North Country Public Health Region
Community Health Improvement Plan
2015-2017

Prepared by

NORTH COUNTRY HEALTH CONSORTIUM

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Executive Summary

New Hampshire is regarded as one of the healthiest states in the nation. However, regional disparities exist within the State, including in the northernmost region of the state, inclusive of Coos and Northern Grafton County, referred to as the North Country. This rural population suffers geographic and economic barriers to accessing health care as well as higher rates of mortality and morbidity that the state and national averages.

In the rural North Country of New Hampshire, residents disproportionately have higher rates of chronic disease or disability than the State as a whole. North Country health behavior data for youth and adults reveal a population that is more likely to use tobacco and engage in other risky health behaviors that contribute to poor health outcomes.

North Country residents are less likely to have insurance or to have seen a doctor in the last 30 days. Family and individual incomes in the North Country are, on average, lower than in NH and the US. The travel distance from most North Country communities to a health care provider is 25 miles or more. People are less able to afford the health care they need. Shortages of nurses, doctors, dentists and other health professionals in the North Country compound these problems.

Overall, people in the North Country are more likely to be sick and less likely to have the care they need to treat or manage their illness.

It is clear from the table below that the North Country population is older, less educated, and earns substantially less than other residents in the State and the Nation. The data below, depicting rates substantially higher than New Hampshire and, in many cases, the United States, are known risk factors for having a population at greater risk for premature death and with a higher prevalence of chronic diseases.

18+ Population Demographics and Socioeconomic Indicators – Geographic Comparison[1]

Variable	North Country	New Hampshire	United States
18+ population	82%	79%	77%
65+ population	20%	14%	15%
75+ population	9%	6%	6%
Median age	47 years	42 years	37 years
Did not finish high school	15%	9%	13%
High school graduate	41%	29%	30%
Some college of technical school	26%	31%	31%
College or technical	18%	30%	24%

[1] 2010- 2013 Behavioral Risk Factor Surveillance Survey, CDC BRFFS and NH Health WRQS web site, Institute for Health Policy and Practice, University of New Hampshire. Data for US, US Census web site, American Community Survey, 2013.

Variable	North Country	New Hampshire	United States
school graduate			
Currently employed	48%	61%	58%
Out of work 1 year or more	2%	3%	4%
Current unemployment rate	9%	7%	6%
Income less than $15,000 per year	15%	7%	12%
Income $15,000-$25,000	22%	13%	18%
Income $25,000-$35,000	18%	10%	12%
Income $50,000+	30%	53%	44%
Median household income	$41,985	$64,916	$53,046
Families at or below 100% of FPL in last 12 months	13%	9%	11%
Population 18-64 at or below 100% FPL	12%	8%	13%
Population 65+ at or below FPL	10%	6%	9%
No health insurance	15%	11%	15%

Collaborative initiatives that address health disparities in the rural North Country have the most impact and make the best use of community and organizational resources. Public health, healthcare and social service agencies rely on population health data for planning effective strategies and interventions to address identified health priorities. The North Country of New Hampshire has a total population that is comparably low than the rest of the State - approximately 19 persons per square mile- but disparately experiences a lack of services, economic instability, geographic isolation, generational poverty, and access to needed health and dental care. Additionally, timely data can aid policy makers to make informed decisions about how best to distribute public health resources in New Hampshire, especially those areas with the highest need.

The North Country Community Health Improvement Plan (CHIP) serves as a guide for the improvement of health indicators in the North Country region. Outlined within the CHIP are six priorities specific to the North Country's health needs:

- Obesity
- Oral Health
- Public Health Emergency Preparedness
- Substance Misuse

- Heart Disease and Stroke
- Mental Health

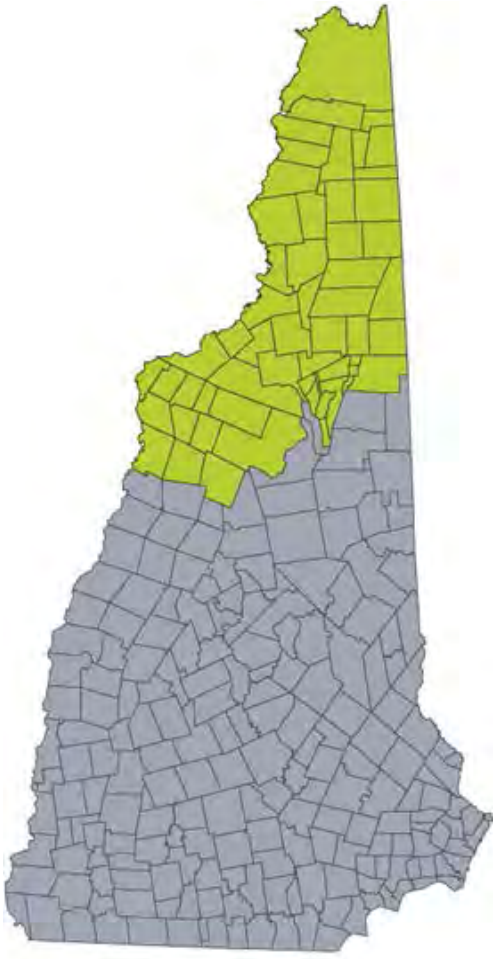
These six priorities are based on several data collection methods including surveys, community health needs assessments, and County Health Ranking data, in which Coos County ranked 10 out of 10 in health outcomes when compared with New Hampshire's nine other counties during the assessments conducted in 2011, 2012, 2013 and 2014. All available data make the case for the North Country Region to have a well established plan to the identified health issues and to establish methods to bring about the desired change. This health improvement plan will be implemented over the next three years (2015-2017) and includes specific goals, objectives and strategies listed for each of the six priority areas.

I. Introduction: North Country Regional Public Health Network

The North Country Public Health Network is one of the 13 regional public health networks in New Hampshire. The North Country Health Consortium (NCHC) is the host agency that contracts with the NH Department of Health and Human Services to convene, coordinate, and facilitate public health partners in the region. These partners collectively are the Public Health Network. NCHC provides leadership to the regional Public Health Advisory Council (PHAC). Additionally, NCHC is responsible for leadership and coordination of Public Health Emergency Preparedness and Substance Misuse Prevention services and activities. The North Country PHAC has overseen the development of this Community Health Improvement Plan.

Towns Served by the North Country Public Health Region:			
Pittsburg	Carroll	Dixville	Bethlehem
Clarksville	Easton	Stewartstown	Lisbon
Colebrook	Errol	Columbia	Lancaster
Stratford	Cambridge	Odell	Jefferson
Stark	Berlin	Lancaster	Milan
Northumberland	Gorham	Kilkenny	Haverhill
Whitefield	Bath	Dalton	Mansfield
Littleton	Millsfield	Sugar Hill	Randolph
Lyman	Monroe	Dummer	Benton
Shelburne	Landaff		

II. Community Profile



The North Country Public Health region includes 37 municipalities and serves approximately 86,000 people living in the community. The geographic area includes Coos and Northern Grafton Counties, which is referred to as The North Country.

The North Country service area includes Coos County and 14 towns in Northern Grafton County. This area is bordered on the west by northern Vermont, on the east by northern Maine, and on the north by Quebec, Canada. The North Country is noted for its spectacular vistas and mountainous terrain lending immense beauty to the region but simultaneously creating economic and geographic barriers. More than 37 percent of the North Country lies within the boundaries of the White Mountain National Forest. Over 50 percent of the total area is forested and, for all practical purposes, is unpopulated. In most of the North Country, the population density is between 15 and 49 persons per square mile. However in some portions, especially within the White Mountains, the density is 0 to 15 persons per square mile. The entire area is classified as rural and is predominantly non-agricultural.

Little public transportation exists for those traveling into and out of the area or between communities. The same winter weather that attracts skiers, snowboarders and others looking for winter activities makes the roads treacherous to navigate for long periods each year. Moreover, as a consequence of the region's topography, average travel distances from most towns to available sources of health care available for low income families are 25 miles or more. From many towns, one-way trips of 45 minutes or more (in good weather) are likely.

The North Country population suffers higher morbidity and mortality than the rest of New Hampshire, and, in some instances the rest of the country. The table below reflects this disparity for selected health status indicators. It is clear from this table that the North Country population is at greater risk for premature death and suffers from chronic diseases at rates substantially higher than the state, and, in many cases, the United States.

Regional, State and National Comparison of Health Status Indicators[2]

Indicator	*North Country Region*	*NH State Rate/Percent*	*National Benchmark Rate/Percent*
Premature Mortality (Under 65 Years)[3]	234.7	180.1	[4]
Percent Elderly (65 & older)	19.4%	12.0%	12.4%
Diabetes Prevalence	12.7%	8.8%	8.7%
Overweight Prevalence	28.9%	34.9%	35.8%
Obesity Prevalence	34.3%	26.6%	27.8%
Asthma Prevalence	15.6%	11.4%	9.1%
Hypertension Prevalence	36.7%	30.6%	30.8%
Heart Attack Prevalence	7.4%	4.1%	4.4%
High Cholesterol Prevalence	43.6%	38.7%	38.3%
Currently smoking	17%	19.6%	21.2%
Heavy alcohol use risk factor	4.4%	7.8%	6.6%
Always wear seat belt	73.3%	81.1%	
General Health Status			
Fair	15.3%	9.9%	12.4%
Poor	4.9%	3.8%	3.8%

[2] Data in this table were obtained from the 2011 Behavioral Risk Factor Surveillance Survey at the NH Health WRQS web site and the US Center For Disease Control web site.

[3] Per 100,000 population

[4] No data available

III. The Vision and Mission of the North Country Health Consortium, the North Country Public Health Network, and the North Country Regional Prevention Network

The North Country Health Consortium Mission:

…To lead innovative collaboration to improve the health status of northern New Hampshire

The North Country Health Consortium Vision:

- *Solving common problems and facilitating regional solutions*
- *Creating and facilitating services and programs to improve population health status*
- *Enhancing the North Country health professions workforce by providing health professional training, continuation and management services to encourage the sustainability of the health care infrastructure*
- *Increasing capacity for local public health essential services*
- *Increasing access to health care for underserved and uninsured residents of Northern New Hampshire.*

The North Country Public Health Network Vision*:*

To improve the health status indicators of the population of Northern New Hampshire through a Public Health approach to emergency preparedness and wellness.

The North Country Regional Prevention Network Vision:

Working together to create healthier communities for our children and families

IV. Community Health Improvement Planning

In the Fall of 2013, the North Country Health Consortium (NCHC) formed the North Country Public Health Advisory Council (PHAC). The PHAC includes all members of the North Country Health Consortium (NCHC) Board of Directors as well as representation from local businesses, education, and government officials. The PHAC functions in an advisory capacity to the NCHC.

INTRODUCTION TO COMMUNITY HEALTH IMPROVEMENT PLANNING

The purpose of the North Country PHAC is to perform the following functions for the North Country Region:

1. Identify local community and public health needs and priorities;
2. Encourage the development and coordination of appropriate community and public health services;
3. Coordinate and sponsor various forums on public health issues
4. Advise the North Country Public Health Region in all major policy matters concerning the nature, scope, and extent of community and public health concerns and responses

In support of these functions, the Public Health Advisory Council:

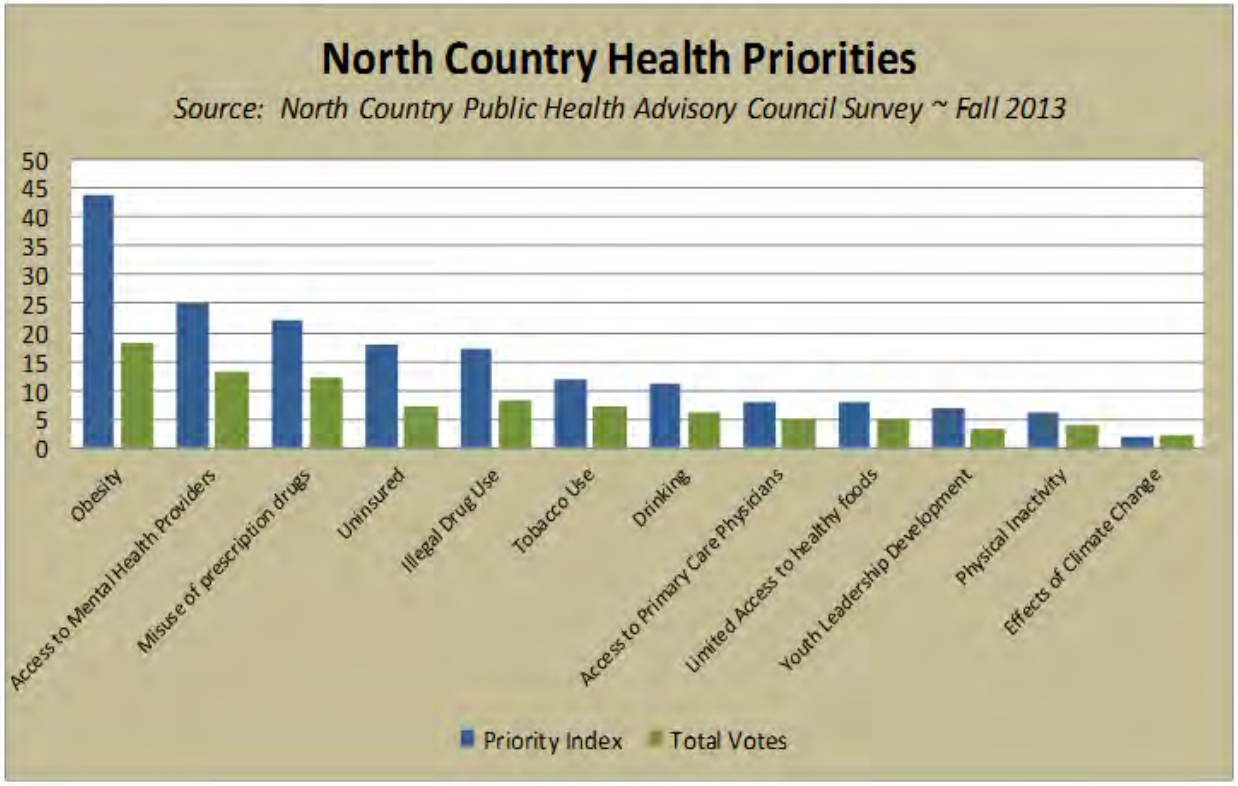
1. Provides input to periodic community health needs assessments completed for the purpose of identifying health-related trends, emerging threats, and community concerns;
2. Reviews and comments on regional health profiles based on needs assessments and provides input on regional health priorities and plans for improvement
3. Reviews the work and recommendations of committees addressing public health matters, including public health emergency planning and substance misuse prevention activities
4. Makes recommendations for developing and improving the delivery of public health programs and policies
5. Facilitates, when appropriate, the review of funding opportunities for federal and state funding.

During 2015, the PHAC in the North Country region engaged community partners in a community health improvement planning process. The purpose of this process was to engage community partners to:

- Review regional community health needs assessments and surveys
- Review relevant regional data
- Provide information to community members
- Build partnerships and coalitions
- Identify emerging issues
- Prioritize five (ultimately six were identified) regional public health priorities
- Develop a Community Health Improvement Plan

COMMUNITY HEALTH ASSESSMENT (CHA)

In the Fall of 2013, NC PHAC partners and community members completed a survey which contributed to the identification of the top health priorities in Northern New Hampshire. The results of this survey are highlighted in the graph below.



PLANNING STEPS

Between January 2015 and September 2015, the North Country Health Consortium Board of Directors/North Country PHAC met monthly. During the same period of time, the North Country Health Improvement Workgroup, the North Country Regional Coordinating Committee, and various substance misuse prevention groups met regularly. Throughout the past nine months each of these groups reviewed and discussed appropriate priority areas, often providing information and recommendations for relevant strategies and activities. In addition, regional data was reviewed and utilized to identify gaps in data and services. Overall goals, objectives, and strategic approaches were presented to the PHAC for review and comment. The CHIP has been designed as a fluid document that will be usable and actionable, with the ability to be flexible as needs of the region change.

Regional Hospital Community Health Needs Assessments were reviewed for commonalities and overall themes. The six community priority areas are highlighted below with the corresponding hospital ranking of importance.

Hospital (assessment date)	Obesity Ranking	Oral Care	Substance Misuse	Emergency Preparedness	Cardio. Health/Stroke	Mental Health
Cottage Hospital (10/01/2013)	8	7	5	N/A	6	N/A
Littleton Regional Hospital (7/23/2013)	1	N/A	4/5	N/A	8	6
Upper Connecticut Valley Hospital (1/30/2014)	5	N/A	N/A	N/A	2	N/A
Weeks Medical Center (9/24/2014)	2	N/A	5	N/A	N/A	8
Androscoggin Valley Hospital (1/2013)	1	N/A	2/3	N/A	N/A	4

Source: Compiled from Hospital Community Health Needs Assessments (Androscoggin Valley Hospital, Upper Connecticut Valley Hospital, Littleton Regional Healthcare, Weeks Medical Center, Cottage Hospital)

V. Community Priority Areas

Based on data analysis, community surveys, and input from community partners, the North Country Health Consortium Board of Directors and the North Country Public Health Advisory Council has identified six priority areas:

1. Obesity
2. Oral Health
3. Public Health Emergency Preparedness
4. Misuse of Alcohol and Drugs
5. Heart Disease/Stroke
6. Mental Health

The remainder of this plan provides more in-depth information about each of these six public health priority areas. Through community-based processes, local partners and the North Country Public Health Advisory Committee have identified goals, objectives and a strategic approach for each priority area.

Priority Area 1: Obesity

Background

Obesity is the single greatest contributor to chronic disease, and inactivity and poor nutrition are the greatest predictors of children and adults becoming overweight. Obesity increases the risk of chronic health conditions such as heart disease, type 2 diabetes, cancer, hypertension, stroke, liver disease, sleep apnea, respiratory problems and osteoarthritis.

In addition to the lowering quality of life, these chronic diseases significantly impact the cost of health care and produce a loss of economic productivity. A national analysis of costs associated with treating preventable obesity-related diseases found combined medical costs associated with treating these diseases is estimated to increase by between $48 billion and $66 billion per year in the United States over the next 18 years. The loss of economic activity could represent a loss of $390 – $580 billion annually by 2030.[5]

According to the National Center for Health Statistics, adult obesity rates have been rising over time. More than two-thirds (68.7%) of American adults are either overweight or obese. In the past 30 years, adult obesity rates have more than doubled – from 15% in 1967-1980 to 35.7% in 2009-2010. The average America adult is more than 24 pounds heavier today than 1960.

The Centers for Disease Control and Prevention (CDC) states that between 2000 and 2010, childhood obesity rates remained statistically the same with the exception of the prevalence of obesity among boys 2-19 years old which increased from 14% in 1999-2000 to 18.6% in 2009-2010. Rates among 2-19 year olds more than tripled from 1980. According to the National Health and Nutrition Examination Survey, 16.9% of children ages 2-19 are obese, and 31.7% are overweight or obese. Evidence shows that children who are overweight or obese at 3 to 5 years old are five times as likely to be overweight or obese are adults.

In August 2013, the CDC reported a 43% drop in the obesity rate among 2-5 year old children over the past decade, the first broad decline in an epidemic that often leads to lifelong struggles with weight and higher risks for cancer, heart disease and stroke. Additionally, about 8% of 2-5 year olds were considered obese in 2012, down from 14% in 2004. New Hampshire was one of 19 states to have childhood obesity rates decline. In 2008, 15.5% of children ages 2-5 were obese, and in 2011 the survey indicated a rate of 14.6% in NH.

According to a 2012 study by the Robert Wood Johnson Foundation, if obesity rates in New Hampshire continue to rise on their current trajectory, 57.7% of the state's population will have a BMI of 30 or above by 2030. In the North Country that number will be 79.3%. In other words, at the current rate

[5] Wang YC et al. Health and Economic Burden of the Projected Obesity Trends in the USA and UK. *The Lancet*, 378, 2011.

increase in BMI, in just eighteen years, 4 out of every 5 people in the North Country of New Hampshire will be obese.

Why Obesity is a Priority in the North Country

The North Country population, comprised of Coos and Northern Grafton Counties, is approximately 86,000. Of this total, 14,372 are school-age.[6] Between 30 percent and 50 percent of the families residing in this area have children eligible for the U.S. Department of Agriculture's Free and Reduced Lunch program.[7] Children whose families have yearly incomes of up 185 percent of the Federal Poverty Level (FPL), which in 2014 is $44,123 for a family of four, are eligible for this program.[8] In 2013 the median family income for all families residing in the North Country was $49,112,[9] which is within $4,500 of 185 percent FPL.

Economic indicators of obesity from the New Hampshire 2013-2014 Third Grade Healthy Smiles-Healthy Growth Survey indicated that children attending schools with a higher proportion (>50.0%) of students participating in the Free and Reduced Lunch program experienced an increased burden of obesity compared with students in schools with <25% of students participating. In Coos County specifically, 21.6% of students ages 7-10 were obese and 15.6% were overweight compared to statewide rates of 12.6% and 15.4% respectively. More third graders in Coos County (nearly 22%) were obese than in any other New Hampshire region in 2013-14.

Data from the Behavioral Risk Factor Surveillance Survey for the North Country indicate that close to 73% of Coos County adult residents are overweight or obese, compared to 62.8% of New Hampshire residents.[10] Moreover, 35% of North Country residents have a Body Mass Index (BMI) greater than 30 and are therefore obese. This percentage is significantly higher than the state percentage of 26.3, which is comparable to the general obesity level in the United States. Contributing factors to this recognized determinant of poor health are the facts that 28.4% of North Country residents do not engage in any leisure-time physical activity and 77.6% eat less than five servings of fruits and vegetables per day. This compares with New Hampshire percentages of 21.2 and 72.1 respectively.

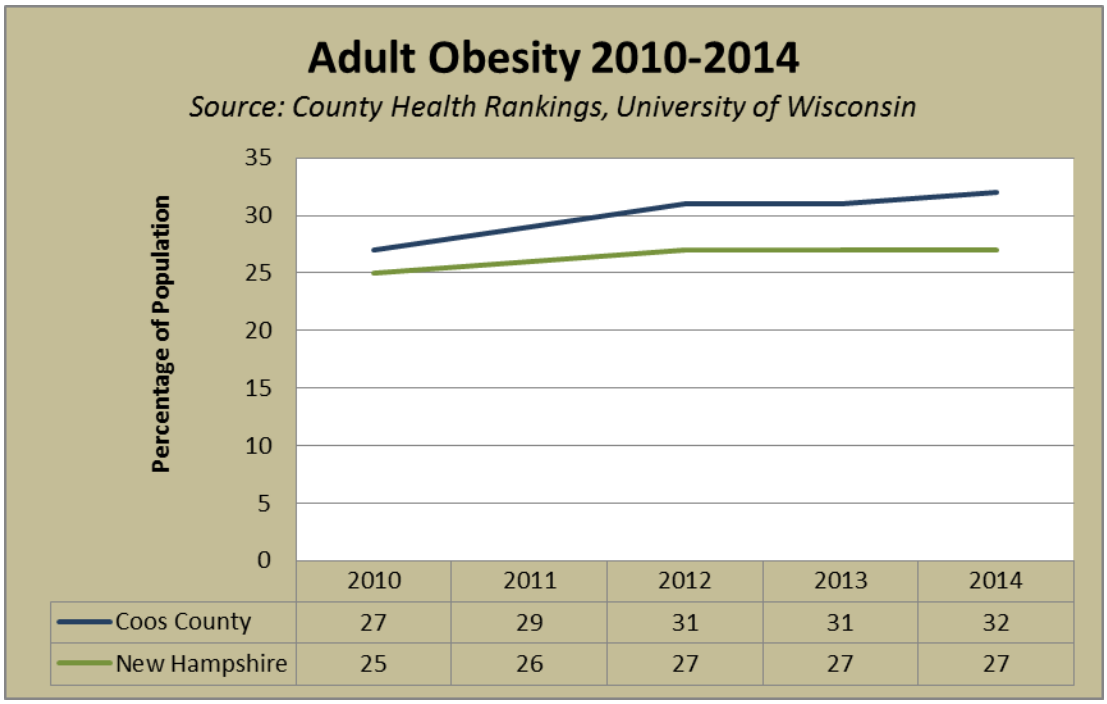
[6] US Census Bureau, American Fact Finder Web site.

[7] NH Department of Education, Division of Program Support, Bureau of Data Management

[8] Families USA Web site.

[9] US Census Bureau, American Community Survey, 2013.

[10] 2011 NH Behavioral Risk Factor Surveillance Survey



STATE AND REGIONAL ASSETS

The North Country Health Consortium supports communities in implementing healthy eating and physical activity strategies in their regions. In collaboration with community partners, an annual Health Improvement Summit is held to address various issues related to health and wellness. The Health Improvement Working Group, a sub-committee of the North Country PHAC, meets quarterly to provide educational programs, discussion forums about community resources, and planning for the annual Summit.

The North Country Health Consortium (NCHC) collaborates with regional health care providers to implement quality improvement strategies to address overweight and obesity among their patient populations. In partnership with the Community Health Improvement Working Group, health care clinicians, and consumers, NCHC created and implemented the Ways To Wellness program which includes a personal journal, educational website, and access to local, regional, and national resources.

Partners Working on this Priority

- Northern New Hampshire Area Health Education Center, Rural Health, Quality Improvement
- Healthy Eating Active Living (HEAL), Berlin
- Northern Human Services
- Regional Federally Qualified Health Centers:
    - Coos County Family Health Services
    - Ammonoosuc Community Health Services

  - Indian Stream Health Center
- UNH Cooperative Extension
- Grafton County Senior Citizens Council
- Adaptive Sports Partners of the North Country
- Littleton Food Co-Op
- Regional Critical Access Hospitals
  - Cottage Hospital
  - Littleton Regional Healthcare
  - Androscoggin Valley Hospital
  - Upper Connecticut Valley Hospital

Priority Area 1: Obesity

GOAL 1	**Reduce prevalence of obesity in Northern New Hampshire**
OBJECTIVES	• Reduce the proportion of North Country adults considered obese from 31.8% (2012) to 30.2% by 2016 and 28.6% by 2020 (2012 BRFSS) • Reduce the proportion of North Country children considered obese from 21.6% (2014) to 20.5% by 2016 and 19.5% by 2020 (2014 3rd grade survey for Coos County)

STRATEGIC APPROACH

- Provide resources and education on healthy eating, physical activity, and stress management to the general population
- Engage food establishments to participate in community education initiatives
- Support health care clinicians to screen for obesity by measuring body mass index and deliver appropriate care according to clinical practice guidelines for obesity
- Incorporate the Ways To Wellness Program into North Country health care systems
- Increase use of electronic health records to document interventions for overweight and obese patients
- Provide continuing education opportunities for health care professionals

Priority Area 2: Oral Health

Background

Oral health is often taken for granted, but it is an essential part of our everyday lives. Good oral health enhances our ability to speak, smile, smell, taste, touch, chew, swallow and convey our feelings and emotions through facial expressions. However, oral diseases, which range from cavities to oral cancer, cause pain and disability for millions of Americans each year.[11] *Oral health is essential to overall general health and well-being, but as Healthy People 2020 national oral health objectives are being finalized, there is a growing recognition that many challenges identified 20 years ago have not been adequately addressed. Dental caries (tooth decay) is the single most common chronic childhood disease; and there are striking disparities in oral diseases among various disadvantaged and underserved population subgroups.*[12]

To maintain optimal oral health, the American Dental Association recommends regular dental visits at intervals determined by a dentist.[13] Good oral health is just as important for children as it is for adults. Tooth decay is the most common childhood disease and is largely preventable through a combination of community, professional and individual strategies. Early tooth loss caused by tooth decay can result in failure to thrive in children. Dental problems can lead to impaired speech development, absence from and inability to concentrate in school, and reduced self-esteem. Children with untreated oral health issues will become adults with oral health issues which, in turn, will affect their overall health status for their entire lives.

New Hampshire ranks 5th lowest in the nation for caries experience among 43 states that conduct third grade oral health surveys, with the US median at 57.2%. However, a significant increase in ambulatory care sensitive emergency department (ED) visits was reported from 2001-2007. The most notable rate of increase was for non-traumatic dental conditions that increased significantly from 11,067 (age-adjusted rate 89.5 per 10,000 population) in 2001 to 16,238 (age adjusted rate 129.3 per 10,000 population) in 2007. ED charges associated with dental conditions, including professional services, increased from 1.8 million dollars in 2001 to 5.9 million dollars in 2007; totaling 26.9 million dollars over the 2001–2007 study period.[14]

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[11] Oral Health: *Preventing Cavities, Gum Disease, Tooth Loss, and Oral Cancers*, National Center for Chronic Disease Prevention and Health Promotion, Division of Oral Health, Centers for Disease Control, 2011.

[12] Healthy People 2020 web site. US Department of Health and Human Services, Office of Health Promotion and Disease Prevention. 2014

[13] American Dental Association. American Dental Association Statement on Regular Dental Visits. Available from: http://www.ada.org/8700.aspx. Accessed on 01/03/2014.

[14] Utilization of Hospital Emergency Departments for Non-Traumatic Dental Care in New Hampshire, 2001-2008. J Community Health

According to the NH Health WISDOM dashboard, although State level data indicates an overall decrease in the experience of caries and untreated caries among third grade students, disparities remain when stratifying the data by county. Students in six counties experience a disproportionately high rate of caries, with Coos County having the highest rate at 56% (compared to 35% statewide). Students in three counties experience a disproportionately high rate of untreated caries, with Strafford and Coos Counties having the highest rate at 14% (compared to 8% statewide).

Individual oral health status is affected by socio-economic factors such as educational attainment and income. According to the unpublished 2015 New Hampshire Oral Health Plan, in 2012, 73.1% of adults in New Hampshire had visited a dentist or dental clinic during the past year, a decrease from the 2010 figure of 76.7%. The percentage of adults who had a dental visit was lowest among those making less than $15,000 per year, at 39.8%. By contrast, among those who made $50,000 or more per year, 85.9% had visited a dentist or dental clinic. Similarly, among those who had not earned a high school diploma, 46.0% had visited a dentist or dental clinic, compared to 85.9% among those who had earned a college degree. Moreover, those whose income was less than $15,000 experienced tooth loss at a rate of 35.2% compared to 3.4% whose income was >$50,000. Additional regional disparities related to geographic location within the state became evident with Coos County experiencing a tooth loss rate nearly double that of the State rate.

According to the New Hampshire Department of Health and Human Services' 2014 Oral Health Survey of New Hampshire Older Adults, oral diseases disproportionately affect older adults more than any other age group and affect their nutritional status, social functioning and overall well-being. Moreover, oral inflammatory diseases have been linked to cardiovascular diseases, type 2 diabetes, respiratory diseases, and cancer. Older adults face barriers to regular dental care due to lack of dental insurance (Medicare does not cover preventive, diagnostic or restorative care), financial constraints, absence of perceived need and transportation issues. Part of this report was based on a survey of senior citizens participating in programs at New Hampshire senior centers. The survey consisted of evaluations performed by public health dental hygienists of the oral health status of participants and a self-administered questionnaire. In addition, each center was classified as urban or rural on the basis of zip codes. Prevalence of oral health issues was substantially higher for those participants living in rural areas. Surveys were also conducted for seniors participating in the Commodity Supplemental Food Program (CSFP). Eligibility for this program is set at 130 percent of the Federal Poverty Level. These participants have substantial oral health issues.

Why Oral Health is a Priority in the North Country

The North Country encompasses the top 1/3 of the state and is the most rural region of New Hampshire. Residents face unique geographical and socioeconomic barriers that make accessing dental services difficult. NH Oral Health Data found that "individuals who have lower incomes or less education are substantially more likely report having dental problems and less likely to report having had dental care".

The North Country region has a lower rate of educational attainment; a lower median household income; lacks public transportation; and has a higher proportion of elderly residents than the rest of the State. The North Country is a federally designated dental health provider shortage area, in which dental health workforce shortages reduce the availability and access to needed dental care.

Caries experience among third grade students

Percent of 3rd graders with caries experience; Both genders; 2014

County

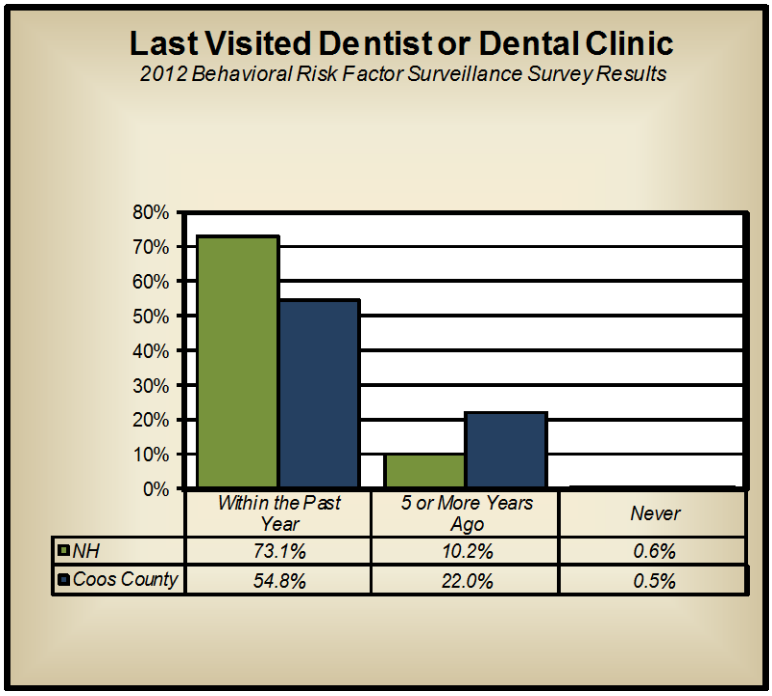
County	Percent of 3rd graders with caries experience	Lower confidnece interval	Upper confidnece interval	Percent of 3rd graders with caries experience in NH	NH lower confidnece interval	NH upper confidnece interval	Significance
Coos	56.0	56.0	56.0	35.4	31.0	39.7	Significantly higher
Belknap	46.7	46.7	46.7	35.4	31.0	39.7	Significantly higher
Strafford	46.6	41.3	51.9	35.4	31.0	39.7	Significantly higher
Sullivan	45.5	45.5	45.5	35.4	31.0	39.7	Significantly higher
Grafton	43.1	43.1	43.1	35.4	31.0	39.7	Significantly higher
Cheshire	42.4	42.4	42.4	35.4	31.0	39.7	Significantly higher
Merrimack	39.4	32.8	46.0	35.4	31.0	39.7	No difference
Hillsborough	36.1	25.1	47.1	35.4	31.0	39.7	No difference
Carroll	35.9	35.9	35.9	35.4	31.0	39.7	No difference
Rockingham	21.3	13.2	29.3	35.4	31.0	39.7	Significantly lower

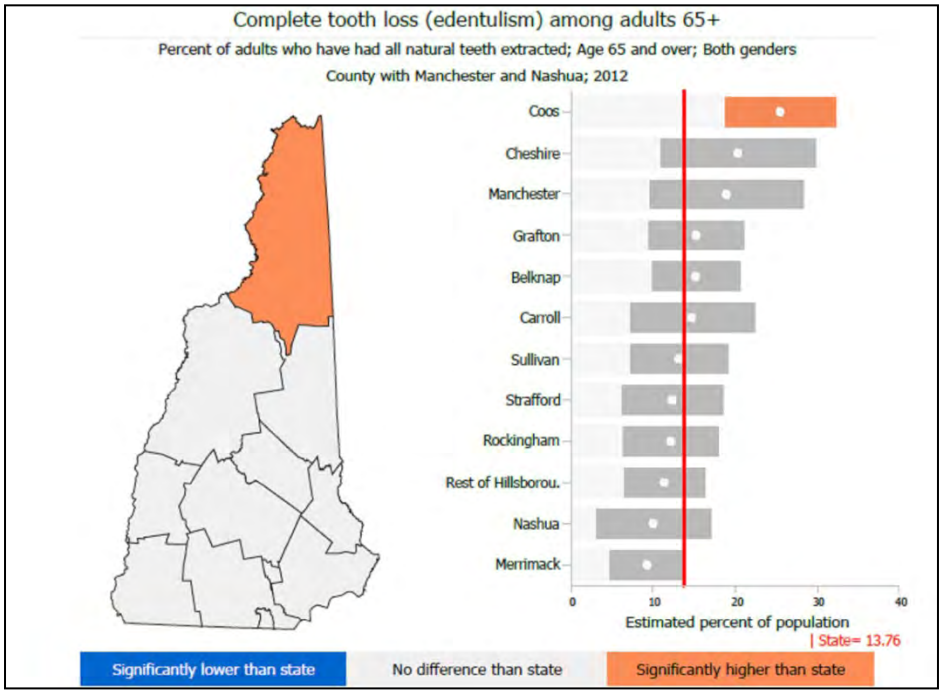
Over thirty-five percent of New Hampshire third grade students experienced tooth decay and 8.2% of students had untreated decay. As seen in the tables below, among Counties, Coos (14.0%) and Strafford (14.2%) counties had the highest prevalence of untreated decay. Coos County had the highest prevalence (56.0%) of decay experience. Third grade students in the Coos (53.5%) and Merrimack (52.3%) Counties had the fewest dental sealants.

2013-2014 Third Grade Healthy Smiles-Healthy Growth Survey

Variable	Coos County	Grafton County	New Hampshire
Decay Experience	56%	43.1%	35.4%
Untreated Decay	14%	11.7%	8.2%
Treated Decay	50.6%	37.9%	31.8%
Dental Sealants	53.5%	61.6%	60.9%
Need Treatment	12.5%	10.9%	8.1%
Need Urgent Treatment	0.5%	0.8%	1.0%

Significantly fewer Coos County residents than NH residents report having seen a dental health provider in the last 12 months. According to the 2012 BRFSS, 54.8% of Coos County residents had seen a dentist within the last year compared to 73.1% for the State as a whole. This disparity increases among residents over the age of 50. In fact, 27.9% of Coos County residents ages 65 years or older have reported complete tooth loss. This is the largest percentage of tooth loss in comparison to all other NH counties.[15] This suggests a lack of available preventative care.





[15] 2010 NH Behavioral Risk Factor Surveillance Survey

STATE AND REGIONAL ASSETS

- NH Medicaid
- NH Oral Health Coalition
- Local WIC programs
- New Hampshire Dental Society
- Healthy New Hampshire Foundation
- DentaQuest Foundation
- DPHS funded community and school-based oral health programs
- Local Dental Providers
- Federally Qualified Health Center Dental/Oral Health Centers
- North Country Health Consortium/Molar Express

Partners Working on this Priority

- North Country Health Consortium/Molar Express
- Northern New Hampshire Area Health Education Center
- Regional Federally Qualified Health Centers:
    - Coos County Family Health Services
    - Ammonoosuc Community Health Services
    - Indian Stream Health Center
- Grafton County Senior Citizens Council
- Regional Critical Access Hospitals
    - Cottage Hospital
    - Littleton Regional Healthcare

Priority Area 2: Oral Health

GOAL 1	**All North Country residents have equitable access to appropriate and affordable oral health care**
OBJECTIVES	• Reduce the percent of third grade students with dental caries experience in their primary and permanent teeth from 43.6% (2009) to 41.4% by 2015 and 39.2% by 2020 • By 2017, increase the number of adults in the region who have received oral health care within the past year to 70% • Reduce the number of oral health related emergency department visits in the region by 50%
STRATEGIC APPROACH • Outreach and oral health care services to communities and schools through the Molar Express program. • Collaborate with healthcare system partners and increase care coordination and referral.	
GOAL 2	**Promote and implement timely interventions that prevent and control dental disease and injury across the lifespan of North Country residents**
OBJECTIVES	• By 2017, increase the number of medical practices in the region providing fluoride varnish applications. • Increase educational opportunities for parents, school personnel, and students on the importance of oral and facial injury prevention by 50%
STRATEGIC APPROACH • Promote the integration of oral health into primary care through interprofessional education and collaboration. • Educational campaign that includes resources, services and guidelines for appropriate oral health care.	
GOAL 3	**Strengthen the integration of oral health into overall health**
OBJECTIVES	• Assess the current level of integration of oral health into overall health, by 2016 • By 2017, Increase awareness of the importance of oral health as a significant factor in overall health
STRATEGIC APPROACH • Survey community stakeholders to determine level of integration of oral health into overall health • Provide trainings to health care professionals using evidence-based oral health curriculum • Incorporate oral health resources into the NCHC Primary Care Extension Center • Promote the integration of oral health into wellness initiatives at employers, organizations, schools and community groups	

Priority Area 3: Public Health Emergency Preparedness

Increase the capacity of individuals, families and regional partners to plan for, respond to, and recover from an emergency.

Background

Public health threats are all around us. They may be natural, accidental, or even intentional. Being prepared to prevent, respond to, and rapidly recover from a public health threat is critical for protecting the public's health. Public health emergencies and natural disasters with public health, healthcare, and behavioral health system impact do not discriminate, so the effect is across the life span. New Hampshire's primary preparedness strategy is to identify opportunities to align currently existing resources in order to meet operational needs. New Hampshire is well positioned to coordinate all statewide activities in order to support the State's response during an emergency. Collaborative work among agencies is crucial and already exists in the coordination of response among the Department of Health and Human Services' Emergency Services Unit (ESU) and Division of Public Health Services (DPHS); the Department of Safety's Division of Homeland Security and Emergency Management (HSEM); and regional and local partners. Emergency Preparedness activities are broad and span across many disciplines statewide.

Key goals for emergency preparedness in the NH SHIP include: engagement of key stakeholders; information sharing to promote and maintain situational awareness during an event; and timely and effective response, specifically related to dispensing and distribution of countermeasures. Every emergency response is unique and each event varies in scope, impact, resource demand and required expertise. (DHHS SHIP pg. 75)

Why is Emergency Preparedness important in the North Country

Health security relies on actions by individuals and communities as well as governments. An essential component of being prepared is to assure that community partners are aware of their potential risks and have public health emergency response plans that address the needs of their communities (National Health Security Strategy). For DPHS, planning, training and coordinating a systematic response during a public health emergency is crucial. DPHS staff completed trainings from Federal Emergency Management Agency (FEMA) for the national incident management system (NIMS) incident command system (ICS).

Empowered communities have contingency plans, communications plans, and provisions in place to shelter, sustain, and provide medical and other care for the entire community, including at-risk individuals; they also have community members who are actively engaged in local decision-making. Empowered individuals have the information and skills they need to protect their health and safety. A foundation of effective routine health promotion and access to health services is needed to support

healthy and resilient individuals and communities and thereby support national health security. NH is structured into 13 Public Health Networks (PHN) in order to build community capacity to respond during emergencies. The PHN is comprised of community-based partnerships involving broad public health interests, including local health departments and health officers, health care providers, social service agencies, schools, fire, police, emergency medical services, media and advocacy groups, behavioral health, and leaders in the business, government,(DHHS SHIP pg. 75) and faith communities, working together to address complex public health issues. A key capability that is needed during an emergency is the capacity to request, collect and analyze health data to maintain situational awareness of the health threats in order to improve the effectiveness of the response. (National Health Security Strategy) DPHS performs surveillance during weather related events, such as looking at carbon monoxide exposures and people who visit the emergency department. This data is tracked using a surveillance system called Automated Hospital Emergency Department Data (AHEDD). Reports are built using real time syndromic surveillance data. Additionally, data are analyzed and reports are provided during extreme heat and cold conditions to describe potential or actual health impact. For example, with extreme heat conditions, data is analyzed for the number of people who visit an emergency department with dehydration. This data provides information to stakeholders so they can assess resources in a community, such as if a shelter or a cooling center needs to be opened.

As with any disaster, close consideration should be given to the populations most at risk. Most disasters, and other types of emergencies, whether biological, chemical or radiological do not discriminate but, rather, affect the entire population. However there are some events, such as emerging infectious diseases or a pandemic that may affect certain populations disproportionately (such as how H1N1 affected young adults/children). Improving readiness to respond promptly and ensuring responders are trained and their safety and health protected will enhance capacity to better respond to any event whether natural disaster or large-scale outbreak.
(NH SHIP)

STATE AND REGIONAL ASSETS

- 12 Other NH Public Health Networks
- Five Regional Hospitals and Supporting Health Centers
- NH Emergency Management and Emergency Services Unit
- Local Emergency Management Directors
- North Country Public Health Regional Coordinating Committee
- Northern NH Medical Reserve Corps
- Disaster Behavioral Response Team

Partners Working on this Priority

- Littleton Regional Healthcare
- Cottage Hospital
- Androscoggin Valley Hospital
- Upper Connecticut Valley Hospital
- Grafton County
- North Country Municipalities
- Law Enforcement

Priority Area 3: Public Health Emergency Preparedness

GOAL 1	Increase individual and family preparedness and response through education, awareness, and training activities
OBJECTIVES	Work with regional partners (e.g., worksites, faith-based groups, community-based groups, public schools, colleges, home health care) to improve the capacity of individuals and families to prepare for, respond to, and recover from an emergency through education, awareness, and training activities.

STRATEGIC APPROACH

- Offer family emergency preparedness trainings throughout the region
- Work with municipalities to investigate the feasibility (eg. logistics, costs) of sharing preparedness information with North Country residents
- Work with school personnel to assess the best way to communicate with school personnel and families
- Work with the organizers of annual health, wellness, and safety fairs in the region to participate in presentations, demonstrations, and displays of preparedness information and volunteer opportunities
- Display preparedness information in community locations

Priority Area 4: Misuse of Drugs and Alcohol

Background

According to the 2012-2013 National Survey on Drug Use and Health (NSDUH), the most recent NSDUH available, 49% of NH's 18-25 year olds reported binge drinking in the past 30 days. This rate is the third highest in the country and much higher than the national average of 38.7%. For pain reliever abuse, 10.5% of NH young adults reported this behavior in the past year, and 10% of young adults reported illicit drug use other than marijuana. This last prevalence indicator is important for several reasons. First, it is the most accessible data point relative to young adult opioid use because the illicit drug use indicator includes opioids. Secondly, NH's rate of 10% for 18-25 year olds reporting regular illicit drug use is *the highest in the country* and is 1.5 percentage points higher than the next closest state (Rhode Island, 8.6%) and higher than the national average of 6.9%. Furthermore, there were five times greater the number of heroin-related deaths in NH in 2014 than there were in 2008. Heroin-related Emergency Department (ED) visits and administrations of naloxone to prevent death from an overdose have also multiplied exponentially in the last two years. Consequently, alcohol and drug misuse cost NH more than $1.84 billion in 2012 in lost productivity and earnings, increased expenditures for healthcare, and public safety costs.[16] In addition to economic costs, substance misuse impacts and is influenced by poor mental health. From 2007 to 2011, suicide among those aged 10-24 was the second leading cause of death for NH compared to the third leading cause nationally.[17]

In NH, youth have rates of substance use significantly higher than the national average and the other northeast (NE) states as demonstrated in the table below.

NH Substance Use Disorders (SUD) Higher than National Average				
18-25 year olds	**NH**	**Northeast**	**US**	**Significant differences**
Binge Drinking	49.0%	43%	38.7%	NH Higher than NE and US
Marijuana Use	27.8%	21.0%	18.9%	NH Higher than NE and US
Nonmedical use of pain relievers	10.5%	8.6%	9.5%	No sig difference
Dependent/abusing alcohol or illicit drugs	23.7%	19.1%	18.1%	NH Higher than NE and US

[16] Source: http://www.new-futures.org/sites/default/files/Summary%20Report_0.pdf

[17] Source: http://www.dhhs.nh.gov/dphs/suicide/documents/annual-report-2013.pdf

Youth and families across NH describe having little access to services and supports for SUDs in NH. In fact, according to the National Survey on Drug Use and Health, NH ranks worst among the states in percentage of 18-25 year olds "needing but not receiving treatment" for alcohol or illicit drug use and is also among the bottom states for 12-17 year olds as shown the table below. Additionally, among 12-20 year olds, NH ranks highest and above the overall national average in both underage alcohol use in past month (NH: 35.72%, US: 23.52%) and underage binge alcohol use in past month (NH: 23.21%, US: 14.75%).

NH Highest in Needing Not Receiving Treatment				
	NH		**US**	
	12-17	**18-25**	**12-17**	**18-25**
Illicit Drug use past month	11.77% 7th highest	29.84% 4th highest	9.18%	21.44%
Illicit Drug use not including marijuana past month	3.0% 35th highest	10.04% Highest	3.36%	6.88%
Illicit Drug Dependence or Abuse in the Past Year	4.38% 6th highest	9.39%	3.76%	7.59%
Dependence or abuse of illicit drugs or alcohol in past year	6.82% 3rd highest	23.66% Highest	5.66%	18.09%
Needing But Not Receiving Treatment for Illicit Drug Use in the Past Year	**3.9%** **10th highest**	**8.61%** **Highest**	**3.49%**	**6.94%**
Needing But Not Receiving Treatment for Alcohol Use in the Past Year	**4.32%** **2nd highest**	**18.66%** **Highest**	**2.96%**	**13.34%**
Binge Alcohol past month	8.06% 3rd highest	48.96% 3rd highest	6.73%	38.7%

To further understand the challenges that youth face in NH, it is important to also discuss co-occurring mental illness and SUD. One in five 18-25 year olds in this country had mental illness and 6.4 percent of

young adults had co-occurring mental illness and SUD in the past year[18]. Nationally, among older adolescents who had co-occurring substance use and major depressive disorders only 5.5 percent received both treatment for depression and substance use treatment[19].

In NH, about 11,000 adolescents (10.6% of all adolescents) per year in 2009–2013[20] had at least one Major Depressive Episode within the year prior to being surveyed. The percentage of adolescents reporting improved functioning from treatment received through the public mental health system was lower in New Hampshire than in the nation as a whole. Further, in the US, young adults have higher rates of co-occurring mental illness and SUD than adults aged 26 or older.[21]

Finally, and tragically, in 2013, the NH Medical Examiner reported 161 opioid-related deaths in the state, including 24 deaths among individuals aged 19-25 and from 2007-2011. Suicide among those aged 10-24 was the second leading cause of death for NH compared to the third leading cause nationally.[22] NH must create an accessible system for screening, assessment, treatment and recovery services and supports for adolescents and transition age youth with substance use disorders and/or co-occurring substance use and mental health disorders.

Why Drug and Alcohol Misuse Prevention is a Priority in the North Country

The geographic and demographic profiles of the region are vital to consider during the planning process because these factors play a significant role in addressing the Region's challenges. Throughout the strategic planning process the Region heard from youth that two of the primary factors causing their peers to engage in substance abuse were a lack of alternative activities for youth and the ease of evading the authorities by using back roads or holding parties in the woods. Both of these factors arise from living in a large and sparsely populated region. In a similar way, the income demographics are important because many participants in the root cause analysis focus groups cited economics as a driving factor in the distribution and ease of access to all of the substances targeted by this plan. This is especially true in the case of the diversion of prescription drugs, but also was cited as a reason for the dealing of marijuana and the provision of alcohol to underage youth.

Alcohol

The data as well as community feedback obtained in interviews and focus groups indicated that youth alcohol use has been and continues to be a problem in the North Country Region (in 2013 among high school aged youth, 38.2% drank alcohol in the last 30 days, while 34% used in the last 30 days in New

[18] http://archive.samhsa.gov/data/2k14/CBHSQ173/sr173-mh-challenges-young-adults-2014.htm
[19] http://archive.samhsa.gov/data/2k14/CBHSQ173/sr173-mh-challenges-young-adults-2014.htm
[20] http://www.samhsa.gov/data/sites/default/files/State_BHBarometers_2014_2/BHBarometer-NH.pdf
[21] http://archive.samhsa.gov/data/2k14/CBHSQ173/sr173-mh-challenges-young-adults-2014.htm
[22] http://www.dhhs.nh.gov/dphs/suicide/documents/annual-report-2013.pdf

Hampshire). Contributing to this was an identification of an environment of **acceptance of misuse** that is present in the North Country, with "alcohol as a rite of passage" for youth being brought up by several focus groups in root cause analysis activities. Youth alcohol use was, therefore, chosen as a priority substance to address.

Marijuana

Feedback from the community obtained through focus groups identified youth marijuana as another priority substance of concern for its residents. Given the recently passed legislation to decriminalize marijuana and approve it for medical use, along with a decreased perception of risk of harm of marijuana use among youth, the strategic planning participants identified marijuana as another substance to address. The data from the Youth Risk Behavior Survey bore this out, with an increase in the past 30 day use rate of marijuana from 19.8% in 2009 to 23% in 2013. Even more concerning was that the rate at which students **perceived great risk** in regular marijuana use had fallen from 50.4% in 2009 to 23.4% in 2013.

Non-medical prescription drugs and other opioids

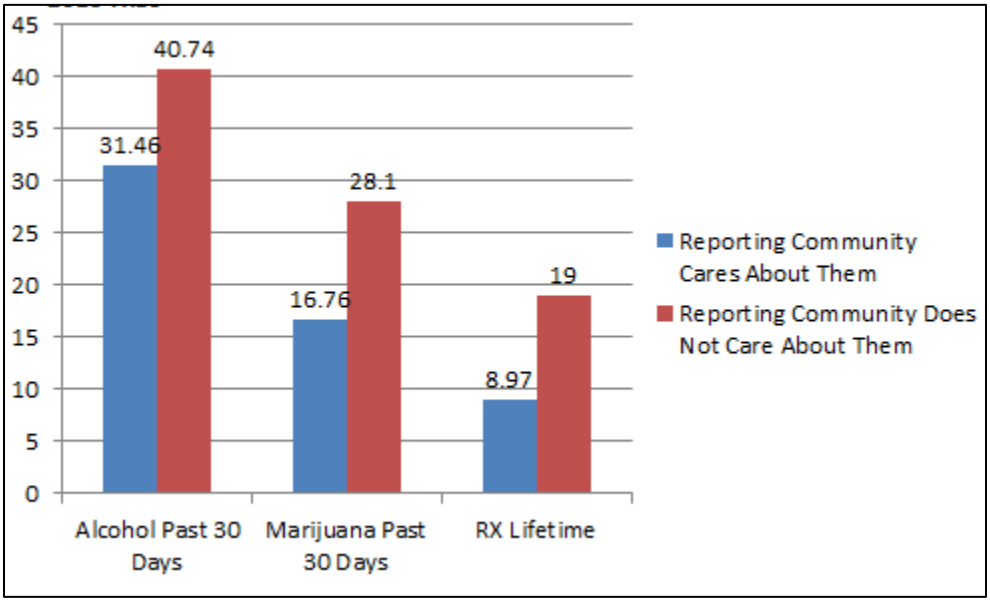
Non-medical prescription drugs were identified as a priority due to the prevalence of use in the North Country Region. Between 2009 and 2011 the rate of lifetime use measured in the Youth Risk Behavior Survey stayed above 17%, or more than one in every six high school students. At the time we had concerns about opioid overdoses and the risk of lethality posed by this emerging trend. Since then, the rates have levelled off (posting a 14.1% lifetime use rate in the 2013 YRBS), however we have also learned from a variety of research sources (including a 2013 article published in the Substance Abuse and Mental Health Service Administration's Data Review Journal: "*Associations of Non Medical Pain Reliever Use and Initiation of Heroin Use and Initiation in America*") that the **prescription drug misuse problem is a contributing factor in the current heroin epidemic**. Therefore any effort to tackle the heroin issue must address prescription drug misuse as well. Put succinctly, the prescription drug initiates of today are significantly more likely to be heroin users within the year than the population as a whole.

Regional planning efforts were also informed by a University of New Hampshire Carsey Institute of Public Policy study that found a correlation between levels of stress and rates substance misuse in Coos County youth.[23] The Carsey Institute further highlighted the level which individual youth felt connected to their community and schools as a protective factor that helps youth deal with this stress without resorting to substance misuse. This stress can originate from a variety of sources, with youth in focus groups indicating family problems, and in-school issues being the primary drivers. The idea of stress as a contributing factor to youth substance misuse, and community attachment being a protective factor was a concept that helped inform the selection of youth leadership development and the strengthening of community and school connections as a means to address the substance misuse problems within the

[23] Jaffee, Eleanor. Coos Youth Study, University of New Hampshire Carsey Institute of Public Policy. https://carsey.unh.edu/policy/coos-youth-study

region. The chart below demonstrates clearly the correlation between community connectedness and use rates:

Substance Use Among those Who Feel Community Cares About Them



Source: 2013 YRBS

STATE AND REGIONAL ASSETS

- Regional Public Health Networks
- Network of Student Assistance Professionals
- Youth Leadership Groups
- Northern New Hampshire Area Health Education Center
- Collaboration with the Governor's Commission on Alcohol and Other Drug Abuse Prevention Intervention and Treatment
- Community coalitions and task force groups with representation from community sectors including education, businesses, local law enforcement, and health care
- Use of evidence-based practice by community health centers (such as SBIRT) to identify, reduce, and prevent use, abuse, and dependence on alcohol and illicit drugs
- Promoting collaboration between primary care physicians and alcohol and other drug treatment providers in the treatment of opioid, including heroin, addiction
- Project AWARE through the Berlin Public Schools
- New Hampshire Charitable Foundation/Tillotson Fund

Partners working on this priority

- Public Health Network Leadership Teams
- Local police departments

- Northern Human Services
- Tri County Community Action Program
- Federally Qualified Health Centers
- Local municipalities
- Regional hospitals
- Local legislators
- Schools and other Educational Institutions

Priority Area 4: Misuse of Alcohol and Drugs

GOAL 1	**Strengthen the capacity of the North Country Prevention Network to address substance misuse**
OBJECTIVES	• Increase collaboration with agencies and individuals at all points along the continuum of care • Support implementation and enforcement of alcohol and drug control policies • Maintain data collection, analysis, and reporting to support development of quality programs and policies

STRATEGIC APPROACH

- Monitor youth drinking behaviors through the Youth Risk Behavior Survey and other reliable instruments
- Leverage existing regional capacities to improve data collection, analysis and reporting relative to problems and effective responses to alcohol and other drug misuse.
- Increase the knowledge and skills of the network members relative to current and emerging drug trends in the region
- Partner with North Country Public Health Network to hold one overdose identification/narcan administration training
- Leverage existing regional capacities to improve data collection, analysis and reporting relative to problems and effective responses to alcohol and other drug misuse.

GOAL 2	**Increase public awareness relative to alcohol, and other drug (including heroin) misuse, treatment, and recovery support services, including co-occurring disorders**
OBJECTIVES	• Produce and disseminate effective messages on a range of topics for public audiences, and media • Work with media outlets and retailers to reduce alcohol marketing to youth • Increase the knowledge and skills of the network members relative to current and emerging drug trends in the region

STRATEGIC APPROACH

- Work to inform the community about treatment resources in the area by leveraging local media and directing traffic to nhtreatment.org
- Increase Prescription Drug Monitoring Program utilization among major area healthcare providers

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- Ensure effective alcohol and drug prevention education over multiple years and transitions
- Increase collaboration with agencies and individuals located at other points along the continuum of care

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<tr><td>GOAL 3</td><td>Increase participation in youth leadership development initiatives focused on alcohol and other drug misuse prevention</td></tr>
<tr><td>OBJECTIVES</td><td>

- Achieve sustainability and portability for Youth Leadership Through Adventure (YLTA) initiative
- Increase the number of schools participating in YLTA programs

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STRATEGIC APPROACH

- Maintain Active and Committed Youth Leadership Through Adventure Groups Who Will Create and Implement Prevention Action Plans for their Schools and Community
- Banner Swap Campaign, removing outdoor alcohol advertisement banners in favor of more neutral banners
- Achieve recognition for YLTA as a national evidence-based prevention program

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Priority Area 5: Heart Disease and Stroke

Background

In New Hampshire, heart disease and stroke were the second and fourth leading causes of death in 2009, accounting for 2,268 and 499 deaths, respectively. The number of deaths from heart disease and stroke exceeded the number of deaths from chronic lower respiratory disease, unintentional injury, Alzheimer's disease, diabetes mellitus, influenza pneumonia, suicide, and nephritis combined.

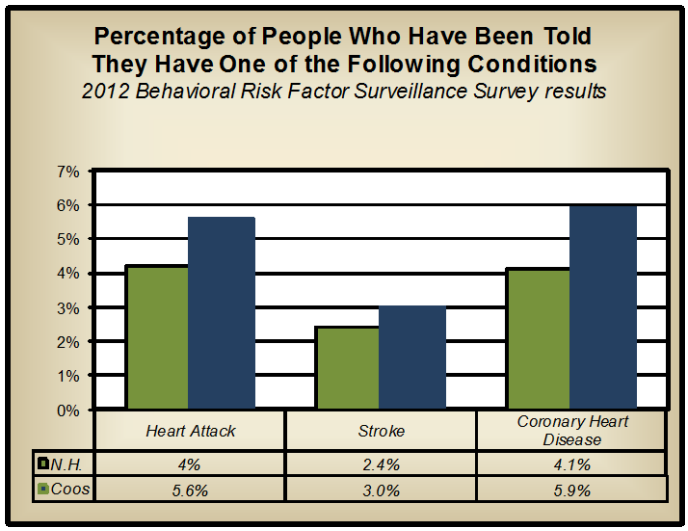
Coronary heart disease (CHD), also called coronary artery disease, occurs when a substance called plaque - usually made up of cholesterol, calcium and other substances - builds up in the arteries (called coronary arteries) that supply blood to the heart muscle. Coronary heart disease is the most common type of heart disease that can lead to a heart attack. Heart disease is the leading cause of death for both men and women in the US. In New Hampshire, it was the second leading cause of death in 2008, when over 1,700 deaths occurred and there were 5,583 hospitalizations due to heart disease. The age-adjusted death rate for coronary heart disease was 115.9 per 100,000. Modifiable risk factors for coronary heart disease include high blood pressure, high blood cholesterol, diabetes, overweight and obesity, tobacco use, alcohol use, physical inactivity, and a diet that is rich in saturated fat, trans fat, and cholesterol. New Hampshire is ranked 29th lowest in the country for coronary heart disease.

Coronary heart disease can lead to chest pain, heart failure, and abnormal heart rhythm, which is a risk factor for stroke. In addition, it can lead to sudden cardiac death, and may also be associated with greater declines in global cognition, verbal memory, and executive function. Stroke is a leading cause of serious long-term disability. People who survive stroke usually live with impairments, including vision problems, paralysis or weakness, speech/language problems, and memory loss. Stroke is associated with permanent brain damage and deaths. It can also lead to emotional problems and depression. Uncontrolled high blood pressure can lead to coronary artery disease, heart attack, heart failure, and stroke–an important cause of long term disability. In addition, high blood pressure causes more than 25,000 new cases of kidney failure annually in the US. Other possible health consequences include bleeding from the large blood vessel (aorta) that supplies blood to the body and vision problems.

Uncontrolled high blood cholesterol (LDL) carries a 10-year risk of developing coronary heart disease and heart attack. It also increases the risk of stroke. In 2010, the estimated cost of heart disease (which also includes coronary heart disease) in the US was $316.4 billion and the estimated cost of stroke was $53.9 billion. The estimated cost of hypertension is more than $93.5 billion per year. These estimates include the cost of health care services, medications, and lost productivity. [24]

[24] New Hampshire State Health Improvement Plan 2013-2020: Charting a Course to Improve the Health of New Hampshire

Why Heart Disease/Stroke is Priority in the North Country



Nationally, rural residents generally fare worse than their urban counterparts in heart disease deaths, as well as the associated risk factors of obesity and physical inactivity.[25] The populations of the North Country, particularly those over the age of 65, have more risk factors for heart disease and stroke, and higher rates of chronic diseases. Individuals who are 18 or older in the North Country account for 81 percent of the total population. The North Country population 18+ is a larger percent of the total population than the population in the state as a whole or nationally and the 65+ population is substantially larger. The area population is not only older but also has less income and less education than the populations of the state and nationally. In addition, the 18+ North Country population suffers from chronic diseases at rates higher than the rest of the state. Moreover, North Country residents both below and above 65 have substantially higher rates of heart disease and stroke risk factors including high blood pressure, diabetes, smoking, etc. than their New Hampshire or U.S. counterparts.[26]

According to the New Hampshire Heart Disease and Stroke Prevention Program 2013 report 'The Burden of Heart Disease and Stroke in New Hampshire', Coos County had the highest adjusted hospitalization rate (56.5 per 10,000) and death rates (168.8 per 100,000) for coronary heart disease; the highest age-adjusted death rates (64.3 per 100,000) for heart attack deaths; higher proportion than the State for high blood pressure (36.9%), high blood cholesterol (48.0%), and obesity (35.9%).

[25] Knudson, A, Meit, M, Popat, S. Rural-Urban Disparities in Heart Disease. Rural Health Reform Policy Research Center

[26] 2010-2013 Behavioral Risk Factor Surveillance Survey, CDC BRFSS and NH Health WRQS web site, Institute for Health Policy and Practice, University of New Hampshire; U.S. census; American Community Survey 2013.

Heart Disease and Stroke Risk Factors

Risk Factor	North Country 18-64	North Country 65+	NH 18-64	NH 65+	US 18-64	US 65+
Diabetes	8%	24%	7%	22%	6%	20%
High Blood Pressure	27%	63%	24%	61%	24%	61%
Overweight (obese)	34% (33%)	43% (28%)	34% (28%)	39% (39%)	34% (27%)	40% (26%)
Smoking	23%	9%	19%	7%	17%	9%
Physical activity in last 30 days	75%	58%	82%	69%	76%	67%
Angina or coronary artery disease	4%	15%	2%	13%	2%	13%

STATE AND REGIONAL ASSETS

- North Country Health Consortium/FQHC quality improvement projects
- Ways To Wellness
- North Country ACO
- Health Improvement Working Group
- Critical Access Hospitals

Partners working on this priority

- Federally Qualified Health Center
- North Country ACO
- Critical Access Hospitals
- North Country Health Consortium/Northern New Hampshire AHEC

Priority Area 5: Heart Disease and Stroke

GOAL 1	**Promote community-based educational opportunities focused on health and wellness**
OBJECTIVES	• By 2017, expand chronic disease self-management programs in the region by 30% • By 2017, increase the number of worksite wellness programs
STRATEGIC APPROACH • Integrate Ways2Wellness into a variety of community-based settings. • Increase awareness around signs and symptoms related to heart disease and stroke. • Determine baseline for number of worksite wellness programs	
GOAL 2	**Promote evidence-based strategies within primary care settings that encourage team-based clinical care**
OBJECTIVES	• By 2017, increase the number of primary care practices that incorporate new models of health care delivery by 70%
STRATEGIC APPROACH • Provide interprofessional training to health care providers and health profession students. • Create opportunities for health professionals to engage in peer learning.	
GOAL 3	**Integrate Community Health Workers (CHW) into health care teams**
OBJECTIVES	• By 2016, increase knowledge about the role and value of CHWs among health care providers • Increase the number of trained CHWs in the North Country
STRATEGIC APPROACH • Outreach and marketing campaign to North Country health care entities around the role of CHWs in providing more cost-effective care delivery. • Train CHWs in nationally-recognized core competency areas and facilitate job placement. • Incorporate training modules related to prevention and management of heart disease and stroke into CHW curriculum.	

Priority Area 6: Mental Health

Background

Both nationally and in New Hampshire, young people with co-occurring disorders are at greater risk of negative outcomes than either those diagnosed with a mental illness or substance use disorder alone. Nationwide, 43% of youth receiving mental health services have been diagnosed with a co-occurring substance use disorder. Among adolescents with significant emotional and behavioral problems, 13% reported substance use. Studies of adolescents entering substance use treatment indicate that 62% of males and 82% of females have a co-occurring psychiatric disorder (Substance Abuse and Mental Health Services Administration, 2002).

Access to mental health care is limited for North Country residents. Shortages of mental health care providers, treatment options, and medication assistance negatively impacts long-term patient outcomes.

Anxiety and depression, often occurring together, are the most common forms of mental illness. The risk of clinical depression is higher in individuals with serious medical illnesses, such as heart disease, stroke, cancer and diabetes. Depression is one of the leading causes of preventable death.

Approximately 60% of adults and almost one-half of youth ages 8 to 15 with a mental illness received no mental health services in the previous year.[27] Poor outcomes for patients with mental illness are associated with delayed or insufficient initial treatment, severity of the illness, older age at onset, co-morbid physical illness, and continuing problems with family, marriage, or employment.

Assuring that individuals and families are safe, feel secure, have opportunities to make meaningful contributions, and possess the tools for self-efficacy will promote mental health. Good physical health, including avoidance of alcohol and other drugs also promotes mental health.

Depression and anxiety are treatable. Early identification, appropriate referral and sustainable treatment options contribute to good outcomes. Depression and anxiety are treatable. Early identification, appropriate referral and sustainable treatment options contribute to good outcomes.

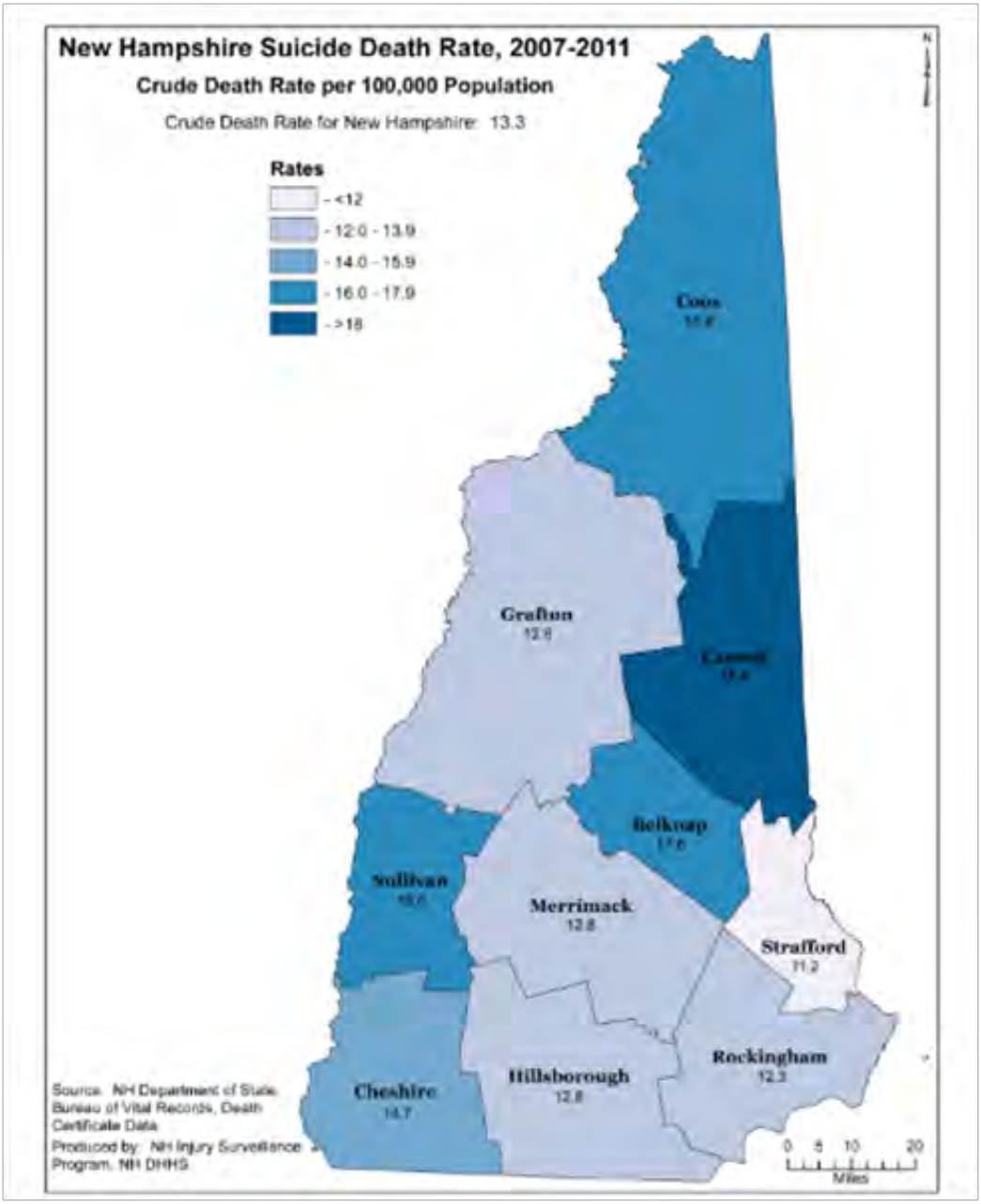
Why Mental Health is a Priority in the North Country

During a 30-day time frame, NH residents were asked to report the number of days they felt their mental health was poor. This is referring to feelings of depression, stress, and emotional

[27] National Institute of Mental Health: *Use of Mental Health Treatment Among Children*, 2013

problems. Of those 30 days, 18.8% of Coös County residents reported 14-30 days were of poor mental health. This is the highest reporting of all NH counties.[28]

In 2014, 23% of students in the North Country reported feeling sad or hopeless for two weeks in a row, or more, in the past 12 months and 14% seriously considered attempting suicide in the past 12 months.[29]This is an important indicator in regards to youth mental health status, as it can impact school performance, drug and alcohol use, and involvement in violence.



[28] 2011 NH Behavioral Risk Factor Surveillance Survey

[29] NH 2014 Youth Risk Behavioral Survey

STATE AND REGIONAL ASSETS

- North Country Health Consortium
- Health Improvement Working Group
- National Alliance on Mental Illness- New Hampshire

Partners working on this priority

- Federally Qualified Health Centers
- Northern Human Services
- Gorham Family Resource Center
- North Country ACO
- Critical Access Hospitals
- North Country Health Consortium/Northern New Hampshire AHEC

Priority Area 6: Mental Health

GOAL 1	**Increase awareness of mental health issues**
OBJECTIVES	• Increase collaboration and education with agencies, individuals, and the public to address specific issues including suicide, depression, and feelings of hopelessness and isolation • By 2017, 5 additional communities incorporate activities with schools, parents, and providers to engage youth, and support leadership development
STRATEGIC APPROACH • Encourage inclusive community activities • Increase awareness and education about co-occurring substance and mental health disorders • Provide public education on the importance of mental health to overall health • Incorporate mental health promotion into chronic disease and substance misuse prevention efforts	
GOAL 2	**Improved access to mental health care services for North Country residents**
OBJECTIVES	• By 2016, assess mental health service delivery and identify the regional barriers that exist for receiving mental health services • By 2017, increase behavioral health and primary care integration in primary care practices
STRATEGIC APPROACH • Provide educational guidelines to primary care providers for the prevention, identification and treatment of mental disorders • Work with schools to implement and support programs that can provide identification, early intervention and referral for students with mental health conditions • Explore options to maximize access to mental health services (eg. Telemedicine)	