2016

Penobscot Valley Hospital

Community Health Needs Assessment & Implementation Strategy

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ADOPTED BY THE PVH BOARD OF DIRECTORS ON DECEMBER 14, 2016[1]

[1]*Response to Schedule h (Form 990) Part V B 4 & Schedule h (Form 990) Part V B 9*

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See end of the report for a list of contributors and collaborating organizations.

Table of Contents

Table of Tables ..... **iii**
How to Use This Report ..... **v**
Executive Summary **2**
Background **6**
County & Primary Service Area Demographics **9**
Penobscot County Summary of Findings **12**
Penobscot County Priority Health Issues and Factors **34**
County Health Rankings & Roadmaps **39**
Stakeholder Survey Findings **41**
Health Indicators Results from Secondary Data Sources **45**
Penobscot Valley Hospital 2016 Implementation Strategy……**64**
Appendix A: Impact of 2013 CHNA……..**83**

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Table of Tables

Table 1. Key Socioeconomic Indicators for Penobscot County 13
Table 2. Key Health and Mortality Indicators for Penobscot County 13
Table 3. Key Access to Health/Health Care Quality Indicators for Penobscot County 14
Table 4. Key Asthma and COPD Indicators for Penobscot County 15
Table 5. Key Cancer Indicators for Penobscot County 15
Table 6. Key Cardiovascular Disease Indicators for Penobscot County 16
Table 7. Key Diabetes Indicators for Penobscot County 16
Table 8. Key Environmental Health Indicators for Penobscot County 17
Table 9. Key Immunization Indicators for Penobscot County 18
Table 10. Key Infectious Disease Indicators for Penobscot County 18
Table 11. Key Sexually Transmitted Disease Indicators for Penobscot County 20
Table 12. Key Intentional Injury Indicators for Penobscot County 20
Table 13. Key Unintentional Injury Indicators for Penobscot County 21
Table 14. Key Mental Health Indicators for Penobscot County 22
Table 15. Key Nutrition and Physical Activity Indicators for Penobscot County 23
Table 16. Key Weight Indicators for Penobscot County 24
Table 17. Key Pregnancy and Birth Outcomes for Penobscot County 24
Table 18. Key Substance Abuse Indicators for Penobscot County 26
Table 19. Key Tobacco Use Indicators for Penobscot County 27
Table 20. Percentage of Stakeholders who agreed that Significant Disparities Exist Among Specific Groups for a Specific Health Issue. 30
Table 21. Percentage of Stakeholders who identified Certain Factors as Key Drivers that lead to a Specific Health Condition 31
Table 22. Priority Health Issue Successes and Challenges for Penobscot County-Surveillance Data 34
Table 23. Priority Health Issue Challenges and Resources for Penobscot County-Stakeholder Survey Responses 36
Table 24. Priority Health Factor Strengths and Challenges for Penobscot County-Surveillance Data 37
Table 25. Priority Health Factor Challenges and Resources for Penobscot County-Stakeholder Responses 38

Table 26. Stakeholder Survey Results for Penobscot County and Maine 41
Table 27. Quantitative Health Indicators for Penobscot County, Maine and the U.S. 45
Table 28. List of Data Sources and Years for Quantitative Health Indicators 51

How to Use This Report

This report contains findings for Penobscot County from the Maine Shared Community Health Needs Assessment (Maine Shared CHNA) conducted in 2015. It is divided into ten sections to provide the reader with an easy-to-use reference to the data-rich assessment. It starts with the highest level of data, followed by summaries and synthesis of the data. The last sections include the detailed findings from assessments as well as the sources.

The report has several features that are important to keep in mind:

- The document provides a reference for more than 160 indicators and more than 30 qualitative survey questions covering many topics. It does not explore any individual topic in-depth.
- The definitions, sources and year(s) for each indicator discussed in the report are found at the end in the data sources section.
- Wherever the term, "statistically significant" is used to describe differences between data estimates, it means that the 95 percent confidence intervals for the given point estimates do not overlap.
- Unless otherwise noted, all rates presented in this report are age-adjusted and calculated per 100,000 population to facilitate comparisons between counties, Maine and the U.S.

The following is a brief description of each section.

Executive Summary
The summary provides the highest level overview of data for the county.

Background
This section explains the purpose and background of the SHNAPP and the Shared CHNA. It includes a description of the methodology and data sources used in the assessment.

County Demographics
The demographic section compares the population and socioeconomic characteristics of the county to the overall state of Maine.

Summary of Findings
This section provides a summary of the assessment data by health issue; it compares the county to the state and U.S. on key indicators and explains the importance of the health issues.

Stakeholder Feedback
High-level findings from the stakeholder survey are included in this section. It explores the top five health issues and factors identified as local priorities or concerns by stakeholders. It shares respondent concern for populations experiencing disparities in health status for these issues.

Priority Health Issues and Challenges

Priority health issues and challenges appear in this section. This section categorizes the key findings from the quantitative and stakeholder (qualitative) datasets as strengths and challenges. The analysis includes health issue indicators from the quantitative datasets sorted into challenges and strengths, stakeholder responses for challenges and resources to address the challenges.

County Health Rankings

The *2015 County Health Ranking & Roadmaps* model for the county is shown in this section. The model, from the University of Wisconsin Population Health Institute, shows how the individual health behaviors lead to health outcomes, which then determines the overall health status for a population. The graphic illustration includes the associated measures for each health indicator and the county rank among all 16 counties in the state of Maine. The data for the underlying health measures are those used by the University of Wisconsin in its 2015 report and may not always match the data shown in other sections of this report due to the time period for the data or use of different indicators.

Stakeholder Survey Findings

This section displays the full set of responses to each question asked in the stakeholder survey (excluding open-ended responses, which are available upon request). It compares the county to the statewide responses.

Health Indicator Results from Secondary Data Sources

The results and sources section details the data for each of the 160 indicators for the county. It includes a table that compares data for the county, the state and the U.S. (where available). Statistically significant differences (at 95 percent confidence) are noted in this table where available and applicable.

Health Indicator Data Sources

This section lists the data source, year and additional notes for each indicator. In addition to the stakeholder survey conducted as a primary data source for this project, the secondary data sources used in this assessment include:

- Child Maltreatment Report, Administration on Children Youth and Families
- Maine Cancer Registry (MCR)
- MaineCare
- Maine Behavioral Risk Factor Surveillance System (BRFSS)
- Maine CDC Drinking Water Program
- Maine CDC HIV Program
- Maine CDC Lead Program
- Maine CDC National Electronic Disease Surveillance System (NEDSS)
- Maine CDC Public Health Emergency Preparedness (PHEP)
- Maine CDC STD Program
- Maine CDC Vital Records
- Maine Department of Education
- Maine Department of Public Safety
- Maine Department of Labor
- Maine Health Data Organization (MHDO)
- Maine Integrated Youth Health Survey (MIYHS)
- Maine Office of Data Research and Vital Records
- National Immunization Survey (NIS)
- National Survey of Children w//Special Health Care Needs
- National Center for Health Statistics
- U.S. Bureau of Labor Statistics
- U.S. CDC WONDER & WISQARS
- U.S. Census

Executive Summary

Public health and health care organizations share the goal of improving the lives of Maine people. Health organizations, along with business, government, community organizations, faith communities and individuals, have a responsibility to shape health improvement efforts based on sound data, personal or professional experience and community need.

This summary provides high-level findings from the Maine Shared Community Health Needs Assessment (CHNA), a comprehensive review of health data and community stakeholder input on a broad set of health issues in Maine. The Shared CHNA was conducted through a collaborative effort among Maine's four largest health-care systems – Central Maine HealthCare, Eastern Maine Healthcare Systems (EMHS), MaineGeneral Health, and MaineHealth – as well as the Maine Center for Disease Control and Prevention an office of the Maine Department of Health and Human Services (DHHS).

While it covers a broad range of topics, the Shared CHNA is not an exhaustive analysis of all available data on any single health issue. These data help identify priorities and should lead the reader to conduct a deeper investigation of the most pressing health issues.

Data are important and a solid starting point, but the numbers represent people who live in Maine. The overall goal of the Maine SHNAPP is to "turn data into action." Community engagement is therefore a critical next step, assuring shared ownership and commitment to collective action. The perspectives of those who live in our communities will bring these numbers to life and, together, we can set priorities to achieve measurable community health improvement. We invite all readers to use the information in this report as part of the solution to develop healthier communities in Maine.

Demographics and Socioeconomic Factors

Penobscot County was home to 153,364 people in 2013. It is considered a metro or urban county, according to the urban and rural classifications defined by the New England Rural Health RoundTable.[1] It is worse off than the state averages in many demographic and socioeconomic characteristics, including income and poverty rates. Key demographic features for the 2009-2013 time period include:

- Median household income of $43,734.
- 20.8 percent of children and 17.0 percent of all individuals lived in poverty.

[1] Rural Data for Action, New England Rural Health RoundTable, 2014. Available from: http://www.newenglandruralhealth.org/rural_data

Access to Health Care/Quality

Access to health care in Penobscot County is similar to the state for all measures, with the exception of a significantly high ambulatory care sensitive-conditions[2] hospital admission rate in Penobscot County. Key features for Penobscot County include:

- 10.6 percent of residents did not have health insurance (2009-2013); 11 percent experienced cost-related barriers to getting healthcare in the last year (2011-2013).
- 86.4 percent of adults reported having a personal doctor or other health care provider (2011-2013).
- The hospitalization rate for ambulatory care-sensitive conditions was 1,981.9 per 100,000 population (2011).

General Health and Mortality

The general health of people in Penobscot County is slightly worse than the state. Key features for Penobscot County include:

- 18.4 percent of adults reported their health as fair or poor (2011-2013).
- Similar to the state overall, the top three leading causes of death were cancer, heart disease and lower respiratory diseases (2013).
- The overall mortality rate per 100,000 population was 797.5 in Penobscot County compared with 745.8 for the state (2009-2013).

Disease Incidence and Prevalence

The incidence of new cancers is significantly higher in Penobscot County compared to the state. Lung cancer incidence and mortality are particularly significantly higher. Cardiovascular disease is a major concern in Penobscot County with significantly higher rates of acute myocardial infarction, heart failure and hypertension hospitalizations as well as significantly higher rates of acute myocardial infarction and coronary heart disease mortality, compared to the state overall. In addition, the hospitalization rate for COPD is significantly higher in Penobscot County, while asthma and pneumonia emergency department visits rates are significantly lower. The Lyme disease incidence rate is lower than the state. Key features for Penobscot County include:

- The number of new cases of all cancer sites per 100,000 population in Penobscot County was 529.9 (2007-2011). Lung cancer mortality per 100,000 population was 61.2 and incidence was 89.8 (2007-2011).
- Acute myocardial infarction hospitalizations per 10,000 population was 27.1 (2010-2012).

[2] Ambulatory care-sensitive conditions (ACSC) are Prevention Quality Indicators from the Agency for Healthcare Research and Quality and is intended to measure whether these conditions are being treated appropriately in the outpatient setting before hospitalization is required.

- Coronary heart disease mortality per 100,000 population was 105.5 (2009-2013).
- Hypertension hospitalizations were 43.2 per 100,000 population compared to 28 for the state (2011).
- COPD hospitalizations per 100,000 population was 307.1 (2011).
- Diabetes prevalence for Penobscot County was similar to the state, 10.3 percent of adults (2011-2013).
- 44.2 percent of adults reported being immunized annually for influenza, which is comparable to the state at 41.5 percent (2011-2013).
- Lyme disease incidence was 32.6 per 100,000 population in 2014.

Health Behaviors and Risk Factors

Penobscot County has significantly lower rates of emergency department visits for mental health issues compared to the state, while the prevalence of adults reporting depression and anxiety is similar. Fruit and vegetable consumption among youth is significantly lower than the state, while binge drinking among youth is slightly higher. Substance abuse is a concern in Penobscot County, with a high rate of referrals for drug-affected babies as a percentage of live births and high emergency medical service overdose response rates compared to the state. However, substance-abuse hospital admissions are significantly lower in Penobscot County. Tobacco use indicators are similar to the state. Key health behavior and risk factor indicators for Penobscot County include:

- Mental health emergency department rates per 100,000 population was 1,830.4 (2011).
- The rate of fruit and vegetable consumption among high school students at 13.5 percent was significantly lower than the state (2013).
- Binge drinking of alcoholic beverages among high school students is slightly higher in Penobscot County: 16.9 percent (2013).
- The rate of drug-affected baby referrals received as a percentage of all live births was 16 percent (2014).
- The emergency medical service overdose response per 100,000 population was 593.8 compared to 391.5 for the state (2014).
- The substance-abuse hospital admissions per 100,000 population was 150.2 (2011).

Stakeholder Priorities of Health Issues

Stakeholders who work in Penobscot County listed the following health issues as their top five concerns:

1. Drug and alcohol abuse
2. Obesity
3. Physical activity and nutrition
4. Mental health
5. Cardiovascular diseases

Stakeholders identified the following populations as being disproportionately affected by the top health issues in Penobscot County:

- Low-income people, including those with incomes below the federal poverty level
- People with less than a high school education and/or low literacy (low reading or math skills)
- People who are medically underserved, including the uninsured and underinsured
- People with disabilities: physical, mental, or intellectual
- People in very rural and/or geographically isolated locations

Stakeholders prioritized the following factors as having a great influence on health in Penobscot County, resulting in poor health outcomes for residents:

- Poverty
- Access to behavioral care/mental health care
- Employment
- Health care insurance
- Health literacy

Background

Purpose

The Maine Shared Health Needs Assessment and Planning Process (SHNAPP) Project is a collaborative effort among Maine's four largest healthcare systems – Central Maine HealthCare, Eastern Maine Healthcare Systems (EMHS), MaineGeneral Health (MGH), and MaineHealth – as well as the Maine Center for Disease Control and Prevention (Maine CDC), an office of the Maine Department of Health and Human Services (Maine DHHS). The current collaboration expands upon the OneMaine Health Collaborative created in 2007 as a partnership among EMHS, MGH and MaineHealth. The Maine CDC and other partners joined these entities to develop a public-private partnership in 2012. The four hospital systems and the Maine CDC signed a memorandum of understanding in effect between June 2014 and December 2019 committing resources to the Maine SHNAPP Project.

The overall goal of the Maine SHNAPP is to "turn data into action" by conducting a shared community health improvement planning process for stakeholders across the state. The collaborative assessment and planning effort will ultimately lead to the implementation of comprehensive strategies for community health improvement. As part of the larger project, the Maine SHNAPP has pooled its resources to conduct this Shared Community Health Needs Assessment (Shared CHNA) to address community benefit reporting needs of hospitals, support state and local public health accreditation efforts, and provide valuable population health assessment data for use in prioritizing and planning for community health improvement.

This assessment builds on the earlier *OneMaine 2011 CHNA* that was developed by the University of New England and the University of Southern Maine, as well as the 2012 Maine State Health Assessment that was developed by the Maine DHHS. This Shared CHNA includes a large set of statistics on health status and risk factors from existing surveillance and health datasets. It differs from earlier assessments in two ways. Firstly, it includes input from a broad set of stakeholders from across the state from the 2015 SHNAPP Stakeholders' Survey. Secondly, it does not include the household telephone survey conducted for the OneMaine effort.

Quantitative Data

This report contains both quantitative health data and qualitative stakeholder survey data on health issues and determinants affecting those living in Maine. The quantitative data come from numerous sources including surveillance surveys, inpatient and outpatient health data and disease registries. These data consist of 160 quantitative indicators within 18 groupings (domains) for reporting at the state level and, where possible, at the county and select urban levels. Please note that the data are taken from the most current year(s) available. Since the indicators come from a variety of sources, the data are measured over different time periods. In some cases, where there were not enough data in a single year to produce a statistically valid result, multiple years were combined to compute an indicator. Table 28 contains the complete list of the data sources.

Qualitative Data

Qualitative data were collected through a statewide stakeholder survey conducted in May and June 2015 with 1,639 people representing more than 80 organizations and businesses in Maine. The survey was developed using a collaborative process that included Maine SHNAPP partners, Market Decisions Research and Hart Consulting, and a number of other stakeholders and health experts. In Penobscot County, a total of 185 stakeholders responded to the survey.

The objective of the survey was to produce qualitative data of the opinions of health professionals and community stakeholders on the health issues and needs of communities across the state. Given this purpose, the survey used a snowball sampling approach by inviting leaders of member organizations and agencies to invite their members and employees to participate. A concerted effort was made to recruit participants from a number of different industries and backgrounds across all communities in the state. Survey respondents represented public health and health care organizations as well as behavioral health, business, municipalities, education, public safety, and nongovernmental organizations. More than 80 organizations agreed to send the survey to their members or stakeholders.

The online survey was approximately 25 minutes in length and contained a number of questions about important health issues and determinants in the state, including a rating of most critical issues, the ability of Maine's health system (including public health) to respond to issues, availability of resources and assets to address specific health issues, impact on disparate populations, and identification of the entities primarily responsible for addressing issues and determinants. The survey asked all respondents a basic set of questions to rate the importance of health issues and impact of health factors. It then allowed respondents to provide answers to probing questions on the three issues and factors that they were most interested in or had the most knowledge about. Respondents provided over 12,000 open-ended comments to these in-depth probing questions in the survey. The Market Decisions Research/Hart Consulting team reviewed, coded and cleaned all open-ended comments for similar and recurrent themes. Not all respondents shared comments for the probing questions.

Limitations

While a number of precautions were taken to ensure that the results and findings presented in this report are sound and based upon statistically valid methods and analyses, there are some limitations to note. While the quantitative analysis used the most recent data sources available as of July 1, 2015, some of these sources contain data that are several years old. The most recent BRFSS and mortality data available at the time of analysis were from 2013, while the most recent hospitalization and cancer data were from 2011. This presents a particular challenge in trying to capture recent trends in health in the state, such as with opioid use. The data presented in this report may not necessarily represent the current situation in Maine, but are the best data available at the time of publication.

Given the qualitative nature of the survey questions and the sampling methodology, it is important to note that the results of the stakeholder survey are not necessarily representative of the population of Maine or a county at a given level of statistical precision. The findings reflect the informed opinions of health experts and community leaders from all areas of the state. However, it is important to use some caution when interpreting results, especially at the county level due to smaller sample sizes, as the results represent the opinions of only those who completed the survey.

Reports

The Shared CHNA has several reports and datasets for public use that are available on the Maine CDC website and may be downloaded at www.maine.gov/SHNAPP/.

- County-Level Maine Shared Community Health Needs Assessment Reports summarize the data and provide insights into regional findings. These reports explore the priorities, challenges, and resources for each county and contain both summary and detailed tables.
- State-Level Maine Shared Community Health Needs Assessment Report includes information on each health issue, including analysis of sub-populations. The report includes state summaries and detailed tables.
- Summary tables are available for each public health district[3], each county, and the cities of Portland and Bangor and the combined cities of Lewiston/Auburn.
- Detailed Tables contain each indicator, by subpopulation, region, and year.

[3] To improve coordinated delivery of essential public health services, Department of Health and Human Services (DHHS) and the Maine Legislature approved the establishment of eight public health districts. District boundaries were established using population size, geographic areas, hospital service areas, and county borders. A District Liaison coordinates a Public Health Unit with co-located Maine CDC staff in one DHHS regional office for every District.

Demographics

Penobscot County has a total population of 153,365, with a slightly lower percentage of youth 0-17 and greater percentage of adults age 18-64 compared to the state of Maine.

Figure 1. Population by Age Categories (U.S. Census 2013)

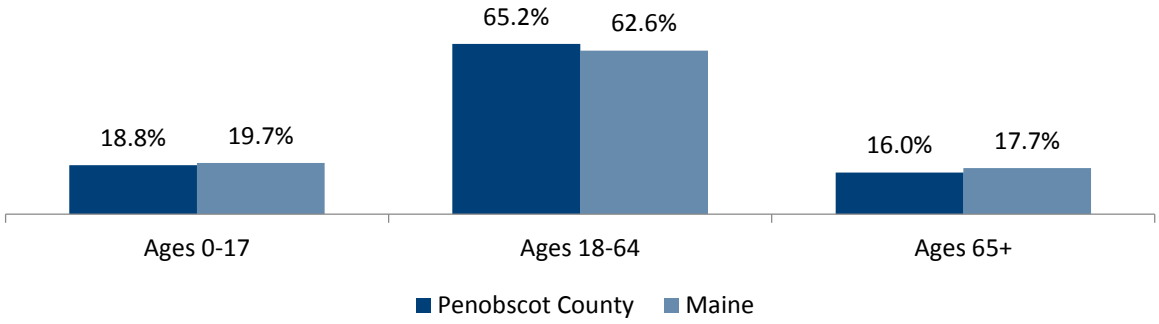
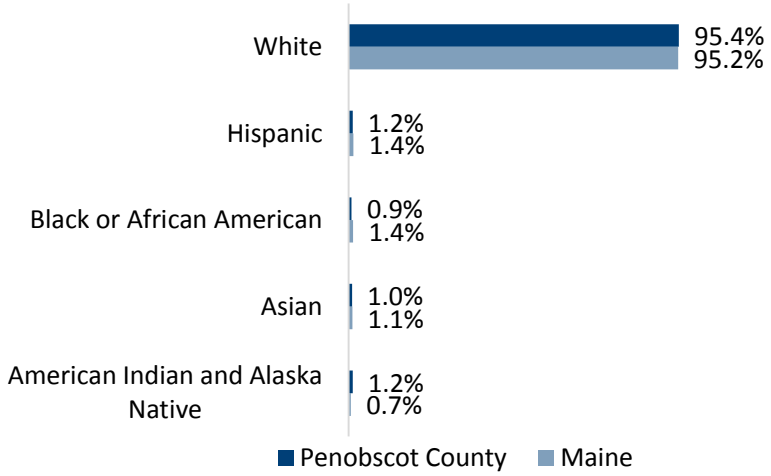
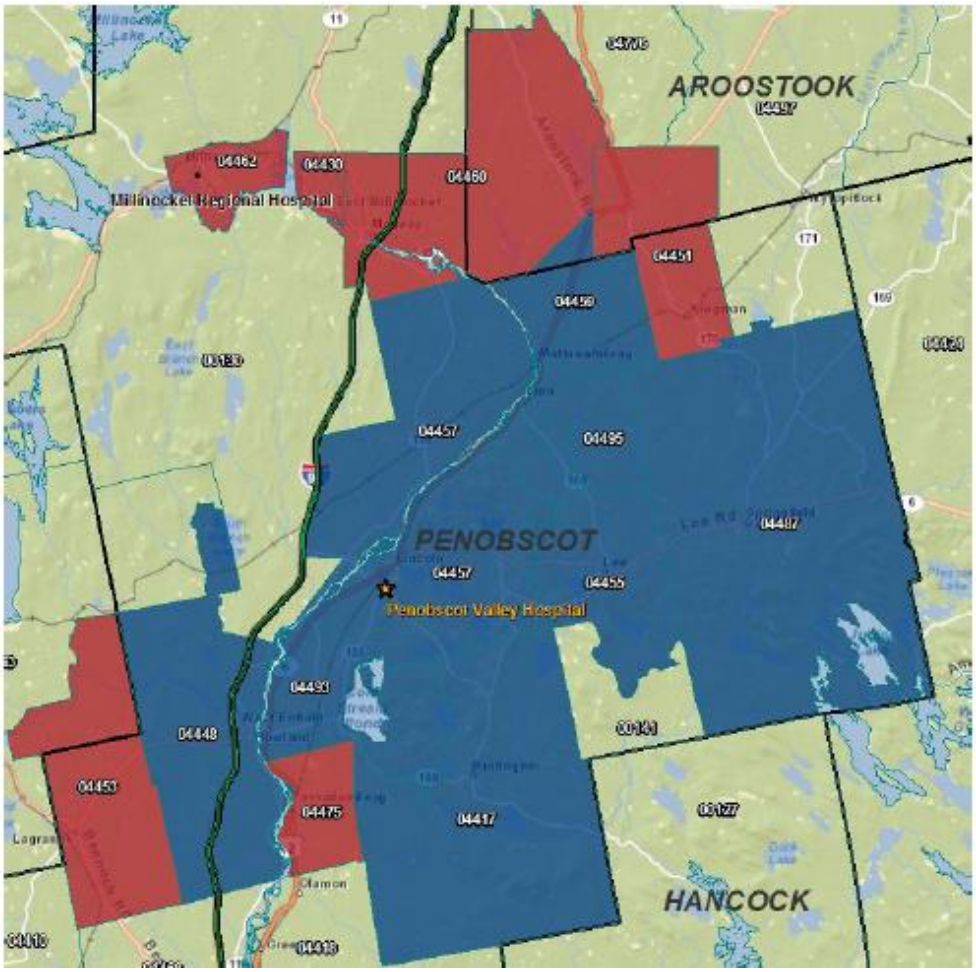


Figure 2. Population by Race/Ethnicity (U.S. Census 2013)



The following map depicts the PVH service area based on inpatient admissions from 2012, 2013, 2014. The primary service area reflects the vast majority (80%+) of inpatient admissions based upon the patient's hometown. The secondary service area accounts for a smaller percentage (10%) of patient admissions based on hometown origin.

Figure 3. Penobscot Valley Hospital Service Area (Truven Health Analytics 2015)



Penobscot Valley Hospital Primary Service Area	
04417	Burlington
04448	Howland
04455	Lee
04457	Lincoln
04459	Mattawamkeag
04487	Springfield
04493	West Enfield
04495	Winn

Penobscot Valley Hospital Secondary Service Area	
04430	East Millinocket
04451	Kingman
04453	LaGrange
04460	Medway
04462	Millinocket
04475	Passadumkeag

Figure 4. Demographic & Socioeconomic Comparisons

Key Demographics & Socioeconomics

Penobscot County is part of the Penquis Public Health District and Tribal Health District. It is Maine's second largest metropolitan area and boasts the scenic beauty of its countryside with the urban living of its county seat, the city of Bangor. The Bangor Public Health and Community Services Department is also located in the city. Several hospitals are sited in Penobscot County including:

- Acadia Hospital
- Dorothea Dix Psychiatric Center
- Eastern Maine Medical Center
- Millinocket Regional Hospital
- Penobscot Valley Hospital
- St. Joseph Hospital.

The following data depicts key demographics and the socioeconomic status for the Penobscot Valley Hospital primary service area listed on the prior page. In comparison to Penobscot County and the State, there is a much higher prevalence of economic hardship among those residing in the hospital's primary service area.

Population	PVH Primary Service Area^	Penobscot County	Maine
Overall Population	12,849	153,364	1.33 mil
Population density (per sq. mile)	15.0	45.3	43.1
Percentage living in rural areas	100.0%	43.1%	66.4%
Single parent families	12.9%	32.0%	34.0%
65+ living alone	20.6%	40.5%	41.2%
Population living with a disability	20.5%	18.1%	15.9%
Economic Status			
Median household income	$32,572	$43,734	$48,453
Unemployment rate	10.3%	6.2%	5.7%
Adults and children living in poverty	19.4%	17.0%	13.6%

(^Primary Service Area data from Truven Health Analytics, 2016 & American Fact Finder, 2014)

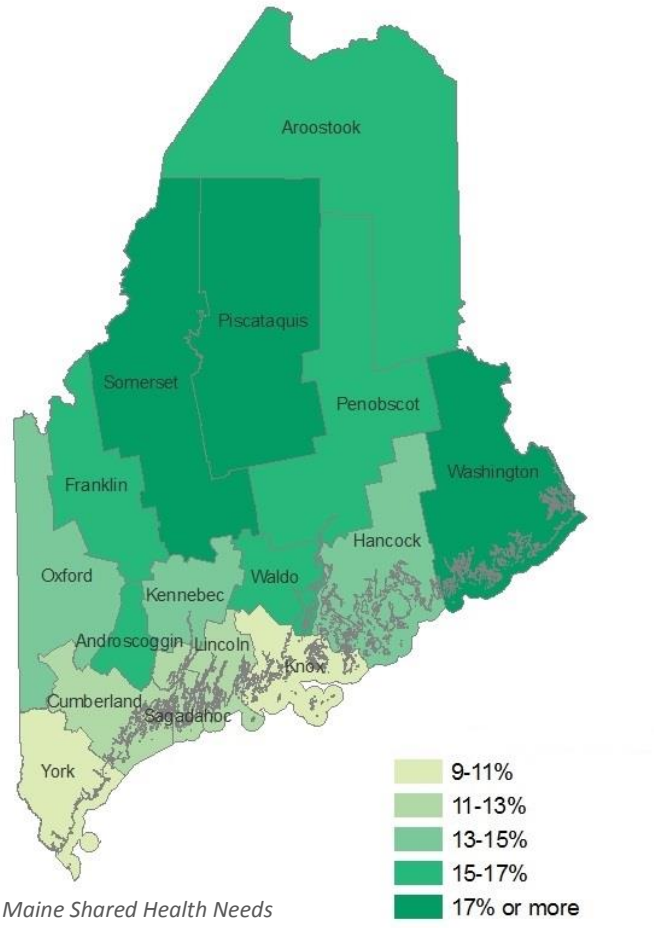
Penobscot County Summary of Findings

Socioeconomic Status

Economic opportunity and stability, including factors such as income, employment, food security and housing stability, have a significant impact on the health of individuals and communities. The 2013 Maine Behavioral Risk Factor Surveillance System (BRFSS) found the percentage of adults in Maine rating their health as excellent, very good or good was 94.8 percent among adults with household incomes of $50,000 or more, but 53.8 percent among those with incomes under $15,000.

In addition to income, there are many other social determinants of health, which have been defined as "conditions in the environments in which people are born, live, learn, work, play, worship and age that affect a wide range of health, functioning and quality-of-life outcomes and risks."[4] The conditions in which we live explain in part why some are healthier than others and why many generally are not as healthy as they could be. The Maine Shared CHNA takes into account a number of socioeconomic factors and other health determinants, including income and poverty, employment, education and household structure.

Percentage of adults and children living in poverty



Maine Shared Health Needs Assessment, 2015

[4] The Institute of Medicine. Disparities in Health Care: Methods for Studying the Effects of Race, Ethnicity, and SES on Access, Use, and Quality of Health Care, 2002. Available from: www.iom.edu/~/media/Files/Activity%20Files/Quality/NHDRGuidance/DisparitiesGornick.pdf

Table 1. Key Socioeconomic Indicators for Penobscot County
Also refer to Figure 4 on page 11 for specific comparisons to the PVH service area.

	Penobscot	Maine	U.S.
Adults and children living in poverty (2009-2013)	*17.0%**	13.6%	15.4%
Children living in poverty (2009-2013)	20.8%	18.5%	21.6%
Median household income (2009-2013)	*$43,734**	$48,453	$53,046
Single-parent families (2009-2013)	32.0%	34.0%	33.2%
65+ living alone (2009-2013)	40.5%	41.2%	37.7%

Asterisk (*) and italics indicate a statistically significant difference between Penobscot County and Maine;
NA = Not Available - data are not available for this indicator.
Note: U.S. results are from the most recently available year which may be different than county and state figures.

General Health and Mortality

While it is essential to understand the causes, risk factors and other determinants of a population's health status, broad measures of health and mortality can also help explain the overall status and needs of the population in general and show in which populations there are disparities. General health status can be measured by self-reported data, as well as by mortality-related data such as life expectancy, leading causes of death and years of potential life lost.

Table 2. Key Health and Mortality Indicators for Penobscot County

	Penobscot	Maine	U.S.
Adults who rate their health fair to poor (2011-2013)	*18.3%**	15.6%	16.7%
Adults with 14+ days lost due to poor mental health (2011-2013)	13.8%	12.4%	NA
Adults with 14+ days lost due to poor physical health (2011-2013)	14.0%	13.1%	NA
Adults with three or more chronic conditions (2011, 2013)	29.7%	27.6%	NA
Overall mortality rate per 100,000 population (2009-2013)	*797.5**	745.8	731.9

Asterisk (*) and italics indicate a statistically significant difference between Penobscot County and Maine;
NA = Not Available - data are not available for this indicator.
Note: Age-adjusted rates presented in table; U.S. results are from the most recently available year which may be different than county and state figures.

The life expectancy in Penobscot County is 75.5 years for males and 80.4 years for females.

Access to Health/Health Care Quality

Access to timely, appropriate, high-quality and regular health care and preventive health services is a key component of maintaining health. Good access to health care can be limited by financial, structural, and personal barriers. Access to health care is affected by location of and distance to health services, availability of transportation and the cost of obtaining the services – including the availability of insurance, the ability to understand and act upon information regarding

services, the cultural competency of health care providers and a host of other characteristics of the system and its clients. *Healthy People 2020* has identified four major components of access to health services: coverage, services, timeliness and workforce.[5]

In Penobscot County, 10.6 percent of residents did not have health insurance over the period from 2009-2013. However, access to health insurance does not necessarily guarantee access to care: among adults with health insurance, 7 percent in Penobscot County reported that they had experienced cost-related barriers to getting health care during the previous year (compared to 11.0 percent of all adults in the county).

Table 3. Key Access to Health/Health Care Quality Indicators for Penobscot County

	Penobscot	Maine	U.S.
Adults with a usual primary care provider (2011-2013)	86.4%	87.7%	76.6%
Individuals who are unable to obtain or delay obtaining necessary medical care due to cost (2011-2013)	11.0%	11.0%	15.3%
Percent uninsured (2009-2013)	10.6%	10.4%	11.7%
Ambulatory care-sensitive condition hospital admission rate per 100,000 population (2011)	*1,981.9**	1,499.3	1,457.5
Adults with visits to a dentist in the past 12 months (2012)	63.8%	65.3%	67.2%

Asterisk (*) and italics indicate a statistically significant difference between Penobscot County and Maine;
NA = Not Available - data are not available for this indicator.
Note: U.S. results are from the most recently available year which may be different than county and state figures.

Ambulatory care-sensitive hospital discharges is a Prevention Quality Indicator defined by the Agency for Healthcare Research and Quality (AHRQ) and is intended to measure whether conditions are being treated appropriately in the outpatient setting before hospitalization is required. AHRQ provides nationwide rates based on lower acuity and cost analysis of 44 states from the 2010 Agency for Healthcare Research and Quality's Healthcare Cost and Utilization Project State Inpatient Databases.[6]

Chronic Disease

It is estimated that treatment for chronic diseases accounts for 86 percent of our nation's health care costs.[7] Chronic diseases include cancer, cardiovascular disease, diabetes and respiratory diseases like asthma and COPD, among other conditions. They are long-lasting health conditions and are responsible for seven out of ten deaths each year. Many chronic diseases can be

[5] Healthy People 2020, Office of Disease Prevention and Health Promotion. Available from: http://www.healthypeople.gov/2020/topics-objectives/topic/Access-to-Health-Services
[6] Agency for Healthcare Research and Quality, Prevention Quality Indicators Technical Specifications - Version 5.0, March 2015, available at: http://www.qualityindicators.ahrq.gov/Modules/PQI_TechSpec.aspx
[7] National Center for Chronic Disease Prevention and Health Promotion, http://www.cdc.gov/chronicdisease/

prevented or controlled by reducing risk factors such as tobacco use, physical inactivity, poor nutrition and obesity.

Asthma is the most common childhood chronic condition in the United States and the leading chronic cause of children being absent from school.

Table 4. Key Asthma and COPD Indicators for Penobscot County

	Penobscot	Maine	U.S.
Asthma emergency department visits per 10,000 population (2009-2011)	*55.5**	67.3	NA
COPD diagnosed (2011-2013)	8.0%	7.6%	6.5%
COPD hospitalizations per 100,000 population (2011)	*307.1**	216.3	NA
Current asthma (Adults) (2011-2013)	13.4%	11.7%	9.0%
Current asthma (Youth 0-17) (2011-2013)	10.9%	9.1%	NA
Pneumonia emergency department rate per 100,000 population (2011)	*570.6**	719.9	NA
Pneumonia hospitalizations per 100,000 population (2011)	*424.3**	329.4	NA

Asterisk (*) and italics indicate a statistically significant difference between Penobscot County and Maine;
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While the age-adjusted all-cancer incidence and mortality rates in Maine decreased significantly over the past ten years, cancer remains the leading cause of death among people in Maine. Cancer was also the leading cause of death in Penobscot County in 2013.

Table 5. Key Cancer Indicators for Penobscot County

	Penobscot	Maine	U.S.
Mortality – all cancers per 100,000 population (2007-2011)	189.4	185.5	168.7
Incidence – all cancers per 100,000 population (2007-2011)	*529.9**	500.1	453.4
Mammograms females age 50+ in past two years (2012)	85.4%	82.1%	77.0%
Colorectal screening (2012)	72.7%	72.2%	NA
Lung cancer incidence per 100,000 population (2007-2011)	*89.8**	75.5	58.6

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More than one in three adults lives with some type of cardiovascular disease. Heart disease and stroke can cause serious illness and disability with associated decreased quality of life and high economic costs. Cardiovascular disease conditions are among the most preventable health problems through the modification of common risk factors.

Table 6. Key Cardiovascular Disease Indicators for Penobscot County

	Penobscot	Maine	U.S.
Acute myocardial infarction hospitalizations per 10,000 population (2010-2012)	*27.1**	23.5	NA
Acute myocardial infarction mortality per 100,000 population (2009-2013)	*41.9**	32.2	32.4
Cholesterol checked every five years (2011, 2013)	78.9%	81.0%	76.4%
Coronary heart disease mortality per 100,000 population (2009-2013)	*105.5**	89.8	102.6
Heart failure hospitalizations per 10,000 population (2010-2012)	*27.5**	21.9	NA
Hypertension prevalence (2011, 2013)	33.5%	32.8%	31.4%
Hypertension hospitalizations per 100,000 population (2011)	*43.2**	28.0	NA
Stroke hospitalizations per 10,000 population (2010-2012)	*27.4**	20.8	NA
Stroke mortality per 100,000 population (2009-2013)	38.0	35.0	36.2

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Diabetes mellitus is a complex health condition that lowers life expectancy, increases the risk of heart disease and is the leading cause of adult-onset blindness, lower-limb amputations and kidney failure. Lifestyle changes, effective self-management and treatment can delay or prevent diabetes and complications of diabetes.

Table 7. Key Diabetes Indicators for Penobscot County

	Penobscot	Maine	U.S.
Diabetes prevalence (ever been told) (2011-2013)	10.3%	9.6%	9.7%
Pre-diabetes prevalence (2011-2013)	7.1%	6.9%	NA
Adults with diabetes who have received formal diabetes education (2011-2013)	57.6%	60.0%	55.8%
Diabetes hospitalizations (principal diagnosis) per 10,000 population (2010-2012)	*14.3**	11.7	NA
Diabetes long-term complication hospitalizations (2011)	*80.0**	59.1	NA
Diabetes mortality (underlying cause) per 100,000 population (2009-2013)	*26.4**	20.8	21.2

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Environmental Health

Environmental health includes the natural and built environments. Within these environments, there is risk of exposure to toxic substances and other physical hazards that exist in the air we breathe, the food we eat, the water we drink and the places where we live, play and work.[8]

Water quality issues in Maine include hazards such as disinfection byproducts, arsenic and nitrates/nitrites as well as bacteria contamination. Among households who get their drinking water from private wells, naturally occurring arsenic is a risk. Regular water quality testing can indicate the need for mitigation. In Penobscot County, 35.5 percent of households with private wells have tested their water for arsenic, compared with 43.3 percent of households statewide.

Childhood lead poisoning rates are of particular concern in areas with older housing. It can disproportionately affect people who live in older rental units and those who have less income.

Table 8. Key Environmental Health Indicators for Penobscot County

	Penobscot	Maine	U.S.
Children with confirmed elevated blood lead levels (% among those screened) (2009-2013)	*1.6%**	2.5%	NA
Children with unconfirmed elevated blood lead levels (% among those screened) (2009-2013)	*2.1%**	4.2%	NA
Homes with private wells tested for arsenic (2009, 2012)	*35.5%**	43.3%	NA
Lead screening among children age 12-23 months (2009-2013)	*52.8%**	49.2%	NA
Lead screening among children age 24-35 months (2009-2013)	*31.5%**	27.6%	NA

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Immunization

Immunization has accounted for significant decreases in morbidity and mortality of infectious diseases and an overall increase in life expectancy. However, many infectious diseases that can be prevented through vaccination continue to cause significant burdens on the health of Maine residents. The U.S. CDC has recommendations for a number of vaccines for young children,

[8] Maine Center for Disease Control and Prevention. Healthy Maine 2020. Available from: http://www.maine.gov/dhhs/mecdc/healthy-maine/index.shtml

adolescents and older adults. Among its other recommendations, the U.S. CDC recommends yearly influenza vaccinations for people over six months of age.

Table 9. Key Immunization Indicators for Penobscot County

	Penobscot	Maine	U.S.
Adults immunized annually for influenza (2011-2013)	44.2%	41.5%	NA
Adults immunized for pneumococcal pneumonia (ages 65 and older) (2011-2013)	77.0%	72.4%	69.5%
Immunization exemptions among kindergarteners for philosophical reasons (2015)	2.9%	3.7%	NA
Two-year-olds up to date with "Series of Seven Immunizations" 4-3-1-3-3-1-4 (2015)	81.0%	75.0%	NA

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Infectious Disease/Sexually Transmitted Disease

There are 71 infectious diseases and conditions reportable in Maine. Surveillance data assist in monitoring trends in disease and identifying immediate threats to public health. However, there are limitations in surveillance data, specifically pertaining to underreporting. Available data reflects a subset of the disease burden in Maine.

Advances in sanitation, personal hygiene and immunizations have provided control over some diseases, but others continue to thrive despite best efforts. Lyme disease, if left untreated, can cause severe headaches, severe joint pain and swelling, inflammation of the brain and short-term memory problems[9]. Incidence has increased from 224 reported cases statewide in 2004 to 1,400 in 2014, a growth of more than 500 percent in a decade.

Table 10. Key Infectious Disease Indicators for Penobscot County

	Penobscot	Maine	U.S.
Incidence of past or present hepatitis C virus (HCV) per 100,000 population (2014)	106.9	107.1	NA
Incidence of newly reported chronic hepatitis B virus (HBV) per 100,000 population (2014)	3.9	8.1	NA
Lyme disease incidence per 100,000 population (2014)	32.6	105.3	10.5

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[9] Signs and Symptoms of Untreated Lyme Disease, Centers for Disease Control and Prevention (CDC), Available from: http://www.cdc.gov/lyme/signs_symptoms/

While the rates of sexually transmitted diseases like chlamydia, gonorrhea and HIV are significantly lower in Maine than the U.S., it is an issue that disproportionately affects specific segments of the population, including young adults and men who have sex with men.

Table 11. Key Sexually Transmitted Disease Indicators for Penobscot County

	Penobscot	Maine	U.S.
Chlamydia incidence per 100,000 population (2014)	350.0	265.5	452.2
Gonorrhea incidence per 100,000 population (2014)	11.7	17.8	109.8
HIV incidence per 100,000 population (2014)	3.9	4.4	11.2

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Injuries

Intentional or violence-related injury is an important public health problem that affects people of all ages. Violence prevention activities include changing societal norms regarding the acceptability of violence, improving conflict resolution and other problem-solving skills and developing policies to address economic and social conditions that can lead to violence.

Suicide is the second leading cause of death among 15- to 34-year-olds in Maine and the tenth leading cause of death among all ages combined. In Penobscot County, the age-adjusted rate of suicide deaths was 15.3 per 100,000 population, compared to 15.2 for the state over the same time period.

Table 12. Key Intentional Injury Indicators for Penobscot County

	Penobscot	Maine	U.S.
Domestic assault reports to police per 100,000 population (2013)	321.2	413.0	NA
Firearm deaths per 100,000 population (2009-2013)	10.5	9.2	10.4
Suicide deaths per 100,000 population (2009-2013)	15.3	15.2	12.6
Violent crime rate per 100,000 population (2013)	91.2	125.0	367.9

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Unintentional injuries are a leading cause of death and disability. While many people think of unintentional injuries as a result of accidents, most are predictable and preventable.

Unintentional injury was the leading cause of death among 1- to 44-year-olds in Maine and the fifth-leading cause of death among all ages combined in 2013. Motor vehicle crashes, unintentional poisonings, traumatic brain injuries and falls lead to millions of dollars in medical and lost work costs.

Table 13. Key Unintentional Injury Indicators for Penobscot County

	Penobscot	Maine	U.S.
Always wear seatbelt (Adults) (2013)	85.3%	85.2%	NA
Always wear seatbelt (High School Students) (2013)	52.6%	61.6%	54.7%
Traumatic brain injury related emergency department visits (all intents) per 10,000 population (2011)	*89.8**	81.4	NA
Unintentional and undetermined intent poisoning deaths per 100,000 population (2009-2013)	11.1	11.1	13.2
Unintentional fall related injury emergency department visits per 10,000 population (2011)	*303.3**	361.3	NA

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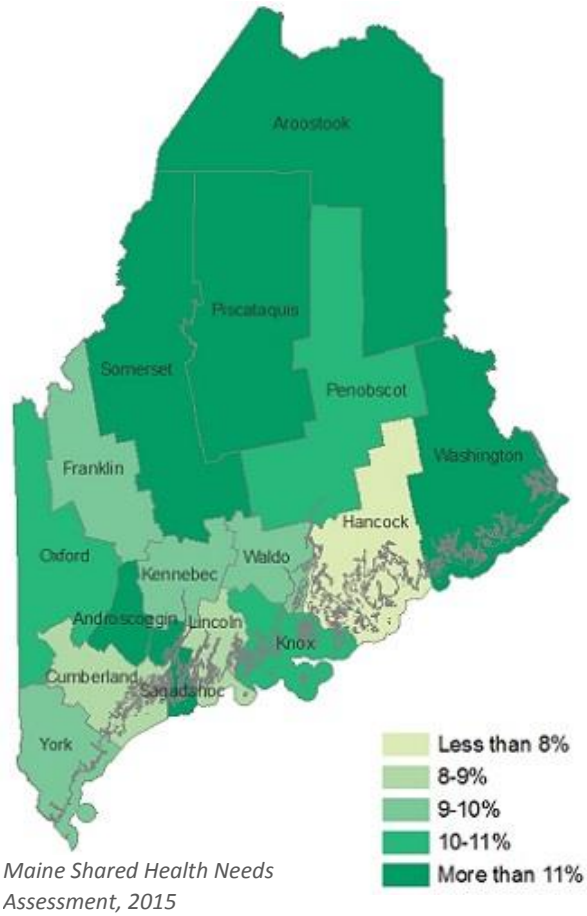
Mental Health

Mental health is a complex issue that can affect many facets of a person's daily life. In the U.S., about one in four adults and one in five children have diagnosable mental disorders and they are the leading cause of disability among people ages 15-44.[10] In Penobscot County, 19.8 percent of adults reported currently receiving outpatient mental health treatment (taking medicine or receiving treatment from a doctor) in 2011-2013, compared to 17.7 percent of adults statewide.

Mental well-being can also affect a person's physical health in many ways, including chronic pain, a weakened immune system and increased risk for cardiovascular problems. In addition, mental illnesses, such as depression and anxiety, affect people's ability to participate in health-promoting behaviors.[11]

Stigma, additional health issues, access to services and complexities of treatment delivery also prevent many from receiving adequate treatment for their mental health issues.

Percentage of Adults with Current Depression



Maine Shared Health Needs Assessment, 2015

Table 14. Key Mental Health Indicators for Penobscot County

	Penobscot	Maine	U.S.
Adults who have ever had depression (2011-2013)	25.8%	23.5%	18.7%
Adults currently receiving outpatient mental health treatment (2011-2013)	19.8%	17.7%	NA
Mental health emergency department rates per 100,000 population (2011)	*1,830.4**	1,972.1	NA
Sad/hopeless for two weeks in a row (High School Students) (2013)	22.8%	24.3%	29.9%
Seriously considered suicide (High School Students) (2013)	13.1%	14.6%	17.0%

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[10] Guide to Community Preventive Services. Improving mental health and addressing mental illness. www.thecommunityguide.org/mentalhealth/index.html.
[11] US Department of Health and Human Services. Health People 2020: Mental Health and Mental Disorders. 2012 Available from: www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=28.

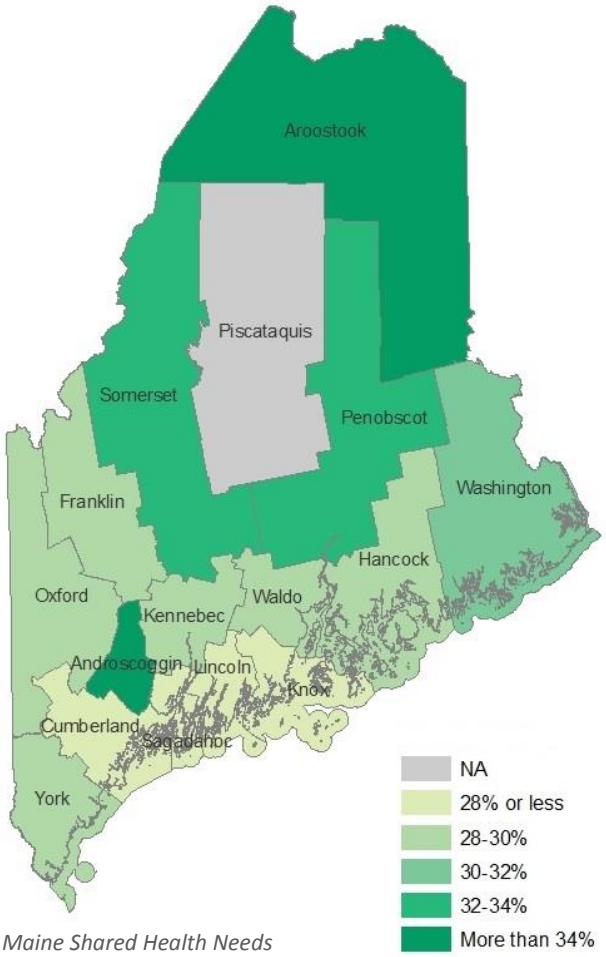
Physical Activity, Nutrition and Weight

Eating a healthy diet, being physically active and maintaining a healthy weight are essential for an individual's overall health. These three factors can help lower the risk of developing numerous health conditions, including high cholesterol, high blood pressure, heart disease, stroke, diabetes and cancer. They also can help prevent existing health conditions from worsening over time.

Sugar-sweetened beverages, such as non-diet soda, sports drinks and energy drinks, provide little to no nutritional value, but their calories can lead to obesity and being overweight, along with health risks including tooth decay, heart disease and type 2 diabetes.

The 2008 *Physical Activity Guidelines for Americans* recommends that adults, age 18-64, get a minimum of 150 minutes of moderate-intensity physical activity a week and that children, age 6-17, get 60 or more minutes of physical activity each day.[12] Among adults in Penobscot County from 2011-2013, 25.8 percent led a sedentary lifestyle, meaning they did not participate in any leisure-time (non-work) physical activity or exercise in the previous month.

Percentage of Obese Adults



Maine Shared Health Needs Assessment, 2015

Table 15. Key Nutrition and Physical Activity Indicators for Penobscot County

	Penobscot	Maine	U.S.
Fruit and vegetable consumption (High School Students) (2013)	*13.5%**	16.8%	NA
Fruit consumption among Adults 18+ (less than one serving per day) (2013)	38.4%	34.0%	39.2%
Met physical activity recommendations (Adults) (2013)	48.7%	53.4%	50.8%
Physical activity for at least 60 minutes per day on five of the past seven days (High School Students) (2013)	43.3%	43.7%	47.3%

[12] Physical Activity Guidelines for Americans, U.S. Department of Health and Human Services, 2008, http://health.gov/Paguidelines/guidelines/

	Penobscot	Maine	U.S.
Sedentary lifestyle – no leisure-time physical activity in past month (Adults) (2011-2013)	*25.8%**	22.4%	25.3%
Soda/sports drink consumption (High School Students) (2013)	29.7%	26.2%	27.0%
Vegetable consumption among Adults 18+ (less than one serving per day) (2013)	19.4%	17.9%	22.9%

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In 2013, 69.1 percent of adults 18 years and older in Penobscot County were overweight or obese (36.7 percent were overweight and 32.4 percent were obese). Overall in Maine, 64.8 percent of adults were overweight or obese.

Table 16. Key Weight Indicators for Penobscot County

	Penobscot	Maine	U.S.
Obesity (Adults) (2013)	32.4%	28.9%	29.4%
Obesity (High School Students) (2013)	14.8%	12.7%	13.7%

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Pregnancy and Birth Outcomes

Addressing health risks during a woman's pregnancy can help prevent future health issues for women and their children. Increasing access to quality care both before pregnancy and between pregnancies can reduce the risk of pregnancy-related complications and maternal and infant mortality. Early identification and treatment of health issues among babies can help prevent disability or death.[13]

Table 17. Key Pregnancy and Birth Outcomes for Penobscot County

	Penobscot	Maine	U.S.
Infant deaths per 1,000 live births (2003-2012)	6.6	6.0	6.0
Live births for which the mother received early and adequate prenatal care (2010-2012)	*90.9%**	86.4%	84.8%
Live births to 15-19 year olds per 1,000 population (2010-2012)	18.2	20.5	26.5
Low birth weight (<2500 grams) (2010-2012)	6.3%	6.6%	8.0%

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[13] Healthy People 2020. Maternal, infant, and child health: overview. Available from: http://www.healthypeople.gov/2020/topics-objectives/topic/maternal-infant-and-child-health

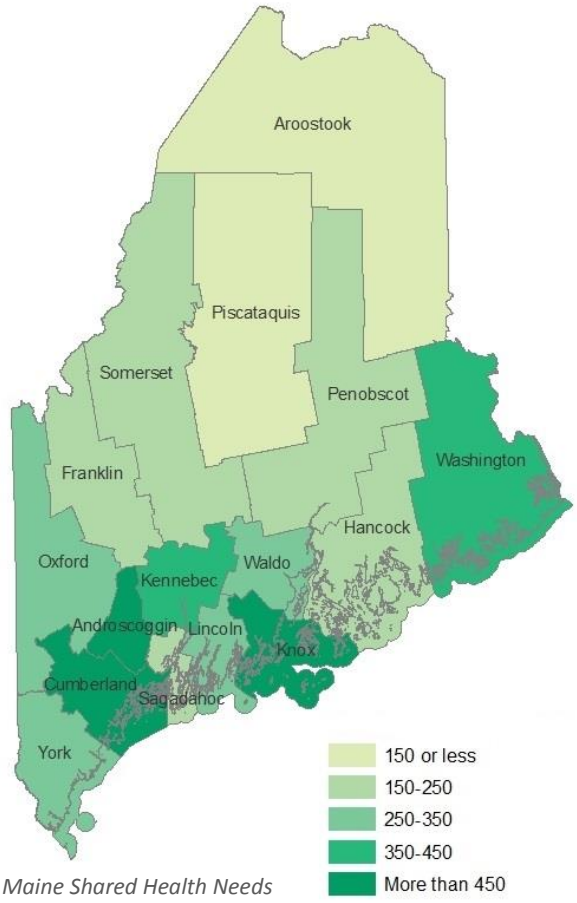
Substance and Alcohol Abuse

Substance abuse and dependence are preventable health risks that lead to increased medical costs, injuries, related diseases, cancer and even death. Substance abuse also adversely affects productivity and increases rates of crime and violence.[14] In Maine in 2010, approximately $300 million was spent on medical care where substance use was a factor.[15]

Of particular note is the recent increase in heroin and prescription opioid dependence and mortality, both nationally and in the state. From 2002 to 2013, heroin overdose death rates nearly quadrupled in the U.S., from 0.7 deaths to 2.7 deaths per 100,000 population. The rates nearly doubled from 2011 to 2013.[16] In addition, data from the National Survey on Drug Use and Health (NSDUH) indicate that heroin use, abuse and dependence have increased in recent years.[11]

The heroin problem in Maine has become a focus of national attention.[17] Deaths from heroin overdoses in Maine rose from seven in 2010 to 57 in 2014[18] and that number continues to climb in 2015.[19]

Substance Abuse Hospitalizations



Maine Shared Health Needs Assessment, 2015

[14] National Institute on Drug Abuse. Principles of Drug Abuse Treatment for Criminal Justice Populations: A Research-Based Guide. Bethesda, MD: National Institutes of Health, National Institute on Drug Abuse. NIH publication No. 11-5316, revised 2012. Available at www.drugabuse.gov/publications/principles-drug-abuse-treatment-criminal-justice-populations

[15] The Cost of Alcohol and Drug Abuse in Maine, 2010. Office of Substance Abuse and Mental Health Services, Department of Health and Human Services, 2013. Available at: http://www.maine.gov/dhhs/samhs/osa/pubs/data/2013/Cost2010-final%20Apr%2010%2013.pdf

[16] Jones CM, Logan J, Gladden M, Vital Signs: Demographic and Substance Use Trends Among Heroin Users — United States, 2002–2013, Morbidity and Mortality Weekly Report (MMWR), 2015. Available from: http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6426a3.htm

[17] Heroin in New England, More Abundant and Deadly. The New York Times. July 18, 2013. http://www.nytimes.com/2013/07/19/us/heroin-in-new-england-more-abundant-and-deadly.html

[18] Heroin Deaths in Maine Jump – Record Level of Overdose Deaths in 2014. May 15, 2015. Office of the Chief Medical Examiner (OCME) of the Office of the Maine Attorney General. Available at: http://www.maine.gov/ag/news/article.shtml?id=644190

[19] First half of 2015 shows pace of drug deaths has not slowed – Heroin, Fentanyl deaths continue to surge. August 20, 2015. Office of the Chief Medical Examiner (OCME) of the Office of the Maine Attorney General. Available at: http://www.maine.gov/ag/news/article.shtml?id=653671

Table 18. Key Substance Abuse Indicators for Penobscot County

	Penobscot	Maine	U.S.
Alcohol-induced mortality per 100,000 population (2009-2013)	8.4	8.0	8.2
Chronic heavy drinking (Adults) (2011-2013)	*5.6%**	7.3%	6.2%
Drug-affected baby referrals received as a percentage of all live births (2014)	16.0%	7.8%	NA
Drug-induced mortality per 100,000 population (2009-2013)	12.2	12.4	14.6
Emergency medical service overdose response per 100,000 population (2014)	593.8	391.5	NA
Opiate poisoning (ED visits) per 100,000 population (2009-2011)	25.7	25.1	NA
Past-30-day alcohol use (High School Students) (2013)	28.1%	26.0%	34.9%
Past-30-day marijuana use (High School Students) (2013)	21.0%	21.6%	23.4%
Prescription Monitoring Program opioid prescriptions (days supply/pop) (2014-2015)	6.1	6.8	NA
Substance-abuse hospital admissions per 100,000 population (2011)	*150.2**	328.1	NA

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Tobacco Use

Use of tobacco is the most preventable cause of disease, death and disability in the United States. Despite this, more than 480,000 deaths in the United States are attributable to tobacco use every year [20] (more than from alcohol use, illegal drug use, HIV, motor vehicle injuries and suicides combined). In addition, exposure to secondhand tobacco smoke has been causally linked to cancer and to respiratory and cardiovascular diseases in adults, and to adverse effects on the health of infants and children, such as respiratory and ear infections.[21] While the percentage of Maine adults who smoke cigarettes has declined significantly over time, one-fifth of the state's population still smokes cigarettes, including 22.5 percent of adults in Penobscot County.

[20] U.S. Department of Health and Human Services. The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014

[21] U.S. Department of Health and Human Services. Healthy People 2020. Leading health indicators: tobacco overview and impact. Available from: http://www.healthypeople.gov/2020/LHI/tobacco.aspx

Table 19. Key Tobacco Use Indicators for Penobscot County

	Penobscot	Maine	U.S.
Current smoking (Adults) (2011-2013)	22.5%	20.2%	19.0%
Current smoking (High School Students) (2013)	13.3%	12.9%	15.7%
Current tobacco use (High School Students) (2013)	19.6%	18.2%	22.4%

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Stakeholder Feedback

In June 2015, the Maine Shared CHNA research team conducted a survey among stakeholders to identify and prioritize significant health issues in communities across the state. The purpose of the survey was to include the voices and broad interests of local stakeholders about community health needs in their areas. The survey instrument was designed in collaboration with the Maine Shared CHNA Steering Committee and its work groups; it covered four domains of questions:

- Stakeholder demographic information
- Health issues with the greatest impact
- Determinants of health
- Health priorities and challenges

The survey was administered using a snowball approach, where stakeholder agencies agreed to send the surveys to their members and stakeholders for participation. Statewide, 1,639 people completed the survey; 185 of the total respondents indicated that they worked in Penobscot County or the Penquis Public Health District. Respondents represented health care agencies, public health agencies, law enforcement, municipalities, schools, businesses, social service agencies and non-governmental organizations.

There were 403 respondents who indicated they worked at the state-level (e.g., Maine CDC, businesses that spanned the state, etc.). These respondents were included in the overall results, but were not included in any of the county-level results. Respondents could indicate that they represent more than one county in the survey, therefore the total of completed surveys by county will add up to more than 1,639.

Stakeholder Ratings of Health Issues

How much of a problem is __ in Penobscot County? (Responses were provided on a 5 point scale where 1-Not at all a problem, 2-Minor problem, 3-Moderate problem, 4-Major problem, 5-Critical problem (This table includes % reporting 4-Major or 5-Critical problem).

Health Issue	Penobscot	Maine
Family Health	n=185	n=1639
Childhood obesity	60%	58%
Elder health	51%	55%
Child developmental issues	32%	34%
Maternal and child health	26%	23%
Adolescent health	20%	25%
Infant mortality	5%	4%
Chronic Diseases		
Obesity	75%	78%
Cardiovascular diseases	63%	63%
Diabetes	59%	63%
Depression	56%	67%
Cancer	56%	50%
Respiratory diseases	55%	60%
Neurological diseases	33%	35%
Musculoskeletal diseases	25%	28%
Infectious Diseases		
Infectious diseases	18%	22%
Sexually transmitted diseases/HIV/AIDS	11%	13%
Healthy Behaviors		
Drug and alcohol abuse	82%	80%
Physical activity and nutrition	65%	69%
Tobacco use	60%	63%
Other Health Issues		
Mental health	65%	71%
Violence	42%	38%
Oral health	39%	53%
Suicide and self-harm	34%	37%
Unintentional injury	32%	34%
Lead poisoning and other environmental health issues	9%	17%

Top Health Issues

Penobscot County stakeholders ranked a set of 25 health issues on "how you feel they impact overall health of residents" on a five-point scale, where 1 is "not at all a problem" and 5 is "critical problem." The top five issues of concern reported for the county were:

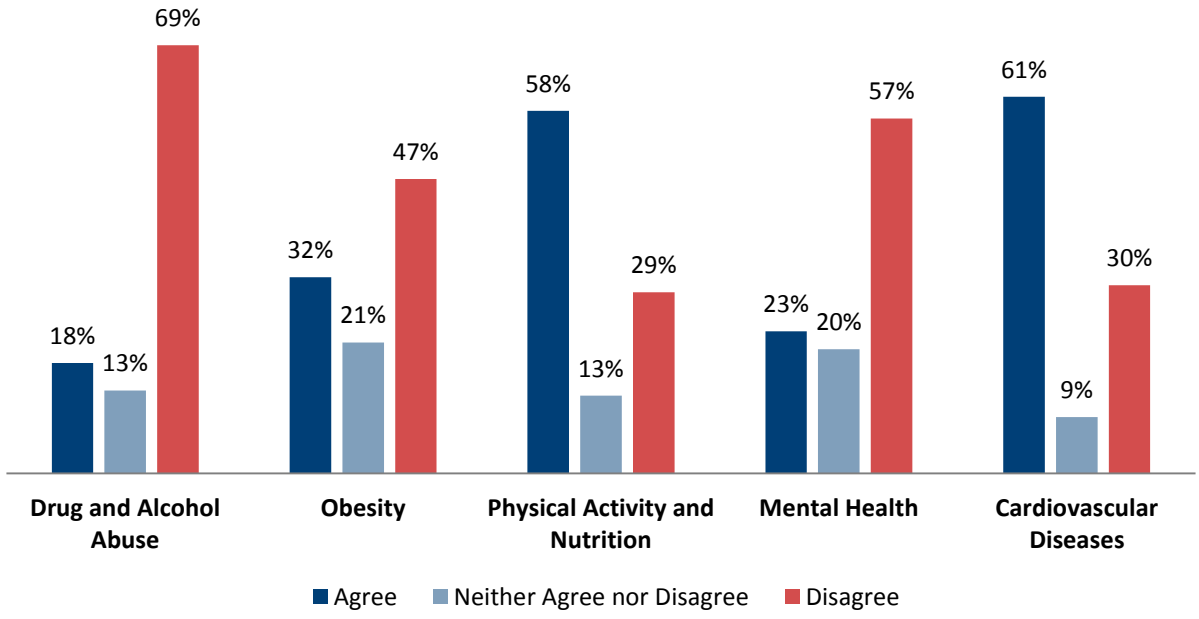
1. Drug and alcohol abuse
2. Obesity
3. Physical activity and nutrition
4. Mental health
5. Cardiovascular diseases

Respondents were asked probing statements about the three issues they knew the most about. The question was worded as follows:

"The health system (including public health) in Penobscot County has the ability to significantly improve [ ] health issue."

Stakeholder responses on the probing question for the top five health issues appear in Figure 3.

Figure 3. The health system (including public health) in Penobscot County has the ability to significantly improve these health issues.



Maine Shared Community Health Needs Assessment, 2015

Stakeholders were also asked to share their thoughts on the populations experiencing health disparities for the health issues that they selected. Results for the top five health issues in Penobscot County are presented in Table 20.

Table 20. Percentage of Stakeholders who agreed that Significant Disparities Exist Among Specific Groups for a Specific Health Issue.

Populations Experiencing Health Disparities	Cardiovascular diseases	Obesity	Drug and alcohol abuse	Physical activity and nutrition	Mental health
Low- income, including those below the federal poverty limit	80%	87%	85%	90%	79%
Medically-underserved - including uninsured and under-insured	78%	70%	63%	59%	74%
Less than a high school education and/ or low literacy	52%	61%	67%	65%	56%
Very rural and/or geographically isolated people	54%	44%	49%	58%	56%
People with disabilities - physical, mental, or intellectual	37%	47%	41%	56%	63%
Limited or no English proficiency	21%	12%	14%	17%	21%
Military veterans	14%	4%	34%	4%	43%
Gay, lesbian, bisexual or transgendered people	3%	4%	30%	2%	36%
Women	18%	15%	17%	11%	20%
Members of any Federally-recognized Tribe	11%	12%	21%	13%	19%
Refugees/immigrants	10%	4%	8%	6%	20%
Specific age group	15%	10%	12%	9%	12%
Racial/ethnic minority populations	8%	4%	9%	6%	11%
Deaf and hard of hearing people	3%	3%	3%	4%	11%
Adolescents/Teens (13-17)	1%	3%	8%	2%	6%
Seniors/Elderly (65+)	10%	3%	-	5%	3%
Youth/Children (0-12)	-	4%	-	4%	4%
Adults (21-64)	6%	1%	3%	1%	-
Young adults (18-21)	1%	1%	7%	-	2%
Other	6%	6%	12%	5%	12%

Stakeholder input also pointed out the key social or environmental drivers in Maine that lead to these health issues. The key drivers for the top five health issues in Penobscot County are presented in Table 21.

Table 21. Percentage of Stakeholders who identified Certain Factors as Key Drivers that lead to a Specific Health Condition

Key Drivers	Cardiovascular diseases	Obesity	Drug and alcohol abuse	Physical activity and nutrition	Mental health
Poverty/low income/low socio-economic status	36%	40%	30%	37%	27%
Lack of education	25%	31%	11%	22%	15%
Lack of access to healthy foods	15%	28%	-	29%	1%
Bad eating habits	26%	26%	-	13%	1%
Lack of access to physical activity opportunities	7%	25%	-	47%	-
Lack of access to behavioral care/mental health care	1%	-	3%	-	44%
Isolated and rural areas	7%	9%	11%	16%	14%
Inadequate health literacy	12%	9%	8%	9%	-
Cultural or social norms/acceptance/role modeling	5%	9%	22%	8%	4%
Lack of transportation	12%	8%	6%	12%	11%
Lack of access to treatment	7%	2%	33%	6%	2%
Lack of employment opportunities	2%	2%	17%	1%	6%
Social attitudes such as discrimination, stigma, etc.	2%	2%	14%	-	34%
Lack of health care insurance	9%	2%	5%	1%	10%
Adverse childhood experiences	1%	2%	3%	1%	5%
Substance use/addiction	22%	2%	2%	2%	5%
Lack of access to primary care	22%	2%	-	1%	3%
Personal responsibility	5%	8%	4%	6%	3%
Apathy/depression/hopelessness	2%	5%	11%	6%	2%
Food insecurity	-	4%	-	1%	1%
Co-morbidity-physical or behavioral	7%	3%	-	1%	4%
Lack of exercise	12%	3%	-	1%	-
Lack of social support and interactions-positive	-	2%	14%	4%	1%
Mental illness	2%	2%	2%	1%	2%
Lack of civic participation	-	2%	-	-	1%
Abuse/trauma	-	1%	3%	-	3%
Lack of funding-programs/low reimbursement to providers	-	1%	2%	3%	8%

The next section of this report has a list of the community resources and assets that are available in the area to address these health issues and drivers, along with a summary of the additional resources that are needed. See **Table 23. Priority Health Issues** in the following section of this report.

Top Health Factors

Health factors are those conditions, such as health behaviors, socioeconomic status, or physical environment features that can affect the health of individuals and communities. Stakeholders prioritized 26 health factors in five categories that can play a significant role in the incidence and prevalence of health problems in their communities.

Stakeholders responded to the following question: "For the factors listed below, please indicate how much of a problem each is in your area and leads to poor health outcomes for residents." They responded using a scale of 1 to 5, where 1 means "not a problem at all," and 5 means "critical problem." Respondents selected the following five factors as greatest problems that lead to poor health outcomes in Penobscot County:

1. Poverty
2. Access to behavioral care/mental health care
3. Employment
4. Health care insurance
5. Health literacy

As with health issues, stakeholders were asked further probing questions on the three factors that they believe have the greatest impact on the health of their county.

To understand the capacity available in the county to address the most significant health factors identified by stakeholders, respondents were asked additional probing statements about the issues they knew the most about. "The health system (including public health) in Penobscot County has the ability to significantly improve these health factors with the current investment of time and resources."

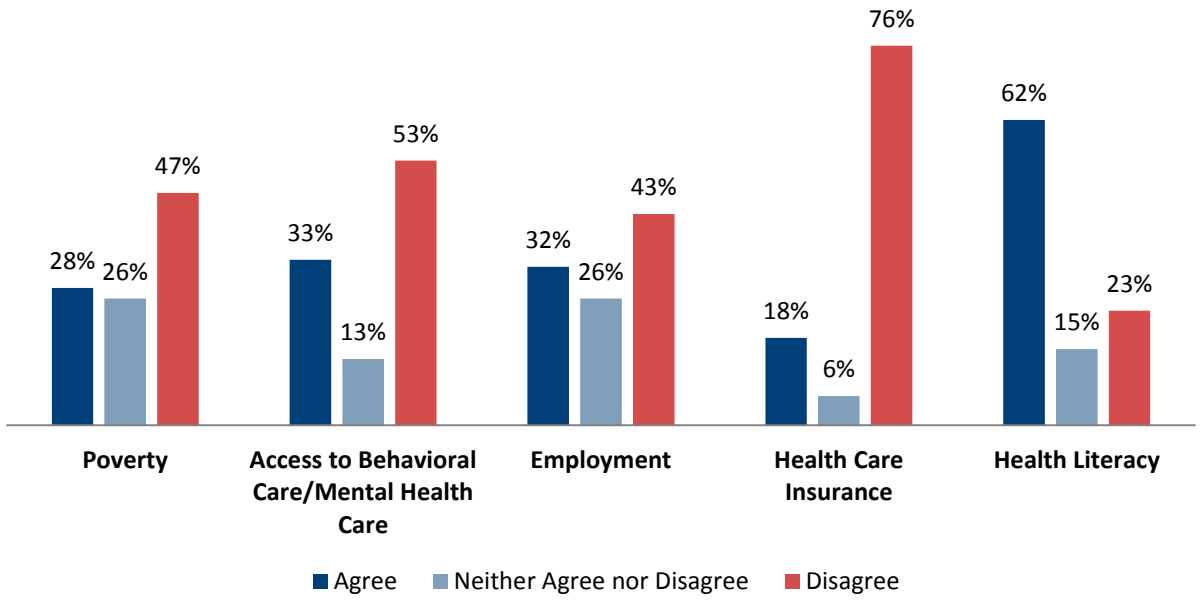
Stakeholder Ratings of Health Factors

How much of a problem is __ in Penobscot County? (Responses were provided on a 5 point scale where 1-Not at all a problem, 2-Minor problem, 3-Moderate problem, 4-Major problem, 5-Critical problem (This table includes % reporting 4-Major or 5-Critical problem).

Health Factor	Penobscot	Maine
Economic Stability	n=185	n=1639
Poverty	74%	78%
Employment	62%	64%
Housing stability	54%	57%
Food security	53%	58%
Education		
Early Childhood Education/Development	42%	43%
Enrollment in higher education	35%	35%
High school graduation	31%	31%
Language and literacy	28%	34%
Social and Community Context		
Adverse childhood experiences	55%	56%
Social support and interactions	45%	50%
Caregiver support	41%	46%
Incarceration or Institutionalization	40%	35%
Social Attitudes (such as Discrimination)	36%	38%
Civic participation	28%	30%
Health and Health Care		
Access to behavioral care/mental health care	63%	67%
Health care insurance	62%	64%
Health literacy	59%	62%
Access to oral health	49%	56%
Access to other health care	39%	41%
Access to primary care	39%	39%
Neighborhood and Built Environment		
Transportation	52%	67%
Access to healthy foods	48%	53%
Access to physical activity opportunities	34%	42%
Crime and violence	27%	27%
Quality of housing	26%	34%
Environmental Conditions (Air quality, water quality, pollution, etc.)	12%	12%

Stakeholder responses on the probing question for the top five health issues appear in Figure 4.

Figure 4. The health system in Penobscot County (including public health) has the ability to significantly improve these health factors with the current investment of time and resources.



Maine Shared Community Health Needs Assessment, 2015

The next section of this report has a list of the community resources and assets that are available in the area to address these health factors, along with a summary of the additional resources that are needed. See **Table 25. Priority Health Factors** in the next section.

Penobscot County Priority Health Issues and Factors

Table 22 presents a summary of the health issues - successes and challenges - experienced by residents of Penobscot County. Data come from a comprehensive analysis of available surveillance data (see Table 28 for a full list of the health indicators and factors included in this project). Two criteria were used to select the issues in this table: statistically significant and relative differences between the county and state. **Statistically significant differences**, using a 95 percent confidence level, are noted with an asterisk (*) after the indicator. A **rate ratio** was also calculated to compare the relative difference between the county and state. Indicators where the county was 15 percent or more above or below the state average are included in this table.

Table 22. Priority Health Issue Successes and Challenges for Penobscot County-Surveillance Data

Health Issues - Surveillance Data	
Health Successes	**Health Challenges**

• Low asthma emergency department visits per 10,000 population [PEN=55.5; ME=67.3]*
• Low pneumonia emergency department rate per 100,000 population [PEN=570.6; ME=719.9]*
• Lower percentage of children with confirmed elevated blood lead levels [PEN=1.6%; ME=2.5%]* and unconfirmed elevated blood lead levels (% among those screened) [PEN=2.1%; ME=4.2%]*
• Penobscot has a lower unintentional fall related injury emergency department visits per 10,000 population [PEN=303.3; ME=361.3]* than the state.
• Lower chronic heavy drinking rate among adults [PEN=5.6%; ME=7.3%]*
• Low substance abuse hospital admissions [PEN=150.2; ME=328.1]*
• Low mental health emergency department rates [PEN=1,830.4; ME=1,972.1]*
• Penobscot has a higher percentage mothers receiving early and adequate prenatal care [PEN=90.9%; ME=86.4%]*
• Low Lyme disease incidence per 100,000 population [PEN=32.6; ME=105.3]
	• Penobscot has a higher age-adjusted overall mortality rate per 100,000 population [PEN=797.5; ME=745.8]* than the state.
	• More adults rate their health fair to poor [PEN=18.3%; ME=15.6%]*
	• High ambulatory care-sensitive condition hospital admission rate per 100,000 population [PEN=1,981.9; ME=1,499.3]*
	• Penobscot faces a number of cardiovascular health challenges, including:
	  • High acute myocardial infarction hospitalizations per 10,000 population [PEN=27.1; ME=23.5]*
	  • High acute myocardial infarction mortality per 100,000 population[PEN=41.9; ME=32.2]*
	  • High coronary heart disease mortality per 100,000 population [PEN=105.5; ME=89.8]*
	  • High heart failure hospitalizations per 10,000 population [PEN=27.5; ME=21.9]*
	  • More high cholesterol [PEN=42.1%; U.S.=31.7%]
	  • High hypertension hospitalizations per 100,000 population [PEN=43.2; ME=28.0]*
	  • High stroke hospitalizations per 10,000 population [PEN=27.4; ME=20.8]*
	• High COPD hospitalizations per 100,000 population [PEN=307.1; ME=216.3]*

Health Issues - Surveillance Data	
Health Successes	**Health Challenges**

• Low incidence of newly reported chronic hepatitis B virus (HBV) per 100,000 population [PEN=3.9; ME=8.1]
• Low HIV/AIDS hospitalization rate per 100,000 population [PEN=16.2; ME=21.4]
• Less domestic assaults reports to police per 100,000 population [PEN=321.2; ME=413.0] as well as low rates of reported rape [PEN=15.0; ME=27.0] and violent crime [PEN=91.2; ME=125.0]
	• High percentage of current asthma among adults [PEN=13.4%; U.S.=9.0%] and youth ages 0-17 years [PEN=10.9%; ME=9.1%]
	• High pneumonia hospitalizations per 100,000 population [PEN=424.3; ME=329.4]*
	• Penobscot has a high all-cancer incidence rate per 100,000 population [PEN=529.9; ME=500.1]*
	• High lung cancer incidence [PEN=89.8; ME=75.5]* and mortality per 100,000 population [PEN=61.2; ME=54.3]*
	• Penobscot faces a number of diabetes-related challenges, including:
	  • High diabetes hospitalizations (principal diagnosis) per 10,000 population [PEN=14.3; ME=11.7]*
	  • High diabetes long-term complication hospitalizations [PEN=80.0; ME=59.1]*
	  • High diabetes mortality (underlying cause) per 100,000 population [PEN=26.4; ME=20.8]*
	• High traumatic brain injury emergency department visits per 10,000 population [PEN=89.8; ME=81.4]*
	• More drug affected baby referrals received [PEN=16.0%; ME=7.8%]
	• High emergency medical service overdose response [PEN=593.8; ME=391.5]
	• Higher rates of opiate poisoning (hospitalizations) [PEN=18.2; ME=13.2]
	• More adults who have ever had depression [PEN=25.8%; U.S.=18.7%]
	• High incidence rates for pertussis [PEN=63.2; ME=41.9] and chlamydia [PEN=350.0; ME=265.5]

Asterisk (*) indicates a statistically significant difference between Penobscot County and Maine
All rates are per 100,000 population unless otherwise noted

Table 23 summarizes the results of the health issues questions in the stakeholder survey for Penobscot County. It includes a summary of the biggest health challenges from the perspective of stakeholders who work in and represent communities in the county. The table also shares stakeholders' knowledge of the assets and resources available and those that are lacking but needed in the county to address the biggest health challenges.

Table 23. Priority Health Issue Challenges and Resources for Penobscot County-Stakeholder Survey Responses

Stakeholder Input - Stakeholder Survey Responses[22]	
Community Challenges	**Community Resources**
Biggest health issues in Penobscot County according to stakeholders *(% of those rating issue as a major or critical problem in their area*). • Drug and alcohol abuse (82%) • Obesity (75%) • Physical activity and nutrition (65%) • Mental health (65%) • Cardiovascular diseases (63%)	**Assets Needed to Address Challenges:** • **Drug and alcohol abuse:** Greater access to drug/alcohol treatments; greater access to substance abuse prevention programs; free or low-cost treatments for the uninsured; more substance abuse treatment providers; additional therapeutic programs • **Obesity/ Physical activity and nutrition:** Greater access to affordable and healthy food; more programs that support low income families • **Mental health:** More mental health professionals; more community-based services; better funding and support; greater access to inpatient care; readily available information about resources; transitional programs **Assets Available in County/State:** • **Drug and alcohol abuse:** Maine Alcoholics Anonymous; Substance Abuse Hotlines; Office of Substance Abuse and Mental Health Services • **Obesity/ Physical activity and nutrition:** Public gyms; farmers markets; Maine SNAP-ED Program; school nutrition programs; public walking and biking trails; Healthy Maine Partnerships; Let's Go! 5-2-1-0 • **Mental health/depression:** Mental health/counseling providers and programs • **Cardiovascular diseases:** Hospitals; Primary Care Providers; YMCA's (Public gyms); Education programs

[22] Results are from the Maine Shared Community Health Needs Assessment Stakeholder Survey, conducted in May-June, 2015.

Table 24 presents a summary of the major health strengths and challenges that affect the health of Penobscot County residents. Data come from a comprehensive analysis of available surveillance data (see Table 28 for a full list of the health indicators and factors included in this project). Two criteria were used to select the factors presented in this table. **Statistically significant differences**, using a 95 percent confidence level, between the county and state are noted with an asterisk (*) after the indicator. A **rate ratio** was also calculated to compare the relative difference between the county and state. Indicators where the county was 15 percent or more above or below the state average are included in this table.

Table 24. Priority Health Factor Strengths and Challenges for Penobscot County-Surveillance Data

Health Factors – Surveillance Data	
Health Factor Strengths	**Health Factor Challenges**
• Lower percentage of individuals who are unable to obtain or delay obtaining necessary medical care due to cost [PEN=11.0%; U.S.=15.3%] • Higher percentage of lead screening among children age 12-23 months [PEN=52.8%; ME=49.2%]* and children age 24-35 months [PEN=31.5%; ME=27.6%]* • Fewer immunization exemptions among kindergarteners for philosophical reasons [PEN=2.9%; ME=3.7%]	• More individuals living in poverty [PEN=17.0%; ME=13.6%]* • Lower median household income [PEN=$43,734; ME=$48,453]* • Lower percentage of homes with private wells tested for arsenic [PEN=35.5%; ME=43.3%]* • More adults leading a sedentary lifestyle – no leisure-time physical activity in past month [PEN=25.8%; ME=22.4%]* • Less fruit and vegetable consumption among high school students) [PEN=13.5%; ME=16.8%]* • Higher levels of obesity among high school students [PEN=14.8%; ME=12.7%]

Asterisk (*) indicates a statistically significant difference between Penobscot County and Maine
All rates are per 100,000 population unless otherwise noted

Table 25 summarizes the results of the health factor questions in the stakeholder survey for Penobscot County. It includes a summary of the health factors that cause the biggest challenges from the perspective of stakeholders who work in and represent communities in the county. The table also shares stakeholders' knowledge of the assets and resources available and those that are lacking but needed in the county to address the biggest health challenges.

Table 25. Priority Health Factor Challenges and Resources for Penobscot County- Stakeholder Responses

Stakeholder Input- Stakeholder Survey Responses [23]	
Community Challenges	**Community Resources**
Biggest health factors leading to poor health outcomes in Penobscot County according to stakeholders *(% of those rating factor as a major or critical problem in their area*). • Poverty (74%) • Access to behavioral care/mental health care (63%) • Employment (62%) • Health care insurance (62%) • Health literacy (59%)	**Assets Needed to Address Challenges:** • **Poverty:** Greater economic development; increased mentoring services; more skills trainings; more employment opportunities at livable wages; better transportation; better education • **Access to behavioral care/mental health care:** Better access to behavioral/mental health care for the uninsured; full behavioral/mental health integration at hospital and primary care levels; expand behavioral/mental health agencies to more rural areas; more hospital beds for mentally ill patients • **Employment:** More job creations; more training; more employment opportunities at livable wages; Greater economic development; more funding for education • **Health care insurance:** Expansion of Medicaid; making insurance more affordable; universal health care; more stable health care system **Assets Available in County/State:** • **Poverty:** General Assistance; other federal, state and local programs • **Access to behavioral care/mental health care:** Behavioral/mental health agencies • **Employment:** Adult education centers; career centers • **Health care insurance:** MaineCare; ObamaCare (Affordable Care Act); Free care • **Health literacy:** Hospital systems; primary care providers; social service agencies.

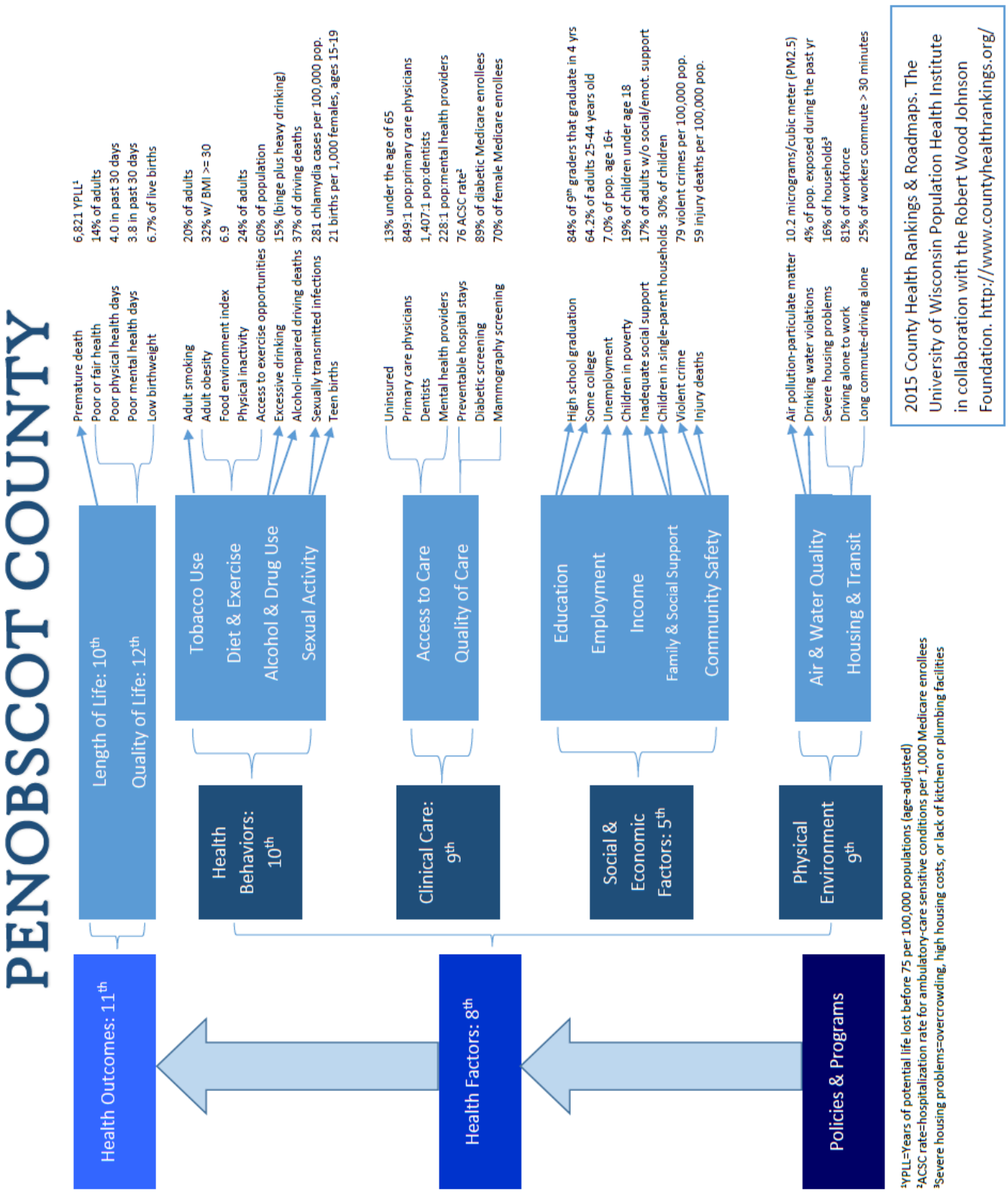
[23] Results are from the Maine Shared Community Health Needs Assessment Stakeholder Survey, conducted in May-June, 2015.

County Health Rankings & Roadmaps

Each year, the University of Wisconsin Health Institute and Robert Wood Johnson Foundation produce *The County Health Rankings & Roadmaps* for every county in the U.S. The annual reports measure the social, economic, environmental and behavioral factors that influence health. These factors are quantified using indicators such as high school graduation rates, obesity, smoking, unemployment, access to healthy foods, the quality of air and water, income and teen births, to name a few. The rankings weight and score the sets of indicators to provide county comparisons within each state. For more information: www.countyhealthrankings.org

For this analysis, the 2015 rankings data for each of Maine's 16 counties is displayed in the graphic used by the University of Wisconsin to show how all of the factors ultimately affect community health. The comparison across counties provides insight into county health status. In Maine, the county ranked as "#1" on a particular health issue, is the healthiest in that measure, "#16" is the least healthy. The data for the underlying health measures are those used by the University of Wisconsin in its 2015 report and may not always match the data shown in other sections of this report due to timing or use of different indicators.

In interpreting the rankings for each county, it is important to keep in mind the underlying health measures. Because of the forced ranking, one county is always the "healthiest" and one is always the "least healthy." The comparisons are helpful in understanding differences, but it is important to look past the assignment of rank to understand the underlying issues and opportunities and their relative importance in the region.


PENOBSCOT COUNTY
Health Outcomes: 11th
Length of Life: 10th
Quality of Life: 12th
Premature death 6,821 YPLL¹
Poor or fair health 14% of adults
Poor physical health days 4.0 in past 30 days
Poor mental health days 3.8 in past 30 days
Low birthweight 6.7% of live births
Health Factors: 8th
Health Behaviors: 10th
Tobacco Use
Diet & Exercise
Alcohol & Drug Use
Sexual Activity
Adult smoking 20% of adults
Adult obesity 32% w/ BMI >= 30
Food environment index 6.9
Physical inactivity 24% of adults
Access to exercise opportunities 60% of population
Excessive drinking 15% (binge plus heavy drinking)
Alcohol-impaired driving deaths 37% of driving deaths
Sexually transmitted infections 281 chlamydia cases per 100,000 pop.
Teen births 21 births per 1,000 females, ages 15-19
Clinical Care: 9th
Access to Care
Quality of Care
Uninsured 13% under the age of 65
Primary care physicians 849:1 pop:primary care physicians
Dentists 1,407:1 pop:dentists
Mental health providers 228:1 pop:mental health providers
Preventable hospital stays 76 ACSC rate²
Diabetic screening 89% of diabetic Medicare enrollees
Mammography screening 70% of female Medicare enrollees
Social & Economic Factors: 5th
Education
Employment
Income
Family & Social Support
Community Safety
High school graduation 84% of 9th graders that graduate in 4 yrs
Some college 64.2% of adults 25-44 years old
Unemployment 7.0% of pop. age 16+
Children in poverty 19% of children under age 18
Inadequate social support 17% of adults w/o social/emot. support
Children in single-parent households 30% of children
Violent crime 79 violent crimes per 100,000 pop.
Injury deaths 59 injury deaths per 100,000 pop.
Physical Environment 9th
Air & Water Quality
Housing & Transit
Air pollution-particulate matter 10.2 micrograms/cubic meter (PM2.5)
Drinking water violations 4% of pop. exposed during the past yr
Severe housing problems 16% of households³
Driving alone to work 81% of workforce
Long commute-driving alone 25% of workers commute > 30 minutes
Policies & Programs
¹YPLL=Years of potential life lost before 75 per 100,000 populations (age-adjusted)
²ACSC rate=hospitalization rate for ambulatory-care sensitive conditions per 1,000 Medicare enrollees
³Severe housing problems=overcrowding, high housing costs, or lack of kitchen or plumbing facilities
2015 County Health Rankings & Roadmaps. The University of Wisconsin Population Health Institute in collaboration with the Robert Wood Johnson Foundation. http://www.countyhealthrankings.org/

Stakeholder Survey Findings

Table 26. Stakeholder Survey Results for Penobscot County and Maine

Detailed Findings from SHNAPP Stakeholder Survey, June 2015		
Survey Questions and Top Responses		
	Penobscot County	**Maine**
Demographics		
Which of the following sectors best describes your role or organization? (12 choices, picked 1)		
Number of Respondents	n=185	n=1639
Medical care provider	27%	22%
Other non-profit or social service agency	10%	14%
Other	8%	13%
Public health	8%	11%
Business owner or employee	6%	9%
Educator	21%	8%
Other type of health care organization	10%	8%
Behavioral/mental health provider	4%	6%
Local government	3%	4%
Other governmental agency	1%	3%
Youth-serving organization	0%	2%
Faith-based organization	1%	1%
Do you work for or represent: (5 choices, picked 1)		
None of the above	46%	49%
Hospital/Health-care system	48%	38%
Local public health agency	5%	10%
Maine CDC	1%	3%
Tribal health	0%	<1%
Please identify the type of geographical area that you primarily serve? (6 choices, picked 1)		
Town or region	30%	27%
Hospital/Health service area	35%	26%
Statewide	20%	22%
County	9%	18%
Other area	5%	4%
Public health district	2%	3%
Does your organization work with specific groups of people or populations recognized as being at risk of, or experiencing, higher rates of health risk or poorer health outcomes than the general population within your area?		
Yes	22%	24%
Somewhat	49%	47%
No	29%	29%

Detailed Findings from SHNAPP Stakeholder Survey, June 2015		
Survey Questions and Top Responses		
	Penobscot County	**Maine**
If "Yes" or "Somewhat" to Q4: To which of the following populations does your organization directly provide resources to address their needs? (select all that apply)		
Number of Respondents	n=131	n=1159
Low-income, including those below the federal poverty limit, or defined as low-income by some other definition	75%	77%
Medically-underserved - including uninsured and under-insured	69%	63%
People with disabilities - physical, mental, or intellectual	69%	58%
Very rural and/or geographically isolated people	56%	47%
Less than a high school education and/ or low literacy (low reading or math skills)	51%	47%
Women	53%	44%
Limited or no English proficiency	39%	38%
Gay, lesbian, bisexual or transgendered people	41%	36%
Deaf and hard of hearing people	49%	35%
Military veterans	44%	34%
Refugees/immigrants	24%	28%
Racial/ethnic minority populations	29%	27%
Members of any federally recognized tribe	44%	25%
Specific age group	15%	21%
Other	18%	15%
Don't know	5%	5%
Overall, to what degree to you feel the health needs of your area are being addressed?		
Number of Respondents	n=185	n=1639
Not addressed at all	0%	<1%
Mostly unaddressed	9%	10%
Somewhat addressed	47%	55%
Mostly addressed	41%	30%
Completely addressed	2%	2%
Don't know	1%	2%
Health Issues and Factors		
Please rate the following health issues based on how you feel they impact the overall health of residents in your area. (*Percentage of stakeholders in county who rated issue as a major or critical problem in their area*)		
Number of Respondents	n=131	n=1639
Family Health		
Adolescent health	20%	25%
Child developmental issues	32%	34%
Childhood obesity	60%	58%
Elder health	51%	55%
Infant mortality	5%	4%

Detailed Findings from SHNAPP Stakeholder Survey, June 2015		
Survey Questions and Top Responses		
	Penobscot County	**Maine**
Maternal and child health	26%	23%
Chronic Diseases		
Cancer	56%	50%
Cardiovascular disease	63%	63%
Depression	56%	67%
Diabetes	59%	63%
Musculoskeletal diseases	25%	28%
Neurological diseases	33%	35%
Obesity	75%	78%
Respiratory disease	55%	60%
Infectious Diseases		
Infectious diseases	18%	22%
Sexually transmitted diseases/HIV/AIDS	11%	13%
Health Behaviors		
Drug and alcohol abuse	82%	80%
Physical activity and nutrition	65%	69%
Tobacco use	60%	63%
Other Health Issues		
Lead poisoning and other environmental health issues	9%	17%
Mental health	65%	71%
Oral health	39%	53%
Suicide and self-harm	34%	37%
Unintentional injury	32%	34%
Violence	42%	38%
"Don't know" responses not included		
Please indicate how much of a problem each of the following health factors is in your area and leads to poor health outcomes for residents. *(Percentage of stakeholders in county who rated factor as a major or critical problem in their area)*		
Number of Respondents	n=131	n=1639
Economic Stability		
Employment	62%	64%
Food security	53%	58%
Housing stability	54%	57%
Poverty	74%	78%
Education		
Enrollment in higher education	35%	35%
Early childhood education/development	42%	43%
High school graduation	31%	31%
Language and literacy	28%	34%

Detailed Findings from SHNAPP Stakeholder Survey, June 2015		
Survey Questions and Top Responses		
	Penobscot County	**Maine**
Social and Community Context		
Adverse childhood experiences	55%	56%
Civic participation	28%	30%
Incarceration or institutionalization	40%	35%
Social attitudes such as discrimination	36%	38%
Social support and interactions	45%	50%
Caregiver support	41%	46%
Health and Health Care		
Access to behavioral care/mental health care	63%	67%
Access to primary care	39%	39%
Access to other health care	39%	41%
Access to oral health	49%	56%
Health care insurance	62%	64%
Health literacy	59%	62%
Neighborhood and Built Environment		
Access to healthy foods	48%	53%
Access to physical activity opportunities	34%	42%
Crime and violence	27%	27%
Environmental conditions	12%	12%
Quality of housing	26%	34%
Transportation	52%	67%
"Don't know" responses not included		
Please rank each health issue according to how you think resources in your area should be allocated. (1=highest priority and 8=lowest priority) *(mean)*		
Number of Respondents	n=143	n=1168
Risk factors that lead to poor health	2.87	3.08
Mental health - conditions that impact how people think, feel and act as they cope with life	3.80	3.49
Substance abuse behaviors, including excessive drinking, smoking, and other drug use	3.56	3.71
Community capacity - ability to sustain a high quality of life, including access to employment, education and housing	4.57	3.93
Chronic diseases, such as heart disease, cancer, diabetes, and asthma	3.78	4.05
Family health, including teen pregnancy, prenatal care, and healthy behaviors during pregnancy	5.09	4.81
Environmental issues - access to healthy foods, access to recreation, clean air, water, lead exposure, etc.	5.33	5.36
Injuries, intentional and unintentional	6.26	6.52

Health Indicators Results from Secondary Data Sources

The county level summary of health indicators analyzed from secondary data sources is presented in the table below. Results are displayed for the county, state and U.S. (where available). County trends are presented in the column after the county data when available. Results are organized by health issue or category. Please note that age-adjusted rates are presented for all applicable indicators, with the exception of ambulatory care-sensitive conditions and infectious and sexually transmitted diseases (which are presented as crude rates). A detailed list of all data sources, years and notes for all indicators is presented in Table 28.

Indicates county is significantly better than state average (using a 95% confidence level).
Indicates county is significantly worse than state average (using a 95% confidence level).
+ Indicates an improvement in the indicator over time at the county level (using a 95% confidence level)
− Indicates a worsening in the indicator over time at the county level (using a 95% confidence level)
† Results may be statistically unreliable due to small numerator, use caution when interpreting.
NA = Data not available.

Table 27. Quantitative Health Indicators for Penobscot County, Maine and the U.S.

Maine Shared CHNA Health Indicators	Year	Penobscot	Trend	Maine	U.S.
Demographics					
Total Population	2013	153,364		1,328,302	319 Mil
Population – % ages 0-17	2013	18.8%		19.7%	23.3%
Population – % ages 18-64	2013	65.2%		62.6%	62.6%
Population – % ages 65+	2013	16.0%		17.7%	14.1%
Population – % White	2013	95.4%		95.2%	77.7%
Population – % Black or African American	2013	0.9%		1.4%	13.2%
Population – % American Indian and Alaska Native	2013	1.2%		0.7%	1.2%
Population – % Asian	2013	1.0%		1.1%	5.3%
Population – % Hispanic	2013	1.2%		1.4%	17.1%
Population – % with a disability	2013	18.1%		15.9%	12.1%
Population density (per square mile)	2013	45.3		43.1	87.4
Socioeconomic Status Measures					
Adults and children living in poverty	2009-2013	*17.0%*	NA	13.6%	15.4%
Children living in poverty	2009-2013	20.8%	NA	18.5%	21.6%
High school graduation rate	2013-2014	86.9%	NA	86.5%	81.0%
Median household income	2009-2013	*$43,734*	NA	$48,453	$53,046
Percentage of people living in rural areas	2013	43.1%	NA	66.4%	NA
Single-parent families	2009-2013	32.0%	NA	34.0%	33.2%
Unemployment rate	2014	6.2%	NA	5.7%	6.2%
65+ living alone	2009-2013	40.5%	NA	41.2%	37.7%
General Health Status					
Adults who rate their health fair to poor	2011-2013	*18.3%*		15.6%	16.7%

Indicates county is significantly better than state average (using a 95% confidence level).
Indicates county is significantly worse than state average (using a 95% confidence level).

Maine Shared CHNA Health Indicators	Year	Penobscot	Trend	Maine	U.S.
Adults with 14+ days lost due to poor mental health	2011-2013	13.8%		12.4%	NA
Adults with 14+ days lost due to poor physical health	2011-2013	14.0%		13.1%	NA
Adults with three or more chronic conditions	2011, 2013	29.7%		27.6%	NA
Mortality					
Life expectancy (Female)	2012	80.4	NA	81.5	81.2
Life expectancy (Male)	2012	75.5	NA	76.7	76.4
Overall mortality rate per 100,000 population	2009-2013	*797.5*	NA	745.8	731.9
Access					
Adults with a usual primary care provider	2011-2013	86.4%		87.7%	76.6%
Individuals who are unable to obtain or delay obtaining necessary medical care due to cost	2011-2013	11.0%		11.0%	15.3%
MaineCare enrollment	2015	29.2%	NA	27.0%	23.0%
Percent of children ages 0-19 enrolled in MaineCare	2015	42.7%	NA	41.8%	48.0%
Percent uninsured	2009-2013	10.6%	NA	10.4%	11.7%
Health Care Quality					
Ambulatory care-sensitive condition hospital admission rate per 100,000 population	2011	*1,981.9*		1,499.3	1457.5
Ambulatory care-sensitive condition emergency department rate per 100,000 population	2011	4,123.5	NA	4,258.8	NA
Oral Health					
Adults with visits to a dentist in the past 12 months	2012	63.8%	NA	65.3%	67.2%
MaineCare members under 18 with a visit to the dentist in the past year	2014	52.9%	NA	55.1%	NA
Respiratory					
Asthma emergency department visits per 10,000 population	2009-2011	*55.5*	+	67.3	NA
COPD diagnosed	2011-2013	8.0%		7.6%	6.5%
COPD hospitalizations per 100,000 population	2011	*307.1*	-	216.3	NA
Current asthma (Adults)	2011-2013	13.4%		11.7%	9.0%
Current asthma (Youth 0-17)	2011-2013	10.9%†	NA	9.1%	NA
Pneumonia emergency department rate per 100,000 population	2011	*570.6*		719.9	NA
Pneumonia hospitalizations per 100,000 population	2011	*424.3*		329.4	NA
Cancer					
Mortality – all cancers per 100,000 population	2007-2011	189.4	NA	185.5	168.7
Incidence – all cancers per 100,000 population	2007-2011	*529.9*	NA	500.1	453.4
Bladder cancer incidence per 100,000 population	2007-2011	26.7	NA	28.3	20.2
Female breast cancer mortality per 100,000 population	2007-2011	17.7	NA	20.0	21.5
Breast cancer late-stage incidence (females only) per 100,000 population	2007-2011	43.2	NA	41.6	43.7
Female breast cancer incidence per 100,000 population	2007-2011	129.1	NA	126.3	124.1
Mammograms females age 50+ in past two years	2012	85.4%	NA	82.1%	77.0%
Colorectal cancer mortality per 100,000 population	2007-2011	16.3	NA	16.1	15.1
Colorectal late-stage incidence per 100,000 population	2007-2011	23.2	NA	22.7	22.9

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Indicates county is significantly worse than state average (using a 95% confidence level).

Maine Shared CHNA Health Indicators	Year	Penobscot	Trend	Maine	U.S.
Colorectal cancer incidence per 100,000 population	2007-2011	47.1	NA	43.5	42.0
Colorectal screening	2012	72.7%	NA	72.2%	NA
Lung cancer mortality per 100,000 population	2007-2011	*61.2*	NA	54.3	46.0
Lung cancer incidence per 100,000 population	2007-2011	*89.8*	NA	75.5	58.6
Melanoma incidence per 100,000 population	2007-2011	21.2	NA	22.2	21.3
Pap smears females ages 21-65 in past three years	2012	89.0%	NA	88.0%	78.0%
Prostate cancer mortality per 100,000 population	2007-2011	NA	NA	22.1	20.8
Prostate cancer incidence per 100,000 population	2007-2011	134.3	NA	133.8	140.8
Tobacco-related neoplasms, mortality per 100,000 population	2007-2011	33.8	NA	37.4	34.3
Tobacco-related neoplasms, incidence per 100,000 population	2007-2011	91.6	NA	91.9	81.7
Cardiovascular Disease					
Acute myocardial infarction hospitalizations per 10,000 population	2010-2012	*27.1*	+	23.5	NA
Acute myocardial infarction mortality per 100,000 population	2009-2013	*41.9*	NA	32.2	32.4
Cholesterol checked every five years	2011. 2013	78.9%		81.0%	76.4%
Coronary heart disease mortality per 100,000 population	2009-2013	*105.5*	NA	89.8	102.6
Heart failure hospitalizations per 10,000 population	2010-2012	*27.5*		21.9	NA
Hypertension prevalence	2011, 2013	33.5%		32.8%	31.4%
High cholesterol	2011, 2013	42.1%		40.3%	38.4%
Hypertension hospitalizations per 100,000 population	2011	*43.2*		28.0	NA
Stroke hospitalizations per 10,000 population	2010-2012	*27.4*		20.8	NA
Stroke mortality per 100,000 population	2009-2013	38.0	NA	35.0	36.2
Diabetes					
Diabetes prevalence (ever been told)	2011-2013	10.3%		9.6%	9.7%
Pre-diabetes prevalence	2011-2013	7.1%		6.9%	NA
Adults with diabetes who have eye exam annually	2011-2013	78.1%	NA	71.2%	NA
Adults with diabetes who have foot exam annually	2011-2013	87.6%	NA	83.3%	NA
Adults with diabetes who have had an A1C test twice per year	2011-2013	78.1%	NA	73.2%	NA
Adults with diabetes who have received formal diabetes education	2011-2013	57.6%	NA	60.0%	55.8%
Diabetes emergency department visits (principal diagnosis) per 100,000 population	2011	253.0		235.9	NA
Diabetes hospitalizations (principal diagnosis) per 10,000 population	2010-2012	*14.3*		11.7	NA
Diabetes long-term complication hospitalizations	2011	*80.0*		59.1	NA
Diabetes mortality (underlying cause) per 100,000 population	2009-2013	*26.4*	NA	20.8	21.2
Environmental Health					
Children with confirmed elevated blood lead levels (% among those screened)	2009-2013	*1.6%*	NA	2.5%	NA
Children with unconfirmed elevated blood lead levels (% among those screened)	2009-2013	*2.1%*	NA	4.2%	NA

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Indicates county is significantly worse than state average (using a 95% confidence level).

Maine Shared CHNA Health Indicators	Year	Penobscot	Trend	Maine	U.S.
Homes with private wells tested for arsenic	2009, 2012	*35.5%*	NA	43.3%	NA
Lead screening among children age 12-23 months	2009-2013	*52.8%*	NA	49.2%	NA
Lead screening among children age 24-35 months	2009-2013	*31.5%*	NA	27.6%	NA
Immunization					
Adults immunized annually for influenza	2011-2013	44.2%		41.5%	NA
Adults immunized for pneumococcal pneumonia (ages 65 and older)	2011-2013	77.0%		72.4%	69.5%
Immunization exemptions among kindergarteners for philosophical reasons	2015	2.9%	NA	3.7%	NA
Two-year-olds up to date with "Series of Seven Immunizations" 4-3-1-3-3-1-4	2015	81.0%	NA	75.0%	NA
Infectious Disease					
Hepatitis A (acute) incidence per 100,000 population	2014	0.0†	NA	0.6	0.4
Hepatitis B (acute) incidence per 100,000 population	2014	0.7†	NA	0.9	0.9
Hepatitis C (acute) incidence per 100,000 population	2014	4.6†	NA	2.3	0.7
Incidence of past or present hepatitis C virus (HCV) per 100,000 population	2014	106.9	NA	107.1	NA
Incidence of newly reported chronic hepatitis B virus (HBV) per 100,000 population	2014	3.9†	NA	8.1	NA
Lyme disease incidence per 100,000 population	2014	32.6	NA	105.3	10.5
Pertussis incidence per 100,000 population	2014	63.2	NA	41.9	10.3
Tuberculosis incidence per 100,000 population	2014	0.0†	NA	1.1	3.0
STD/HIV					
AIDS incidence per 100,000 population	2014	1.3†	NA	2.1	8.4
Chlamydia incidence per 100,000 population	2014	350.0	NA	265.5	452.2
Gonorrhea incidence per 100,000 population	2014	11.7†	NA	17.8	109.8
HIV incidence per 100,000 population	2014	3.9†	NA	4.4	11.2
HIV/AIDS hospitalization rate per 100,000 population	2011	16.2		21.4	NA
Syphilis incidence per 100,000 population	2014	3.3†	NA	1.6	19.9
Intentional Injury					
Domestic assaults reports to police per 100,000 population	2013	321.2	NA	413.0	NA
Firearm deaths per 100,000 population	2009-2013	10.5	NA	9.2	10.4
Intentional self-injury (Youth)	2013	NA	NA	17.9%	NA
Lifetime rape/non-consensual sex (among females)	2013	NA	NA	11.3%	NA
Nonfatal child maltreatment per 1,000 population	2013	NA	NA	14.6	9.1
Reported rape per 100,000 population	2013	15.0	NA	27.0	25.2
Suicide deaths per 100,000 population	2009-2013	15.3	NA	15.2	12.6
Violence by current or former intimate partners in past 12 months (among females)	2013	NA	NA	0.8%	NA
Violent crime rate per 100,000 population	2013	91.2	NA	125.0	368
Unintentional Injury					
Always wear seatbelt (Adults)	2013	85.3%		85.2%	NA
Always wear seatbelt (High School Students)	2013	52.6%		61.6%	54.7%
Traumatic brain injury related emergency department visits (all intents) per 10,000 population	2011	*89.8*	NA	81.4	NA

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Maine Shared CHNA Health Indicators	Year	Penobscot	Trend	Maine	U.S.
Unintentional and undetermined intent poisoning deaths per 100,000 population	2009-2013	11.1	NA	11.1	13.2
Unintentional fall related deaths per 100,000 population	2009-2013	6.9	NA	6.8	8.5
Unintentional fall related injury emergency department visits per 10,000 population	2011	*303.3*	NA	361.3	NA
Unintentional motor vehicle traffic crash related deaths per 100,000 population	2009-2013	10.0	NA	10.8	10.5
Occupational Health					
Deaths from work-related injuries (number)	2013	NA	NA	19.0	4,585
Nonfatal occupational injuries (number)	2013	1,630.0	NA	13,205.0	NA
Mental Health					
Adults who have ever had anxiety	2011-2013	21.8%		19.4%	NA
Adults who have ever had depression	2011-2013	25.8%		23.5%	18.7%
Adults with current symptoms of depression	2011-2013	10.8%		10.0%	NA
Adults currently receiving outpatient mental health treatment	2011-2013	19.8%		17.7%	NA
Co-morbidity for persons with mental illness	2011, 2013	33.6%	NA	35.2%	NA
Mental health emergency department rates per 100,000 population	2011	*1,830.4*	+	1,972.1	NA
Sad/hopeless for two weeks in a row (High School Students)	2013	22.8%		24.3%	29.9%
Seriously considered suicide (High School Students)	2013	13.1%		14.6%	17.0%
Physical Activity, Nutrition and Weight					
Fewer than two hours combined screen time (High School Students)	2013	NA	NA	33.9%	NA
Fruit and vegetable consumption (High School Students)	2013	*13.5%*	NA	16.8%	NA
Fruit consumption among Adults 18+ (less than one serving per day)	2013	38.4%	NA	34.0%	39.2%
Met physical activity recommendations (Adults)	2013	48.7%		53.4%	50.8%
Physical activity for at least 60 minutes per day on five of the past seven days (High School Students)	2013	43.3%	NA	43.7%	47.3%
Sedentary lifestyle – no leisure-time physical activity in past month (Adults)	2011-2013	*25.8%*		22.4%	25.3%
Soda/sports drink consumption (High School Students)	2013	29.7%	NA	26.2%	27.0%
Vegetable consumption among Adults 18+ (less than one serving per day)	2013	19.4%	NA	17.9%	22.9%
Obesity (Adults)	2013	32.4%		28.9%	29.4%
Obesity (High School Students)	2013	14.8%		12.7%	13.7%
Overweight (Adults)	2013	36.7%		36.0%	35.4%
Overweight (High School Students)	2013	15.9%		16.0%	16.6%
Pregnancy and Birth Outcomes					
Children with special health care needs	2009-2010	NA	NA	23.6%	19.8%
Infant deaths per 1,000 live births	2003-2012	6.6	NA	6.0	6.0

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Indicates county is significantly worse than state average (using a 95% confidence level).

Maine Shared CHNA Health Indicators	Year	Penobscot	Trend	Maine	U.S.
Live births for which the mother received early and adequate prenatal care	2010-2012	*90.9%*	NA	86.4%	84.8%
Live births to 15-19 year olds per 1,000 population	2010-2012	18.2	NA	20.5	26.5
Low birth weight (<2500 grams)	2010-2012	6.3%	NA	6.6%	8.0%
Substance and Alcohol Abuse					
Alcohol-induced mortality per 100,000 population	2009-2013	8.4	NA	8.0	8.2
Binge drinking of alcoholic beverages (High School Students)	2013	16.9%		14.8%	20.8%
Binge drinking of alcoholic beverages (Adults)	2011-2013	16.2%		17.4%	16.8%
Chronic heavy drinking (Adults)	2011-2013	*5.6%*		7.3%	6.2%
Drug-affected baby referrals received as a percentage of all live births	2014	16.0%	NA	7.8%	NA
Drug-induced mortality per 100,000 population	2009-2013	12.2	NA	12.4	14.6
Emergency medical service overdose response per 100,000 population	2014	593.8	NA	391.5	NA
Opiate poisoning (ED visits) per 100,000 population	2009-2011	25.7		25.1	NA
Opiate poisoning (hospitalizations) per 100,000 population	2009-2011	18.2		13.2	NA
Past-30-day alcohol use (High School Students)	2013	28.1%		26.0%	34.9%
Past-30-day inhalant use (High School Students)	2013	3.6%		3.2%	NA
Past-30-day marijuana use (Adults)	2011-2013	8.6%†		8.2%	NA
Past-30-day marijuana use (High School Students)	2013	21.0%		21.6%	23.4%
Past-30-day nonmedical use of prescription drugs (Adult)	2011-2013	1.4%†		1.1%	NA
Past-30-day nonmedical use of prescription drugs (High School Students)	2013	6.3%		5.6%	NA
Prescription Monitoring Program opioid prescriptions (days supply/pop)	2014-2015	6.1	NA	6.8	NA
Substance-abuse hospital admissions per 100,000 population	2011	*150.2*	+	328.1	NA
Tobacco Use					
Current smoking (Adults)	2011-2013	22.5%		20.2%	19.0%
Current smoking (High School Students)	2013	13.3%		12.9%	15.7%
Current tobacco use (High School Students)	2013	19.6%	NA	18.2%	22.4%
Secondhand smoke exposure (Youth)	2013	39.6%		38.3%	NA

Indicates county is significantly better than state average (using a 95% confidence level).

Indicates county is significantly worse than state average (using a 95% confidence level).

Table 28. List of Data Sources and Years for Quantitative Health Indicators

Maine Shared Community Health Needs Assessment Data Sources 2015			
Indicator	**Data Source**	**Year(s)**	**Other Notes**
Demographics			
Population	U.S. Census	2013	2013 data was used for all age, racial and ethnic groups.
Population with a disability	U.S. Census	2011-2013	Adults reporting any one of the six disability types are considered to have a disability: hearing difficulty, vision difficulty, cognitive difficulty, ambulatory difficulty, self-care difficulty, independent living difficulty.
Population density	U.S. Census	2010	Based on 2010 U.S. Census population.
Socioeconomic Status Measures			
Adults and children living in poverty	U.S. Census	2009-2013	The poverty status of the household is determined by the poverty status of the householder. Households are classified as poor when the total income of the householder's family is below the appropriate poverty threshold. The American Community Survey measures poverty in the previous 12 months instead of the previous calendar year.
Children living in poverty	U.S. Census	2009-2013	The poverty status of the household is determined by the poverty status of the householder. Households are classified as poor when the total income of the householder's family is below the appropriate poverty threshold. The American Community Survey measures poverty in the previous 12 months instead of the previous calendar year.
High school graduation rate	Maine Dept. of Education	2013-14 School Year	Proportion of students who graduate with a regular diploma four years after starting ninth grade. Graduation rates include all public schools and all private schools that have 60% or more publicly funded students.
Median household income	U.S. Census	2009-2013	In 2013 inflation-adjusted dollars. This includes the income of the householder and all other individuals 15 years old and older in the household, whether they are related to the householder or not.
Percentage of people living in rural areas	U.S. Census	2012	The urban/rural categories used in this analysis were defined by the New England Rural Health Roundtable available in Rural Data For Action 2nd Edition: http://www.newenglandruralhealth.org/rural_data
Single-parent families	U.S. Census	2009-2013	Families consist of a householder and one or more other people related to the householder by birth, marriage, or adoption. They do not include same-sex married couples even if the marriage was performed in a state issuing marriage certificates for same-sex couples. "Householder without a spouse present" is defined as a male householder without a wife present or a female householder without a husband present.
Unemployment rate	Bureau of Labor Statistics	2014	Unemployment rate of the civilian noninstitutionalized population averaged for the full year of 2014.

Maine Shared Community Health Needs Assessment Data Sources 2015			
Indicator	**Data Source**	**Year(s)**	**Other Notes**
65+ living alone	U.S. Census	2009-2013	Estimated number of one-person households with a person 65 years and older.
General Health Status			
Adults who rate their health fair to poor	BRFSS	2011-2013	Adults rating their health as fair or poor vs. excellent, very good or good.
Adults with 14+ days lost due to poor mental health	BRFSS	2011-2013	Now thinking about your mental health, which includes stress, depression and problems with emotions, for how many days during the past 30 days was your mental health not good?
Adults with 14+ days lost due to poor physical health	BRFSS	2011-2013	Now thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?
Adults with three or more chronic conditions	BRFSS	2011, 2013	Chronic conditions available in 2013 BRFSS: arthritis, asthma, cancer, cardiovascular disease, chronic kidney disease, chronic obstructive pulmonary disease (COPD), coronary heart disease, diabetes, hypertension, high cholesterol, obesity.
Mortality			
Life expectancy (Female)	National Center for Health Statistics	2012	Life expectancy at birth.
Life expectancy (Male)	National Center for Health Statistics	2012	Life expectancy at birth.
Overall mortality rate per 100,000 population	DRVS	2009-2013	All deaths are defined as deaths in which the underlyin g cause of death was coded as ICD-10 any listed.
Access			
Adults with a usual primary care provider	BRFSS	2011-2013	Adults that have one or more person they think of as their personal doctor or health care provider.
Individuals who are unable to obtain or delay obtaining necessary medical care due to cost	BRFSS	2011-2013	Adults reporting that there was a time during the last 12 months when they needed to see a doctor but could not because of the cost.
MaineCare enrollment	MaineCare	2015	The number and percent of individuals participating in MaineCare. These data are reported as of April 2015. Percentages calculated based on the 2014 US Census population estimates. Individuals are reported by county of residence at the end of the SFY or the end of participation in the program. Figures exclude individuals who were nonresidents or who were out of state.
Percent of children ages 0-19 enrolled in MaineCare	MaineCare	2015	The number and percent of individuals participating in MaineCare. These data are reported as of April 2015. Individuals are reported by county of residence at the end of the SFY or the end of participation in the program. Figures exclude individuals who were nonresidents or who were out of state.
Percent uninsured	U.S. Census	2009-2013	Estimated number of Maine people who do not currently have health insurance.

Maine Shared Community Health Needs Assessment Data Sources 2015			
Indicator	**Data Source**	**Year(s)**	**Other Notes**
Health Care Quality			
Ambulatory care-sensitive condition hospital admission rate per 100,000 population	MHDO	2011	PQI = Prevention Quality Indicators, a set of measures that can be used with hospital inpatient discharge data to identify quality of care for ambulatory care-sensitive conditions. Additional information at: AHRQ Quality Indicators, Version 4.4, Agency for Healthcare Research and Quality: U.S. Department of Health and Human Services. http://www.qualityindicators.ahrq.gov.
Ambulatory care-sensitive condition emergency department rate per 100,000 population	MHDO	2011	PQI = Prevention Quality Indicators, a set of measures that can be used with hospital inpatient discharge data to identify quality of care for ambulatory care-sensitive conditions. Additional information at: AHRQ Quality Indicators, Version 4.4, Agency for Healthcare Research and Quality: U.S. Department of Health and Human Services. http://www.qualityindicators.ahrq.gov.
Oral Health			
Adults with visits to a dentist in the past 12 months	BRFSS	2012	Adults who last visited the dentist or a dental clinic for any reason in the past 12 months.
MaineCare members under 18 with a visit to the dentist in the past year	Maine Care	2014	Total members younger than 18 with dental claims during calendar year 2014 was 67,871. Of those, only 61,948 had eligibility as of April 2015. Members were younger than 18 on date of service, but some turned 18 by April 2015.
Respiratory			
Asthma emergency department visits per 10,000 population	MHDO	2009-2011	ICD-9 CM - 493
COPD diagnosed	BRFSS	2011-2013	Adults that have been told by a doctor, nurse or health professional that they have COPD chronic obstructive pulmonary disease, emphysema, or chronic bronchitis.
COPD hospitalizations per 100,000 population	MHDO	2011	ICD-9 CM - 490, 491, 492, 494, 496
Current asthma (Adults)	BRFSS	2011-2013	Adults that have been told by a doctor, nurse or health professional that they had asthma and that they still have asthma.
Current asthma (Youth 0-17)	BRFSS	2011-2013	Children that have been told by a doctor, nurse or health professional that they had asthma and that they still have asthma.
Pneumonia emergency department rate per 100,000 population	MHDO	2011	ICD-9 CM - 480-486
Pneumonia hospitalizations per 100,000 population	MHDO	2011	ICD-9 CM - 480-486
Cancer			
Mortality – all cancers per 100,000 population	MCR	2007-2011	All cancer: SEER Cause of Death Recode: 20010-37000 (which include ICD-10 codes: C00-C97).
Incidence – all cancers per 100,000 population	MCR	2007-2011	All cancer: SEER Site Recode: 20010-37000 (which include ICD-O-3 codes: C00-C797).

Maine Shared Community Health Needs Assessment Data Sources 2015			
Indicator	**Data Source**	**Year(s)**	**Other Notes**
Bladder cancer incidence per 100,000 population	MCR	2007-2011	Cancer Incidence: The number of people who develop cancer (new cancer cases) during a specified period of time in a specified population. Incidence case definitions exclude histologies consistent with Kaposi sarcoma and mesothelioma, where applicable.
Female breast cancer mortality per 100,000 population	MCR	2007-2011	Cancer Deaths: Deaths with malignant cancer as the underlying cause of death.
Breast cancer late-stage incidence (females only) per 100,000 population	Maine Cancer Registry (MCR)	2007-2011	Cancer Incidence: The number of people who develop cancer (new cancer cases) during a specified period of time in a specified population. Incidence case definitions exclude histologies consistent with Kaposi sarcoma and mesothelioma, where applicable.
Female breast cancer incidence per 100,000 population	MCR	2007-2011	Cancer Incidence: The number of people who develop cancer (new cancer cases) during a specified period of time in a specified population. Incidence case definitions exclude histologies consistent with Kaposi sarcoma and mesothelioma, where applicable.
Mammograms females age 50+ in past two years	BRFSS	2012	Females ages 50 years and older who reported they had a mammogram within the past 2 years.
Colorectal cancer mortality per 100,000 population	MCR	2007-2011	Cancer Deaths: Deaths with malignant cancer as the underlying cause of death.
Colorectal late-stage incidence per 100,000 population	MCR	2007-2011	Cancer Incidence: The number of people who develop cancer (new cancer cases) during a specified period of time in a specified population. Incidence case definitions exclude histologies consistent with Kaposi sarcoma and mesothelioma, where applicable.
Colorectal cancer incidence per 100,000 population	MCR	2007-2011	Cancer Incidence: The number of people who develop cancer (new cancer cases) during a specified period of time in a specified population. Incidence case definitions exclude histologies consistent with Kaposi sarcoma and mesothelioma, where applicable.
Colorectal screening	BRFSS	2012	Adults ages 50 years and older who reported that they had a home blood stool test (e.g., FOBT or FIT) within the past year OR sigmoidoscopy within the past 5 years and home blood stool test within the past 3 years OR a colonoscopy within the past 10 years.
Lung cancer mortality per 100,000 population	MCR	2007-2011	Cancer Deaths: Deaths with malignant cancer as the underlying cause of death.
Lung cancer incidence per 100,000 population	MCR	2007-2011	Cancer Incidence: The number of people who develop cancer (new cancer cases) during a specified period of time in a specified population. Incidence case definitions exclude histologies consistent with Kaposi sarcoma and mesothelioma, where applicable.
Melanoma incidence per 100,000 population	MCR	2007-2011	Cancer Incidence: The number of people who develop cancer (new cancer cases) during a specified period of time in a specified population. Incidence case definitions exclude histologies consistent with Kaposi sarcoma and mesothelioma, where applicable.

Maine Shared Community Health Needs Assessment Data Sources 2015			
Indicator	**Data Source**	**Year(s)**	**Other Notes**
Pap smears females ages 21-65 in past three years	BRFSS	2012	Females with intact cervix, that have received a pap smear within the past three years.
Prostate cancer mortality per 100,000 population	MCR	2007-2011	Cancer Deaths: Deaths with malignant cancer as the underlying cause of death.
Prostate cancer incidence per 100,000 population	MCR	2007-2011	Cancer Incidence: The number of people who develop cancer (new cancer cases) during a specified period of time in a specified population. Incidence case definitions exclude histologies consistent with Kaposi sarcoma and mesothelioma, where applicable.
Tobacco-related neoplasms, mortality per 100,000 population	MCR	2007-2011	Cancer Deaths: Deaths with malignant cancer as the underlying cause of death.
Tobacco-related neoplasms, incidence per 100,000 population	MCR	2007-2011	Cancer Incidence: The number of people who develop cancer (new cancer cases) during a specified period of time in a specified population. Incidence case definitions exclude histologies consistent with Kaposi sarcoma and mesothelioma, where applicable.
Cardiovascular Disease			
Acute myocardial infarction hospitalizations per 10,000 population	MHDO	2010-2012	ICD-9 CM - 410
Acute myocardial infarction mortality per 100,000 population	Maine CDC Vital Records	2009-2013	ICD-10 I21-I22
Cholesterol checked every five years	BRFSS	2011. 2013	Adults reporting that they last had their blood cholesterol checked within the past 5 years.
Coronary heart disease mortality per 100,000 population	Maine CDC Vital Records	2009-2013	ICD-10 I20-I25
Heart failure hospitalizations per 10,000 population	MHDO	2010-2012	ICD-9 CM - 428
Hypertension prevalence	BRFSS	2011, 2013	Adults who have ever been told by a doctor, nurse, or other health professional that they have high blood pressure.
High cholesterol	BRFSS	2011, 2013	Adults who have been told by a doctor or other health professional that their blood cholesterol is high.
Hypertension hospitalizations per 100,000 population	MHDO	2011	ICD-9 CM - 401, 402, 403, 404
Stroke hospitalizations per 10,000 population	MHDO	2010-2012	ICD-9 CM - 430-438
Stroke mortality per 100,000 population	Maine CDC Vital Records	2009-2013	ICD-10 I60-I69
Diabetes			
Diabetes prevalence (ever been told)	BRFSS	2011-2013	Adults that have ever been told by a doctor or other health professional that they have diabetes.
Pre-diabetes prevalence	BRFSS	2011-2013	Adults that have ever been told by a doctor or other health professional that they have pre-diabetes or borderline diabetes.
Adults with diabetes who have eye exam annually	BRFSS	2011-2013	Adults with diabetes who report having an eye exam in which the pupils were dilated within the past year.

Maine Shared Community Health Needs Assessment Data Sources 2015			
Indicator	**Data Source**	**Year(s)**	**Other Notes**
Adults with diabetes who have foot exam annually	BRFSS	2011-2013	Adults with diabetes who report having a health professional check their feet for any sores or irritations within the past year.
Adults with diabetes who have had an A1C test twice per year	BRFSS	2011-2013	Adults who have had a doctor, nurse, or other health professional checked them for "A one C" in the past 12 months.
Adults with diabetes who have received formal diabetes education	BRFSS	2011-2013	Adults with diabetes who have ever taken a course or class in how to manage your diabetes themselves.
Diabetes emergency department visits (principal diagnosis) per 100,000 population	MHDO	2011	ICD-9 CM - 250
Diabetes hospitalizations (principal diagnosis) per 10,000 population	MHDO	2010-2012	ICD-9 CM - 250
Diabetes long-term complication hospitalizations	MHDO	2011	Diabetes long-term complication hospitalizations are defined as hospitalizations of Maine residents for which diabetes long-term complication was the primary diagnosis, coded as ICD 9 - 25040, 25070, 25041, 25071, 25042, 25072, 25043, 25073, 25050, 25051, 25052, 25053, 25080, 25081, 25082, 25083, 25060, 25061, 25062, 25063, 25090, 25091, 25092.
Diabetes mortality (underlying cause) per 100,000 population	Maine CDC Vital Records	2009-2013	ICD-10 E10-E14
Environmental Health			
Children with confirmed elevated blood lead levels (% among those screened)	Maine CDC Lead Program	2009-2013	In 2012, CDC defined a reference level of 5 micrograms per deciliter (µg/dL) to identify children with elevated blood lead levels. These children are exposed to more lead than most children. For more information, visit: www.cdc.gov/nceh/lead/ACCLPP/blood_lead_levels.htm(http://www.cdc.gov/nceh/lead/acclpp/blood_lead_levels.htm
Children with unconfirmed elevated blood lead levels (% among those screened)	Maine CDC Lead Program	2009-2013	In 2012, CDC defined a reference level of 5 micrograms per deciliter (µg/dL) to identify children with elevated blood lead levels. These children are exposed to more lead than most children. For more information, visit: www.cdc.gov/nceh/lead/ACCLPP/blood_lead_levels.htm(http://www.cdc.gov/nceh/lead/acclpp/blood_lead_levels.htm
Homes with private wells tested for arsenic	BRFSS	2009, 2012	Data are weighted to the household. At the county level, 9.7%-32.2% of those surveyed did not know whether they had tested their well water for arsenic.
Lead screening among children age 12-23 months	Maine CDC Lead Program	2009-2013	A blood lead test is considered a “screening test” only when a child has no prior history of a confirmed elevated blood lead level.
Lead screening among children age 24-35 months	Maine CDC Lead Program	2009-2013	A blood lead test is considered a “screening test” only when a child has no prior history of a confirmed elevated blood lead level.

Maine Shared Community Health Needs Assessment Data Sources 2015			
Indicator	**Data Source**	**Year(s)**	**Other Notes**
Immunization			
Adults immunized annually for influenza	BRFSS	2011-2013	Adults who have had either a seasonal flu shot or a seasonal flu vaccine that was sprayed in your nose during the past 12 months.
Adults immunized for pneumococcal pneumonia (ages 65 and older)	BRFSS	2011-2013	Risk factor for adults aged 65 or older that have ever had a pneumonia shot.
Immunization exemptions among kindergarteners for philosophical reasons	Maine Immunization Program	2015	Available from: http://www.maine.gov/dhhs/mecdc/infectious-disease/immunization/publications/index.shtml
Two-year-olds up to date with "Series of Seven Immunizations" 4-3-1-3-3-1-4	Maine Immunization Program	2015	The Maine Immunization Program conducts an annual immunization assessment on January 1 of each calendar year that includes all 2-year-olds in the State of Maine immunization registry, ImmPact, associated to a practice that enters client specific data. These assessments follow the standard Centers for Disease Control and Prevention childhood assessment criteria of 24-35 months of age immunized as of 24 months for the 4 DTaP (Diphtheria, Tetanus, Polio): 3 IPV (Polio): 1 MMR (Measles, Mumps, Rubella): 3 Hib (Haemophilus influenza type B): 3 HepB (Hepatitis B):1 Var (Varicella):4 PCV (Pneumococcal Conjugate) schedule.
Infectious Disease			
Hepatitis A (acute) incidence per 100,000 population	Maine Infectious Disease Surveillance System (MIDSS)	2014	Defined as the number of new infections during 2014.
Hepatitis B (acute) incidence per 100,000 population	MIDSS	2014	Defined as the number of new infections during 2014.
Hepatitis C (acute) incidence per 100,000 population	MIDSS	2014	Defined as the number of new infections during 2014.
Incidence of past or present hepatitis C virus (HCV) per 100,000 population	MIDSS	2014	New diagnoses, regardless of when infection occurred or stage of disease at diagnosis.
Incidence of newly reported chronic hepatitis B virus (HBV) per 100,000 population	MIDSS	2014	New diagnoses, regardless of when infection occurred or stage of disease at diagnosis.
Lyme disease incidence per 100,000 population	MIDSS	2014	Defined as the number of new infections during 2014.
Pertussis incidence per 100,000 population	MIDSS	2014	Incidence is defined as the number of new infections during 2014.
Tuberculosis incidence per 100,000 population	MIDSS	2014	New diagnoses, regardless of when infection occurred or stage of disease at diagnosis.
STD/HIV			
AIDS incidence per 100,000 population	Maine CDC HIV Program	2014	Incidence is defined as the number of new infections during 2014.
Chlamydia incidence per 100,000 population	Maine CDC STD Program	2014	Incidence is defined as the number of new infections during 2014.

Maine Shared Community Health Needs Assessment Data Sources 2015			
Indicator	**Data Source**	**Year(s)**	**Other Notes**
Gonorrhea incidence per 100,000 population	Maine CDC STD Program	2014	Incidence is defined as the number of new infections during 2014.
HIV incidence per 100,000 population	Maine CDC HIV Program	2014	Incidence is defined as the number of new infections during 2014.
HIV/AIDS hospitalization rate per 100,000 population	MHDO	2011	DRG-MDC 25
Syphilis incidence per 100,000 population	Maine CDC STD Program	2014	Incidence is defined as the number of new infections during 2014.
Intentional Injury			
Domestic assaults reports to police per 100,000 population	Maine Dept. of Public Safety	2013	All offenses of assault between family or household members are reported as domestic assault.
Firearm deaths per 100,000 population	Maine CDC Vital Records	2009-2013	ICD-10 W32-W34 ,X72-X74, X93-X95, Y22-Y24, Y350 or U014.
Intentional self-injury (Youth)	MIYHS	2013	High school students who have ever done something to purposely hurt themselves without wanting to die, such as cutting or burning themselves on purpose.
Lifetime rape/non-consensual sex (among females)	BRFSS	2012	Females who have ever had sex with someone after they said or showed that they didn't want them to or without their consent.
Nonfatal child maltreatment per 1,000 population	Child Maltreatment Report ACYF	2013	Rates are unique child victims per 1,000 population under age 18.
Reported rape per 100,000 population	Maine Dept. of Public Safety	2013	Includes rape by force and attempted forcible rape. Excludes carnal abuse without force (statutory rape) and other sex offenses.
Suicide deaths per 100,000 population	Maine CDC Vital Records	2009-2013	ICD-10 U03 X60-X84 or Y87.0
Violence by current or former intimate partners in past 12 months (among females)	BRFSS	2012	Females who have experienced physical violence or had unwanted sex with a current or former intimate partner within the past 12 months.
Violent crime rate per 100,000 population	Maine Dept. of Public Safety	2013	Reported violent crime offenses. Violent crime includes murder, rape, robbery and aggravated assault.
Unintentional Injury			
Always wear seatbelt (Adults)	BRFSS	2013	Adults reporting they always use seatbelts when they drive or ride in a car.
Always wear seatbelt (High School Students)	MIYHS	2013	High School students who report they always wear a seatbelt when riding in a vehicle.
Traumatic brain injury related emergency department visits (all intents) per 10,000 population	MHDO	2011	Emergency department visits by Maine residents at Maine acute care hospitals that did not end with the patient being admitted to that hospital as an inpatient, for which the principal diagnosis is an injury (ICD 9 CM 800–909.2, 909.4, 909.9–994.9, 995.5–995.59 or 995.80–995.85) or any external cause of injury code is ICD 9 CM E800-E869, E880-E929 or E950-E999, and the principal or any other diagnosis is ICD-9-CM 800.00–801.99, 803.00–804.99, 850.0–850.9, 851.00–854.19, 950.1–950.3, 959.01 or 995.55.

Maine Shared Community Health Needs Assessment Data Sources 2015			
Indicator	**Data Source**	**Year(s)**	**Other Notes**
Unintentional and undetermined intent poisoning deaths per 100,000 population	Maine CDC Vital Records	2009-2013	Deaths of Maine residents for which the underlying cause of death is ICD-10 X40-X49 or Y10-Y19. want the complete definition, it's "deaths of Maine residents for which the underlying cause of death is ICD-10 X40-X49 or Y10-Y19.
Unintentional fall related deaths per 100,000 population	Maine CDC Vital Records	2009-2013	Deaths of Maine residents for which the underlying cause of death is ICD-10 W00-W19.
Unintentional fall related injury emergency department visits per 10,000 population	MHDO	2011	Unintentional fall-related injury ED Visits are defined as ED Visits in which external cause of injury was coded as ICD--9CM E880-E886 or E888.
Unintentional motor vehicle traffic crash related deaths per 100,000 population	Maine CDC Vital Records	2009-2013	Deaths of Maine residents for which the underlying cause of death is ICD-10 V02-V04 (.1, .9), V09.2, V12-V14 (.3-.9), V19 (.4-.6), V20-V28 (.3-.9), V29 (.4-.9), V30-V39 (.4-.9), V40-V49 (.4-.9), V50-V59 (.4-.9) ,V60-V69 (.4-.9), V70-V79 (.4-.9) ,V80 (.3-.5), V81.1 ,V82.1, V83-V86 (.0-.3) ,V87 (.0-.8) or V89.2."
Occupational Health			
Deaths from work-related injuries (number)	Maine Dept. of Labor	2013	Includes self-employed workers, owners of unincorporated businesses and farms, paid and unpaid family workers, members of partnerships and may include owners of incorporated businesses.
Nonfatal occupational injuries (number)	U.S. Bureau of Labor Statistics	2013	Includes both injuries that required days away from work and those that required job transfer or restriction. Data do not reflect the relative FTEs worked by the various groups of employees.
Mental Health			
Adults who have ever had anxiety	BRFSS	2011-2013	Adults who have ever been told by a doctor or other healthcare provider that they have an anxiety disorder?
Adults who have ever had depression	BRFSS	2011-2013	Adults who have ever been told by a doctor or other healthcare provider that they have a depressive disorder.
Adults with current symptoms of depression	BRFSS	2011-2013	Indicator of current depression coded using two items from the PHQ-2 depression screener.
Adults currently receiving outpatient mental health treatment	BRFSS	2011-2013	Adults now taking medicine or receiving treatment from a doctor for any type of mental health condition or emotional problem.
Co-morbidity for persons with mental illness	BRFSS	2011, 2013	Adults with current symptoms of depression from the PHQ-2 depression screener with 3 or more chronic conditions.
Mental health emergency department rates per 100,000 population	MHDO	2011	ICD-9 CM- 209-302, 306-319, which exclude substance use related disorders.
Sad/hopeless for two weeks in a row (High School Students)	MIYHS	2013	During the past 12 months, did you ever feel so sad or hopeless almost every day for two weeks or more in a row that you stopped doing some usual activities? Percentage of students who answered "Yes".

Maine Shared Community Health Needs Assessment Data Sources 2015			
Indicator	**Data Source**	**Year(s)**	**Other Notes**
Seriously considered suicide (High School Students)	MIYHS	2013	During the past 12 months, did you ever seriously consider attempting suicide? Percentage of students who answered "Yes".
Physical Activity, Nutrition and Weight			
Fewer than two hours combined screen time (High School Students)	MIYHS	2013	Percentage of students watching 2 or fewer hours of combined screen time (tv, video games, computer) per day on an average school day.
Fruit and vegetable consumption (High School Students)	MIYHS	2013	Percentage of students who drank 100% fruit juice, ate fruit and/or ate vegetables five or more times per day during the past seven days.
Fruit consumption among Adults 18+ (less than one serving per day)	BRFSS	2013	Adults with less than one serving per day of fruits or fruit juice.
Met physical activity recommendations (Adults)	BRFSS	2013	Adults who reported doing enough physical activity to meet the aerobic and strengthening recommendations.
Physical activity for at least 60 minutes per day on five of the past seven days (High School Students)	MIYHS	2013	Percentage of students who were physically active for a total of at least 60 minutes per day on five of the past seven days.
Sedentary lifestyle – no leisure-time physical activity in past month (Adults)	BRFSS	2011-2013	Adults reporting that during the past month, other than their regular job, they did not participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise.
Soda/sports drink consumption (High School Students)	MIYHS	2013	Percentage of students who drank at least one can, bottle, or glass of soda, sports drink, energy drink, or other sugar-sweetened beverage such as Gatorade, Red Bull, lemonade, sweetened tea or coffee drinks, flavored milk, Snapple, or Sunny Delight (Not counting diet soda, other diet drinks, or 100% fruit juice.) per day during the past week.
Vegetable consumption among Adults 18+ (less than one serving per day)	BRFSS	2013	Adults with less than one serving per day of vegetables.
Obesity (Adults)	BRFSS	2013	Adults with a BMI of 30 or more.
Obesity (High School Students)	MIYHS	2013	Percentage of students who were obese (i.e., at or above the 95th percentile for body mass index, by age and sex) -- SELF-REPORTED HEIGHT/WEIGHT.
Overweight (Adults)	BRFSS	2013	Adults with a BMI between 25.0 and 29.9.
Overweight (High School Students)	MIYHS	2013	Percentage of students who were overweight (i.e., at or above the 85th percentile but below the 95th percentile for body mass index, by age and sex) -- SELF-REPORTED HEIGHT/WEIGHT.
Pregnancy and Birth Outcomes			
Children with special health care needs	National Survey of Children with Special Health Care Needs	2011-2012	Survey respondents who reported that their child has a special health care need.
Infant deaths per 1,000 live births	Maine CDC Vital Records	2003-2012	Number of babies who died before their first birthday per 1,000 live births. Average annual number of infant deaths and infant mortality rate might be slightly

Maine Shared Community Health Needs Assessment Data Sources 2015			
Indicator	**Data Source**	**Year(s)**	**Other Notes**
			underestimated due to possible missing out-of-state deaths of Maine infants in 2010.
Live births for which the mother received early and adequate prenatal care	Maine CDC Vital Records	2010-2012	Defined as an adequate or adequate-plus rating on the Kotelchuck Adequacy of Prenatal Care Utilization Index.
Live births to 15-19 year olds per 1,000 population	Maine CDC Vital Records	2010-2012	Defined as the number of live births among 15- to 19-year-old Maine women per 1,000 population.
Low birth weight (<2500 grams)	Maine CDC Vital Records	2010-2012	Low birth weight defined as less than 2500 grams.
Substance and Alcohol Abuse			
Alcohol-induced mortality per 100,000 population	Maine CDC Vital Records	2009-2013	ICD-10 - E24.4 , F10, G31.2, G62.1, G72.1, I42.6, K29.2, K70, K85.2, K86.0, R78.0, X45, X65 or Y15
Binge drinking of alcoholic beverages (High School Students)	MIYHS	2013	During the past 30 days, on how many days did you have 5 or more drinks of alcohol in a row, that is, within a couple of hours? Percentage of students who answered at least 1 day.
Binge drinking of alcoholic beverages (Adults)	BRFSS	2011-2013	Risk factor for binge drinking where binge drinking is defined as having 5 or more drinks on 1 occasion for men and 4 or more drinks on 1 occasion for women.
Chronic heavy drinking (Adults)	BRFSS	2011-2013	At risk for heavy alcohol consumption (greater than two drinks per day for men and greater than one drink per day for women).
Drug-affected baby referrals received as a percentage of all live births	OCFS Maine Automated Child Welfare Information System	2014	This measure reflects the number of infants born in Maine where a healthcare provider reported to OCFS that there was reasonable cause to suspect the baby may be affected by illegal substance abuse or demonstrating withdrawal symptoms resulting from prenatal drug exposure or who have fetal alcohol spectrum disorders.
Drug-induced mortality per 100,000 population	CDC Wonder	2009-2013	The population figures for year 2013 are bridged-race estimates of the July 1 resident population, from the Vintage 2013 postcensal series released by NCHS on June 26, 2014.
Emergency medical service overdose response per 100,000 population	Maine Emergency Medical Services	2014	Includes overdoses from drugs/medication, alcohol and inhalants.
Opiate poisoning (ED visits) per 100,000 population	MHDO	2009-2011	ICD-9 - 9650, 96500, 96501, 96502, 96509
Opiate poisoning (hospitalizations) per 100,000 population	MHDO	2009-2011	ICD-9 - 9650, 96500, 96501, 96502, 96509
Past-30-day alcohol use (High School Students)	MIYHS	2013	During the past 30 days, on how many days did you have at least one drink of alcohol? Percentage of students who answered at least 1 day.
Past-30-day inhalant use (High School Students)	MIYHS	2013	During the past 30 days, how many times did you sniff glue, breathe the contents of aerosol spray cans, or inhale any paints or sprays to get high? Percentage of students who answered at least 1 time.
Past-30-day marijuana use (Adults)	BRFSS	2011-2013	During the past 30 days, have you used marijuana?

Maine Shared Community Health Needs Assessment Data Sources 2015			
Indicator	**Data Source**	**Year(s)**	**Other Notes**
Past-30-day marijuana use (High School Students)	MIYHS	2013	During the past 30 days, how many times did you use marijuana? Percentage of students who answered at least 1 time.
Past-30-day nonmedical use of prescription drugs (Adult)	BRFSS	2011-2013	Adults who used prescription drugs that were either not prescribed and/or not used as prescribed in order to get high at least once within the past 30 days.
Past-30-day nonmedical use of prescription drugs (High School Students)	MIYHS	2013	During the past 30 days, how many times did you take a prescription drug (such as OxyContin, Percocet, Vicodin, codeine, Adderall, Ritalin, or Xanax) without a doctor's prescription? Percentage of students who answered at least 1 time.
Prescription Monitoring Program opioid prescriptions (days supply/pop)	Prescription Monitoring Program	2014-2015	Presented as Days Supply/Population, which is the total days of supply of medication divided by the overall population.
Substance-abuse hospital admissions per 100,000 population	MHDO	2011	DRG-MDC 20
Tobacco Use			
Current smoking (Adults)	BRFSS	2011-2013	Adults that reported having smoked at least 100 cigarettes in their lifetime and currently smoke.
Current smoking (High School Students)	MIYHS	2013	During the past 30 days, on how many days did you smoke cigarettes? Percentage of students who answered at least 1 day.
Current tobacco use (High School Students)	MIYHS	2013	Percentage of students who smoked cigarettes or cigars or used chewing tobacco, snuff, or dip on one or more of the past 30 days. (Note: Reports read "Percentage of students who smoked cigarettes and/or cigars and/or used chewing tobacco, snuff, or dip on one or more of the past 30 days").
Secondhand smoke exposure (Youth)	MIYHS	2013	Percentage of students who were in the same room with someone who was smoking cigarettes at least 1 day during the past 7 days.

Penobscot Valley Hospital CHNA 2016 Implementation Strategy

2016 Significant Health Needs

Let us look to the future as we work to improve the health and well-being of those we serve at PVH. Review the priority rankings of area health needs by the Local Expert Advisors below as we organize the search for locally available resources as well as the response to the community needs.[24] The following list:

- Identifies the rank order of each identified Significant Need
- Presents the factors considered in developing the ranking
- Establishes a Problem Statement to specify the problem indicated by use of the Significant Need term
- Identifies PVH current efforts responding to the need
- Establishes the Implementation Strategy programs and resources PVH will devote to attempt to achieve improvements
- Documents the Leading Indicators PVH will use to measure progress
- Presents the Lagging Indicators PVH believes the Leading Indicators will influence in a positive fashion, and
- Presents the locally available resources noted during the development of this report as believed to be currently available to respond to this need.

In general, PVH is the major hospital in the service area. PVH is a 25 bed, critical access hospital located in Lincoln, Maine. The next closest facilities are outside the service area and include:

- Millinocket Regional Hospital – 25 bed critical access hospital in Millinocket, ME; 35 miles away from Lincoln (45 minutes by vehicle);
- St. Joseph Hospital – 112 bed acute care medical facility in Bangor, Me; 47.5 miles away from Lincoln (49 minutes by vehicle); and
- Eastern Maine Medical Center – 411 bed acute care medical facility in Bangor, ME; 48.9 miles away from Lincoln (50 minutes by vehicle).

All data items analyzed to determine significant needs are “Lagging Indicators,” measures presenting results after a period of time, characterizing historical performance. Lagging Indicators tell you nothing about how the outcomes were achieved. In contrast, the PVH Implementation Strategy uses “Leading Indicators.” Leading Indicators anticipate change in the Lagging Indicator. Leading Indicators focus on short-term performance, and if accurately selected, anticipate the broader achievement of desired change in the Lagging Indicator. Leading Indicators also must be within the ability of the hospital to influence and measure.

[24] Response to IRS Schedule h (Form 990) Part V B 3 e

Significant Needs

1. DRUG AND ALCOHOL ABUSE

Reasons identified as a significant need:

- 2013 Significant Need
- 82% of local experts identify drug and alcohol abuse as a major or critical problem within Penobscot County

Problem statement:

Drug and alcohol abuse are major health problems impacting society on multiple levels including violence, abuse, homelessness, illness, and even death. Over 80% of local experts agree that drug and alcohol abuse are major or critical problems within our County. In order to combat this problem, PVH will work to increase resources available to prevent and treat substance abuse in our service area. With assistance from Health Access Network, the organizations will work with our primary care providers to meet 2016 Maine opioid prescribing practices. Efforts will lead to a decrease in the number of Emergency Medical Services overdose response rates by 2018.

Baseline data:

- Emergency medical services overdose response rate is higher than state average at 594 per 100,000 (Maine 392 per 100,000).

PVH services, programs, and resources available to respond to this need include:[25]

- PVH treats and refers emergency department patients;
- Patients are treated for detoxification through the Emergency Room;
- All PVH providers closely monitor patients per state standards on controlled substance prescribing;
- PVH offers alternative pain management services through the PVH Specialty Clinic in pain management and physical therapy;
- PVH staff are active members of the Save-a-Life Substance Abuse Task Force providing education to the community and prevention efforts surrounding substance abuse,

[25] This section in each need for which the hospital plans an implementation strategy responds to Schedule h (Form 990) Part V Section B 3 c

including sending referrals to three newly formed substance abuse support groups;

- PVH provides space for ALANON and AA at no cost for meetings;
- PVH promoted the national and statewide Prescription Drug Take Back events with the Lincoln Police Department; and
- PVH works with schools to educate students on the long-term effects of substance abuse.

PVH plans to take the following steps to address this need:

- Leadership activities
    - Design and implement an after care treatment policy to include available support systems for patients following inpatient care with PVH & HAN senior leadership teams and providers.
    - Research the feasibility of opening a detox treatment facility with PVH & HAN senior leadership teams.
- Provider activities
    - Provide medical staff development and education on new prescribing law (An Act to Prevent Opiate Abuse by Strengthening the Controlled Substances Prescription Monitoring Program in Maine) for both PVH and HAN providers.
    - Update prescribing policies with senior leadership teams and providers at PVH and HAN to align with state and national laws.
    - Continue recruitment efforts of quality advanced clinicians at PVH and HAN to expand suboxone treatments in collaboration with HAN through their substance abuse grant.
    - Continue to screen all prenatal patients at HAN for drug use in their first trimester of pregnancy and refer all pregnant patients with substance use to the Family and Children Together program for support and HAN's behavioral health program.
- Community involvement
    - Continue to educate providers and the community on alternative pain therapies available through physical therapy and pain management.
    - Encourage healthy, safe and fun alternatives for teens, especially on nights and weekends in collaboration with the area Rec Departments and schools.
    - Promote the Nurturing Parental Program offered by the Penquis Regional Linking Project.

- Continue promoting Nar-Anon, NA groups and Save-A-Life substance abuse task force efforts

Anticipated results from PVH Implementation Strategy

Community Benefit Attribute Element	Yes, Implementation Strategy Addresses	Implementation Strategy Does Not Address
1. Available to public and serves low income consumers	Yes	
2. Reduces barriers to access services (or, if ceased, would result in access problems)	Yes	
3. Addresses disparities in health status among different populations		No
4. Enhances public health activities	Yes	
5. Improves ability to withstand public health emergency		No
6. Otherwise would become responsibility of government or another tax-exempt organization		No
7. Increases knowledge; then benefits the public	Yes	

The strategy to evaluate PVH intended actions is to monitor change in the following Leading Indicator:

- Establish an after-care program for patients once they have been discharged from substance abuse treatment.

The change in the Leading Indicator anticipates appropriate change in the following Lagging Indicator:

- Decline in emergency medical services' responses to overdoses in Penobscot County from 594 per 100,000 by 2018.

PVH anticipates collaborating with the following other facilities and organizations to address this Significant Need:

Organization	Contact Name	Contact Information
Health Access Network	William Diggins, RN	207-794-6700
Save-A-Life Task Force	Elizabeth Stevens (HAN)	estevens@hanfqhc.org
Penquis Regional Linking Project	Larry Tyler	207-941-2347
PVH Medical Staff	Carl Alessi, M.D.	207-794-7215
Partnership for a Healthy Northern Penobscot	Jane McGillicudy	207-723-5161
Acadia Hospital		207-973-6100
Lincoln Police Department	Dan Summers	207-794-8455
Full Circle Wellness Center		207-794-6166
Northeast Occupational Exchange		207-794-8919
Families and Children Together (F.A.C.T.)	Don Lynch	207-941-2347

Other local resources identified that are believed available to respond to this need:[26]

Organization	Contact Name	Contact Information
SAD #67	Dr. Keith Laser, Superintendent	207-794-3700
SAD #30	William Braun, Superintendent	207-738-2665
SAD #31	Michael Wright, Superintendent	207-943-7317
Lee Academy	Gus Leblanc, Headmaster	207-738-2252
Maine Contracted agent addressing Opioid & Other Substance Use Prevention	TBA	TBD
Penquis District Coordinator with the Maine Centers for Disease Control & Prevention	TBA	TBD

[26] This section in each need for which the PVH plans an implementation strategy responds to Schedule h (form 990) Part V Section B 3 c and Schedule h (Form 990) Part V Section B 11

2. & 3. OBESITY, PHYSICAL ACTIVITY AND NUTRITION

Reasons identified as a significant need:

- Obesity was 2013 Significant Need
- 75% of local experts identify obesity as major or critical problems within Penobscot County
- 65% identify physical activity and nutrition as major or critical problems within Penobscot County

Because these needs were so closely related, the hospital has combined obesity, the second ranked priority health need, and physical activity and nutrition, the third ranked priority health need, to address these issues as a combined need.

Problem statement:

Obesity is the second leading cause of death in the United States for people under 70. Obesity is linked to a large number of health issues including heart disease, stroke, diabetes, high blood pressure, and breast and colon cancer. Obesity has a negative effect on wages, healthcare expenses and quality of life. In order to make a positive impact on our society, PVH will continue efforts to reduce obesity in our service area in working with employers and schools to implement wellness programs in their organizations by 2018.

Baseline data:

- Higher percentage of overweight (36.7) and obese (32.4) adults in Penobscot County (69.1 total compared to state 64.8); and
- Lower percentage of high school students consuming fruits and vegetables (13.5% compared to 16.8% in the state).

PVH services, programs, and resources available to respond to this need include:

- PVH offers the Community Fitness Center and Independent Gym to the public for a nominal monthly fee and promotes this service at community health fairs;
- PVH staff created the free Healthy Me weight loss program to teach the community about healthy eating and safe exercising;
- PVH staff works with Health Access Network to disseminate 5-2-1-0 Let's Go materials to families. As a result, 5-2-1-0 bookmarks on healthy eating and active lifestyles are being given to all children with the books they receive through the "Raising Readers"

program at well child visits;

- PVH collects healthy food items for the Lincoln Regional Food Cupboard's weekend backpack program to provide students in need with the healthy food options on the weekends; and
- PVH provides healthy meals for patients and staff in the cafeteria.

PVH plans to take the following steps to address this need:

- Evaluate the feasibility of implementing workplace wellness policies and programs at PVH, HAN, Town of Lincoln, school systems and other area businesses.
- Offer Healthy Me, a free weight loss program, designed to educate community members on healthy nutritional habits and effective weight loss strategies.
- Adopt and promote the 5-2-1-0 Let's Go program as the official obesity prevention program to increase physical activity and healthy eating for children and adults through policy and environmental change.
- Offer free diabetes assessment screenings and fitness challenges at community events.

Anticipated results from PVH Implementation Strategy

Community Benefit Attribute Element	Yes, Implementation Strategy Addresses	Implementation Strategy Does Not Address
1. Available to public and serves low income consumers	Yes	
2. Reduces barriers to access services (or, if ceased, would result in access problems)	Yes	
3. Addresses disparities in health status among different populations	Yes	
4. Enhances public health activities	Yes	
5. Improves ability to withstand public health emergency		No
6. Otherwise would become responsibility of government or another tax-exempt organization		No
7. Increases knowledge; then benefits the public	Yes	

The strategy to evaluate PVH intended actions is to monitor change in the following Leading Indicator:

- Encourage implementation of workplace wellness initiatives at PVH and other businesses;
- Promote 5-2-1-0 Let's Go program in the primary care practices and schools;
- Reach additional populations and grow participation in the Healthy Me weight loss program; and
- Participate in community events offering free diabetes screenings and fitness challenges.

The change in the Leading Indicator anticipates appropriate change in the following Lagging Indicator:

- Decrease in obesity rates from 32.4% by 2018

PVH anticipates collaborating with the following other facilities and organizations to address this Significant Need:

Organization	Contact Name	Contact Information
Health Access Network	William Diggins, RN	207-794-6700
Barbara Bush Children's Hospital / Maine Medical Center / MaineHealth	5-2-1-0 Let's Go Program Coordinator	207-662-3734
Partnership for a Healthy Northern Penobscot	Jane McGillicudy	207-723-5161
Town of Lincoln	Jeremy Weatherbee Recreational Department Director	jeremyweatherbee@gmail.com
SAD #67	Dr. Keith Laser, Superintendent	207-794-3700
SAD #30	William Braun, Superintendent	207-738-2665
SAD #31	Michael Wright, Superintendent	207-943-7317
Lee Academy	Gus Leblanc, Headmaster	207-738-2252

Other local resources identified during the CHNA process that are believed available to respond to this need:

Organization	Contact Name	Contact Information
Health Insurance Companies offering worksite wellness programs	Various	Various

4. MENTAL HEALTH

Reasons identified as a significant need:

- 2013 Significant Need
- 65% of local experts identify mental health as major or critical problem within Penobscot County

Problem statement:

Mental health behaviors have a significant impact on society causing economic burden to individuals and families, lost employment, reduced productivity and crime. Many people suffering from mental health issues have comorbidities that have further negative impacts on their health and wellness. PVH will work with Health Access Network to increase mental health and suicide prevention resources available, especially to the uninsured population in our service area.

Baseline:

- Higher rates of adult depression in Penobscot County of 25.8% compared to state 23.5% and national 18.7% averages; and
- Higher rates of outpatient mental health treatment 19.8% in Penobscot County than state 17.7% average.

PVH services, programs, and resources available to respond to this need include:

- PVH has expanded access to mental health services through a psychiatric telemedicine program and a crisis prevention program in the emergency department;
- PVH treats and refers emergency department patients for psychiatric care; and
- PVH primary care providers refer patients for psychiatric care.

PVH plans to take the following steps to address this need:

- Continue to host monthly Case Management luncheons to coordinate efforts with the agencies listed below who network and share information on services provided within our service area.
- Assist Health Access Network in recruiting an additional psychologist to their practice.
- Assist Health Access Network in promoting their school based health centers at Lee Academy and Mattanawcook Academy, where counseling services are provided to high

school students.

- Review the feasibility of enhancing tele-psychology to enhance medication management, billing, and expansion to the inpatient unit at PVH.

Anticipated results from PVH Implementation Strategy

Community Benefit Attribute Element	Yes, Implementation Strategy Addresses	Implementation Strategy Does Not Address
1. Available to public and serves low income consumers	Yes	
2. Reduces barriers to access services (or, if ceased, would result in access problems)	Yes	
3. Addresses disparities in health status among different populations	Yes	
4. Enhances public health activities	Yes	
5. Improves ability to withstand public health emergency		No
6. Otherwise would become responsibility of government or another tax-exempt organization		No
7. Increases knowledge; then benefits the public	Yes	

The strategy to evaluate PVH intended actions is to monitor change in the following Leading Indicator:

- Recruitment of an additional psychologist at HAN
- Review opportunities to enhance tele-psychiatry services at PVH

The change in the Leading Indicator anticipates appropriate change in the following Lagging Indicator:

- Decrease the wait list at Health Access Network for psychiatric services from 50 patients to less than 10 patients by 2018

Other local resources identified during the CHNA process that are believed available to respond to this need:

Organization	Contact Name	Contact Information
Health Access Network	William Diggins, RN	207-794-6700
Acadia Hospital		207-973-6100
Behavioral HealthCare Program		800-538-9698
Community Care		207-945-4240
Community Health & Counseling		207-794-3554
Full Circle Wellness Center		207-794-6166
Northeast Occupational Exchange		207-794-8919
Turning Points	Loretta Severson, PSY.D	207-794-8990
Maine Suicide Prevention Program	Maine Department of Health and Human Services	1-800-464-5767

5. CARDIOVASCULAR DISEASE

Reasons identified as a significant need:

- New significant need;
- 63% of stakeholders reported cardiovascular disease as a major or critical problem;
- Statistically significant higher rates for Penobscot County residents over state averages.

Problem statement:

Cardiovascular disease can be fatal or can lead to serious illness, disability and lower quality of life. PVH will focus efforts on our youth population to prevent cardiovascular disease through partnerships in schools to educate and prevent tobacco use.

Baselines:

Data from 2015 Maine Integrated Youth Health Survey Report for Penobscot County:

- High school students who smoked at least 1 cigarette in prior 30-days: 11.5%
- Middle school students who smoke at least 1 cigarette in prior 30-days: 2.3%
- Middle school students who smoked a whole cigarette before age 11: 30.9%
- High school students who believe parents feel it would be wrong for them to smoke cigarettes: 8.2%
- High school students who reported being taught about the dangers of tobacco use in a class within the past 12 months: 41.1%
- Middle school students who reported being taught about the dangers of tobacco use in a class within the past 12 months: 64.5%

PVH services, programs, and resources available to respond to this need include:

- PVH participates in the Breathe Easy Coalition and Maine Tobacco Free Hospital Network programs, implementing best practices for a smoke-free campus through their Gold Star Standards of Excellence program;
- PVH partners with the Tobacco-Free Maine CDC program offering free resources to the public through The Maine Tobacco Helpline 1-800-207-1230;
- Maine Rural Health Innovation Network (MRHIN) health collaborative to implement best practices in diabetes and congestive heart failure treatment and prevention, including

increasing access to care in rural areas; and

- PVH Community Relations Committee provides education in the school systems.

PVH plans to take the following steps to address this need:

- Senior leadership team will implement best practices and policy updates to align with the Maine Tobacco Free Hospital Network.
- Community relations committee will assist Health Access Network with Tar Wars education in schools to educate on the dangers of tobacco use.

Anticipated results from PVH Implementation Strategy

Community Benefit Attribute Element	Yes, Implementation Strategy Addresses	Implementation Strategy Does Not Address
1. Available to public and serves low income consumers	Yes	
2. Reduces barriers to access services (or, if ceased, would result in access problems)	Yes	
3. Addresses disparities in health status among different populations	Yes	
4. Enhances public health activities	Yes	
5. Improves ability to withstand public health emergency		No
6. Otherwise would become responsibility of government or another tax-exempt organization		No
7. Increases knowledge; then benefits the public	Yes	

The strategy to evaluate PVH intended actions is to monitor change in the following Leading Indicator:

- Assist Health Access Network with Tar Wars presentations and other education in area high schools and middle schools to prevent tobacco use, increasing the number of students receiving education on the dangers of tobacco from 64.5% (middle school) and 41.1% (high school); and
- Strive for the "Gold Star" in the annual application for the Gold Star Standards of Excellence award through the Maine Tobacco Free Hospital Network.

The change in the Leading Indicator anticipates appropriate change in the following Lagging Indicator:

- Decrease the percent of students who smoke a whole cigarette before age 11 from 30.9%
- Decrease the percent of high school students who smoke at least 1 cigarette in prior 30-days from 11.5%

PVH anticipates collaborating with the following other facilities and organizations to address this Significant Need:

Organization	Contact Name	Contact Information
Health Access Network	William Diggins, RN	207-794-6700
Town of Lincoln	Jeremy Weatherbee	jeremyweatherbee@gmail.com
Lincoln Regional Food Cupboard	Melvin Voisine	207-794-2569
Maine Rural Health Innovation Network	Cary Medical Center	207-498-3111
Maine Tobacco Free Hospital Network	Sarah Mayberry	207-874-8774
Maine Tobacco Helpline	Maine CDC	1-800-207-1230
Partnership for a Tobacco-Free Maine (Mini Grant Opportunities)	Maine DHHS / CDC	207-287-4627 ptm.dhhs@maine.gov
SAD #67	Dr. Keith Laser, Superintendent	207-794-3700
SAD #30	William Braun, Superintendent	207-738-2665
SAD #31	Michael Wright, Superintendent	207-943-7317

Lee Academy	Gus Leblanc, Headmaster	207-738-2252

Other local resources identified during the CHNA process that are believed available to respond to this need:

Organization	Contact Name	Contact Information
N/A		

Overall Community Need Statement and Priority Ranking Score

Significant needs where PVH has implementation responsibility[27]

1. Drug and Alcohol Abuse
2. Obesity
3. Physical Activity and Nutrition (combined with obesity in the Implementation Strategy)
4. Mental Health
5. Cardiovascular Diseases

Significant needs where PVH did not develop implementation strategy[28]

1. None

Other needs where PVH did not develop implementation strategy

6. Tobacco use (partially addressed in the Drug and Alcohol Abuse and Cardiovascular Diseases strategies)
7. Diabetes
8. Depression
9. Cancer
10. Respiratory Diseases
11. Elder Health
12. Violence
13. Oral Health
14. Suicide and self-harm
15. Neurological diseases
16. Child development issues
17. Unintentional injury
18. Maternal and child health
19. Musculoskeletal diseases
20. Adolescent health
21. Sexually transmitted diseases/HIV/AIDS
22. Lead poisoning and other environmental health issues
23. Infant mortality

[27] Responds to Schedule h (Form 990) Part V B 8
[28] Responds to Schedule h (Form 990) Part V Section B 8

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Collaborating Organizations for SHNAPP Implementation:
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Maine Health Access Foundation
Maine Health Management Coalition
Maine Hospital Association
Maine Office of Substance Abuse and Mental Health Services
Maine Primary Care Association
Portland Public Health Division
St. Mary’s Regional Medical Center
Statewide Coordinating Council for Public Health
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Cumberland: Becca Matusovich, formerly Maine CDC, Maine DHHS
Cumberland: Adam Hartwig, acting
Downeast: Alfred May
MidCoast: Carrie McFadden
Penquis: Jessica Fogg
Wabanaki: Kristi Ricker and Sandra Yarmal
Western: Jamie Paul
York: Adam Hartwig

Penobscot Valley Hospital / Health Access Network January 2016 Forum Attendees:

Alessi, Carl
Bubar, Beverly
Butterfield, Mike
Cornelio, Marco
Dawson, Phil
Diggins, William
Ettinger, David
Fogg, Jessica
Head, Susan
Head, William
Junaidi, Babar
Laser, Keith
Libby, Kristie
Loman, Sarah
Maxwell, Sonia
Mayo, Gilberte
McCafferty, Holly
McGillicuddy, Jane
Morrison, Nicole
Nute, Debra
Poquette, Gary
Rideout, David
Rush, Ann Marie
Sutherland, Marie
Theriault, Amy
Thibodeau, Joseph
Willett, Miranda
Wyman, Richard
Young, Earlene

APPENDIX A

Impact of 2013 PVH Community Health Needs Assessment

First let us begin by recognizing efforts by Penobscot Valley Hospital to address top health priorities in 2013-2015 pertaining to obesity, smoking, alcohol and drug use, mental health and suicide, and diabetes. In early 2016, PVH collected feedback from community leaders through an online survey regarding progress and achievements addressing our community's top health priorities over the last three years. Comments on efforts toward each significant health need in 2013-2015 are summarized below.

1. Obesity

Public comments received on previously adopted implementation strategy in 2013:

- Exemplary efforts have been made by PVH to address this issue. PVH has sponsored Run/Walks for wellness, LYNX Rush, offered gym memberships to the community, promoted the Lincoln trail system, performed nutrition education talks with area school children at Wellness Fairs, provided exercise education to our area's senior citizens, providing healthier options at the PVH cafeteria, offered nutrition education presentations at 2015 Lincoln Expo, published a fabulous article in Bangor Metro Magazine on childhood nutrition, participated in Lincoln Homecoming Parade with an award winning float which promoted healthy eating, published "Health Talks" articles in the Lincoln News and will soon begin a Healthy Me Weight Loss Program, a summer camp for area youth and more.
- Food Drives with healthy options in PVH cafeteria [are] setting a better example and Healthy Cooking demonstrations for public, such as Golden Key Senior Center
- We work with our local public health organization to promote healthy lifestyles, including nutrition, substance abuse, tobacco cessation, and other identified needs. We work with our local FQHC to distribute information for healthy eating and the importance of an active lifestyle, our local high school to offer sessions on healthy cooking, and we provide healthy meals for PVH patients, staff, visitors, and community members.
- PVH should offer more educational activities in the schools and throughout the year at meetings.
- In my opinion PVH has made significant progress in its efforts to influence life style, nutrition and healthy eating to reduce obesity in our region. Especially impressed with the

diabetes education available at PVH.

- Registered dietician has attending many community educational sessions.
- Need to provide Obesity Clinics, which are Medicare/insurance reimbursed.

PVH evaluation of impact of actions taken on obesity since the 2013 CHNA:

- SPRINT provided 189 nutritional educational sessions "Healthy Eating on a Budget" to over 1,250 students in northern Penobscot County through the SNAP-ed grant;
- PVH Rehab & Wellness Center opened the gym to employees and their spouses in November 2012 and opened to the public in February 2015 with an average of 84 members per month; and
- Obesity rates have risen from 31% to 32.4% in Penobscot County adults.

2. Smoking

No public comments were solicited on this health need as PVH chose not to address this issue which was covered extensively by our local Healthy Maine Partnership.

3. Alcohol & Drug Abuse

Public comments received on previously adopted implementation strategy in 2013:

- This is a serious issue in our community and PVH does put forth a concerted effort to educate and reduce the number of individuals who abuse alcohol and illegal drugs. The formation of the Save-a-Life Task Force in which numerous education presentations have taken place over the past months has been successful. Town forums implemented for the public at Golden Key and also the Every 15 Minutes program at Mattanawcook Academy (mock accident disaster) are other great education tools. The work being performed at Penobscot Valley Primary Care to audit, closely monitor, and hold accountable patients (to comply with new standards being created for controlled substance monitoring) has been underway for a while. However, efforts have been accelerated to monitor these patients. Articles submitted by PVH in the Lincoln News help to increase awareness on this topic. PVH also provides free space for ALANON and AA members to meet.
- PVH could partner with the Save-A-Life group to offer more education at the schools and

other meetings offered throughout the year.

- Providing space for group meetings related to alcohol and drugs along with partnering with other agencies to provide community awareness is certainly evident in the past few years.
- Need substance counselors, detox program, and case management oversight of patient's treatment.
- Huge strides are being made. More funding would help to continue the efforts.

PVH evaluation of impact of actions taken on alcohol & drug abuse since the 2013 CHNA:

- The Save a Life Substance Abuse Task Force was established in April 2014 including 25 community members working together to educate, treat and prevent substance abuse in the greater Lincoln community. Several PVH staff are involved. The group has hosted around 20 educational sessions with hundreds of attendees viewing a range of topics from the science of addiction, "Drug Show and Tell" with public safety, to opiate prescribing practices with Dr. Noah Nesin.
- On September 9, 2015, PVH hosted the Town Forum on Alcohol & Drug Abuse at the Golden Key Senior Center in collaboration with our local Healthy Maine Partnership, SPRINT, but unfortunately no members from the public attended.
- Maine Integrated Youth Health Survey results show positive trending is being made in Penobscot County's middle and high school students in regards to drug and alcohol abuse, including a decrease in excessive drinking by high school students from 16% in 2013 to 12.2% in 2015.
- Percentage of adults reporting excessive drinking declined from 15.0% to 5.6%, although it is important to note that data collection methods have changed from the 2013 PVH CHNA.

4. Mental Health & Suicide

Public comments received on previously adopted implementation strategy in 2013:

- PVH developed a tele-psych program with Acadia Hospital in Bangor, allowing specialized support from trained mental health professionals.
- Effort is there but we need to do more to increase access, education and referrals. I would imagine that with the recent Mill closings, depression is on the rise. Patients who come

through the ED benefit greatly from this service.

- PVH should have a program for suboxone as well as a partnership for more psychiatric offerings in town.
- Excellent capability. Public not well informed on its availability. Partner with HAN on community outreach.
- Not so familiar in this area of what efforts have been made. I would say that with the current low census at PVH it might be worth exploring designating several beds or a wing for inpatient substance abuse treatment. In our region the closest facilities are located in Bangor.
- Too ED focused. Could PVH provide a psychiatry medication management program comparable to the VA tele-psychiatry program?

PVH evaluation of impact of actions taken on mental health and suicide since the 2013 CHNA:

- PVH implemented Tele-Psych in the Emergency Department in February 2014 with services available on an outpatient basis through Acadia Hospital. Utilized over 35 times in 2014 and 2015.
- Access to mental health services were improved through education and networking within the Maine Health Access Foundation Planning Grant where 17 area agencies met monthly in 2015 and focused on addressing barriers to Behavioral Health care for the poor, uninsured and under-insured; and
- Health Access Network published a resource guide listing available mental health resources in our area.
- 15% of Penobscot County high school students reported seriously considering attempting suicide in 2015 compared to 13.1% in 2013 in the Maine Integrated Youth Health Survey.

5. Diabetes

Public comments received on previously adopted implementation strategy in 2013:

- PVH employs a registered dietician to provide, among other things, nutritional consults to those diagnosed with obesity, diabetes and pre-diabetes. PVH also utilizes an RN to work with patients that have been diagnosed with diabetes. The hospital is part of a rural health network grant to offer continuous glucose monitoring services to those suffering with

diabetes.

- Diabetes is prevalent in our service area and several education opportunities have been offered by PVH. Nutrition education and free screenings were offered at the EXPO as well as other community events. Continuous Glucose Monitoring education, Health Talk sessions at Golden Key Senior Center and Diabetes Education articles in the Lincoln News have also been of benefit.
- Need to reconstitute its earlier diabetic counseling program. Partner with HAN on community outreach.
- PVH is a leader in my opinion in providing preventative measures/education regarding Diabetes [and] has also been diligent for many years in keeping the public aware of early signs of diabetes as well as regular meetings offered right at the hospital. Great Job.
- Nonexistent, poor utilization of dietician by Rural Health Clinic, no small groups or free value added consultations for prevention.
- There is a need for a diabetic educator and program.
- Offered diabetes and prediabetes screenings at Lincoln Expo; started new continuous glucose monitoring program to help manage diabetes.

PVH evaluation of impact of actions taken on diabetes since the 2013 CHNA:

- PVH is part of the Maine Rural Hospital Innovative Network grant to implement best practices in diabetes prevention, education and treatment methods. The grant allowed PVH to add continuous glucose monitoring services to patients in December 2015. The group conducted a feasibility study and located a vendor, Community Health and Counseling Services, who provides a thorough diabetic prevention program.
- PVH screened 15 people at the community business Expo in May 2015 with 87% being at risk for pre-diabetes. Those individuals were referred to their primary care physician for further discussions on diabetes and prevention.
- Diabetes mortality rates for Penobscot County increased from 24.8 per 100,000 to 26.4 per 100,000.