

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

#### **Physical Inactivity**

Within the report area, 11,810 or 19.4% of adults aged 20 and older 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, NH	58,756	11,810	19.4%
New Hampshire	1,005,392	209,259	20.2%
United States	231,341,061	53,415,737	22.6%

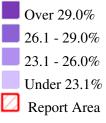




Data Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. 2012. Source geography: County

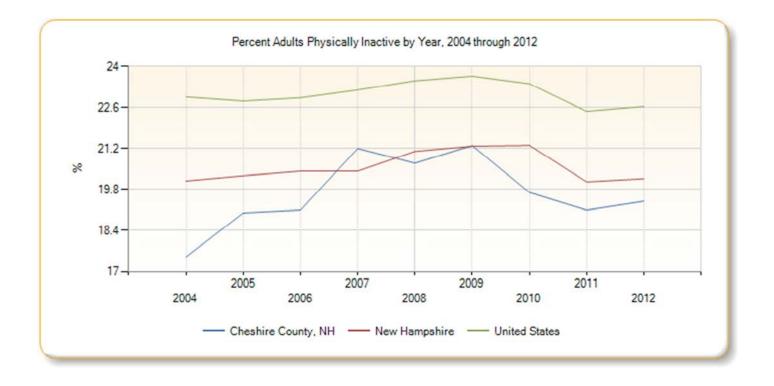


# No Leisure-Time Physical Activity, Adults Age 20 , Percent by County, CDC NCCDPHP 2012



#### Percent Adults Physically Inactive by Year, 2004 through 2012

Report Area	2004	2005	2006	2007	2008	2009	2010	2011	2012
Cheshire County, NH	17.5%	19%	19.1%	21.2%	20.7%	21.3%	19.7%	19.1%	19.4%
New Hampshire	20.09%	20.27%	20.43%	20.43%	21.1%	21.28%	21.31%	20.06%	20.17%
United States	22.96%	22.82%	22.93%	23.2%	23.51%	23.67%	23.41%	22.47%	22.64%

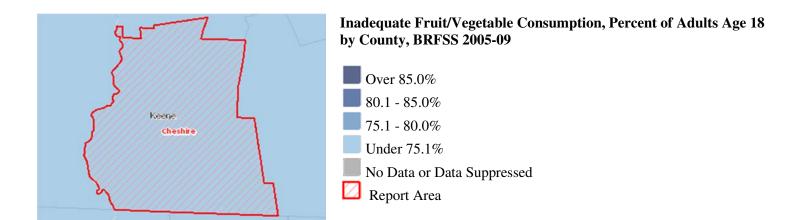


#### **Fruit/Vegetable Consumption**

In the report area an estimated 43,611, or 71.1% of adults over the age of 18 are 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 cause of significant health issues, such as obesity and diabetes.

Report Area	Total Population (Age 18)	Total Adults with Inadequate Fruit / Vegetable Consumption	Percent Adults with Inadequate Fruit / Vegetable Consumption	Percent Adults with Inadequate Fruit / Vegetable Consumption
Cheshire County, NH	61,337	43,611	71.1%	50% 100%
New Hampshire	1,017,239	727,326	71.5%	Cheshire County, NH (71.1%)
United States	227,279,010	171,972,118	75.7%	New Hampshire (71.5%)
Data Source: Centers	for Disease Control	and Prevention, Behavioral Risk Factor	Surveillance System. Accessed via the	United States (75.7%)

Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Accessed via the Health Indicators Warehouse. US Department of Health Human Services, Health Indicators Warehouse. 2005-09. Source geography: County



#### **Alcohol Consumption**

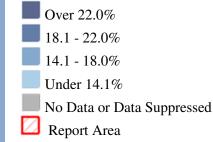
This indicator reports the percentage of adults aged 18 and older who self-report heavy alcohol consumption (defined as more than two drinks per day on average for men and one drink per day on average for women). This indicator is relevant because current behaviors are determinants of future health and 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 Adults Drinking Excessively	Estimated Adults Drinking Excessively (Crude Percentage)	Estimated Adults Drinking Excessively (Age-Adjusted Percentage)	Estimated Adults Drinking Excessively (Age-Adjusted Percentage)
Cheshire County, NH	61,896	10,151	16.4%	17.4%	0 50%
New Hampshire	1,025,011	180,402	17.6%	18.4%	Cheshire County, NH (17.4%)
United States Data Source: Center	232,556,016 s for Disease Control ar	38,248,349 nd Prevention, Behavioral Ri	16.4% isk Factor Surveillance Syste	16.9% em. Accessed via the Health	New Hampshire (18.4%) United States (16.9%)

Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Accessed via the Health Indicators Warehouse. US Department of Health Human Services, Health Indicators Warehouse. 2006-12. Source geography: County



#### Excessive Drinking, Percent of Adults Age 18 by County, BRFSS 2006-12

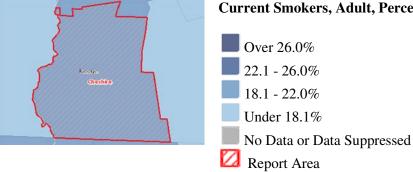


#### Tobacco Usage - Current Smokers

In the report area an estimated 10,646, or 17.2% of adults age 18 or older 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	Total Adults Regularly Smoking Cigarettes	Percent Population Smoking Cigarettes (Crude)	Percent Population Smoking Cigarettes (Age-Adjusted)	Percent Population Smoking Cigarettes (Age-Adjusted)
Cheshire County, NH	61,896	10,646	17.2%	18.1%	0 30%
New Hampshire	1,025,011	171,177	16.7%	17.1%	Cheshire County, NH (18.1%)
United States Data Source: Centers	232,556,016 s for Disease Control and	41,491,223 d Prevention, Behavioral Risk	17.8% Factor Surveillance System	18.1% n. Accessed via the Health	New Hampshire (17.1%) United States (18.1%)

Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Accessed via the Health Indicators Warehouse. US Department of Health Human Services, Health Indicators Warehouse. 2006-12. Source geography: County



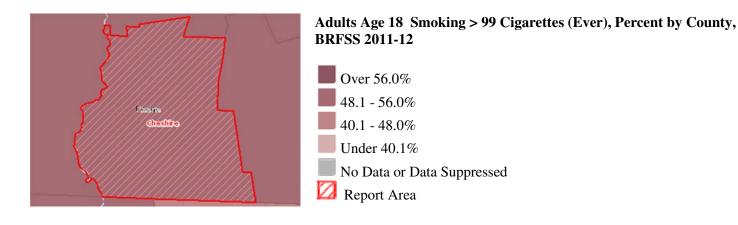
### Tobacco Usage - Former or Current Smokers

In the report area, an estimated 27,386 adults, or 50.98%, report ever smoking 100 or more cigarettes. This indicator is relevant because tobacco use is linked to leading causes of death such as cancer and cardiovascular disease.

Report Area	Survey Population (Adults Age 18)	Total Adults Ever Smoking 100 or More Cigarettes	Percent Adults Ever Smoking 100 or More Cigarettes	Percent Adults Ever Smoking 100 or More Cigarettes
Cheshire County, NH	53,717	27,386	50.98%	0 60%
New Hampshire	1,013,822	494,419	48.77%	Cheshire County, NH (50.98%) New Hampshire (48.77%)
United States	235,151,778	103,842,020	44.16%	United States (44.16%)

Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Additional data analysis by CARES. 2011-12. Source geography: County

#### Current Smokers, Adult, Percent of Adults Age 18 by County, BRFSS 2006-12

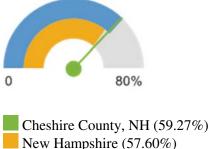


#### Tobacco Usage - Quit Attempt

An estimated 59.27% of adult smokers in the report area attempted to quit smoking for at least 1 day in the past year. This indicator is relevant because tobacco use is linked to leading causes of death such as cancer and cardiovascular disease and supporting efforts to quit smoking may increase positive health outcomes.

				10
Report Area	Survey Population (Smokers Age 18 )	Total Smokers with Quit Attempt in Past 12 Months	Percent Smokers with Quit Attempt in Past 12 Months	in
Cheshire County, NH	10,261	6,082	59.27%	0
New Hampshire	185,245	106,694	57.60%	
United States	45,526,654	27,323,073	60.02%	

Percent Smokers with Quit Attempt in Past 12 Months



United States (60.02%)

Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Additional data analysis by CARES. 2011-12. Source geography: County



# Smokers Who Quit / Attempted to Quit in Past 12 Months, Percent by County, BRFSS 2011-12

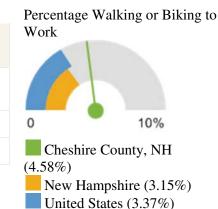


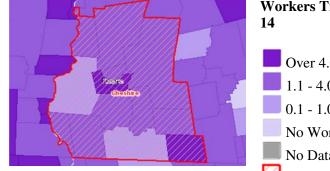
#### Walking or Biking to Work

This indicator reports the percentage of the population that commutes to work by either walking or riding a bicycle.

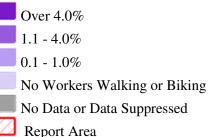
Report Area	Population Age 16	Population Walking or Biking to Work	Percentage Walking or Biking to Work
Cheshire County, NH	38,710	1,774	4.58%
New Hampshire	676,708	21,283	3.15%
United States	141,337,152	4,764,868	3.37%

Data Source: US Census Bureau, American Community Survey. 2010-14. Source geography: Tract





### Workers Traveling to Work by Walking/Biking, Percent by Tract, ACS 2010-



#### **Health Outcomes**

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

#### **Prevalence of Various Diagnoses**

This indicator is relevant because asthma is a prevalent problem in the U.S. that is often exacerbated by poor environmental conditions.

	Cheshire County	New Hampshire	United States
Asthma	11.2%	14.7%	13.4%
Depression (Medicare Population)	17.9%	18.1%	15.4%
Diabetes	7.4%	8.09%	9.11%
Heart Disease	4.4%	3.9%	4.4%
High Blood Pressure	27.6%	26.2%	28.16%
High Cholesterol	34.39%	39.15%	38.52%

Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Additional data analysis by CARES. 2011-12. Source geography: County

#### **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)	Infant Mortality Rate (Per 1,000 Births)
Cheshire County, NH	3,765	13	3.4	
New Hampshire	68,170	334	4.9	0 10
United States	20,913,535	136,369	6.5	
HP 2020 Target			<= 6.0	Cheshire County, NH (3.4)

Data Source: Centers for Disease Control and Prevention, National Vital Statistics System. Accessed via CDC WONDER. Centers for Disease Control and Prevention, Wide-Ranging Online Data for Epidemiologic Research. 2006-10. Source geography: County



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Over 10.0 8.1 - 10.0 5.1 - 8.0 Chashira Under 5.1 No Data or Data Suppressed Report Area

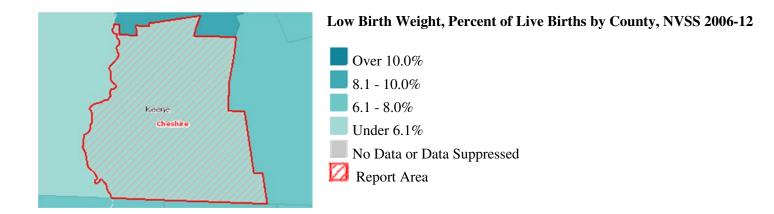
#### Infant Mortality, Rate (Per 1,000 Live Births) by County, AHRF 2006-10

#### Low Birth Weight

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

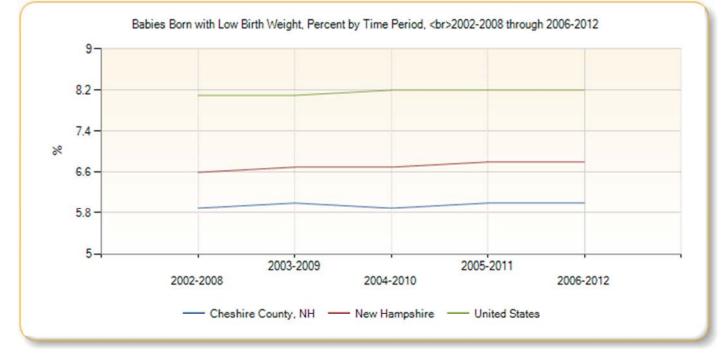
				Percent Low Birth Weight
Report Area	Total Live Births	Low Weight Births (Under 2500g)	Low Weight Births, Percent of Total	Births
Cheshire County, NH	5,222	313	6%	0 15%
New Hampshire	98,987	6,731	6.8%	
United States	29,300,495	2,402,641	8.2%	Cheshire County, NH
HP 2020 Target			<= 7.8%	(6%) New Hampshire (6.8%)
1			ehouse. Centers for Disease Control and 06-12 Source geography: County	United States (8.2%)

Data Source: US Department of Health Human Services, Health Indicators Warehouse. Centers for Disease Control and Prevention, National Vital Statistics System. Accessed via CDC WONDER. 2006-12. Source geography: County



# Babies Born with Low Birth Weight, Percent by Time Period, 2002-2008 through 2006-2012

Report Area	2002-2008	2003-2009	2004-2010	2005-2011	2006-2012
Cheshire County, NH	5.9%	6%	5.9%	6%	6%
New Hampshire	6.6%	6.7%	6.7%	6.8%	6.8%
United States	8.1%	8.1%	8.2%	8.2%	8.2%



#### **Mortality**

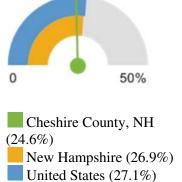
Report Area	Cheshire County	New Hampshire	United States
Cancer	156	2,614	577,313
Heart Disease	146	2,330	600,899
Homicide	0	19	16,421
Lung Disease	44	651	142,214
Motor Vehicle Accident	10	117	34,139
Premature Death	280	4,364	1,119,700
Stroke	30	477	128,955
Suicide	13	189	39,308

#### **Obesity**

24.6% of adults aged 20 and older self-report that they have a Body Mass Index (BMI) greater than 30.0 (obese) in the report area. Excess weight may indicate an unhealthy lifestyle and puts individuals at risk for further health issues.

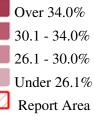
	Total Population	Adults with BMI >	Percent Adults with	Percent Adults with BMI > 30.0 (Obese)
Report Area	Age 20	30.0 (Obese)	BMI > 30.0 (Obese)	
Cheshire County, NH	58,620	14,655	24.6%	
New Hampshire	1,005,521	274,364	26.9%	0 50%
United States	231,417,834	63,336,403	27.1%	
Data Source: Centers for	Disease Control and Preve	ntion, National Center for Chroni	c Disease Prevention and Health	Cheshire County, NH

Promotion. 2012. Source geography: County



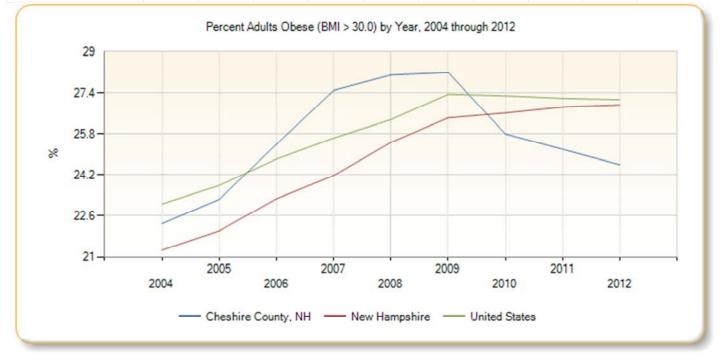


Obese (BMI >= 30), Adults Age 20, Percent by County, CDC NCCDPHP 2012



#### Percent Adults Obese (BMI > 30.0) by Year, 2004 through 2012

Report Area	2004	2005	2006	2007	2008	2009	2010	2011	2012
Cheshire County, NH	22.3%	23.25%	25.4%	27.5%	28.1%	28.2%	25.8%	25.2%	24.6%
New Hampshire	21.27%	22.02%	23.27%	24.18%	25.47%	26.43%	26.62%	26.85%	26.93%
United States	23.07%	23.79%	24.82%	25.64%	26.36%	27.35%	27.29%	27.19%	27.14%



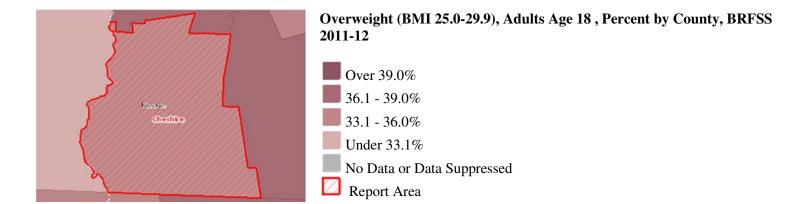
#### **Overweight**

34.7% of adults aged 18 and older self-report that they have a Body Mass Index (BMI) between 25.0 and 30.0 (overweight) in the report area. Excess weight may indicate an unhealthy lifestyle and puts individuals at rist for further health issues.

				Percent Adults Overweight
Report Area	Survey Population (Adults Age 18)	Total Adults Overweight	Percent Adults Overweight	
Cheshire County, NH	52,684	18,295	34.7%	0 50%
New Hampshire	972,414	340,974	35.1%	Cheshire County, NH
United States	224,991,207	80,499,532	35.8%	(34.7%)
Data Source: Centers for Dise	ease Control and Prevention	n, Behavioral Risk Factor Surveill	ance System. Additional data analysis	New Hampshire (35.1%)

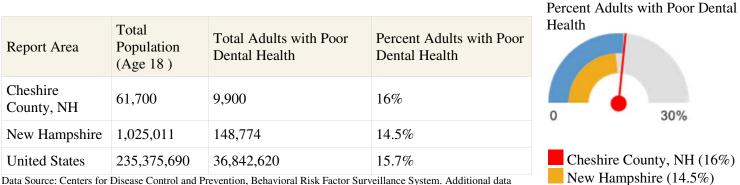
Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Additional data analysis by CARES. 2011-12. Source geography: County

United States (35.8%)



#### 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.

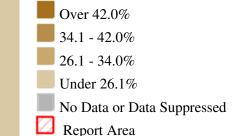


analysis by CARES. 2006-10. Source geography: County

United States (15.7%)



### Adults Age 18 Without Dental Exam in Past 12 Months, Percent by County, BRFSS 2006-10



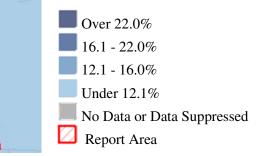
#### **Poor General Health**

Within the report area 13.9% of adults age 18 and older self-report having poor or fair health in response to the question "Would you say that in general your health is excellent, very good, good, fair, or poor?". This indicator is relevant because it is a measure of general poor health status.

					Percent Adults with Poor or
Report Area	Total Population Age 18	Estimated Population with Poor or Fair Health	Crude Percentage	Age-Adjusted Percentage	Fair Health (Age-Adjusted)
Cheshire County, NH	61,896	8,604	13.9%	13.2%	
New Hampshire	1,025,011	121,976	11.9%	11.4%	0 25%
United States	232,556,016	37,766,703	16.2%	15.7%	Cheshire County, NH
Data Source: Contera	for Disease Control and P	revention Rehavioral Rick Factor	Surveillance System	Accessed via the Health	(13.2%)

Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Accessed via the Health Indicators Warehouse. US Department of Health Human Services, Health Indicators Warehouse. 2006-12. Source geography: County



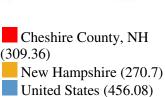


#### **STI - Chlamydia Incidence**

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	Total Chlamydia Infections	Chlamydia Infection Rate (Per 100,000 Pop.)	Chlamydia Infection Rate (Per 100,000 Pop.)
Cheshire County, NH	76,610	237	309.36	
New Hampshire	1,323,236	3,582	270.7	0 700
United States	316,128,839	1,441,789	456.08	

Data Source: US Department of Health Human Services, Health Indicators Warehouse. Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. 2014. Source geography: County

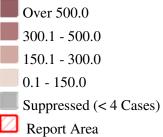


New Hampshire (11.4%)

United States (15.7%)

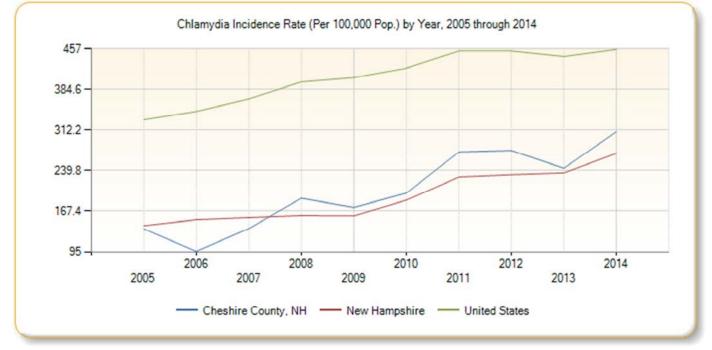


# Chlamydia, Infection Rate per 100,000 Population by County, NCHHSTP 2014



#### Chlamydia Incidence Rate (Per 100,000 Pop.) by Year, 2005 through 2014

Report Area	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Cheshire County, NH	135.86	95.62	136.38	190.49	173.92	199.7	273.02	275.62	244.09	309.36
New Hampshire	141.58	152.31	156.1	159.65	158.98	186.99	228.36	232.44	235.7	270.7
United States	330.3	345.4	367.7	398	405.7	422.8	453.4	453.4	443.5	456.1

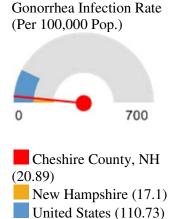


#### **STI - Gonorrhea Incidence**

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.

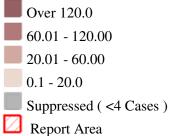
Report Area	Total Population	Total Gonorrhea Infections	Gonorrhea Infection Rate (Per 100,000 Pop.)
Cheshire County, NH	76,610	16	20.89
New Hampshire	1,321,637	226	17.1
United States	316,128,839	350,062	110.73

Data Source: US Department of Health Human Services, Health Indicators Warehouse. Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. 2014. Source geography: County



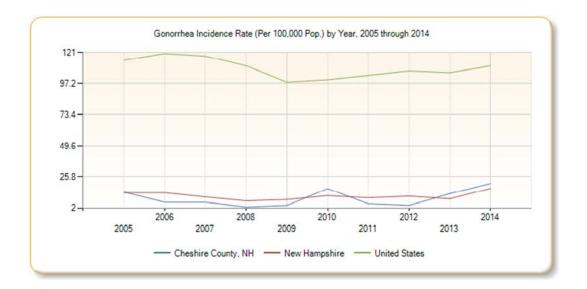


#### Gonorrhea, Infection Rate per 100,000 Population by County, NCHHSTP 2014



#### Gonorrhea Incidence Rate (Per 100,000 Pop.) by Year, 2005 through 2014

Report Area	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Cheshire County, NH	14.23	6.46	6.43	2.59	3.89	16.86	5.2	3.9	13.05	20.89
New Hampshire	13.6	13.73	10.48	7.57	8.55	11.47	9.86	11.12	9.1	17.1
United States	114.9	120.1	118.1	110.7	98.2	100	103.3	106.7	105.3	110.7

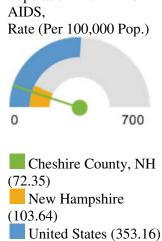


#### **STI - HIV Prevalence**

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

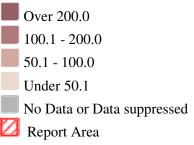
				Population with HIV /
Report Area	Population Age 13	Population with HIV / AIDS	Population with HIV / AIDS, Rate (Per 100,000 Pop.)	AIDS, Rate (Per 100,000 Pop.)
Cheshire County, NH	66,343	48	72.35	
New Hampshire	1,136,640	1,178	103.64	0 700
United States	263,765,822	931,526	353.16	
Data Source: US Departmer	nt of Health Human Servic	es. Health Indicators Warehouse, Ce	enters for Disease Control and	Cheshire County, NH

Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. 2013. Source geography: County



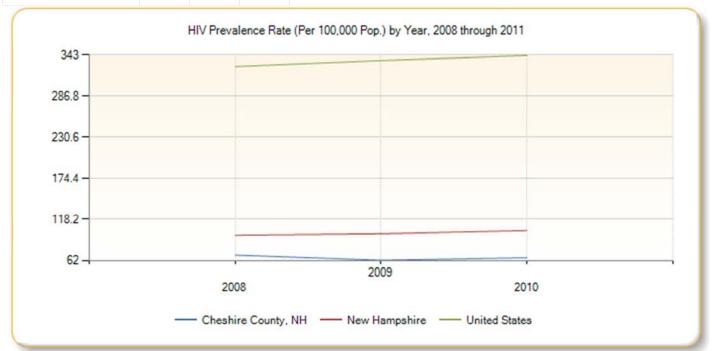


#### HIV Prevalence, Rate (Per 100,000 Pop.) by County, NCHHSTP 2013



#### HIV Prevalence Rate (Per 100,000 Pop.) by Year, 2008 through 2011

Report Area	2008	2009	2010
Cheshire County, NH	69.1	62.1	65.5
New Hampshire	96.86	98.73	102.87
United States	327.37	335.38	342.17



Please see <u>Cheshire County Report footnotes</u> for information about the data background, analysis methodologies and other related notes. Report prepared by <u>Community Commons</u>, June 20, 2016.