Maine SHNAPP

Shared Health Needs Assessment & Planning Process

2015 Shared Community Health Needs Assessment

State Report

Acknowledgements

Revised 11/18/2015

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How to Use This Report

This report contains statewide findings from the Maine Shared Community Health Needs Assessment (Shared CHNA) conducted in 2015. It is divided into several sections to provide the reader with an easy-to-use reference to the lengthy, 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 the assessments as well as sources.

The report has several features that are important to keep in mind:
- The document provides a reference for more than 160 indicators for Maine and the U.S. and more than 30 qualitative survey questions covering many topics. It does not explore any individual topic in-depth.
- The definitions and sources 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. In other words, we are confident that 19 out of 20 times, the estimates reflect a difference that is not by chance only.

The following is a brief description of each section.

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

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.

Population and Demographic Profile
The demographic section compares the population and socioeconomic characteristics of Maine with the U.S. overall.

Overall Findings for Maine
The first part of this section contains the priority health issues and challenges identified in the Shared CHNA. The analysis includes both the stakeholder input and the review of the 160 quantitative indicators. This section categorizes the key findings from both data sets as strengths and challenges. The analysis includes health issue indicators from the quantitative data sets sorted into challenges and strengths, and aligns the stakeholder responses for challenges and resources to address each of the challenges.

Health Issues
The overall findings section is followed by a series of summaries of the assessment data by health issue; these sections describe the issue, compare the state and U.S. on key indicators and explain the importance of the health issue in Maine. Disparities based on available data for susbpopulations such as females and males, racial and ethnic groups, income and educational

attainment and geographic residence are provided in each section. Related Healthy Maine 2020 objectives, Maine's ten-year goals, are also included in each section

Stakeholder Feedback
A summary of findings from the stakeholder survey are included in this section. It explores the top ten 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.

Stakeholder Survey Findings
This section displays the full set of responses to each question asked in the stakeholder survey, excluding open-ended responses.

Health Indicator Results From Secondary Data Sources
This section details the state wide data for each of the 160 quantitative indicators. It includes a table that compares data for the state and the U.S. (where available). Trends for the state are noted where available. Statistically significant differences are noted in this table where available and applicable. These statistical differences were calculated by comparing 95 percent confidence intervals around the state and U.S. estimate. If the intervals did not overlap with each other, the difference was considered to be statistical significant.

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:

Maine Cancer Registry
MaineCare
Maine Behavioral Risk Factor Surveillance
   System
Maine CDC Drinking Water Program
Maine CDC HIV Program
Maine CDC Lead Program
Maine CDC Public Health Emergency
   Preparedness
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
Maine Infectious Disease Surveillance System
Maine Integrated Youth Health Survey
Maine Office of Data Research and Vital
   Records
National Immunization Survey
National Survey of Children w/ Special Health
   Care Needs
National Center for Health Statistics
US Administration on Children Youth and
   Families, Child Maltreatment Report
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 (Shared CHNA), a comprehensive review of health data and community stakeholder input on health issues in Maine. The Shared CHNA was conducted through the Maine Shared Health Needs Assessment Planning Process (SHNAPP) a collaborative effort among Maine's four largest health-care systems – Central Maine Healthcare, Eastern Maine Healthcare Systems (EMHS), MaineGeneral Health, MaineHealth – and 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. Wherever the term "statistically significant" is used to describe differences between data estimates, we are confident that 19 out of 20 times, the estimates reflect a "real" difference that does not appear by chance alone. These data help identify priorities and should lead the reader to conduct a deeper investigation of the most pressing health issues. For this executive summary, data was included when there are significant differences between the U.S. and state rates and between different years of data, and when the differences are greater than 10 percent.

While data are important, providing a solid starting point, it is also important to remember that 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

Maine was home to roughly 1.33 million people in 2014. The residents of Maine are older and less diverse in race and ethnicity than every other state in the nation. Key demographic features include:
- 95.0 percent of residents are white, compared with 77.4 percent in the U.S. (2014).
- Maine has the highest median age in the country: 44.2, compared with 37.7 for the U.S. (2014).
- Median household income in Maine is $48,453, compared with $53,046 for the U.S. (2009-2013).

- 18.5 percent of children live in poverty, compared with 21.6 percent in the U.S. (2009-2013).
- High school graduation rate in Maine is 86.5 percent (2013-2014 school year). For the 2012-2013 school year, this rate was 81 percent in the U.S.

General Health and Mortality

The general health of Maine residents' tracks very closely to the U.S. Maine has a lower percentage of adults reporting poor health and a lower mortality rate. Key features for Maine include:
- 14.9 percent of adults report their health as fair or poor, compared with the U.S. at 16.7 percent (2013).
- Similar to the nation overall, the top three leading causes of death in Maine are cancer, heart disease and lower respiratory diseases. However, heart disease is the leading cause of death in the U.S., whereas in Maine, it is cancer (2013).
- The overall mortality rate per 100,000 population is significantly higher in Maine (753.8) compared to the U.S. (731.9) (2013).

Health Care Access and Quality

Access to care in Maine is slightly better than the U.S. overall. Specifically, a higher percentage of residents have health insurance. Key features include:
- 10.1 percent of Maine adults and 11.7 percent of U.S. adults do not have health insurance (2014).
- 10.1 percent of Maine adults experience cost-related barriers to getting health care in the last year, compared to 15.3 percent nationally (2013).
- 87.4 percent of adults report having a personal doctor or other health care provider, compared with 76.6 percent in the U.S. (2013).
- The ambulatory care sensitive condition hospital admission rate (2011) was 1,499.3 per 100,000 population in Maine. Nationwide, this rate was 1,457.5 (2012).[1]

Disease Incidence and Prevalence

Maine has a higher incidence of cancer – particularly lung cancer – than in the U.S. The state has high prevalence and incidence of cardiovascular diseases and events. Diabetes incidence is similar, but deaths are fewer than in the nation. Asthma and Lyme disease are much higher than the national rates. Adult immunizations for influenza lag the nation. Key features include:

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[1] Ambulatory care-sensitive condition (ACSC) hospital admissions and discharges 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. 2011 national data were not available, and 2012 Maine data were not available.

- There is a higher incidence of cancer in Maine (488.7 per 100,000 population) compared to the U.S. (453.4 per 100,000 population) (2009-2011).
- There is a higher incidence of lung cancer in Maine (74.0 per 100,000) compared with U.S. rates (58.6 per 100,000) (2009-2011).
- More than one in three adults in Maine lives with some type of cardiovascular disease, similar to the U.S. Additionally, adults in Maine have a higher prevalence of high cholesterol (39.7 percent) than in the U.S. (38.4 percent) (2013).
- While diabetes prevalence for Maine is similar to the nation (9.6 and 9.7 percent of adults, respectively), diabetes mortality (underlying cause) per 100,000 population is lower (20.4) compared with the nation (21.2) (2013).
- Emergency department visits rate for asthma is 66.2 per 100,000 population (2011) and current asthma among adults in Maine is 11.9 percent compared with 9 percent in the U.S. (2013).
- 44.1 percent of adults in Maine report being immunized annually for influenza. Additionally, 73.8 percent of Maine adults ages 65 years and older report being immunized for pneumococcal pneumonia, compared with 69.5 percent in the U.S. (2013).
- Lyme disease incidence in Maine is 105.3 per 100,000 population, compared with 10.5 per 100,000 nationwide (2014).
- Maine has a higher prevalence of adults reporting ever having depression than the U.S. (23.4 percent, compared with 18.7 percent) (2013).

Health Behaviors and Risk Factors

There are many behaviors that impact our health, and tracking these behaviors can help understand and predict the potential future health status of a population if risk behaviors do not change. Maine alcohol use risk factors among adults are similar to the U.S. Youth rates of alcohol abuse are lower than the U.S. Tobacco use is lower among youth, but higher among Maine adults compared to the U.S. Obesity and underlying risk factors such as physical activity and nutrition are similar to or slightly better than the U.S. Health behaviors and risk factors for the state include:
- Suicide deaths are higher in Maine than in the nation (17.4 per 100,000 population versus 12.6 nationally) whereas violent crime the lowest in the nation (125 per 100,000 population compared to 368 nationally) (2013).
- Obesity prevalence is comparable to the U.S. (12.7 percent for high school students compared to 13.7 percent nationwide and 28.9 percent for adults compared to 29.4 percent nationwide) (2013).
- The proportion of Maine adults with a sedentary lifestyle is lower than the U.S. (Maine: 23.3 percent, U.S.: 25.3 percent). In addition, the proportion of adults who meet recommended physical activity levels is higher in Maine (Maine: 53.4 percent, U.S.: 50.8 percent) (2013).
- Adult binge drinking of alcoholic beverages is slightly higher in Maine than the U.S. (17.2 percent and 16.8 percent, respectively) as is the proportion of adults who report chronic heavy drinking (7.2 percent compared to 6.2 percent) (2013).

- Alcohol use among high school youth in the past 30 days is lower in Maine than the U.S. (26 percent and 34.9 percent, respectively) (2013).
- Current tobacco use among high school youth is lower in Maine than the U.S. (18.2 percent compared to 22.4 percent). However, adult cigarette smoking rates are higher than the U.S. (20.2 percent in Maine compared to 19.0 percent nationwide) (2013).

Stakeholder Priorities of Health Issues

Stakeholders across the state listed the following 10 health issues as their top concerns for their regions:

Top 10 Health Issues Identified by Stakeholders	Related Statistics from Quantitative Indicators in the Shared CHNA
Drug and alcohol abuse	• The number of drug-affected babies born to Maine residents in 2014 was 961, which represents 7.8 percent of all babies born in the state. The number has increased from 927 in 2013 and 772 in 2012. • The 2013 drug-induced mortality rate was 13.9 per 100,000 population in the state compared to 14.6 nationally. • 7.2 percent of Maine adults reported chronic heavy drinking in 2013, compared to 6.2 percent nationally. • Rates of some substance use in high school students improved compared to previous years, including current alcohol use (26% in 2013), binge drinking (14.8% in 2013), current inhalant use (3.2% in 2013), and misuse of prescription drugs (5.6% in 2013)
Obesity	• Obesity among adults in Maine is 28.9 percent, the U.S. is 29.4 percent (2013).
Mental health	• 14.6 percent of high school students in Maine reported seriously considered suicide, while 24.3 percent reported having been sad/hopeless for two weeks in a row (2013). • 17.4 percent of adults reported receiving medication or treatment for mental health in the past 12 months (2013).
Physical activity and nutrition	• The proportion of adults that met the physical activity recommendations in Maine is 53.4 percent, the U.S. is 50.8 percent (2013). • The proportion of high school students that met physical activity recommendations in Maine is 43.7 percent; the U.S. is 47.3 percent (2013).
Depression	• In 2013, 23.4 percent of Maine's adults reported ever having depression compared to 18.7 percent of adults in the nation. • Also in 2013, 9.9 percent of adults in the state reported currently having symptoms of depression.
Tobacco use	• 20.2 percent of adults in Maine were current cigarette smokers in 2013 compared to 19 percent nationwide. • 18.2 percent of high school students in Maine were current tobacco users in 2013 compared to 22.4 percent nationally. • Smoking has decreased for both youth and adults from 2001 to 2013, as has secondhand smoke exposure for youth.

Top 10 Health Issues Identified by Stakeholders	Related Statistics from Quantitative Indicators in the Shared CHNA
Diabetes	• Maine and the U.S have comparable diabetes prevalence rates (9.6 percent and 9.7 percent, respectively) and mortality rates (20.4 and 21.2 per 100,000 population, respectively) (2013). • More Mainers with diabetes received formal diabetes education (Maine: 60 percent, U.S: 55.8 percent) (2013).
Cardiovascular diseases	• Hypertension prevalence is higher in Maine than the U.S (33.3 percent and 31.4 percent, respectively) (2013). • In addition, high cholesterol prevalence is slightly higher in Maine than the U.S (39.7 percent and 38.4 percent, respectively) (2013). • Maine has seen a significant decrease in acute myocardial infarction and stroke hospitalization rates, decreasing from 27.8 and 22.3 per 10,000 population in 2007, respectively, to 23.4 and 20.8 in 2011, respectively. • Coronary heart disease deaths also increased from 106.7 per 100,000 population in 2008 to 89.5 in 2013.
Respiratory diseases	• More adults in Maine are diagnosed with COPD (Maine: 7.1 percent, U.S: 6.5 percent) (2013). • More adults in Maine report current asthma (Maine: 11.9 percent, U.S: 9 percent) (2013). • Maine has seen a significant increase in pneumonia emergency department visits rate, increasing from 630.9 per 100,000 population in 2007 to 719.9 in 2011.
Childhood obesity	• Obesity among high school students in Maine is 12.7 percent, the U.S. rate is 13.7 percent (2013).

Stakeholders identified the following populations as being disproportionately impacted by the top health issues in Maine:

- Low-income, including those below the federal poverty limit.
- Medically underserved, including uninsured and underinsured.
- Less than a high school education and/or low literacy (low reading or math skills).
- Very rural and/or geographically isolated people.
- People with disabilities – physical, mental, or intellectual.

Stakeholders prioritized the following 10 *factors* as having a great influence on health in their regions, resulting in poor health outcomes for residents. The factors are listed in order of importance as determined by the survey responses:

- Poverty.
- Access to behavioral and mental health care.
- Transportation.
- Health care insurance.
- Employment.
- Health literacy.
- Food security.
- Housing stability.
- Access to oral health.
- Adverse childhood experiences.

Background

Purpose

The Maine Shared Health Needs Assessment and Planning Process Project (SHNAPP) is a collaborative effort among Maine's four largest health care systems – Central Maine Health Care (CMHC), Eastern Maine Healthcare Systems (EMHS), MaineGeneral Health (MGH), MaineHealth – and 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 CHNA to inform community benefit efforts of non-profit 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 data sets. 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 affecting Maine people. 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 topic areas 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 in 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. Appendix C contains the complete list of the data sources and year(s) by indicator. A brief description of the data sources used in the analysis is included below:

U.S. Census, including the American Factfinder, the American Community Survey and the Current Population Survey provided population information and selected health care access and socioeconomic status indicators. Population estimates for 2014 were available for the state and counties. However, the most recent data on county sub-populations, as well as education, income and employment, were from 2013. Census population estimates were also used to determine all rates (e.g., hospitalization rates) that included population-based denominators.

Rural-Urban Commuting Areas (RUCA) were used to define rurality (metro versus three levels of rural). RUCA was developed by the Center for Rural Health, School of Medicine and Health Sciences, University of North Dakota, and the Economic Research Service, Department of Agriculture. The specific RUCA categories used in this analysis were refined by the **New England Rural Health Roundtable**, available in *Rural Data for Action, Second Edition*: www.newenglandruralhealth.org/rural_data.

Maine CDC Data, Research and Vital Statistics provided fertility and maternal health information from the birth registry system, death data and cause-specific mortality rates from death registry system, and town-level census estimates for rural/urban analyses and urban data summaries. Death data are age-adjusted.

The **Maine Integrated Youth Health Survey** (MIYHS) is a statewide effort designed to assess the health status of Maine's youth and determine the positive and negative attitudes and behaviors that influence healthy development. This survey includes a parent survey of kindergarteners and third-graders, and a student survey for three levels: grades five and six, grades seven and eight, and high school. It provided data on youth health behaviors, sexual orientation, and some mental health prevalence measures. The Shared CHNA uses the high school level data for most indicators. A portion of the MIYHS data is used by the U.S. CDC in the Youth Risk Behavioral Surveillance system (YRBSS). Where there are comparisons to national YRBSS data in the report, only those where the YRBSs data for Maine shows significant differences are so noted, since MIYHS and U.S. cannot be directly compared. The MIYHS is a collaborative effort of the Maine Department of Education and the Maine CDC and Office of Substance Abuse and Mental Health Services in the Maine Department of Health and Human Services.

The **Behavioral Risk Factor Surveillance System** (BRFSS) is a national population-based telephone survey of adults 18 years and older. The survey is conducted throughout the year with robust sampling for state-level estimates and can provide county-level estimates in many cases. It provided data on adult health behaviors, sexual orientation, and some disease and health condition prevalence measures.

Maine Cancer Registry (MCR) is a statewide population-based cancer surveillance system within Maine CDC and provided incidence rates and staging levels of selected cancers. It receives and analyzes data from health care providers, laboratories, and the electronic death registration system. These data are age adjusted.

Maine CDC Environmental and Occupational Health Program provided data on lead screening and elevated lead blood levels in children.

The **Maine Department of Education** provided high school graduation rates.

The **Maine Department of Labor** provided occupational health injuries and fatality data, while the **U.S. Bureau of Labor Statistics** provided information on unemployment.

The **Maine CDC Public Health Emergency Preparedness Program** (PHEP) provided data to measure public health emergencies in Maine.

Maine CDC Drinking Water Program provided information on fluoridated water.

Maine Department of Public Safety provided data on violent crime.

Maine Health Data Organization (MHDO) provided hospitalization and emergency room usage data measured via hospital inpatient and outpatient reporting. Inpatient and outpatient admission data were obtained for 2007 to 2011. These data are age adjusted, except where otherwise noted.

The **Maine CDC HIV, STD, and Viral Hepatitis Program** provided information on HIV/AIDS and other sexually transmitted diseases.

Data on infectious diseases was provided by the **Maine Infectious Disease Surveillance System** (MIDSS), part of Maine CDC.

The **Office of MaineCare Services** provided data on MaineCare enrollment and dental visits.

Non-fatal child maltreatment data was obtained from **the U.S. Administration on Children Youth and Families, Child Maltreatment Report**.

The **U.S. Centers for Disease Control and Prevention** provided data on drug and alcohol mortality, leading causes of death and years of potential life lost, and national rates for a number of indicators for comparison purposes. WISQARS (Web-based Injury Statistics Query and Reporting System) is an interactive, online database that provides fatal and nonfatal injury, violent death, and cost of injury data from a variety of sources. WONDER (Wide-ranging OnLine Data for Epidemiologic Research) is an integrated information and communication system for public health, providing provides access to a wide array of public health information.

Qualitative Data

Qualitative data were collected through a statewide stakeholder survey conducted in May and June 2015 with 1,639 people, with responses from every county in Maine. (Table 1 lists completed surveys by county.) The survey was developed using a collaborative process that included Maine SHNAPP partners, Market Decisions Research and Hart Consulting, and a number of other stakeholder and health experts involved in the process.

The objective of the survey was to produce qualitative data of the opinions of health experts and community stakeholders on the health issues and needs of communities in the state. Given this purpose, the survey used a snowball sampling method 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. Some of the organizations included:

- Maine Public Health Association.
- Maine Medical Association.
- Maine Area Agencies on Aging.
- Maine State Chamber of Commerce.
- Maine Development Foundation.
- Maine Municipal Association.
- Maine Drug Court/Court System.
- Maine Police Chiefs.
- Maine Sheriffs.
- Maine Department of Public Safety.

The online survey 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 for 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. As a result, respondents provided 3,380 detailed responses on the health issues that affect the state of Maine and over 12,000 open ended comments in the survey. It was approximately 25 minutes in length, although some respondents took longer in order to provide extensive thoughtful comments, while others did not provide any.

The Market Decisions Research/Hart Consulting team reviewed, coded and cleaned all open ended comments for similar and recurrent themes. This was first done by hand, with researchers

reviewing all comments and grouping and coding similar comments by theme. As a second step, Wordstat text mining software by Provalis was used to scan all comments and identify patterns and themes in the data. The final, coded groups of comments were developed using a combination of these two approaches and reflect the actual verbatim comments provided by stakeholders. The unedited coded comments are used throughout the report to provide more detailed information on the health issues and factors identified by stakeholders as most important to their communities and to support the results of the quantitative analysis.

Table 1. Completed Surveys by County

County	Completed Surveys
Androscoggin	130
Aroostook	110
Cumberland	176
Franklin	46
Hancock	81
Kennebec	220
Knox	53
Lincoln	51
Oxford	61
Penobscot	185
Piscataquis	89
Sagadahoc	37
Somerset	102
Waldo	64
Washington	133
York	86
Statewide*	403
Total	1,639

Note: 403 respondents indicated they worked at or represented Maine 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.

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 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.

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, particularly for health issues for which the state may be experiencing rapid changes, 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 the time of publication.

Where possible, comparisons to national data are provided, but for some data sets, nationally available data is not comparable, due to differences in methodology or definitions. In particular, for youth behavior data, Maine uses the Maine Integrated Youth Health Survey, which is similar to the national Youth Risk Behavior Survey. In this case, although there are some small differences in the weighting of the data to represent the population of the state, where the same question was asked, comparisons are provided.

Also note that data was collected from the qualitative survey of stakeholders using a convenience sample. While every effort was made in the recruiting process to reach out to stakeholders in a variety of industries and representing many types of constituents, given the nature of the sampling process, it is not possible to say that the results are representative of a county or the state within a given level of statistical precision. This is especially true in some of the less populated counties in the state where fewer stakeholders responded to the survey and the final sample sizes are smaller.

Reporting of Results

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 for each public health district[2], each county, and the cities of Portland and Bangor and the combined cities of Lewiston/Auburn.
- Detailed Tables with each indicator, by subpopulation, region, and year. Where data sources and numbers permitted, subpopulations analyzed included gender, age, race and ethnicity, county, public health district, rural and urban residence, income, education, and health insurance status.

Public and Stakeholder Feedback

The Shared CHNA includes input from extensive outreach to stakeholders and the public. More than 1,630 stakeholders shared their thoughts about health priorities, resources, and needs in a web-based survey. The findings from the survey are an integral part of this report. Once a draft of the report was completed, it was posted to the Maine CDC website for public access, review and comment. Feedback from a web-based form, although sparse, was incorporated into this report.

Distribution

The 2015 Maine Shared CHNA has been distributed via Maine CDC's website, with promotion through the State Coordinating Committee and through the Maine CDC's Public Health Update. In the months following release of these data, the findings will be shared with local hospitals, Maine's Public Health District Coordinating Councils and other regional partners for their consideration and use in local health planning. The opportunity to provide feedback via the Maine CDC website will remain available, as well.

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[2] 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.

Population and Demographic Profile

Demographics are characteristics used to describe a population.[1] Looking at Maine's age and sex composition is one of the most basic ways to see what the population is like today, but also how it is changing over time.[2] Maine's population is older than the U.S. as a whole; Maine has the highest median age in the country.[1] In 2014, more than one of every six Maine residents (18.3 percent) were 65 years and older, and that percentage is projected to increase to 26.5 percent in 2030.[3]

Figure 1. Trends and Projections in Population Ages 65+ (2000-2030)[3]
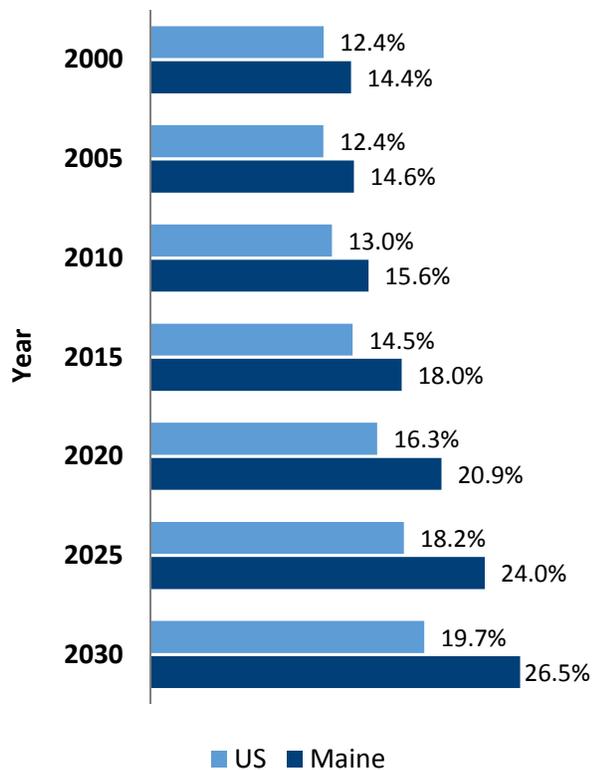
Key Demographic Features		
Population	**Maine**	**U.S.**
Overall population	1.33 Mil	319 Mil
Male	49.0%	49.2%
Female	51.0%	50.8%
Ages under 5	4.9%	6.2%
Ages under 18	19.5%	23.1%
Ages 18-64	62.2%	62.4%
Ages 65+	18.3%	14.5%
Median age	44.2	37.7
White	95.0%	77.4%
Black or African-American	1.4%	13.2%
American Indian/Alaska Native	0.7%	1.2%
Asian	1.2%	5.4%
Hispanic	1.5%	17.4%
Two or more races	1.6%	2.5%
Population density (per sq. mile)	43.1	87.4
Population with a disability	16.3%	12.1%
Socioeconomic Status		
Median household income	$48,453	$53,046
Persons per household	2.33	2.63
Unemployment rate	5.7%	6.2%
Adults living in poverty	13.6%	15.4%
Children living in poverty	18.5%	21.6%
Single-parent families	29.1%	33.2%
65+ living alone	40.1%	37.7%
Language other than English spoken at home	6.8%	20.7%
Education		
High school graduation rate	86.5%	81%
Bachelor's degree or higher	27.9%	28.8%
Health Status		
Life expectancy	79.2	78.9
Adults rating health as fair/poor	14.9%	16.7%
Percent uninsured	10.1%	11.7%
Medicaid members	27.0%	23.0%
Adults with primary care provider	87.4%	76.6%

[1] Rector A. Maine population outlook to 2030. Issued February 2013.
Available from: http://www.maine.gov/tools/whatsnew/attach.php?id=501734&an=1
[2] Howden LM, Meyer JA. 2010 Census brief: age and sex composition: 2010. Issued May 2011.
Available from: http://www.census.gov/prod/cen2010/briefs/c2010br-03.pdf
[3] U.S. Census Bureau, Population Division, Interim State Population Projections, 2005.
Retrieved from: https://www.census.gov/population/projections/files/stateproj/SummaryTabB1.pdf

Overall Findings for the State

Table 2 presents a summary of the health issues - successes and challenges - experienced by residents of Maine. Data come from a comprehensive analysis of available surveillance data (see Appendix B for a full list of the quantitative health indicators and factors included in this assessment). Two criteria were used to select the issues and challenges presented in this table: statistically significant differences and relative differences when comparing Maine to the nation. Statistically significant differences between the state and U.S. at the 95 percent confidence level are noted with an asterisk (*) after the indicator. A rate ratio was also calculated to compare the relative differences between Maine and the U.S. Indicators for which the state statistic was 10 percent or more above or below the U.S. figure were included in this table. A rate ratio was also calculated to compare the relative differences between Maine and the U.S. Indicators for which the state statistic was 10 percent or more above or below the U.S. figure were included in this table. It should be noted that "strengths" are relative to the U.S. rates and do not necessarily reflect a lower burden of disease.

Table 2. Priority Health Issues in Maine†

Health Issues – Surveillance Data	
Health Successes	**Health Challenges**
• Maine has a lower percentage of adults who rate their health fair to poor than the U.S. [ME=14.9%; U.S.=16.7%]. • Maine has a lower incidence rate of prostate cancer [ME=118.4; U.S.=140.8]* than the U.S. Prostate cancer incidence has significantly improved in Maine since 2006. • Maine has a lower coronary heart disease mortality rate than the U.S. [ME=89.5; U.S.=102.6]. • Maine has a lower violent crime rate than the U.S. [ME=125; U.S.=367.9]. • Maine has a lower percentage of low birth weight babies (<2,500 grams) than the U.S. [ME=6.6%; U.S=8.0%]. • Maine has a lower percentage of high school students who reported being sad or hopeless for the two weeks in a row than the U.S. [ME=24.3%; U.S.=29.9%]. • Maine has a lower percentage of high school students who seriously considered suicide than the U.S. [ME=14.6%; U.S.=17.0%]. • Low percent of alcohol use [ME=26.0%; U.S.=34.9%] among high school students.	• Maine has a higher overall mortality rate than the U.S. [ME=753.8; U.S.=731.9]. • Maine has a higher ambulatory care-sensitive condition hospital admission rate than the U.S. [ME=1,499.3; U.S.=1,457.5]. The rate in Maine has improved significantly since 2008. • Maine as higher all cancers incidence [ME=488.7; U.S.=453.4]* and mortality [ME=181.7; U.S.=168.7].* • Maine has a higher lung cancer incidence [ME=74.0; U.S.=58.6]* and mortality [ME=51.8; U.S.=46]* than the U.S. However, lung cancer rates have improved significantly in Maine since 2006. • Maine has a higher incidence rate of bladder cancer [ME=28.6; U.S.=20.2]* than the U.S. • Maine has higher tobacco-related cancer incidence [ME=91.9; U.S.=81.7]* and mortality [ME=37.9; U.S.=34.3] * than the U.S. • Maine has a higher percentage of adults with current asthma than the U.S. [ME=11.9%; U.S.=9.0%].* • Maine has a higher incidence of acute hepatitis C infections than the U.S. [ME=2.3; U.S.=0.7]. • Maine has higher Lyme disease [ME=105.3; U.S.=10.5] and pertussis [ME=41.9; U.S.=10.3] incidence rates than the U.S. Lyme disease incidence has significantly worsened in Maine since 2009. • Maine has a higher rate of suicide deaths than the U.S. [ME=17.4; U.S.=12.6].* Suicide death rates in Maine have worsened significantly since 2008. • Maine has higher rates of nonfatal child maltreatment rate per 1,000 population than the U.S. [ME=14.6; U.S.=9.1]. These rates have worsened significantly since 2008. • Maine has a higher percentage of children with special health needs than the U.S. [ME=23.6%; U.S.=19.8%].* This percentage has increased

Health Issues – Surveillance Data	
Health Successes	**Health Challenges**
	in Maine since 2010.
	• Maine has a higher percentage of adults who have ever had depression [ME=23.4%; U.S.=18.7%].*
	• Higher percent of chronic heavy drinking among adults [ME=7.2%; U.S.=6.2%].

† *All rates are per 100,000 population unless otherwise noted.*

Table 3 summarizes the results of the health issues questions in the stakeholder survey for Maine. 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 in their regions and those that are lacking but needed to address the biggest health challenges.

Table 3. Priority Health Issue Challenges and Resources for Maine-Stakeholder Survey Responses

Stakeholder Input - Stakeholder Survey Responses [3]	
Challenges†	**Resources**
• Drug and alcohol abuse (80%). • Obesity (78%). • Mental health (71%). • Physical activity and nutrition (69%). • Depression (67%). • Tobacco use (63%). • Diabetes (63%). • Cardiovascular disease (63%). • Respiratory diseases (60%). • Childhood obesity (58%). • Elder health (55%). • Oral health (53%). • Cancer (50%). • Violence (38%). • Suicide and self-harm (37%). • Neurologic diseases (35%). • Unintentional injury (34%). • Child developmental issues (34%). • Musculoskeletal diseases (28%). • Adolescent health (25%). • Maternal and child health (23%). • Infectious diseases (22%). • Lead poisoning/environmental health issues (17%). • Sexually transmitted diseases/HIV/ AIDS (13%). • Infant mortality (4%).	**Assets Needed to Address Top 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/depression:** 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:** • **Drug and alcohol abuse:** Maine Alcoholics Anonymous; Substance abuse hotlines; Office of Substance Abuse. • **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.

†*Percentage of stakeholders who rated issue as a major or critical problem in the state*

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

Table 4 presents a summary of the major health factors and challenges that impact the health of residents. Data come from a comprehensive analysis of available surveillance data. (See Appendix B for a full list of the health indicators and factors included in this project.) Two criteria were used to select the factors and challenges presented in this table. Statistically significant differences (at the 95 percent confidence level) between the state and the U.S. are noted with an asterisk (*) after the indicator. A rate ratio was also calculated to compare the relative differences between the state and U.S. (where available). Indicators for which the state was 10 percent or more above or below the U.S. figure were included in this table. Again, it should be noted that "strengths" are relative to U.S. statistics and do not always reflect factors for which there is no concern.

Table 4. Priority Health Factors in Maine†

Health Factors – Surveillance Data	
Health Factor Strengths	**Health Factor Challenges**
- Low unemployment rate [ME=5.7%; U.S.=6.2%]. This rate has improved in Maine since 2009. - Less adults living in poverty [ME=13.6%; U.S.=15.4%].* - Less children living in poverty [ME=18.5%; U.S.=21.6%].* - More adults with a usual primary care provider [ME=87.4%; U.S.=76.6%].* - Low percent uninsured [ME=10.1%; U.S.=11.7%]. - Fewer individuals who are unable to obtain or delay obtaining necessary medical care due to cost [ME=10.1%; U.S.=15.3%].* - High percent of females ages 50+ who had mammograms in past two years [ME=82.1%; U.S.=77.0%]* as well as high percent of females ages 21-65 who had pap smears tests in past three years [ME=88.0%; U.S.=78.0%].* - More adults with cholesterol checked every five years [ME=81.4%; U.S.=76.4%].* - More adults immunized for pneumococcal pneumonia (ages 65 years and older) [ME=73.8%; U.S.=69.5%].* - Low percent of adults who consume less than one serving of fruit per day [ME=34.0%; U.S.=39.2%].* - Low percent of adults who consume less than one serving of vegetables per day [ME=17.9%; U.S.=22.9%].* - Low percent of cigarette smoking [ME=12.9%; U.S.=15.7%] and tobacco use [ME=18.2%; U.S.=22.4%] among high school students.* These rates have improved over past years.	Low median household income [ME=$48,453; U.S.=$53,046].*

† *All rates are per 100,000 population unless otherwise noted.*

Table 5 summarizes the results of the health factor questions in the stakeholder survey for the state. 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 state. A description of the assets and resources available and those that are needed at the state level to address these health factors is also included.

Table 5. Priority Health Factor Challenges and Resources – Maine Stakeholder Responses

Stakeholder Input – Stakeholder Survey Responses [4]	
Challenges†	**Resources**
- Poverty (78%). - Access to behavioral/mental health care (67%). - Transportation (67%). - Health care insurance (64%). - Employment (64%). - Health literacy (62%). - Food security (58%). - Housing stability (57%). - Access to oral health (56%). - Adverse childhood experiences (56%).Adverse childhood experiences (56%). - Access to healthy foods (53%). - Social support and interactions (50%). - Caregiver support (46%). - Early childhood education/development (43%). - Access to physical activity opportunities (42%). - Access to other health care (41%). - Access to primary care (39%). - Social attitudes (i.e. discrimination) (38%). - Enrollment in higher education (35%). - Incarceration or institutionalization (35%). - Quality of housing (34%). - Language and literacy (34%). - High school graduation (31%). - Civic participation (30%). - Crime and violence (27%). - Environmental conditions (air/water quality, etc.) (12%).	**Assets Needed to Address Top Challenges:** **Poverty/employment:** 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. **Transportation:** More/better transportation systems; Better access to public transportation; Additional funding for organizations that help with rides to medical appointments; Additional resources for transportation for the elderly and disabled. **Health care insurance:** Broader coverage for all individuals; Making insurance more affordable; Universal health care. **Assets Available in Maine:** **Poverty:** General assistance; Other federal, state and local programs. **Access to behavioral care/mental health care:** Behavioral/mental health agencies. **Health care insurance:** MaineCare; Free care.

† *Percentage of stakeholders who rated factor as a major or critical problem in the state*

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

Socioeconomic Status

Low socioeconomic status (SES) has been associated with higher rates of cardiovascular disease, diabetes, infant mortality, respiratory disease, cancer, infectious diseases, overall mortality and suicide.[1,2] Low SES may influence health through secondary pathways such as limited financial resources, psychological stress and reduced access to public services. Diminished social clout within one's community may, in turn, lead to limited control over healthy environmental conditions, resulting in elevated environmental exposures.[3] For example, the 2013 Maine BRFSS found that the percentage of Maine adults ages 18 and older who rated their general 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.

Map 1. Adults Living in Poverty by County

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."[1] Rurality, English language fluency, education, and household structure are some social determinants measured in the Maine Shared CHNA. In 2013, 66.4 percent of Maine residents lived in rural areas.

Table 6. Key Socioeconomic Indicators

	Maine	U.S.
Adults living in poverty (2009-2013)	13.6%	15.4%
Children living in poverty (2009-2013)	18.5%	21.6%
Median household income (2009-2013)	$48,453	$53,046
Single-parent families (2013)	29.1%	33.2%
65+ living alone (2013)	40.1%	37.7%

Socioeconomic measures chosen for the Maine Shared CHNA include:

- Unemployment rate.
- Adults living in poverty (less than 100 percent of the federal poverty level).
- Children living in poverty (less than 100 percent of the federal poverty level).
- Percentage of people living in rural areas.
- Median household income.
- High school graduation rate.
- Single-parent families.
- Older adults living alone.

In addition, income- and education-specific estimates of health indicators are included, when available.

Socioeconomic measures vary across population groups in Maine. For example:

- Females were significantly more likely than males to have income below the federal poverty level.
- People who described their race as something other than "white alone" were significantly more likely to be below the poverty level than those who described their race as "white alone."
- Median household incomes varied across counties from a low of $36,646 in Piscataquis County to a high of $57,461 in Cumberland County.

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[1] CDC Health Disparities and Inequalities Report - United States, 2013. MMWR, Supplement, November 22, 2013; Vol. 62, No. 3.

[2] Disease and Disadvantage in the United States and in England. Banks, Marmot, Oldfield, and Smith. JAMA. 2006; 295: 2037-2045.

[3] Social Capital and Health: A Review of Prospective Multilevel Studies. Murayama, Fujiwara, and Kawachi. J Epidemiology 2012;22(3):179-187.

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 in understanding the needs of the population and help identify the populations experiencing health 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.

Life expectancy in Maine at 79.2 years is also similar to the national life expectancy of 78.9 years and has increased by more than four years since 1981.

Table 7. Key Health and Mortality Indicators

	Maine	U.S.
Adults who rate their health fair to poor (2013)	14.9%	16.7%
Adults with 14+ days lost due to poor mental health (2011-2013)	12.4%	NA
Adults with 14+ days lost due to poor physical health (2011-2013)	13.1%	NA
Adults with three or more chronic conditions (2011, 2013)	27.6%	NA
Overall age-adjusted mortality rate per 100,000 population (2013)	753.8	731.9

NA = Not Available - data are not available for this indicator.

Table 8. Leading Causes of Death

	Maine	U.S.
1	Cancer	Heart Disease
2	Heart disease	Cancer
3	Chronic lower respiratory disease	Chronic lower respiratory disease
4	Unintentional injuries	Unintentional injuries
5	Cerebrovascular disease (stroke)	Cerebrovascular disease (stroke)

General health and mortality measures chosen for the Maine Shared CHNA include:
- General health status reported by adults.
- Adults with 14 or more days in the past month for which mental health was not good.
- Adults with 14 or more days in the past month for which physical health was not good.
- Adults with three or more chronic conditions.
- Life expectancy at birth.
- Leading causes of death.
- Overall mortality rate per 100,000 population.

General health and mortality measures included in the Maine Shared CHNA vary across population groups.
- In 2013, a smaller percentage of Native Americans reported excellent, very good or good health than was reported by people of other races.
- A greater proportion of adults with more education and higher income reported excellent, very good, or good health than those with less income or lower education.
- Life expectancy is 81.5 years for women and 76.7 years for men,

- A higher percentage of women report 14 or more days of poor mental health during the past month (13 percent) than men (10.8 percent).
- Alzheimer's disease is the fifth leading cause of death among females.
- Men experience a greater number of years of potential life lost due to diabetes mellitus.
- Cancer is the leading cause of death in 13 of the 16 Maine counties. In Androscoggin, Aroostook and Somerset counties, heart disease is the leading cause. Alzheimer's disease is in the top five leading causes of death in two counties: Piscataquis and York.

Access and Quality of Health Care
Access to Health Care

Linking the public to health care is one of the ten essential public health services. Access to timely, appropriate, high-quality and regular health care and preventive health services is a key component of maintaining one's health. Good access to health care can be limited by financial, structural and personal barriers. Access to health care is impacted by location of and distance to health services, availability of transportation, 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. Disparities in access to health care have traditionally been documented among racial minorities and low-SES populations.[3] Healthy People 2020 has identified four major components of access to health services: coverage, services, timeliness, and workforce.[1]

Table 9. Key Health Access to Health/Health Care Quality Indicators

	Maine	U.S.
Adults with a usual primary care provider (2013)	*87.4%**	76.6%
Individuals who are unable to obtain or delay obtaining necessary medical care due to cost (2013)	*10.1%**	15.3%
Percent uninsured (2014)	10.1%	11.7%

Asterisk (*) and italics indicate a statistically significant difference between Maine and the U.S.

One in ten of Maine adults reported that they had experienced cost-related barriers to getting health care in 2013. This is similar to the number reporting such barriers in 2000, but it is an increase from 2006, the year with the lowest percentage (8.8 percent) reported over the last 10 years.[2]

Access measures chosen for the Maine Shared CHNA include:
- Adults with a usual primary care provider.
- Cost-related barriers to health care for adults.
- MaineCare enrollments (adults and children).
- No current health insurance coverage.

Additional measures related to access to preventive services, care management, and oral health care can be found in several sections of the Maine Shared CHNA, including cancer, diabetes, environmental health, health care quality, immunization, maternal and child health, mental health, oral health, respiratory health, and SES.

Access to health care varies in Maine by geography, gender, race and ethnicity, sexual orientation, educational attainment, income and age:
- In general, women in Maine have better access to care, with a lower percentage of uninsured (9.6 percent compared with 12.9 percent for men) and higher percentage reporting having a primary care provider (91.3 percent versus 83.2 percent for men).

- Individuals living in isolated areas have higher percentages of uninsured people (13.6 percent) than those living in urban areas (9.2 percent).
- American Indians and Asians have higher percentages of uninsured people (18.8 percent and 14.7 percent, respectively) than other races, while whites and Hispanics are less likely to report barriers to health care due to cost (10.7 percent and 10.3 percent, respectively) than American Indians (24.1 percent), blacks or African-Americans (21.8 percent) and multiracial-non-Hispanics (18.1 percent).
- In addition, bisexuals were more likely to report cost-related barriers to health care (23.7 percent) than heterosexuals (10 percent).
- A higher percentage of adults with higher levels of education and of those earning over $50,000 report having health insurance, a primary care provider, and fewer cost-related barriers to care.
- A significantly lower percentage of those ages 65 years and over were uninsured (0.2 percent) and reported cost-related barriers to health care (2.3 percent), and more had a primary care provider (95.6 percent).
- Fewer 18 to 24-year-olds and 25 to 34-year-olds reported having a primary care provider (74 percent and 73.6 percent, respectively),
- Insurance rates generally increased for those 18 years and over, as people aged.
- A significantly smaller percentage of children under 18 years of age had no insurance compared with adults ages 19-25 years (5.9 percent and 21.5 percent, respectively).

Table 10. Counties with highest and lowest percentage of uninsured Mainers

	Lowest	Highest
1	Sagadahoc (8.0%)	Hancock (14.7%)
2	Cumberland (8.9%)	Piscataquis (14.4%)
3	York (9.1%)	Washington (13.7%)

Healthy Maine 2020 also has objectives related to access to health, including:[2]
- Increase the proportion of persons with a usual primary care provider.
- Increase the proportion of people of all ages with medical health insurance (sub-categories: adults with medical insurance, children with medical insurance, adults with dental insurance, children with dental insurance).
- Reduce the proportion of individuals who are unable to obtain or delay obtaining necessary medical care due to cost (sub-categories: medical care, dental care).
- Reduce the proportion of children who have dental caries experience in their primary or permanent teeth (kindergarten and third grade only).
- Increase the number of community-based organizations providing population-based primary prevention services (nine topic areas by public health district).
- Increase routine vaccination coverage levels for children and adolescents.
- Reduce invasive health care-associated methicillin-resistant Staphylococcus aureus (MRSA) infections.
- Reduce hospital emergency department visits for asthma.

- Increase the proportion of persons with diagnosed diabetes who receive formal diabetes education.
- Increase the percentage of cancer detected at local stage.
- Reduce hospitalizations of older adults with heart failure as the principal diagnosis.
- Increase the proportion of primary care facilities that provide mental health treatment onsite or by paid referral.
- Increase the proportion of children with mental health problems who receive treatment.
- Increase the proportion of adults with mental health disorders who receive treatment.
- Increase the proportion of persons with co-occurring substance abuse and mental disorders who receive treatment for both disorders.

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[1] Healthy People 2020

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

[3] Health and health care disparities: the effect of social and environmental factors on individual and population health. Thomas B. Int J Environ Res Public Health. July 21, 2014; 11(7): 7492-507.

Health Care Quality

Obtaining quality health care is a key component of maintaining one's health. The Maine Quality Forum's definition of quality health care includes the elements of safety, effectiveness, patient-centeredness, timeliness, efficiency and equity.[1] Quality of health care can be measured by health outcomes, access to health care, the appropriate use of types of health care (such as primary care providers and emergency departments), the occurrence of medical errors or unintended consequences, or patient satisfaction. Access to timely services and preventive care are additional aspects of quality health care. As connections between health care and public health are better recognized and partnerships are strengthened, the importance of measuring health care quality at both the provider and facility levels as well as the population level is also being recognized.

Ambulatory care-sensitive condition (ACSC) hospital discharges is a Prevention Quality Indicator 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. AHRQ provides nationwide comparative rates based on analysis of 44 states from the 2010 Agency for Healthcare Research and Quality's Healthcare Cost and Utilization Project State Inpatient Databases.[2]

Table 11. Ambulatory Care-Sensitive Condition Rates

	Maine	U.S.
Ambulatory care-sensitive condition hospital admission rate per 100,000 population (2011)	1,499.3	1,457.5
Ambulatory care-sensitive condition emergency department rate per 100,000 population (2011)	4,258.8	NA

NA = Not Available - data are not available for this indicator.

Health care quality measures chosen for the Maine Shared CHNA include:
- ACSC hospital admission rate per 100,000 population.
- ACSC emergency department rate per 100,000 population.

Additional measures related to health care quality can be found in several sections of the Maine Shared CHNA, including cancer, diabetes, immunizations (preventive services), and access to care. Data on disparities in health care quality is limited due to a lack of availability of the data by demographic characteristics such as race and ethnicity and small numbers for some indicators.

ACSC hospitalizations and emergency department visits are:
- Higher for women (1,568 and 5,108, respectively) versus men (1,426 and 3,350, respectively).
- Significantly higher for people ages 85 years and older (10,801 and 16,019, respectively).

In addition, ACSC emergency department visits are also significantly higher for people ages 75-84 (10,612).

Table 12. Counties and Public Health Districts with significantly higher and lower Ambulatory Care-Sensitive Condition Rates per 100,000 population compared to Maine

Lower Hospitalizations	Higher Hospitalizations
Cumberland County (1,168)	Penquis Public Health District (1,993)
York County (1,261),	Aroostook County (1,791)
Lincoln County (1,354)	Downeast Public Health District (1,677)
Lower Emergency Department Visits	Higher Emergency Department Visits
Sagadahoc County (3,375)	Aroostook County (6,148),
Knox County (3,388)	Downeast Public Health District (5,181)
Cumberland County (3,510)	Central Public Health District (4,960).

Healthy Maine 2020 also has objectives related to health care quality, including:[3]
- Increase routine vaccination coverage levels for children and adolescents.
- Reduce invasive health care-associated methicillin-resistant Staphylococcus aureus (MRSA) infections.
- Reduce the proportion of individuals who are unable to obtain or delay obtaining necessary medical care or dental care.
- Reduce hospital emergency department visits for asthma.
- Increase the proportion of persons with diagnosed diabetes who receive formal diabetes education.
- Increase the percentage of cancer detected at local stage.
- Reduce hospitalizations of older adults with heart failure as the principal diagnosis.
- Increase the proportion of primary care facilities that provide mental health treatment onsite or by paid referral.
- Increase the proportion of children with mental health problems who receive treatment.
- Increase the proportion of adults with mental health disorders who receive treatment.
- Increase the proportion of persons with co-occurring substance abuse and mental disorders who receive treatment for both disorders.

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[1] Maine Quality Forum http://www.mainequalityforum.gov/mqlp05.html
[2] Agency for Healthcare Research and Quality, Prevention Quality Indicator v4.5 Benchmark Data Tables, May 2013, Available from:
http://www.qualityindicators.ahrq.gov/Downloads/Modules/PQI/V45/Version_45_Benchmark_Tables_PQI.pdf
[3] Maine Center for Disease Control and Prevention. Healthy Maine 2020.
Available from: http://www.maine.gov/dhhs/mecdc/healthy-maine/index.shtml.

Oral Health

Oral health is important for overall health.[1] Good oral health helps us smile, speak, chew, smell, taste, swallow, touch, and make facial expressions that show emotions and feelings. Examples of oral diseases include cavities, gum disease, and mouth and throat cancers. Gum disease, in particular, has been linked to chronic diseases such as heart disease, stroke, and diabetes. Gum disease in pregnant women has been associated with low birth weight and premature birth.

Regular dental care can help prevent many oral diseases.[2] In 2012, 65.3 percent of Maine adults ages 18 years and older reported visiting a dentist or dental clinic for any reason in the past year. This figure has not changed significantly since 1999 (69.8 percent) and is comparable to the United States average of 67.2 percent. In 2014, 55.1 percent of MaineCare members under 18 years had a visit to a dentist during the prior year.

Oral health-related measures chosen for the Maine Shared CHNA include:
- Adults with dental care in past year.
- MaineCare members under 18 years with a visit to the dentist in the past year.

Additional measures related to protective factors, risk factors, or diseases related to oral health can be found in several sections of the Maine Shared CHNA, including diabetes, and cardiovascular health, tobacco use, and substance abuse.

While some oral health measures varied by state or public health district, most Maine counties or districts (with the exception of Aroostook) were not consistently at increased risk. Estimates for adult visits a dentist or dental clinic for any reason in the past year vary across population groups in Maine, with the following groups less likely to have had oral health care:
- Males.
- Adults in lower income groups.
- Adults in isolated areas.

Healthy Maine 2020 has objectives related to oral health, including:[3]
- Increase the proportion of adults ages 18 years and older with dental insurance.
- Reduce the proportion of individuals who are unable to obtain or delay obtaining necessary dental care.
- Reduce the proportion of children who have dental caries experience in their primary or permanent teeth.

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[1] U.S. Department of Health and Human Services. Healthy People 2020. Oral health: overview. Available from http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=32
[2] U.S. Department of Health and Human Services. Healthy People 2020. Leading health indicators: oral health overview and impact. Available from http://www.healthypeople.gov/2020/LHI/oralHealth.aspx
[3] Maine Center for Disease Control and Prevention. Healthy Maine 2020.
Available from: http://www.maine.gov/dhhs/mecdc/healthy-maine/index.shtml.

Chronic Diseases
Cancer

Advances in cancer detection, treatment, and research have led to declines in cancer incidence and death rates. According to Surveillance, Epidemiology, and End Results (SEER) data from the National Cancer Institute, today in the United States, among people who develop cancer, more than half will be alive in five years.[1,4] Many cancers can be prevented by reducing risk factors such as tobacco use, physical inactivity, poor nutrition, obesity, and exposure to sunlight. A recent study also suggests that avoiding even light to moderate drinking of alcohol may reduce overall cancer risk.[5]

Screening, including mammography, Pap tests, and colonoscopy, can be effective in identifying certain cancers at early stages, when they are more easily treated.[1,2] Screening for colorectal and cervical cancers can find precancerous lesions that can be treated before they become cancerous.[2] In addition, the human papillomavirus vaccine may prevent cervical cancers, while the hepatitis B vaccine can help lower liver cancer risk.[6]

The age-adjusted all-cancer death rate in Maine decreased significantly in recent years, but cancer remains the leading cause of death among Maine people.

Table 13. Key Cancer Indicators

	Maine	U.S.
Mortality – all cancers per 100,000 population (2011)	*181.7**	168.7
Incidence – all cancers per 100,000 population (2009-2011)	*488.7**	453.4
Female breast cancer incidence per 100,000 population (2009-2011)	125.0	124.1
Mammograms females age 50+ in past two years (2012)	82.1%	77.0%
Colorectal cancer incidence per 100,000 population (2009-2011)	41.1	42.0
Colorectal screening (2012)	72.2%	NA
Lung cancer incidence per 100,000 population (2009-2011)	*74.0**	58.6
Melanoma incidence per 100,000 population (2009-2011)	22.2	21.3
Prostate cancer incidence per 100,000 population (2007-2011)	*118.4**	140.8

Asterisk (*) and italics indicate a statistically significant difference between Maine and the .S.
NA = Not Available - data are not available for this indicator.
Note: Age-adjusted rates presented in table, except for mammograms and colorectal screening..

Cancer-related measures chosen for the Maine Shared CHNA include:
- Cancer deaths (all cancers).
- Cancer incidence (all cancers).
- Bladder cancer incidence.
- Female breast cancer deaths.
- Late-stage female breast cancer incidence.
- Female breast cancer incidence.

- Women ages 50 and older who have had a mammogram in the past two years.
- Colorectal cancer deaths.
- Late-stage colorectal cancer incidence.
- Colorectal cancer incidence.
- Adults ages 50 years and older who have had colorectal cancer screening.
- Lung cancer deaths.
- Lung cancer incidence.
- Melanoma incidence.
- Women ages 18 and older who have had a Pap smear within the past three years.
- Prostate cancer deaths.
- Prostate cancer incidence.
- Tobacco-related cancer deaths, excluding lung cancer.
- Tobacco-related cancer incidence, excluding lung cancer.

Additional measures related to risk factors for cancer can be found in several sections of the Maine Shared CHNA, including cardiovascular health, environmental health, tobacco use, and physical activity, nutrition and weight.

Cancer incidence, mortality, and screening measures included in the Maine Shared CHNA vary across population groups in Maine. For example:
- Males are at higher risk than females both of being diagnosed with and of dying from colorectal, lung, and tobacco-related cancers, as well as cancer in general.
- People who are white are more likely than people of color to be diagnosed with cancer (all types combined).
- The 2007-2011 age-adjusted all-cancer incidence rate is significantly higher in the Downeast Public Health District (525.1 per 100,000 population), Penquis Public Health District (523.8) and York County (510.4) than in most of the other public health districts in the state.
- Mainers with less education or income are less likely to have cancer screenings such as mammograms, Pap tests, and sigmoidoscopy or colonoscopy than Mainers with higher education or income.

The Chronic Disease section of Healthy Maine 2020 includes objectives to reduce the incidence rate of late-stage female breast cancer and to reduce the incidence rate of late-state colorectal cancer. Objectives related to risk factors for cancer can be found in other sections of Healthy Maine 2020, including Substance Abuse, Physical Activity and Nutrition, and Environmental Health.[3]

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[1] U.S. Department of Health and Human Services. Healthy People 2020. Cancer: overview.
Available from http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=5
[2] Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. Cancer prevention and control. Available from http://www.cdc.gov/cancer/dcpc/prevention/

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

[4] National Cancer Institute, Surveillance Research Program. Cancer Statistics Review 1975–2006: Age-adjusted SEER incidence and U.S. death rates and 5-year relative survival rates. Bethesda, MD: National Cancer Institute. Available from: http://seer.cancer.gov/csr/1975_2006/results_merged/topic_survival.pdf [PDF - 460 KB]

[5] Light to moderate intake of alcohol, drinking patterns, and risk of cancer: results from two prospective U.S. cohort studies. Cao, Willet, and Rimm et al. BMJ 2015; 351 (Published 18 August 2015). Available from: http://www.bmj.com/content/351/bmj.h4238

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Cardiovascular Health

More than one in three adults in the United States live 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. These conditions are, however, among the most preventable health problems. The most common controllable or modifiable risk factors for cardiovascular disease include high blood pressure, high cholesterol, smoking, diabetes, physical inactivity, poor diet, overweight and obesity.[1] In addition to these traditional risk factors, more recent studies have identified early-life psychiatric disorders as a risk factor for early onset cardiovascular disease.[3]

Heart disease is the leading cause of death among Mainers ages 65 years and older and the second leading cause of death among all ages combined. Stroke is the fifth leading cause of death among Mainers.

Table 14. Key Cardiovascular Disease Indicators

	Maine	U.S.
Acute myocardial infarction hospitalizations per 10,000 population (2012)	23.5	NA
Acute myocardial infarction mortality per 100,000 population (2013)	33.4	32.4
Cholesterol checked every five years (2013)	81.4%*	76.4%
Coronary heart disease mortality per 100,000 population (2013)	89.5	102.6
Hypertension prevalence (2011, 2013)	33.3%	31.4%
High cholesterol (2011, 2013)	39.7%	38.4%
Hypertension hospitalizations per 100,000 population (2011)	28.0	NA
Stroke mortality per 100,000 population (2013)	33.3	36.2

Asterisk (*) and italics indicate a statistically significant difference between Maine and the U.S.;
NA = Not Available - data are not available for this indicator.
Note: Age-adjusted rates presented in table, except for cholesterol checked, hypertension and high cholesterol.

Cardiovascular health-related measures chosen for the Maine Shared CHNA include:
- Acute myocardial infarction (heart attack) hospital discharges.
- Acute myocardial infarction (heart attack) deaths.
- Cholesterol checked every 5 years.
- Coronary heart disease deaths.
- Heart failure hospital discharges.
- Hypertension (high blood pressure).
- High cholesterol.
- Hypertension hospital discharges.
- Stroke hospital discharges.
- Stroke deaths.

Additional measures related to risk factors for cardiovascular disease can be found in several sections of the Maine Shared CHNA, including diabetes, tobacco use, substance abuse; and physical activity, nutrition and weight.

Cardiovascular disease mortality and hospital discharge rates and the prevalence of risk factors vary across population groups in Maine. For example:

- Males are at higher risk than females of dying from acute myocardial infarction or coronary heart disease or being hospitalized for heart failure, acute myocardial infarction, hypertension, or stroke.
- Mainers with lower incomes or less education are at higher risk than those with more income or education of ever having been told by a health professional that they had high blood pressure or high cholesterol.
- The age-adjusted acute myocardial infarction and coronary heart disease mortality rates are significantly higher among Mainers who are American Indian or Alaska Native than those who are white.
- Aroostook, Hancock, Penobscot, Piscataquis, Somerset, and Washington counties are at higher risk than the state overall on more cardiovascular health related measures than any other state; their acute myocardial infarction mortality and hospital discharge rates, coronary heart disease mortality rate, and stroke and hypertension hospital discharge rates are all significantly higher than the state rates.

Healthy Maine 2020 has objectives related to cardiovascular health, including:[2]

- Reduce hospitalizations of older adults with heart failure as the principal diagnosis.
- Increase the proportion of adults who report having been diagnosed with hypertension who are at a healthy weight.
- Increase the proportion of adults who report having been diagnosed with hypertension who report cutting down on salt.
- Increase the proportion of adults who report having been diagnosed with hypertension who report engaging in the recommended amount of physical activity.
- Increase the proportion of adults who report having been diagnosed with hypertension who report no heavy or binge drinking.

Additional objectives related to risk factors for cardiovascular disease can be found in other sections of Healthy Maine 2020, including physical activity, nutrition and weight and substance abuse.

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[1] U.S. Department of Health and Human Services. Healthy People 2020. Heart disease and stroke: overview. Available from: http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=21

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

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Diabetes

Diabetes mellitus is a complex public health problem. Diabetes is the inability of the body to control the amount of glucose (sugar) in the blood. Diabetes occurs when the body cannot produce or respond appropriately to insulin. About 90% of diabetes cases are type 2, which is brought on by obesity and lack of physical activity. Diabetes lowers life expectancy, increases the risk of heart disease and is the leading cause of adult-onset blindness, non-traumatic lower limb amputations, and kidney failure. Effective treatment can delay or prevent complications of diabetes; however, about one in four Americans with diabetes are undiagnosed. Many other Americans have blood glucose levels that put them at greatly increased risk of developing diabetes during the next few years.[1] The cost of treatment for diabetes is high and increasing rapidly. Per-person spending for diabetes drugs is higher than for any other class of traditional drug.[3] Average annual health care costs for a person with diabetes have been estimated about $15,000, roughly three times that for a person without the disease.[4] Even in in the U.K., where health care costs have been reported to be better contained than in the U.S,[5] Diabetes UK recently warned that the cost of diabetes care threatens to bankrupt the U.K. National Healthcare System.[6]

Table 15. Key Diabetes Indicators

	Maine	U.S.
Diabetes prevalence (ever been told) (2013)	9.6%	9.7%
Pre-diabetes prevalence (ever been told) (2013)	7.4%	NA
Adults with diabetes who have received formal diabetes education (2013)	60.0%	55.8%
Diabetes emergency department visits (principal diagnosis) per 100,000 population (2011)	235.9	NA
Diabetes hospitalizations (principal diagnosis) per 10,000 population (2012)	11.4	NA
Diabetes long-term complication hospitalizations (2011)	59.1	NA
Diabetes mortality (underlying cause) per 100,000 population (2013)	20.4	21.2

Asterisk (*) and italics indicate a statistically significant difference between Maine and the U.S.
NA = Not Available - data are not available for an indicator.
Note: Age-adjusted rates presented in table for emergency department visits and hospitalizations.

Diabetes mellitus is the seventh leading cause of death among Maine residents and the fifth leading cause of years of potential life lost among males in Maine.

Diabetes-related measures chosen for the Maine Shared CHNA include:
- Adults with diabetes.
- Adults with pre-diabetes.
- Adults with diabetes who have had an eye exam in the last year.
- Adults with diabetes whose feet were checked in the last year.
- Adults with diabetes whose hemoglobin A1C was checked at least twice per year.
- Adults with diabetes who have received formal diabetes education.
- Diabetes emergency department visits.
- Diabetes hospital discharges.

- Diabetes long-term complication hospital discharges.
- Diabetes deaths.

Measures related to risk factors for diabetes can be found in several sections of the Maine Shared CHNA, including physical activity, nutrition and weight, tobacco use, and substance abuse.

The prevalence of diabetes, rates of diabetes-related hospital encounters, and other diabetes-related measures included in the Maine Shared CHNA vary across population groups in Maine. For example:
- Males are at higher risk than females of having diabetes, dying from diabetes and having hospital or emergency department encounters with a diabetes principal or long-term complication diagnosis.
- Adults in lower income groups or with less education are more likely to report ever having been told by a doctor that they have diabetes.
- Non-Hispanic American Indian or Alaska Native adults are more likely than adults of other race/ethnicity groups (except non-Hispanic multiracial) to report ever having been told by a doctor they have diabetes.
- American Indian or Alaska Native Mainers are more likely than white Mainers to die from diabetes.
- Aroostook, Penobscot, Piscataquis, Somerset and, in most cases, Washington counties have higher rates than the state as a whole of both emergency department visits and hospital discharges with a diabetes principal or long-term complication diagnosis.

Healthy Maine 2020 also has objectives related to diabetes, including:[2]
- Increase the proportion of persons with diagnosed diabetes who receive formal diabetes education.
- Reduce co-morbidity for persons with mental illness (diabetes, asthma, and hypertension among people with diagnosed depression or anxiety).
- Increase the proportion of adults diagnosed with pre-diabetes who report engaging in the recommended amount of physical activity.
- Increase the proportion of adults diagnosed with pre-diabetes who are at a healthy weight.

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[1] U.S. Department of Health and Human Services. Healthy People 2020. Diabetes: overview.
Available from: http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=8
[2] Maine Center for Disease Control and Prevention. Healthy Maine 2020.
Available from: http://www.maine.gov/dhhs/mecdc/healthy-maine/index.shtml.
[3] Express Scripts 2014 Drug Trend Report. Available at: http://lab.express-scripts.com/drug-trend-report/
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Available at: http://www.healthcostinstitute.org/files/HCCI%20Diabetes%20Issue%20Brief%205-7-15.pdf
[5] Disease and Disadvantage in the United States and in England. Banks, Marmot, Oldfield, and Smith. JAMA. 2006; 295: 2037-2045.
[6] Huge rise in UK diabetes cases threatens to bankrupt NHS, charity warns. The Guardian. August 17, 2015.
http://www.theguardian.com/society/2015/aug/17/diabetes-bring-down-nhs-charity

Respiratory

Asthma, pneumonia and chronic obstructive pulmonary disease (COPD) are examples of respiratory diseases that are significant public health issues. The burden of respiratory disease falls not only on the people who have them, but also on their families, workplaces, schools, neighborhoods, and society as a whole. Both genetic and environmental factors, such as exposure to cigarette smoke, play a role in who gets certain respiratory diseases and how those diseases progress.[1]

Asthma is the most common childhood chronic condition in the U.S. and the leading chronic cause of children being absent from school.[2] While exposures to dust mites and cockroaches have long been identified as risk factors for asthma,[4] studies also point to parental smoking as a contributing causal factor in childhood asthma.[5,6] More recent studies have also linked obesity to asthma among children.[7]

Asthma rates are higher among people living in the northeastern U.S.[1] In addition, Chronic lower respiratory disease, which includes COPD and asthma, is the third leading cause of death among Maine residents. Maine has seen significant increases in pneumonia emergency department visits (568.9 per 100,000 population in 2007, 719.9 in 2011).

Table 16. Key Asthma and COPD Indicators

	Maine	U.S.
Asthma emergency department visits per 10,000 population (2011)	66.2	NA
COPD diagnosed (2013)	7.1%	6.5%
COPD hospitalizations per 100,000 population (2011)	216.3	NA
Current asthma (Adults) (2013)	*11.9%**	9.0%
Current asthma (Youth 0-17) (2011-2013)	9.1%	9.2%
Pneumonia hospitalizations per 100,000 population (2011)	329.4	NA

Asterisk (*) and italics indicate a statistically significant difference between Maine and the U.S.
NA = Not Available - data are not available for this indicator.
Note: Age-adjusted hospitalization rates presented in table;

Respiratory-related measures chosen for the Maine Shared CHNA include:
- Asthma emergency department visits.
- Adults with COPD.
- COPD hospital discharges.
- Adults with current asthma.
- Asthma among children.
- Pneumonia emergency department visits.
- Pneumonia hospital discharges.

Measures related to risk factors for respiratory diseases can be found in other areas of the Maine Shared CHNA, including cancer, environmental health and tobacco use.

Estimates for respiratory health-related measures included in the Maine Shared CHNA vary across population groups in Maine. For example:

- Current asthma among Maine children is significantly more common among males (10.9 percent) than females (7.1 percent),
- Among Maine adults, current asthma is more common among females (14.6 percent) than males (8.9 percent).
- Among Maine adults, current asthma is also significantly more common among those who identify themselves as non-Hispanic, American Indian or Alaska Native (15.9 percent) or non-Hispanic multiracial (16.2 percent) than among non-Hispanic white adults (11.6 percent).

Healthy Maine 2020 also has respiratory-related objectives, including:[3]

- Reduce hospital emergency department visits for asthma.
- Reduce emergency department visits for work-related asthma.
- Reduce the use of any tobacco products among students.
- Reduce cigarette smoking among students.
- Increase the percentage of youth who reported never having smoked in their life.
- Reduce tobacco use by adults.
- Increase abstinence from cigarette smoking among pregnant women.
- Increase the proportion of persons with a diagnosis of depression or anxiety who do not smoke.
- Reduce the number of days the Air Quality Index exceeds 100.

[1] U.S. Department of Health and Human Services. Healthy People 2020. Respiratory diseases: overview. Available from http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=36

[2] Asthma and Allergy Foundation of America. Asthma facts and figures.
Available from http://www.aafa.org/display.cfm?id=9&sub=42#_ftn2 (accessed 6/5/2013).

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

[4] House dust mite and cockroach exposure are strong risk factors for positive allergy skin test responses in the Childhood Asthma Management Program. Huss, Adkinson, Eggleston et al. Journal of Allergy and Clinical Immunology, 2001; Volume 107, Issue 1: 48–54.
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Available from: http://www.atsjournals.org/doi/abs/10.1164/ajrccm.154.3.8810605#.VdeYGDZRHIU

[7] Effects of BMI, Fat Mass, and Lean Mass on Asthma in Childhood: A Mendelian Randomization Study, news release. Granell, Henderson, Evans et al. PLOS Medicine, 2014; 11(7).
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Environmental Health

Environmental health is a large and varied field that strives to promote health and prevent or minimize exposures in the environment that may have adverse health effects. Environmental health touches nearly every aspect of our lives. The health and safety of our food, water, air, and the places where we live, play and work, are all within the scope of Environmental Health.[1]

There is a particularly strong and important connection between health and the home environment. The Surgeon General's Call to Action to Promote Healthy Homes distills the scientific evidence demonstrating how residential chemicals, drinking water and indoor air quality, as well as a home's structural aspects and safety devices, can affect health.[2] People living in U.S., especially young children and older adults, spend more time at home than in any other location.[3] The developmental vulnerability and behavior of young children put them at unique risk for adverse health outcomes associated with hazards found in the home.

Maine residents face specific challenges when it comes to ensuring a healthy home environment. Maine has the sixth highest percentage of homes built before 1950 in the U.S. – pre-1950 homes are more likely to have lead paint. Between 2009 and 2013, nearly 1,674 Maine children less than six years of age were newly identified as having a confirmed elevated blood lead level (and 2,811 suspected of having an elevated blood lead level).

Childhood lead exposures are of particular concern in urban clusters like Auburn, Bangor, Biddeford, Lewiston, Portland, Saco and Westbrook and disproportionately affect children who live in rental housing, as well as children in families with low incomes and those born in other countries.[4]

Further, more than half of Maine's population relies on private wells for drinking water.[5] The mineral-laden bedrock underlying large areas of the state produces arsenic and other

Map 2. Children Born in 2010 with a Blood Lead Screening Test before 24 Months of Age
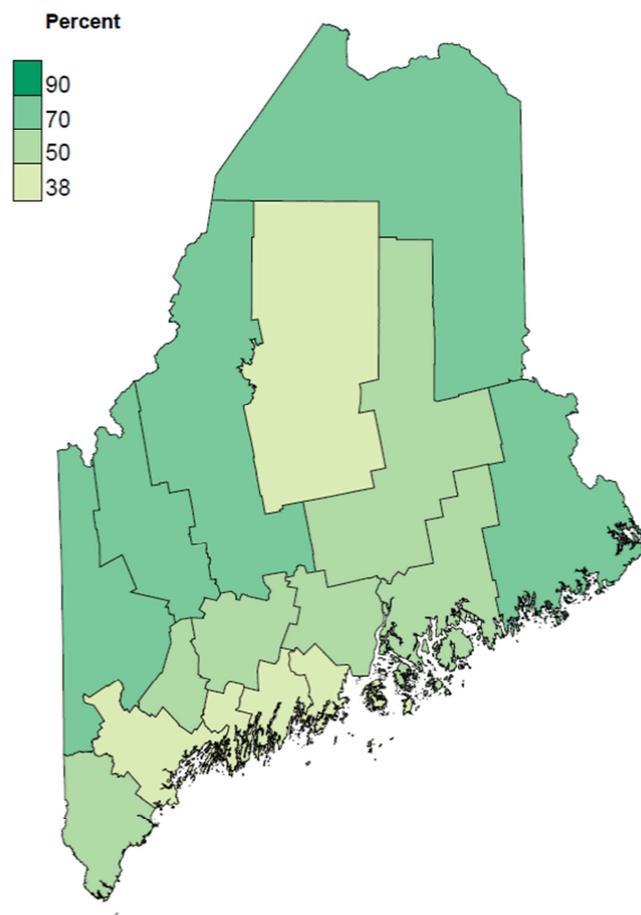
naturally occurring contaminants in drinking water. More than 10 percent of wells have unsafe levels of arsenic – a human carcinogen also linked with cardiovascular disease, diabetes, and IQ deficits – yet less than half of Maine homes with wells have been tested for arsenic.[5]

Environmental Health measures chosen for the Maine Shared CHNA include:
- Children with confirmed and unconfirmed elevated blood lead levels (percent among those screened).
- Homes with private wells tested for arsenic.
- Blood lead screening among 1 & 2 year old children.

Table 17. Key Environmental Health Indicators

	Maine
Children with confirmed elevated blood lead levels (% among those screened) (2013)	2.1%
Children with unconfirmed elevated blood lead levels (% among those screened) (2013)	4.1%
Homes with private wells tested for arsenic (2009, 2012)	43.3%
Lead screening among children age 12-23 months (2009-2013)	49.2%
Lead screening among children age 24-35 months (2009-2013)	27.6%

U.S comparisons are not available for these indicators.

Additional indicators related to environmental health can be found in many sections of the Maine Shared CHNA, including cancer, cardiovascular health, infectious disease, maternal and child health, oral health, and respiratory health.

Public health and health care providers work together toward the goal of eliminating childhood lead poisoning in Maine. Providers fulfill Maine's blood lead testing requirements: children covered by MaineCare must have their blood lead tested at ages 1 and 2 years, and all other children must be tested at these same ages unless a provider determines they are not at risk. An elevated blood lead test triggers public health actions to make the home environment lead-safe for the child, other children living in the dwelling, and children who may live there in the future. In 2015, Maine adopted the national reference value for an elevated blood lead level, which is now 5 micrograms lead per deciliter blood or above ($\geq$ 5 ug/dL), and the Maine CDC issued updated guidelines for blood lead testing.

Public health and health care providers can also work together to promote testing of drinking water that comes from private wells. Primary care providers recognize the importance of evaluating well water quality to assess the need for fluoride supplements.[6] The Maine CDC recommends testing private wells each year for bacteria and nitrates, and every three to five years for arsenic, radon, uranium, lead, and fluoride. Well water quality is not linked to particular socio-economic characteristics, but Maine residents with incomes above $50,000 and those who have graduated from college or technical school are more likely to have tested for arsenic.[5]

There are other important concerns related to the home environment, but not covered in the Shared CHNA, including indoor air radon and carbon monoxide. Indoor air radon is considered

the second leading cause of lung cancer, yet less than a third of Maine homes have tested for radon.[5] Carbon monoxide poisoning, a notifiable condition in Maine, increases every winter due to faulty heating systems or improper use of generators during power outages, yet nearly half of Maine homes do not have a carbon monoxide detector.[5]

Healthy Maine 2020 has additional environmental health objectives, including:[1]
- Particulate matter in the air.
- Number of days the Air Quality Index (AQI) exceeds 100.
- Carbon monoxide poisoning emergency department visits per 100,000 (2009).
- Persons served by a community water systems who receive a supply of drinking water that meets the regulations of the Safe Drinking Water Act.
- Fluoridated water.
- Homes with elevated radon.
- Number of homes with an operating radon mitigation system for persons living in homes at risk for radon exposure.

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[1] Maine Center for Disease Control and Prevention. Healthy Maine 2020.
Available from: http://www.maine.gov/dhhs/mecdc/healthy-maine/index.shtml.
[2] The Surgeon General's Call to Action to Promote Health Housing, 2009. U.S. Department of Health and Human Services.
[3] Exposure Factors Handbook, U.S. Environmental Protection Agency, 2011 Edition.
[4] Maine Tracking Network, Public Data Portal. Available from: https://data.mainepublichealth.gov/tracking/lead-content.
[5] Maine Behavioral Risk Factor Surveillance System. Available from:
https://data.mainepublichealth.gov/brfss/environmental_health
[6] https://healthychildren.org/English/ages-stages/baby/feeding-nutrition/Pages/Fluoride-Supplements.aspx

Infectious Diseases

Immunization

Immunization was one of the top ten "Great Public Health Achievements" of the twentieth century, accounting for significant decreases in morbidity and mortality of infectious diseases and an overall increase in life expectancy.[1] Worldwide progress toward the eradication of key diseases, such as smallpox and polio has been driven by immunization campaigns. However, many infectious diseases that can be prevented via vaccination continue to cause significant burdens of disease. The U.S. CDC recommends immunizations for 17 vaccine-preventable diseases across the lifespan.[2] Young children, adolescents and older adults are populations for which the majority of vaccinations are recommended. Yearly influenza vaccination is recommended for all people ages six months and older.

Table 18. Key Immunization Indicators

	Maine	U.S.
Adults immunized annually for influenza (2013)	44.1%	NA
Adults immunized for pneumococcal pneumonia (ages 65 and older) (2013)	73.8%	69.5%
Immunization exemptions among kindergarteners for philosophical reasons (2015)	3.7%	NA
Two-year-olds up to date with "Series of Seven Immunizations" 4-3-1-3-3-1-4 (2015)	75.0%	NA

NA = Not Available - data are not available for this indicator.

In Maine, 91 percent of children ages 19-35 months were immunized for MMR (measles-mumps-rubella) in 2013, while 88 percent received four doses of DTap (diphtheria and tetanus toxoids and acellular pertussis) vaccine and 80 percent received full series (primary series plus the booster dose) of haemophilus influenzae type b (Hib) vaccine. These figures are comparable to the U.S. averages of 92 percent, 83 percent and 82 percent, respectively.[4]

Immunization measures chosen for the Maine Shared CHNA include:
- Adults immunized annually for influenza.
- Adults immunized for pneumococcal pneumonia (ages 65 years and older).
- Immunizations exemptions among kindergarteners for philosophical reasons.
- Two-year-olds who have received all age appropriate vaccines recommended by ACIP.

Another indicator related to immunizations included in the Maine Shared CHNA topic area of infectious disease is the rate of pertussis.

Due to sample sizes in the surveys used for the Maine Shared CHNA immunization data, there is limited data on geographical, racial and ethnic disparities for childhood and adolescent immunizations in Maine. Shared CHNA data does show some variation by gender, age and educational attainment

- In 2014, 67 percent of female adolescents ages 13-17 years had at least one HPV vaccine dose, compared with 53 percent of male adolescents.[5]
- For adults, influenza vaccination increased with age after age 24. In 2013, these rates ranged from 32.3 percent in adults ages 25-34 years to 62.5 percent in adults ages 65-74 years and 64.5 percent in adults ages 75 years and older.
- As of 2013, 69.4 percent of adults ages 65-74 years and 79.6 percent of those ages 75 years and older are immunized for pneumonia. These rates that have not changed significantly since 2006.
- College and technical school graduates have higher rates of influenza and pneumococcal immunizations than those with less education.
- Women are vaccinated for both flu and pneumonia at higher rates than men.

Healthy Maine 2020 objectives related to immunization are:[3]

- Reduce the rates of vaccine-preventable diseases (focus on pertussis and varicella).
- Increase routine vaccination coverage levels for children and adolescents.

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[1] Centers for Disease Control and Prevention (CDC). Achievements in public health, 1900–1999: Control of infectious diseases. MMWR. 1999 Jul 30;48(29):621-9.

[2] Healthy People 2020, Immunization and Infectious Diseases.
Available at: http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=23#one

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

[4] Centers for Disease Control and Prevention (CDC). Immunization Managers. Vaccination Coverage Rates & Data.
Available from: http://www.cdc.gov/vaccines/imz-anagers/coverage/nis/child/tables/13/tab02_antigen_iap_2013.pdf

[5] Centers for Disease Control and Prevention (CDC). Immunization Managers. Vaccination Coverage Rates & Data.
Available from: http://www.cdc.gov/vaccines/imz-managers/coverage/nis/teen/tables/14/tab01_iap_2014.pdf

Infectious Disease

There are 71 infectious diseases and conditions that are reported in Maine.[1] While advances in sanitation, personal hygiene and immunizations have provided control over some disease, others continue to thrive despite best efforts. For example, Lyme disease has increased from 245 reported cases statewide in 2005 to 1,400 in 2014, a growth of more than 500 percent in a decade.

Surveillance data assist in monitoring trends in disease and identifying immediate threats to public health. Healthcare providers and facilities, medical laboratories, health officers, veterinarians and others are required to report notifiable diseases to Maine CDC. However, there are limitations in surveillance data, especially pertaining to underreporting. Available data reflects a subset of the disease burden in Maine.

Table 19. Key Infectious Disease Indicators

	Maine	U.S.
Incidence of past or present hepatitis C virus (HCV) per 100,000 population (2014)	107.1	NA
Incidence of newly reported chronic hepatitis B virus (HBV) per 100,000 population (2014)	8.1	NA
Lyme disease incidence per 100,000 population (2014)	105.3	10.5
Chlamydia incidence per 100,000 population (2014)	265.5	452.2
Gonorrhea incidence per 100,000 population (2014)	17.8	109.8
HIV incidence per 100,000 population (2014)	4.4	11.2

NA = Not Available - data are not available for this indicator.

The five most commonly reported infectious disease conditions in Maine in 2014 were chlamydia, chronic hepatitis C, Lyme disease, pertussis, and gonorrhea. For 2014:
- The rate of chlamydia in Maine was 265.5 per 100,000 compared to 452.2 per 100,000 nationally.
- The rate of newly reported cases of past or present hepatitis C (chronic hepatitis C) was 107.1 per 100,000; an increase from 87.0 per 100,000 persons in 2010.
- The rate of Lyme disease was 105.3 per 100,000 population which is more than twelve times the national average of 10.5 per 100,000. However, it should be noted that Lyme disease is not found in all states.
- The rate of pertussis in Maine significantly increased from 15.4 per 100,000 in 2011 to 41.9 per 100,000 in 2014.
- The rate of gonorrhea in Maine was 17.8 per 100,000 compared to 109.8 per 100,000 nationally.

Infectious disease measures chosen for inclusion in the Maine Shared CHNA include:
- Acute hepatitis A.
- Acute and chronic hepatitis B (HBV).
- Acute and chronic hepatitis C (HCV).

- Lyme disease.
- Tuberculosis.
- Pertussis.
- AIDS.
- Chlamydia.
- Gonorrhea.
- HIV.
- HIV/AIDS hospitalizations
- Syphilis.

Additional infectious disease related measures can be found in the immunization section of the Maine Shared CHNA.

The occurrence of some infectious disease varies geographically around the state of Maine. Lyme disease rates in 2014 vary by district with Midcoast, Downeast, York and Cumberland Public Health Districts having the highest rates (203.5, 154.9, 134.0 and 117.4 per 100,000 respectively) and Aroostook the lowest (7.2 per 100,000).. Rates of pertussis in 2014 were highest in Aroostook, Penquis, and Midcoast (97.9, 73.3, and 66.9 per 100,000 persons respectively). The rate of gonorrhea in Western Public Health District was twice as high as the state at 38.0 per 100,000 persons.

Healthy Maine 2020 objectives related to infectious disease are[2]:
- Increase the percent of persons with chronic Hepatitis C who know their serostatus.
- Reduce the rates of vaccine-preventable diseases (focus on Pertussis and Varicella).
- Reduce invasive healthcare-associated methicillin-resistant Staphylococcus aureus (MRSA) infections.
- Reduce the percent of new HIV diagnoses that are detected late in the course of HIV illness.
- Increase routine vaccination coverage levels for children and adolescents.
- Reduce infections caused by key pathogens transmitted commonly through food.

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[1] Maine Center for Disease Control and Prevention, Reportable Infectious Diseases in Maine, 2014 Summary. Available from: http://www.maine.gov/dhhs/mecdc/infectious-disease/epi/publications/index.shtml#annualreports.
[2] Maine Center for Disease Control and Prevention. Healthy Maine 2020.
Available from: http://www.maine.gov/dhhs/mecdc/healthy-maine/index.shtml.

Injuries
Intentional Injury

Intentional, or violence-related, injury is an important public health problem that affects people of all ages.[1] 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.[2]

Suicide is the second leading cause of death among 15 to 34 year-old Mainers and the tenth leading cause of death among all ages combined. In 2013, 245 Maine residents died by suicide. There were 97 homicides in Maine in 2010 to 2013 combined. The lifetime medical and work-loss costs associated with all violence-related deaths that occurred among Maine residents in 2005 alone are estimated to be more than $192 million (in 2005 dollars).[8]

Table 20. Key Intentional Injury Indicators

	Maine	U.S.
Domestic assaults reports to police per 100,000 population (2013)	413.0	NA
Firearm deaths per 100,000 population (2013)	10.9	10.4
Suicide deaths per 100,000 population (2013)	*17.4**	12.6
Violent crime rate per 100,000 population (2013)	125.0	367.9

Asterisk (*) and italics indicate a statistically significant difference between Maine and the U.S.
NA = Not Available - data are not available for this indicator.
Note: Age-adjusted rates presented in table.

While many people die as the result of intentional injury each year, many more survive and can be left with emotional and physical scars.[1] In 2013, for example, it was estimated that 17.9 percent of Maine high school students had purposely hurt themselves (e.g., cutting or burning) without wanting to die during the past year.

The following intentional injury-related measures are included in the Maine Shared CHNA:
- Domestic assaults.
- Firearm deaths.
- Self-harm by high school students.
- Lifetime rape.
- Non-fatal child maltreatment.
- Rape reported to law enforcement.
- Suicide deaths.
- Intimate partner violence.
- Violent crime.

Additional intentional injury-related measures can be found in the mental health section of the Maine Shared CHNA.

The occurrence of intentional injuries included in Maine Shared CHNA measures varies across population groups in Maine.

- Suicide is more common among males than females.
- Female high school students, however, are at higher risk than male students of intentionally harming themselves without wanting to die.
- Gay, lesbian, and bisexual high school students are far more likely than heterosexual students to report intentional self-harm without wanting to die
- Asian and Native Hawaiian or other Pacific Islander high school students were less likely to report intentional self-harm without wanting to die than any other race and ethnicity.
- The occurrence of intentional injuries varies by state and public health district, but no one particular state or district is at increased risk on all, or most, of the measures in the Maine Shared CHNA.

Healthy Maine 2020 also has objectives related to intentional injury, including:[3]

- Reduce the suicide rate.
- Reduce nonfatal child maltreatment.
- Reduce bullying among adolescents.
- Reduce violence by current or former intimate partners.
- Reduce rape or attempted rape.

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[1] Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. Violence prevention. Available from http://www.cdc.gov/ViolencePrevention/index.html

[2] U.S. Department of Health and Human Services. Healthy People 2020. Injury and violence prevention: overview. Available from http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicId=24

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

Unintentional Injury

Injuries are a leading cause of death and disability. While many people think of injuries as "accidents," most are predictable and preventable.[1]

Unintentional injury was the leading cause of death among one- to 44-year-old Mainers and the fourth leading cause of death among all ages combined in 2013. The lifetime medical and work-loss costs associated with all unintentional injury deaths that occurred in Maine in 2005 alone are estimated to be more than $500 million (in 2005 dollars).[2] The leading causes of unintentional injury death in Maine were:

- Motor vehicle traffic incidents (10.2 deaths per 100,000 population compared with 10.5 for the U.S.).
- Poisoning (12.6 deaths per 100,000 population compared with 13.2 for the U.S.).
- Falls (8.7 deaths per 100,000 population compared with 8.5 for the U.S.).

Table 21. Key Unintentional Injury Indicators

	Maine	U.S.
Always wear seatbelt (Adults) (2013)	85.2%	NA
Always wear seatbelt (High School Students) (2013)	61.6%	54.7%
Traumatic brain injury related emergency department visits (all intents) per 10,000 population (2011)	81.4	NA
Unintentional and undetermined intent poisoning deaths per 100,000 population (2013)	12.6	13.2
Unintentional fall related injury emergency department visits per 10,000 population (2011)	361.3	NA

Asterisk (*) and italics indicate a statistically significant difference between Maine and the U.S.
NA = Not Available - data are not available for this indicator.
Note: Age-adjusted rates presented in table for deaths and emergency department visits.

Unintentional injury-related measures chosen for the Maine Shared CHNA include:

- Emergency department visits due to falls among adults 65 years and older.
- Fall-related deaths.
- Motor vehicle traffic deaths.
- Adult seatbelt use.
- Youth seatbelt use.
- Traumatic brain injury emergency department visits.
- Unintentional and undetermined poisoning deaths.

Additional unintentional injury-related measures can be found in occupational health section of the Maine Shared CHNA.

The occurrence of unintentional injuries and preventive behaviors included in Maine Shared CHNA measures vary across population groups in the state.

- Males are at higher risk of motor vehicle traffic deaths, fall-related deaths, unintentional- and undetermined-intent poisoning deaths, and emergency department visits related to traumatic brain injury.
- Females are at higher risk of fall-related emergency department visits.
- High school students of color (except Asian) are less likely than white students to report they always wear seat belts when riding in a car.
- Injury risk also varies by state and public health district; Somerset County was at significantly increased risk on four of the seven unintentional injury measures, more than any other county in the state.

Healthy Maine 2020 also has objectives related to unintentional injury, including:[3]
- Reduce motor vehicle crash-related deaths.
- Prevent an increase in the rate of poisoning deaths (all intents and unintentional or undetermined intent).
- Reduce emergency department visits due to unintentional falls among older adults.
- Reduce the rate of infant death.
- Reduce the rate of injury and illness cases involving days away from work due to overexertion.
- Reduce the rate of injury and illness cases involving days away from work due to repetitive motion.
- Reduce deaths from work-related injuries.
- Reduce nonfatal, work-related injuries.

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[1] Healthy People 2020. Injury and violence prevention: overview.
Available from: http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=24
[2] Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. Web-based Injury Statistics Query and Reporting System (WISQARS). Cost of injury reports.
Available from: http://wisqars.cdc.gov:8080/costT/
[3] Maine Center for Disease Control and Prevention. Healthy Maine 2020.
Available from: http://www.maine.gov/dhhs/mecdc/healthy-maine/index.shtml

Occupational Health

Workplace environments and activities have an enormous impact on health. Work-related illnesses and injuries include any illness or injury incurred by an employee engaged in work-related activities while on or off the worksite.[1] Nationally, millions of workers are injured or fall ill every year due to hazards in their workplaces.[2] While research, interventions in the form of policies, and changes in the work environment have made significant improvements in the safety of workplaces, shifting employment and work patterns present new challenges.[1]

From 2009 to 2013, a total of 100 Maine workers died as a result of workplace hazards, with 19 deaths in 2013. There were 13,205 non-fatal work-related injuries. Maine's high proportion of workers in the farm, forest, and fishing industries puts a greater number of Maine workers at risk for fatal injuries on the job.[2]

Occupational health measures chosen for the Maine Shared CHNA include:
- Deaths from work-related injuries.
- Nonfatal, work-related injuries.

Additional measures related to occupational health can be can be found in several sections of the Maine Shared CHNA, including unintentional injury, respiratory health and environmental health.

Occupational health injuries vary by gender and occupation. Data available do not provide information on other disparities in Maine.
- Significantly more men die due to work-related injuries than women.
- Occupations with the most number of work-related fatalities include transportation and material moving, farming, forestry, fishing, and construction and extraction.
- The health care and social assistance industry has the highest number of nonfatal, work-related injuries.

It should be noted that these numbers are not rates, and may not take into account differences in the number of workers in these industries, nor do they reflect the cause of the injury.[3] The majority of Maine's worker fatalities are the result of transportation incidents across industries. The most common injury-causing events, in order, were overexertion in lifting and falling on floors or other surfaces.[2]

Healthy Maine 2020 has objectives related to occupational health, including:[1]
- Reduce the rate of injury and illness cases involving days away from work due to overexertion.
- Reduce the rate of injury and illness cases involving days away from work due to repetitive motion.
- Reduce deaths from work-related injuries.

- Reduce nonfatal, work-related injuries.

[1] Healthy People 2020, Occupational Safety and Health
http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=30
[2] Maine Center for Disease Control and Prevention. Healthy Maine 2020.
Available from http://www.maine.gov/dhhs/mecdc/healthy-maine/index.shtml
[3] Maine Center for Disease Control and Prevention. Maine Shared Community Health Needs Assessment – 2012.
Available from http://www.maine.gov/dhhs/mecdc/phdata/sha/index.shtml

Maternal and Child Health
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.[1]

Table 22. Key Pregnancy and Birth Outcomes

	Maine	U.S.
Infant deaths per 1,000 live births (2012)	7.0	6.0
Live births for which the mother received early and adequate prenatal care (2010-2012)	86.4%	84.8%
Live births to 15-19 year olds per 1,000 population (2012)	19.2	26.5
Low birth weight (<2500 grams) (2010-2012)	6.6%	8.0%

Asterisk (*) and italics indicate a statistically significant difference between Maine and the U.S.
NA = Not Available - data are not available for this indicator.

The Maine infant mortality rate has been increasing in recent years from 5.4 per 1,000 in 2008 to 7.0 per 1,000 in 2012. One Maine baby died every 4 days, on average, during 2012. There was no significant improvement between 2000 and 2012 in the percentage of pregnant women in Maine who received early and adequate prenatal care (84.3 percent and 86.4 percent, respectively).

Pregnancy and birth outcome measures chosen for inclusion in the Maine Shared CHNA include:
- Infant mortality.
- Early and adequate prenatal care.
- Low birth weight (<2,500 grams).
- Live births, fertility rates, and adolescent births.

Additional Pregnancy and birth outcome measures can be found in many other sections of the Maine Shared CHNA.

Pregnancy and birth outcomes often vary across population groups in the state. For example:
- Babies born to mothers who are black or African-American are more likely to die (8.6 deaths per 1,000 live births) before their first birthday than babies born to mothers who are white (5.8 deaths).
- Babies born to mothers with less than a high school diploma are more than twice as likely to die (9.3 deaths per 1,000 live births) before their first birthday than babies born to mothers with a bachelor's degree or higher (4.3 deaths).

- Among 15 to 44-year-old women with a live birth, those with less than a high school diploma are more likely not to receive early and adequate prenatal care (76 percent) than those with a bachelor's degree or higher (91 percent).
- While some reproductive health measures vary by county or public health district, no single county or district is at increased risk relative to the state on all, or most, measures.

Healthy Maine 2020 includes the following reproductive health-related objectives:[2]
- Reduce preterm births.
- Increase the proportion of births that are the result of an intended pregnancy.
- Reduce the rate of infant death.
- Increase the proportion of pregnant women who receive early and adequate prenatal care.
- Increase abstinence from alcohol among pregnant women.
- Increase abstinence from cigarette smoking among pregnant women.

Children with Special Health Care Needs

Nearly one in four Maine children (23.6 percent) were reported to have special health care needs in 2011-2012, which was higher than the 2009-2010 U.S. rate of 19.8 percent. Some of these health needs are linked to birth outcomes, while others may be linked to genetic conditions, early childhood experiences and exposures or mental health.

Nearly one in four Maine children (23.6 percent) were reported to have special health care needs in 2011-2012, which was higher than the 2009-2010 U.S. rate of 19.8 percent.

Children with special health needs measures chosen for inclusion in the Maine Shared CHNA include:
- Percent of children with special health needs.

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[1] National Survey of Children's Health, 2011/12. Child and Adolescent Health Measurement Initiative, Data Resource Center for Child and Adolescent Health. Available from: http://www.childhealthdata.org/
[2] Maine Center for Disease Control and Prevention. Healthy Maine 2020.
Available from: http://www.maine.gov/dhhs/mecdc/healthy-maine/index.shtml.

Mental Health

A person's ability to carry on productive activities and live a rewarding life is affected not only by physical health, but also by mental health. Mental health is a complex issue that can impact many facets of a person's daily life and physical health. 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 ages 15-44.[2]

According to the World Health Organization, mental illnesses account for more disability in developed countries than any other group of illnesses, including cancer and heart disease.[2] Mental health is a broad and complex issue with many facets to consider. The most common mental health disruptions are mild and may fall short of a diagnosable condition, though they still impact daily functioning for many.[3] Stigma, additional health issues and complexities of treatment delivery also prevent many from receiving adequate treatment for their mental health issues.

As the connections between mental and physical health are more widely recognized, the need for a public health approach to mental health is gaining recognition as well. Comprehensive, population-based approaches to promoting mental health are currently primarily focused on early identification and linkages to care for those with mental health needs, and the prevention of mental illness still lacks a strong base of evidence-based practices.

Table 23. Key Mental Health Indicators

	Maine	U.S.
Adults who have ever had depression (2013)	23.4%	18.7%
Adults with current symptoms of depression (2013)	9.9%	NA
Adults currently receiving medication or treatment from a health care provider for mental health (2013)	17.4%	NA
Sad/hopeless for two weeks in a row (High School Students) (2013)	24.3%	29.9%
Seriously considered suicide (High School Students) (2013)	14.6%	17.0%

Asterisk (*) and italics indicate a statistically significant difference between Maine and the U.S,
NA = Not Available - data are not available for this indicator.

Mental health-related measures chosen for the Maine Shared CHNA include:
- Lifetime anxiety (adults).
- Lifetime depression (adults).
- Adults with current symptoms of depression.
- Co-morbidity for persons with mental illness.
- Mental health emergency department rates.
- Adults who received medication or treatment for mental health in the past 12 months.
- Sadness/hopelessness two weeks in a row (youth).
- Seriously considered suicide (youth).

Additional measures related to mental health can be found in several sections of the Maine Shared CHNA, including general health, intentional injury, and children with special health needs.

Disparities between different population groups in Maine for mental health include:
- Women and girls have higher rates for nearly all of the mental health indicators in the Maine Shared CHNA.
- Heterosexuals have lower rates than others for the indicators for which sexual orientation data is available.
- White, non-Hispanics have lower rates, while American Indians and Native Alaskans and Hispanics have higher rates for most of these indicators.
- Those 65 years and older report these conditions less often than other age groups.
- Lower incomes and education are associated with higher rates of ever having been diagnosed with depression, anxiety, current depression, and co-morbidities.
- Those with a college or technical school degree tend to have lower rates of all of the mental health indicators in the Maine Shared CHNA, and those with less than a high school education report higher rates.

Healthy Maine 2020 has objectives related to mental health, including:[4]
- Mental health emergency department rates per 100,000.
- Sadness/hopelessness two weeks in a row (high school students).
- Seriously considered suicide (high school students).
- Lifetime anxiety (adults).
- Lifetime depression (adults).
- Adults with current symptoms of moderate or severe depression.
- Alzheimer's disease, dementia, and related disorders diagnoses per 1,000.
- Co-morbidity for persons with mental illness (people with depression or anxiety and any of diabetes, asthma, or hypertension).
- Primary care facilities that provide mental health treatment onsite or by paid referral.
- Healthy behaviors of people with mental health issues (fruits and vegetable consumption, physical activity, no heavy drinking, and no smoking).
- Children with mental health problems who receive treatment.
- Adults with mental health disorders who receive treatment.
- Persons with co-occurring substance abuse and mental disorders who receive treatment for both disorders.
- Suicide deaths per 100,000.
- Bullying among high school students.
- Non-fatal child maltreatment.

[1] U.S 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.

[2] Guide to Community Preventive Services. Improving mental health and addressing mental illness. www.thecommunityguide.org/mentalhealth/index.html.

[3] Substance Abuse and Mental Health Services Administration, Center for Mental Health Services, National Institutes of Health, National Institute of Mental Health, Mental Health: A Report of the Surgeon General. 1999, U.S. Department of Health and Human Services: Rockville, MD.

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

Physical Activity, Nutrition and Weight

Eating a healthy diet, being physically active, and maintaining a healthy body weight are essential for an individual's overall health. These three factors can help lower a person's risk of developing conditions such as high cholesterol, high blood pressure, heart disease, stroke, diabetes, and cancer.[1] They can also help prevent cognitive decline and reduce the risk of Alzheimer's disease.[4]

Figure 2. Weight status, Adults and High School Students, 2013

- Obese: 12.7% (High School Students), 28.9% (Adults)
- Overweight: 16.0% (High School Students), 36.0% (Adults)
- Healthy Weight: 69.7% (High School Students), 33.7% (Adults)

■ High School Students ■ Adults

Map 3. Obesity Prevalence (Adults)

Obesity (Adults)
- NA
- 28% or less
- 28-30%
- 30-32%
- 32-34%
- More than 34%
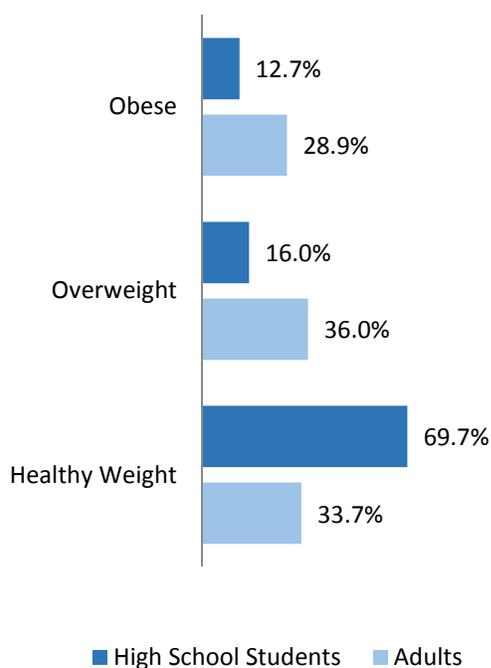
Nutrition and physical activity are key risk factors for obesity. While a healthy diet has many components, fruit and vegetable consumption and limiting sugar sweetened beverage are key indicators. Sugar-sweetened beverages, such as non-diet soda, sports drinks and energy drinks provide little to no nutritional value, and their calories can lead to overweight and obesity, along with health risks that include tooth decay, heart disease and Type 2 diabetes.

The 2008 Physical Activity Guidelines for Americans recommends that adults ages 18-64 get a minimum of 150 minutes of moderate-intensity physical activity a week and that children ages 6-17 get 60 or more minutes of physical activity each day.[2] Limiting leisure time screen time is one strategy to increase physical activity.

Table 24. Key Nutrition and Physical Activity Indicators

	Maine	U.S.
Fruit and vegetable consumption (five or more servings a day) (High School Students) (2013)	16.8%	NA
Fruit consumption among Adults 18+ (less than one serving per day) (2013)	34.0%	39.2%
Met physical activity recommendations (Adults) (2013)	53.4%	50.8%
Physical activity for at least 60 minutes per day on five of the past seven days (High School Students) (2013)	43.7%	47.3%
Sedentary lifestyle – no leisure-time physical activity in past month (Adults) (2013)	23.3%	25.3%
Soda/sports drink consumption (High School Students) (2013)	26.2%	27.0%
Vegetable consumption among Adults 18+ (less than one serving per day) (2013)	17.9%	22.9%
Obesity (Adults) (2013)	28.9%	29.4%
Obesity (High School Students) (2013)	12.7%	13.7%

Asterisk (*) and italics indicate a statistically significant difference between Maine and the U.S.
NA = Not Available - data are not available for this indicator.

Physical activity, nutrition, and weight-related measures chosen for the Maine Shared CHNA include:
- Overweight and obesity among high school students and adults.
- Fruit and vegetable consumption among high school students and adults.
- Combined screen time per day among high school students.
- Physical activity among high school students.
- Non-work (leisure time) physical activity among adults.
- Soda/sports drink consumption among high school students.

Measures related to diseases for which physical activity and nutrition are risk factors can be found in other areas of the Maine Shared CHNA, including cancer, cardiovascular health, diabetes, mental health and maternal and child health.

Estimates for physical activity, nutrition, and weight measures in the Maine Shared CHNA vary across population groups in Maine.
- Male high school students were significantly more likely to be overweight or obese than were female students.
- Adults ages 18 years and older who identified themselves as non-Hispanic American Indian or Alaska Native were significantly less likely to be at a healthy weight than were non-Hispanic white adults.
- Adults in lower income groups and with less education were more likely than those with more education to report eating less than one serving of fruits or vegetables per day.
- The percentage of high school students that ate fruits and vegetables five or more times per day was significantly lower in Oxford, Penobscot, Washington and York counties than in the state as a whole.

Healthy Maine 2020 has objectives related to physical activity, nutrition, and weight, including:[3]
- Reduce the proportion of children and adolescents who are considered obese.

- Increase the proportion of adults who are at a healthy weight.
- Increase the proportion of students who attend daily physical education at school.
- Reduce the percentage of households experiencing food insecurity.
- Increase fruit and vegetable consumption among adults and children.

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[1] U.S. Department of Health and Human Services. Healthy People 2020. Leading health indicators: nutrition, physical activity, and obesity overview and impact.
Available from http://www.healthypeople.gov/2020/LHI/nutrition.aspx (accessed 6/4/2013).

[2] Centers for Disease Control and Prevention. Youth online: high school YRBS.
Available from http://apps.nccd.cdc.gov/youthonline/App/Default.aspx (accessed 6/4/2013).

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

[4] Cardiovascular Risk Factors Associated with Smaller Brain Volumes in Regions Identified as Early Predictors of Cognitive Decline. Srinivasa, Rajiv, Srinivasa et al. Radiology, [ahead of print] 2015.
http://pubs.rsna.org/doi/abs/10.1148/radiol.2015142488

Public Health Emergency Preparedness

Public health emergency preparedness encompasses the critical infrastructure and key resources necessary to prepare for, respond to and recover from natural disasters or emergencies that have the potential to affect the health of populations of people. It includes the establishment and maintenance of 15 core public health emergency preparedness capabilities ranging from fatality management, emergency operation coordination, recovery, mass care, emergency public information and warning, medical material management to laboratory and public health surveillance and epidemiological investigations. It also includes empowering and engaging citizens in their own personal preparedness and recovery strategies and those of their communities.[1]

Threats that can lead to public health emergencies are always present. They include natural disasters, as well as chemical, biological, radiological, nuclear and explosions. The impact of these threats can range from local disease outbreaks to incidents with statewide, national or global ramifications. Because public health emergencies can be unpredictable and vary from year to year, data gathered in this area often focus on the capacity to respond. However, for the Maine Shared CHNA, indicators were chosen that reflect the need for this capacity.

From 2011 to 2015:
- The Maine CDC's Public Health Emergency Preparedness unit recorded 19 activations of the public health emergency operations center in order to coordinate and/or support disease outbreaks or medical surge events. Previous year's data in 2009 and 2008 included five and ten events, respectively.
- There were 156 health alerts and advisories issued by the Maine CDC from 2011 and 2015. .
- The Health and Environmental Testing Laboratory had ten submissions that met qualification to be submitted to the U.S. Laboratory Response Network. Previous years submissions ranged from seven in 2008 and 2010 to 17 in 2004.[2]

Different types of public health hazards require different response levels based on their potential to affect the health and safety of the public. Snow and ice storms are more common in Maine, but hold a lower level of risk than a Category 5 hurricane or major earthquake. By looking at both the probability of an event happening, and the likelihood of an event causing significant death, illness or injury, public health emergency preparedness partners can better focus their resources on the most important types of events for which to prepare.

The Maine Public Health Vulnerability Analysis (HVA) is used to determine areas of vulnerability relative to potential but likely hazards that threaten the public health of the citizens of the state of Maine.[1] The HVA is based off of the Kaiser Permanente Hospital Vulnerability Assessment tool, modified by Maine CDC's Public Health Emergency Preparedness (PHEP) unit making it applicable to public health. The definition of Risk as operationalized in the instrument is as follows: Relative Threat = Probability of the event x Severity of the event. Severity = Magnitude - Mitigation

In Maine, the top types of emergencies with the highest risk and vulnerability scores are:
- Cyber-attack (83 percent).
- Medical supply disruption/shortage (78 percent).
- Tornado (78 percent).
- Major communications disruption (72 percent).
- Mass casualty incident (67 percent).
- Hazmat Incident (56 percent).
- Information systems failure (56 percent).

As with other health issues, public health emergencies can disproportionately affect different populations. However, there is no current Maine data showing these disparities. Regardless of these, preparedness activities include looking at vulnerable populations, including, but not limited to people with cultural and language barriers, disabilities, age and geographical differences, and other characteristics that might indicate special needs. In particular, people with electricity dependent durable medical devices, such oxygen concentrators, a ventilators, IV infusion pumps, suction pump, motorized wheelchair, scooter, or electric bed may be at particular risk in the event of power failures. As of September 2015, there were 12,778 Medicare beneficiaries with such devises in Maine.[2]

Healthy Maine 2020 has objectives related to public health emergency preparedness, including:[3]
- Reduce the time necessary to activate designated personnel in response to a public health emergency via the Health Alert Network.
- Increase the frequency and number of outreach activities to the community through training and education about public health emergency preparedness.
- Increase the number of trained public health and health care emergency responders.
- Reduce the unnecessary surge in hospital emergency departments during an event with public health significance.

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[1] Maine Public Health Emergency Preparedness (PHEP). Available from:
http://www.maine.gov/dhhs/mecdc/public-health-systems/phep/
[2] U.S. Department of Health and Human Services, emPOWER Initiative, data as of August 28, 2015.
[3] Maine Center for Disease Control and Prevention. Healthy Maine 2020.
Available from http://www.maine.gov/dhhs/mecdc/healthy-maine/index.shtml

Substance Abuse

The deliberate use and overuse of harmful substances has a serious impact on the quality of life of Maine people. As a result of substance abuse, the lives of Maine residents have been shorter and less safe. Substance abuse and dependence are preventable health risks that contribute to injuries, violence, cerebrovascular disease, liver disease, cancer, and much more. Substance abuse leads to greater medical costs through an increase in related diseases and also adversely impacts productivity and increases rates of crime and violence.[1] In 2010, approximately $300 million was spent in Maine on medical care where substance use was a factor. Overall substance abuse was estimated to have cost the state $1.4 billion or $1,057 for every Maine resident.[1]

Heroin abuse is a problem of rising concern. Nationally, the number of people addicted to heroin has more than doubled in the last decade, from 214,000 in 2002 to 517,000 in 2013,[4] and deaths from heroin overdoses nearly quadrupled in that same time period.[5]

The heroin problem in Maine has become a focus of national attention.[6] In Maine, new formulations and low street cost have combined to make heroin more potent, available, and affordable.[7,8] Deaths from heroin overdoses in Maine rose from seven in 2010 to 57 in 2014,[9] and that number continues to climb in 2015.[10] In Maine in 2014, heroin accounted for 32 percent of all arrests made by the Drug Crimes Task Force of the Maine Drug Enforcement Agency (MDEA), according to MDEA Commander Peter Arno, who oversees the northern half of the state.[11] In Portland, the number of addicts served by the needle exchange nearly doubled in two years.[12] In response to this public health crisis, The White House recently announced that the Office of National Drug Control Policy would spend $2.5 million to hire public safety and public health coordinators to focus on the treatment of addicts in the Northeastern States.[13]

Table 25. Key Substance Abuse Indicators

	Maine	U.S.
Alcohol-induced mortality per 100,000 population (2013)	8.5	8.2
Chronic heavy drinking (Adults) (2013)	7.2%	6.2%
Drug-affected baby referrals received as a percentage of all live births (2014)	7.8%	NA
Drug-induced mortality per 100,000 population (2013)	13.9	14.6
Emergency medical service overdose response per 100,000 population (2014)	391.5	NA
Opiate poisoning (ED visits) per 100,000 population (2011)	25.1	NA
Past-30-day alcohol use (High School Students) (2013)	26.0%	34.9%
Past-30-day marijuana use (High School Students) (2013)	21.6%	23.4%
Prescription Monitoring Program opioid prescriptions (days supply/pop) (2014-2015)	6.8	NA
Substance-abuse hospital admissions per 100,000 population (2011)	328.1	NA

Asterisk (*) and italics indicate a statistically significant difference between Maine and the U.S.
NA = Not Available - data are not available for this indicator.
Note: Age-adjusted rates presented in table for deaths, hospitalizations and emergency department visits.

The number of drug-affected babies born to Maine residents in 2014 was 961, which represents 7.8 percent of all babies born to mothers in the state. The number of births of this type has increased from 927 in 2013 and 772 in 2012.

Substance abuse measures chosen for the Maine Shared CHNA include:
- Alcohol-induced mortality.
- Binge drinking of alcoholic beverages (high school students).
- Binge drinking of alcoholic beverages (adults).
- Chronic heavy drinking (adults).
- Drug-affected baby referrals received.
- Drug-induced mortality.
- Emergency Medical Service overdose responses.
- Opiate poisoning (ED visits).
- Opiate poisoning (hospitalizations).
- Past 30 day alcohol use (high school students).
- Past 30 day inhalant use (high school students).
- Past 30 day marijuana use (adults).
- Past 30 day marijuana use (high school students).
- Past 30 day nonmedical use of prescription drugs (adults).
- Past 30 day nonmedical use of prescription drugs (high school students).
- Prescription Monitoring Program opioid prescriptions (days supply/population).
- Substance abuse hospital admissions.

Additional measures related to substance abuse can be found in several sections of the Maine Shared CHNA, including tobacco use. In addition, the Office of Substance Abuse and Mental Health Services produces annual reports on substance abuse in Maine.

Men in Maine continue to be more affected by substance abuse than women, with higher rates in 2013 of:
- Alcohol-induced deaths (13.6 per 100,000 population versus 3.8).
- Drug-induced deaths (17.3 per 100,000 versus 10.5).
- Binge-drinking by those ages 18 and over (22.2 percent versus 12.5 percent).
- Current marijuana use by high school students (24.4 percent versus 18.7 percent).

Geographic differences include:
- Higher rates of youth substance use in Sagadahoc and Oxford County, with more than 7.9 percent of Sagadahoc high school students reporting misuse of prescription drugs, and 16.6 percent and 26.8 percent of Oxford County high school students reporting binge drinking and current marijuana use, respectively.
- Lower rates of substance use for Aroostook County youth and adults, with 5.0 percent of Aroostook County high school students reported misusing prescription drugs in 2013, and 4.9 percent of Aroostook County adults ages 18 years and older reported chronic heavy drinking.

Substance abuse in Maine disproportionately affects American Indians, Pacific Islanders, and Hispanics, as well as lesbian, gay and bisexual youth.

- Nearly one in five (19.8 percent) Native American high school students reports binge drinking, while 26.9 percent of Hispanics and 29.1 percent of Pacific Islanders do so.
- Similar disparities in all adolescent substance abuse indicators in the Maine Shared CHNA.
- 15.6 percent of lesbian and gay high school students and 12.9 percent of bisexual high student students report misuse of prescription drugs.

Healthy Maine 2020 has objectives related to substance abuse, including:[3]

- Binge drinking among high school students.
- Binge drinking among adults.
- Lifetime use of illicit drugs among high school students.
- Nonmedical use of prescription drugs among high school students.
- Past-year nonmedical use of prescription drugs among adults.
- Persons who need alcohol and/or illicit drug treatment and received specialty treatment for abuse or dependence in the past year.

[1] Maine Office of Substance Abuse and Mental Health Services. The Cost of Drug and Alcohol Abuse in Maine, 2010. 2013: Augusta, ME. Available from http://www.maine.gov/dhhs/samhs/osa/data/pubrpts.htm

[2] Maine Center for Disease Control and Prevention. Maine Shared Community Health Needs Assessment – 2012. Available from http://www.maine.gov/dhhs/mecdc/phdata/sha/index.shtml

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

[4] Trends in Heroin Use in the United States: 2002 to 2013. The CBHSQ Report, April 23, 2015. Substance Abuse and Mental Health Services Administration. Available at: http://www.samhsa.gov/data/sites/default/files/report_1943/ShortReport-1943.pdf

[5] Increases in Heroin Overdose Deaths - 28 States, 2010 to 2012. MMWR, October 3, 2014, 63(39); 849-854. Centers for Disease Control and Prevention. Available at: http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6339a1.htm

[6] Heroin in New England, More Abundant and Deadly. The New York Times. July 18, 2013. Available at: http://www.nytimes.com/2013/07/19/us/heroin-in-new-england-more-abundant-and-deadly.html?_r=0

[7] Interview with Chemist Jamie Foss of the Health and Environmental Testing Lab., WCSH News, August 6, 2015. Available at: http://www.wcsh6.com/story/news/health/2015/08/06/heroin-coming-into-maine-more-potent-deadly/31243347/

[8] And Then He Decided Not To Be. Marc Fisher. The Washington Post, July 25, 2015. Available at: http://www.washingtonpost.com/sf/national/2015/07/25/and-then-he-decided-not-to-be/#

[9] 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

[10] 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

[11] 'We're losing the battle': Heroin infiltrates small-town Maine. Bangor Daily News. July 13, 2015.

Available at: http://bangordailynews.com/2015/07/13/health/were-losing-the-battle-heroin-infiltrates-small-town-maine/

[12] Hypodermic Apparatus Exchange Programs Report for 2014. Maine Center for Disease Control and Prevention, March 27, 2015.

Available at: http://www.maine.gov/dhhs/reports/2015/Hypodermic-Apparatus-Exchange-Programs.pdf

[13] U.S. Budgets Cash to Treat Heroin Abuse in Northeast. The New York Times. August 17, 2015.

Available at: http://www.nytimes.com/2015/08/18/us/white-house-plan-to-combat-heroin-abuse-focuses-on-treatment.html?_r=1

Tobacco Use

Use of tobacco is the most preventable cause of disease, death, and disability in the United States. Despite this, every year more than 480,000 deaths in the U.S. are attributable to tobacco use[1] (more than that from alcohol use, illegal drug use, HIV, motor vehicle injuries, murders, and suicides combined). In addition, exposure to secondhand tobacco smoke has been causally linked to cancer, respiratory and cardiovascular diseases in adults, and to adverse effects on the health of infants and children, including respiratory and ear infections.[2]

Table 26. Key Tobacco Use Indicators

	Maine	U.S.
Current smoking (Adults) (2013)	20.2%	19.0%
Current smoking (High School Students) (2013)	12.9%	15.7%
Current tobacco use (High School Students) (2013)	18.2%	22.4%
Secondhand smoke exposure (Youth) (2013)	38.3%	NA

Asterisk (*) and italics indicate a statistically significant difference between Maine and the U.S.
NA = Not Available - data are not available for this indicator.

Tobacco use-related measures chosen for the Maine Shared CHNA include:
- Smoking status among adults.
- Current cigarette smoking among students.
- Current tobacco use among students.
- Secondhand smoke exposure among students.

Measures related to diseases for which tobacco use is a risk factor can be found in other areas of the Maine Shared CHNA, including cancer, cardiovascular health, diabetes, and respiratory health.

Estimates for tobacco use-related measures included in the Maine Shared CHNA vary across population groups in Maine.
- Both male adults and male high school students (20.4 percent and 14.7 percent, respectively) were significantly more likely than female adults and female students (16.6 percent and 10.8 percent, respectively) to be current cigarette smokers.
- Adults ages 18 and older with less education or income were more likely to be current cigarette smokers than adults with more education or income.
- Washington, Oxford and Somerset were the counties with a significantly higher prevalence of adult current cigarette smokers (28.8 percent, 26.8 percent and 26.1 percent, respectively).
- Lincoln, Hancock, and Waldo were the counties with significantly lower prevalence (12.5 percent, 14.2 percent and 15.4 percent, respectively).

Healthy Maine 2020 also has tobacco-related objectives, including:[2]

- Reduce the use of any tobacco products among students.
- Reduce cigarette smoking among students.
- Increase the percentage of youth who report never having smoked in their lives.
- Reduce tobacco use by adults.
- Increase abstinence from cigarette smoking among pregnant women.
- Increase the proportion of persons with a diagnosis of depression or anxiety who do not smoke.

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[1] Centers for Disease Control and Prevention. Youth online: high school YRBS.
Available from http://apps.nccd.cdc.gov/youthonline/App/Default.aspx
[2] Maine Center for Disease Control and Prevention. Healthy Maine 2020.
Available from: http://www.maine.gov/dhhs/mecdc/healthy-maine/index.shtml.

Stakeholder Input

In the spring (May-June) of 2015, the Maine Shared CHNA research team conducted a statewide survey among stakeholders to identify and prioritize significant health issues in communities across the state. The online survey was approximately 25 minutes in length and contained a series of questions about important health problems and factors influencing those problems 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 for 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 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. Respondents provided over 12,000 open ended comments as a part of the survey.

The purpose of the survey was to include the voice 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 work groups and 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. 1,639 people, representing more than 80 organizations and businesses in Maine, completed the survey. Respondents represented health care agencies, public health agencies, law enforcement, municipalities, schools, local businesses, social service agencies, and nongovernmental organizations. The results of the stakeholder survey are presented below.

Demographics of Respondents

The following table shows the disposition of the 1,639 stakeholder survey respondents by sector, organization, geography and work status with populations experiencing health disparities. Nearly one-quarter of respondents were medical care providers or worked at a hospital system, while 14 percent were involved with a nonprofit or social service agency and 11 percent public health. Nearly one in ten respondents was a business owner or employee.

Table 27. Sectors that Best Describe Respondents' Role or Organization

	Percentage
Medical care provider/hospital	22%
Other nonprofit or social service agency	14%
Public health	11%
Business owner or employee	9%
Educator	8%
Other type of health care organization	8%
Behavioral/mental health provider	6%
Local government	4%
Other governmental agency	3%
Youth-serving organization	2%
Faith-based organization	1%
Other	13%

*Percentage of respondents in corresponding sector

Figure 3. Health Agency/Organization Stakeholders Represent

Maine Shared CHNA Stakeholder Survey, June 2015, n=1,639
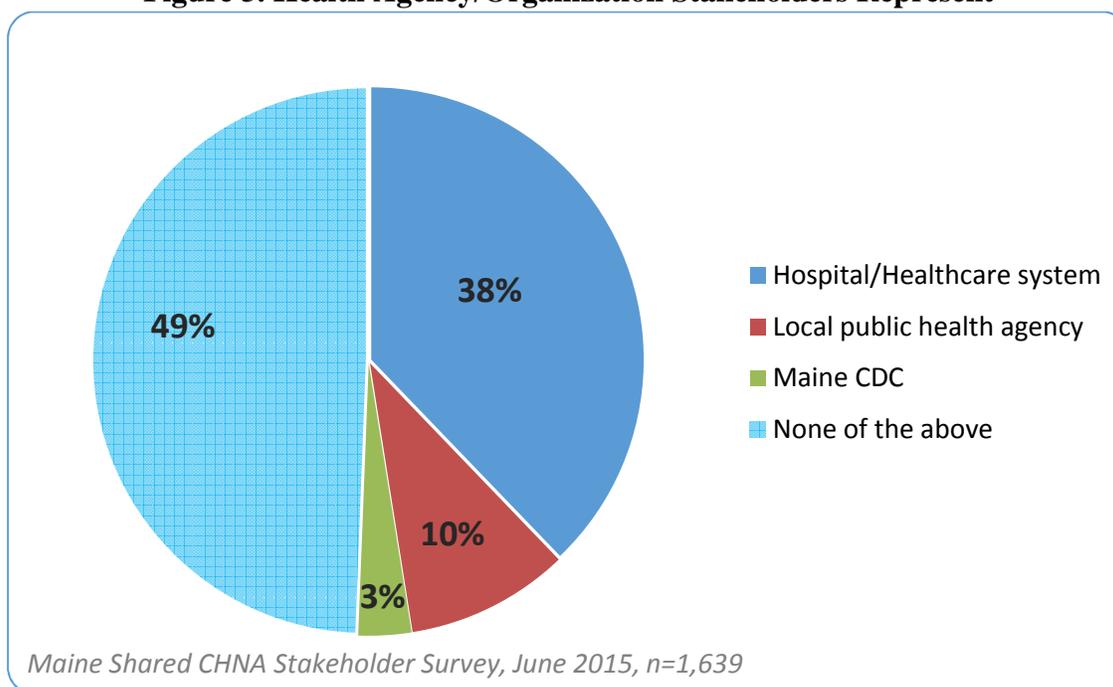
In order to understand more about the health issues in all regions of the state, respondents were asked the geographical area they primarily served or in which they primarily worked. Nearly one-quarter (22 percent) said that they worked statewide or represented statewide interests, while 18 percent worked at the county level, 26 percent at the hospital or health service area, and 27 percent at the town or region level.

Figure 4. Geographical Area That Respondents Primarily Serve

Maine Shared CHNA Stakeholder Survey, June 2015, n=1,639
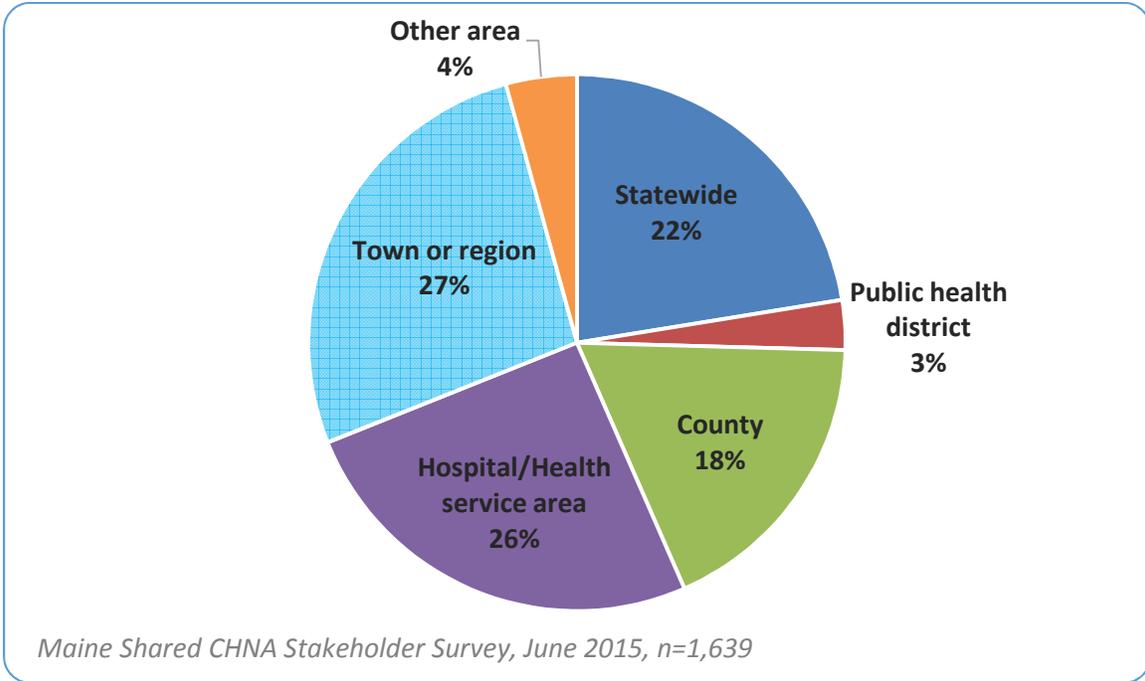
One-quarter of respondents reported that their work focuses on one or more population groups with health disparities, while nearly half are involved with populations with health disparities in some capacity, although it is not their primary focus. The most common populations with which respondents work include low-income and those in poverty (77 percent), the medically underserved (63 percent), and those with physical or mental disabilities (58 percent).

Figure 5. Does 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

■ Yes. We focus mostly or only on one or more population groups with health disparities.

■ Somewhat. We work with the general population in our area and we also intentionally include one or more population groups with health disparities in our work.

■ No

Maine Shared CHNA Stakeholder Survey. June 2015. n=1.639
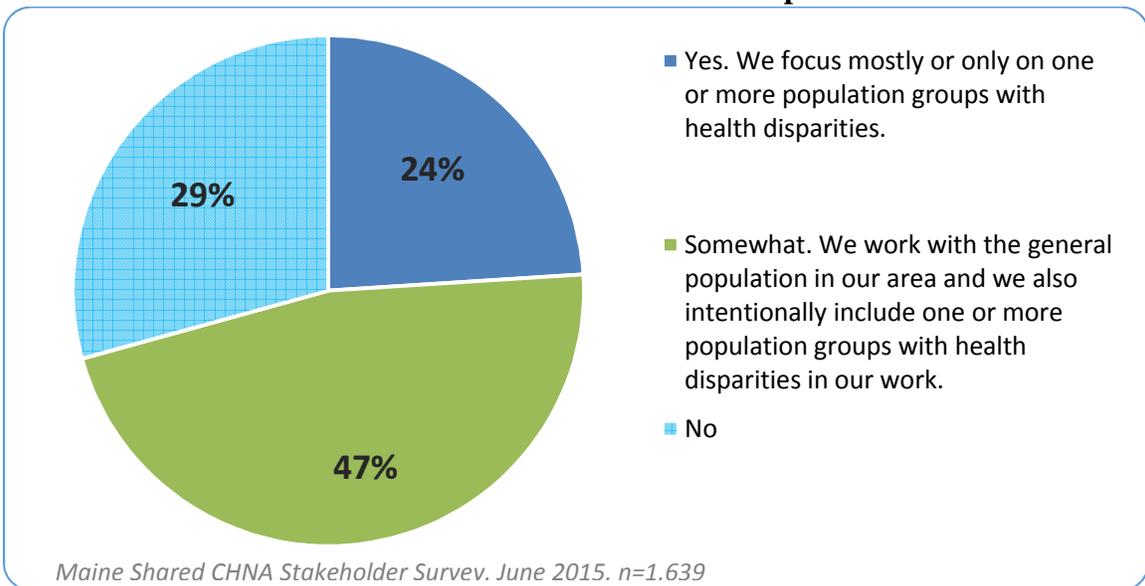
Table 28. Respondent Organization/Agency Provides Direct Resources to these Populations

	Percentage
Low-income, including those below the federal poverty limit	77%
Medically underserved, including uninsured and underinsured	63%
People with disabilities – physical, mental or intellectual	58%
Less than a high school education and/or low literacy (low reading or math skills)	47%
Very rural and/or geographically isolated people	47%
Women	44%
Limited or no English proficiency	38%
Gay, lesbian, bisexual or transgender people	36%
Deaf and hard-of-hearing people	35%
Military veterans	34%
Refugees/immigrants	28%
Racial/ethnic minority populations	27%
Members of any federally recognized tribe	25%
Specific age group	21%
Other	15%

Top Health Issues

Statewide, stakeholders ranked a set of 25 health issues using the criteria, "How do you feel [health issue] impacts the overall health of residents?" Responses were collected using a five-point scale, where one is "not at all a problem" and five is "critical problem." The top ten issues of concern reported by stakeholders in the survey are:

- Drug and alcohol abuse.
- Obesity.
- Mental health.
- Physical activity and nutrition.
- Depression.
- Tobacco use.
- Diabetes.
- Cardiovascular diseases.
- Respiratory diseases.
- Childhood obesity.

The full rating of all health issues is presented in the figure below.

Figure 6. Stakeholder Rating of Health Issues (Percent of those rating the health issue as a major or critical problem in their area)

Family Health
- Childhood obesity: 58%
- Elder health: 55%
- Child developmental issues: 34%
- Adolescent health: 25%
- Maternal and child health: 23%
- Infant mortality: 4%

Chronic Diseases
- Obesity: 78%
- Depression: 67%
- Cardiovascular disease: 63%
- Diabetes: 63%
- Respiratory disease: 60%
- Cancer: 50%
- Neurological diseases: 35%
- Musculoskeletal diseases: 28%

Infectious Diseases
- Infectious diseases: 22%
- Sexually transmitted diseases/HIV/AIDS: 13%

Healthy Behaviors
- Drug and alcohol abuse: 80%
- Physical activity and nutrition: 69%
- Tobacco use: 63%

Other Health Issues
- Mental health: 71%
- Oral health: 53%
- Violence: 38%
- Suicide and self-harm: 37%
- Unintentional injury: 34%
- Lead poisoning and other environmental health issues: 17%

Maine Shared CHNA Stakeholder Survey. June 2015. n=1.639

Respondents were asked the degree to which the health needs of their area or community were being addressed, where one is "not addressed at all" and five is "completely addressed." Overall, about one-third of stakeholders felt the health needs of their area were being adequately addressed. This ranged from a low of 21 percent in Oxford County to a high of 44 percent in York County.

Figure 7. Degree to Which Respondents Feel the Health Needs of Their Area Are Being Addressed (Percent Reporting Mostly or Completely Addressed)

County	Percent
Androscoggin	26%
Aroostook	34%
Cumberland	31%
Franklin	24%
Hancock	37%
Kennebec	40%
Knox	34%
Lincoln	37%
Oxford	21%
Penobscot	43%
Piscataquis	30%
Sagadahoc	24%
Somerset	37%
Waldo	34%
Washington	29%
York	44%
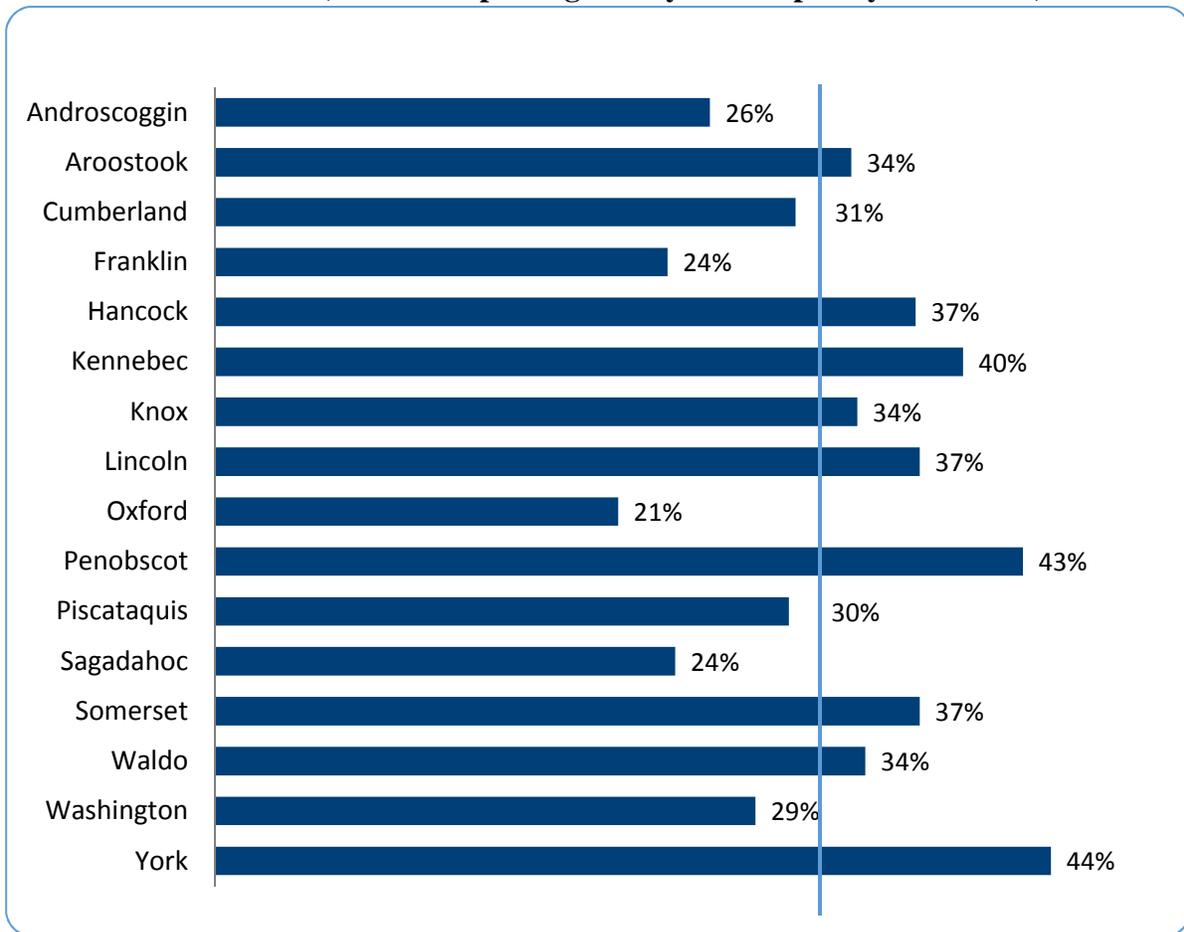
Note: the blue line in the figure indicates the state average

Respondents were asked four probing follow-up questions for each of their priority health issues to understand more about the issues in each region:
1. The present health system has the ability to significantly improve this health issue with the current investment of time and resources.
2. There are sufficient resources available to improve this health issue.
3. Significant health disparities exist among certain groups of people for this health issue.
4. There are key social or environmental factors that lead to increased problems with this health issue.

Table 29. Summary of Follow-up Questions about Health Issues (Percentage who somewhat or strongly agree with statement)

Health Issue	1. This issue can be improved	2. Sufficient resources are available	3. Significant health disparities exist	4. Key social or environmental factors exist
Family Health				
Adolescent health	33%	19%	81%	85%
Child developmental issues	36%	19%	84%	83%
Childhood obesity	34%	21%	85%	88%
Elder health	40%	22%	78%	78%
Infant mortality	44%	33%	78%	78%
Maternal and child health	42%	33%	77%	77%
Chronic Diseases				
Cancer	50%	36%	68%	66%
Cardiovascular diseases	52%	36%	67%	77%
Diabetes	47%	32%	73%	77%
Musculoskeletal diseases	45%	31%	59%	55%
Neurologic diseases	30%	17%	57%	57%
Obesity	38%	21%	83%	87%
Respiratory diseases	51%	26%	79%	77%
Infectious Diseases				
Infectious diseases	45%	27%	51%	65%
Sexually transmitted diseases/HIV/AIDS	42%	26%	77%	84%
Healthy Behaviors				
Drug and alcohol abuse	25%	10%	80%	87%
Physical activity and nutrition	45%	27%	86%	86%
Tobacco use	52%	31%	81%	86%
Other Health Issues				
Lead poisoning and other environmental health issues	33%	13%	88%	83%
Mental health	25%	12%	81%	83%
Oral health	37%	22%	91%	89%
Suicide and self-harm	33%	22%	73%	73%
Unintentional injury	35%	15%	65%	62%
Violence	35%	22%	73%	80%
Depression	30%	16%	79%	83%
Other	22%	30%	81%	81%

Percentage of respondents who strongly or somewhat agree with the proposed statement

An additional follow-up question asked respondents to identify the resources that were available to address the health issue (if they agreed that sufficient resources were available) or to identify the resources that were not available but that were needed (if they did not agree that sufficient resources were available). A summary of respondent statements for these questions is provided below for the top health issues in the state as identified by stakeholders.

Table 30. Resources and Assets Identified by Stakeholders for Top Health Issues

Health Issue		Resources Available or Needed
Drug and Alcohol Abuse (10 percent agreed that sufficient resources are available)	**Available**	Hotlines; Office of Substance Abuse and Mental Health Services; Maine Alcoholics Anonymous
	Needed	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/Childhood Obesity (21 percent agreed that sufficient resources are available)	**Available**	YMCAs (Public gyms); Farmers Markets; Maine SNAP-ED Program; School Nutrition Programs; Public Walking, Biking and Hiking Trails; Healthy Maine Partnerships; Let's go! 5210; Cooking Matters; Healthy Maine Walks; After School Programs; Summer Nutrition Programs; Workplace wellness programs
	Needed	Better access to healthy food
Mental Health/Depression (14 percent agreed that sufficient resources are available)	**Available**	Mental health/counseling providers or programs; Office of Substance Abuse and Mental Health Services
	Needed	More mental health counselors/professionals; More community-based services; More funding and support; More access to inpatient care; Readily available information about resources; Transitional programs
Physical Activity and Nutrition (27 percent agreed that sufficient resources are available)	**Available**	YMCAs (Public gyms); Farmers Markets; Maine SNAP-ED Program; School Nutrition Programs; Public Walking, Biking & Hiking Trails; Healthy Maine Partnerships; Let's go! 5210; Cooking Matters; Healthy Maine Walks; After School Programs; Summer Nutrition Programs; Workplace wellness programs
	Needed	Better access to healthy food
Diabetes (32 percent agreed that sufficient resources are available)	**Available**	National Diabetes Prevention Program; Free screenings; YMCAs (Public gyms); Education programs; School nutrition programs; Diabetes and Nutrition Center; Maine CDC DPCP
	Needed	Funding; Diabetes Self-Management Education Programs (Washington County)
Cardiovascular Diseases (36 percent agreed that sufficient resources are available)	**Available**	Hospitals; Primary Care Providers; YMCAs (Public gyms); Education programs
	Needed	-

Stakeholders also were asked to share their thoughts on the populations experiencing health disparities. Table 31 presents these results for the top ten health conditions identified in the survey.

Table 31. Populations with Health Disparities in Maine (Percentage who agree that population experiences health disparities for a particular health issue)

Health Disparities	Childhood obesity	Cardiovascular diseases	Diabetes	Obesity	Respiratory diseases	Drug and alcohol abuse	Physical activity and nutrition	Tobacco use	Mental health	Depression
Low-income, including those below the federal poverty limit	94%	80%	89%	87%	79%	85%	90%	90%	79%	76%
Medically underserved, including uninsured and underinsured	60%	78%	78%	70%	70%	63%	59%	62%	74%	68%
Less than a high school education and/or low literacy (low reading or math skills)	72%	52%	66%	61%	48%	67%	65%	74%	56%	52%
Very rural and/or geographically isolated people	46%	54%	47%	44%	40%	49%	58%	40%	56%	53%
People with disabilities – physical, mental, or intellectual	31%	37%	46%	47%	30%	41%	56%	37%	63%	61%
Limited or no English proficiency	7%	21%	25%	12%	16%	14%	17%	16%	21%	20%
Military veterans	1%	14%	9%	4%	6%	34%	4%	29%	43%	43%
Gay, lesbian, bisexual or transgender people	1%	3%	3%	4%	-	30%	2%	33%	36%	34%
Women	4%	18%	5%	15%	2%	17%	11%	8%	20%	22%
Members of any federally recognized tribe	10%	11%	13%	12%	5%	21%	13%	15%	19%	17%
Refugees/immigrants	4%	10%	9%	4%	5%	8%	6%	3%	20%	18%

Stakeholders also pointed out that there are key social or environmental drivers in Maine that lead to these health issues. Table 12 shows how stakeholders reported the key drivers or factors that lead to the top health issues in their regions.

Table 32. Key Drivers of Top Health Issues in Maine (Percentage who identified factors as key drivers that lead to a specific health condition)

Key Drivers	Childhood obesity	Cardiovascular diseases	Diabetes	Obesity	Respiratory diseases	Drug and alcohol abuse	Physical activity and nutrition	Tobacco use	Mental health	Depression
Poverty/low income/low socioeconomic status	41%	36%	46%	40%	30%	30%	37%	40%	27%	37%
Lack of education	37%	25%	26%	31%	11%	11%	22%	43%	15%	12%
Lack of access to healthy foods	33%	15%	21%	28%	-	-	29%	-	1%	-
Bad eating habits	36%	26%	24%	26%	-	-	13%	-	1%	1%
Lack of access to physical activity opportunities	31%	7%	13%	25%	-	-	47%	-	-	1%
Lack of access to behavioral care/mental health care	-	1%	1%	-	-	3%	-	1%	44%	34%
Isolated and rural areas	6%	7%	15%	9%	4%	11%	16%	6%	14%	26%
Inadequate health literacy	7%	12%	13%	9%	6%	8%	9%	7%	-	1%
Cultural or social norms	10%	5%	9%	9%	4%	22%	8%	38%	4%	7%
Lack of transportation	4%	12%	13%	8%	4%	6%	12%	3%	11%	18%
Lack of access to treatment	1%	7%	5%	2%	9%	33%	6%	7%	2%	1%
Lack of employment opportunities	2%	2%	1%	2%	2%	17%	1%	7%	6%	6%
Social attitudes (discrimination, stigma, etc.)	7%	2%	3%	2%	2%	14%	-	7%	34%	29%
Lack of health care insurance	1%	9%	5%	2%	9%	5%	1%	1%	10%	9%
Adverse childhood experiences	6%	1%	-	2%	2%	3%	1%	1%	5%	4%
Substance use/addiction	1%	22%	2%	2%	36%	2%	2%	10%	5%	9%
Lack of access to primary care	5%	22%	10%	2%	9%	-	1%	3%	3%	1%
Personal responsibility	2%	5%	9%	8%	13%	4%	6%	1%	3%	1%
Apathy/depression/hopelessness	2%	2%	3%	5%	2%	11%	6%	6%	2%	5%
Food insecurity	2%	-	4%	4%	-	-	1%	1%	1%	1%
Lack of exercise	-	12%	6%	3%	-	-	1%	-	-	-
Lack of social support and positive interactions	4%	-	2%	2%	-	14%	4%	1%	1%	7%
Mental illness	-	2%	-	2%	-	2%	1%	6%	2%	3%
Abuse/trauma	1%	-	-	1%	-	3%		-	3%	4%
Lack of caregiver support	-	-	-	-	-	4%		-	-	-
Crime and violence/lack of personal safety	-	-	1%	-	-		1%	-	1%	-
Easy access to drugs/alcohol/tobacco	-	-	-	-	2%	11%	-	13%	-	-
Environmental conditions (air quality, water quality, pollution, etc.)	-	1%	-	-	32%	1%	-	-	-	-

Linking qualitative data from the stakeholder survey and quantitative data from the analysis of health indicators allows a more in-depth examination of the perceptions and realities of health issues among populations likely to experience health disparities. The following shows the top three stakeholder issues from the survey, the reported populations experiencing disparities, and the related findings from the analysis of health indicators from secondary data sources.

Table 33. Disparities for Drug and Alcohol Abuse

Stakeholders Identified Disparities Among:	Quantitative Findings
• Low-income, including those below the federal poverty limit. • Those with less education and/or low literacy. • Medically underserved, including uninsured and underinsured.	• High percent of chronic heavy drinking among adults in higher annual income groups. • More nonmedical use of prescription drugs among adults with annual income less than $25,000. • High percent of marijuana use among adults with annual income less than $25,000, those under 34 years, homosexuals and uninsured adults.

* Indicates significant difference at the 95 percent confidence level. If * does not appear, there are no known significant differences.

Table 34. Disparities for Obesity

Stakeholders Identified Disparities Among:	Quantitative Findings
• Low-income, including those below the federal poverty limit • Medically underserved, including uninsured and underinsured • Those with less education and/or low literacy	• High percent of obese among adults ages 35-64 years, those with depression or anxiety, and those with annual income less than $35,000*

* Indicates significant difference at the 95 percent confidence level. If * does not appear, there are no known significant differences.

Table 35. Disparities for Mental Health

Stakeholders Identified Disparities Among:	Quantitative Findings
• Low-income, including those below the federal poverty limit • Medically underserved, including uninsured and underinsured • People with disabilities – physical, mental, or intellectual	• High percent of current or past depression among homosexuals, bisexuals and adults with annual income less than $15,000* • High percent of current or past anxiety disorder among adults with annual income less than $15,000* • High percent of poor mental health among adults with less than either high school or GED and adults with annual income less than $25,000*

* Indicates significant difference at the 95 percent confidence level. If * does not appear, there are no known significant differences.

Finally, for each health issue that was selected, stakeholders were asked to identify the entities or organizations that were responsible for improving status of the issue. Results suggest that stakeholders see a significant role for all types of organizations in community health, but that individuals and families still are primarily responsible for their health in many instances.

Table 36. Entity Responsible for Improving Health Issues (Percentage who attributed responsibility to corresponding health issue to agency/organization)

Agency/ Organization	Degree of Responsibility	Childhood obesity	Cardiovascular diseases	Diabetes	Obesity	Respiratory diseases	Drug and alcohol abuse	Physical activity and nutrition	Tobacco use	Mental health	Depression
The state's public health agency (Maine CDC)	No to Minor Role	13%	22%	23%	17%	17%	11%	14%	3%	8%	19%
	Moderate Role	22%	34%	23%	26%	37%	21%	20%	15%	27%	25%
	Significant Role	**51%**	**33%**	**38%**	**43%**	**32%**	**50%**	**51%**	**57%**	**44%**	**38%**
	Primarily Responsible	11%	8%	13%	13%	12%	15%	12%	24%	19%	13%
The state's local public health organizations	No to Minor Role	9%	15%	16%	11%	18%	8%	12%	2%	6%	14%
	Moderate Role	20%	38%	26%	23%	35%	21%	18%	21%	18%	24%
	Significant Role	**59%**	**36%**	**43%**	**50%**	**31%**	**51%**	**51%**	**42%**	**47%**	**46%**
	Primarily Responsible	12%	8%	13%	15%	15%	18%	18%	33%	27%	13%
Primary care providers/ organizations	No to Minor Role	5%	3%	3%	5%	3%	5%	6%	3%	2%	2%
	Moderate Role	19%	10%	12%	18%	16%	15%	22%	20%	13%	14%
	Significant Role	**61%**	**52%**	**49%**	**61%**	**49%**	**62%**	**58%**	**54%**	**57%**	**51%**
	Primarily Responsible	15%	34%	34%	16%	33%	17%	13%	21%	28%	32%
Hospitals/ health care systems	No to Minor Role	16%	4%	6%	13%	5%	8%	15%	9%	3%	5%
	Moderate Role	28%	20%	19%	29%	27%	21%	26%	21%	19%	23%
	Significant Role	**47%**	**57%**	**58%**	**49%**	**53%**	**55%**	**51%**	**57%**	**55%**	**55%**
	Primarily Responsible	9%	18%	15%	8%	13%	15%	8%	12%	22%	15%
Local social service agencies	No to Minor Role	11%	28%	25%	21%	36%	8%	13%	9%	4%	10%
	Moderate Role	36%	37%	37%	38%	34%	21%	32%	35%	15%	23%
	Significant Role	**46%**	**31%**	**28%**	**35%**	**22%**	**60%**	**47%**	**50%**	**60%**	**50%**
	Primarily Responsible	6%	2%	5%	3%	3%	10%	7%	4%	20%	16%
Community organizations	No to Minor Role	10%	32%	27%	15%	29%	10%	7%	12%	6%	14%
	Moderate Role	29%	32%	36%	31%	48%	23%	27%	27%	25%	24%
	Significant Role	**51%**	**32%**	**28%**	**47%**	**18%**	**53%**	**54%**	**53%**	**54%**	**54%**
	Primarily Responsible	8%	2%	5%	5%	3%	12%	12%	6%	14%	6%
Insurance companies, Medicare, MaineCare, or other payers	No to Minor Role	22%	15%	14%	15%	15%	14%	20%	11%	6%	12%
	Moderate Role	24%	26%	21%	27%	31%	19%	26%	17%	14%	22%
	Significant Role	**44%**	**47%**	**48%**	**42%**	**44%**	**49%**	**41%**	**60%**	**50%**	**46%**
	Primarily Responsible	8%	10%	15%	12%	10%	17%	10%	11%	29%	19%
Individuals and families	No to Minor Role	1%	1%	3%	2%	1%	2%	3%	3%	4%	4%
	Moderate Role	3%	11%	7%	5%	14%	11%	5%	13%	16%	13%
	Significant Role	28%	35%	32%	35%	35%	48%	43%	46%	50%	54%
	Primarily Responsible	**68%**	**52%**	**57%**	**58%**	**50%**	**38%**	**49%**	**38%**	**30%**	**28%**

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 local communities. The following ten factors were identified as the greatest problems that lead to poor health outcomes in the state:

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

- Health literacy.
- Food security.
- Housing stability.
- Access to oral health.
- Adverse childhood experiences.

Figure 8. Rating of Health Factors (Percentage of stakeholders rating factor as a major or critical problem in their area)
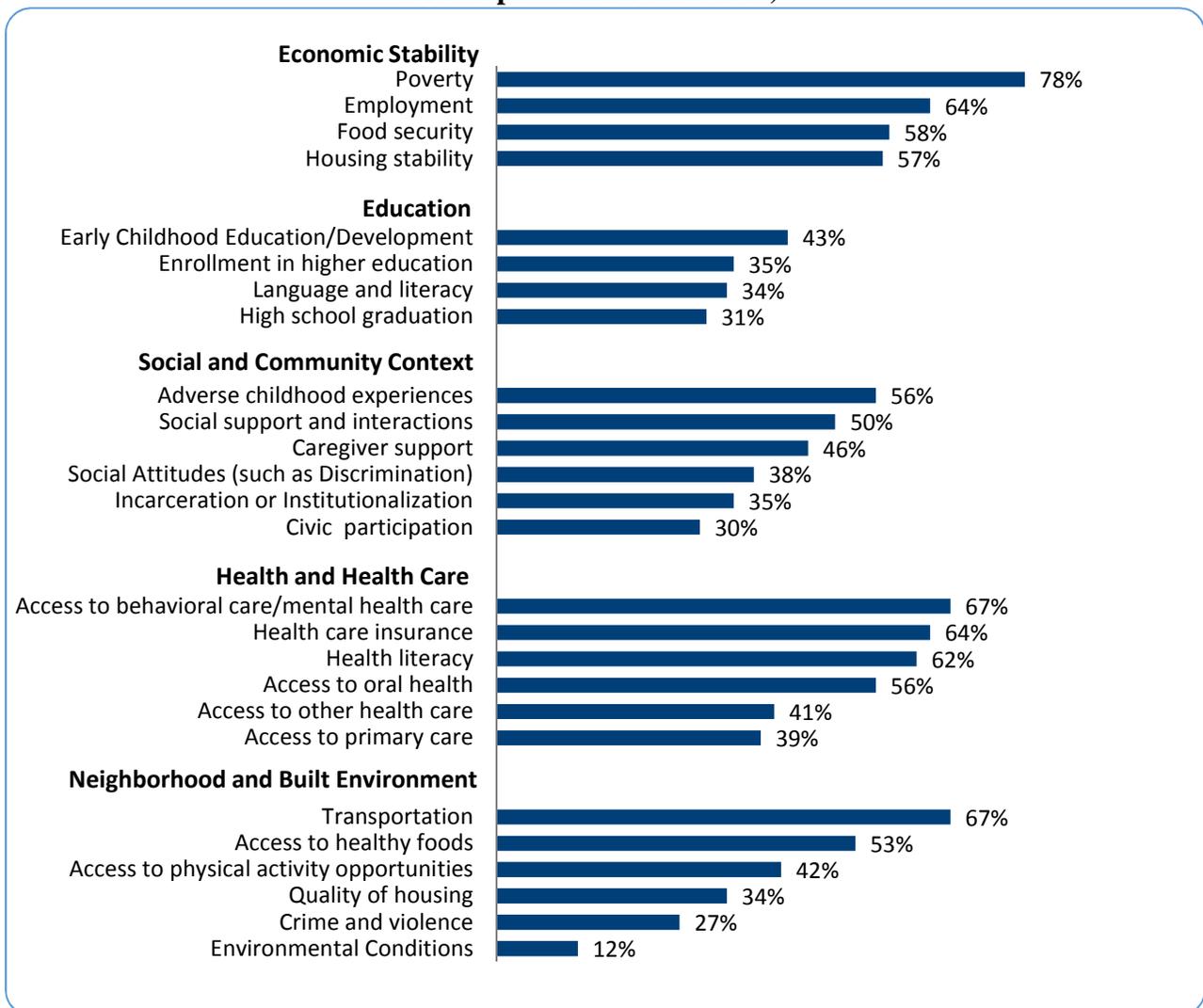
Respondents were asked four probing follow-up questions for each of the priority health factors they selected to understand more about the issues in each region:

1. This is a significant problem in the area and leads to poor health outcomes for residents
2. The health system in the area has the ability to significantly improve this health factor with the current investment of time and resources
3. There are sufficient resources available in the area to improve this health factor and its effect on health outcomes
4. Key disparities exist among certain groups of people

Table 37. Summary of Follow-up Questions about Health Factors (Percentage of respondents who somewhat or strongly agreed with the proposed statement)

Health Factor	1. This is a significant problem in the area	2. The health factor can be improved	3. There are sufficient resources available	4. Key disparities exist
Economic Stability				
Employment	92%	34%	18%	76%
Food security	92%	41%	27%	89%
Housing stability	92%	19%	23%	82%
Poverty	97%	24%	14%	82%
Education				
Enrollment in higher education	91%	33%	28%	85%
Early childhood education/development	89%	41%	18%	87%
High school graduation	77%	26%	23%	67%
Language and literacy	90%	41%	39%	76%
Social and Community Context				
Adverse childhood experiences	99%	28%	17%	85%
Civic participation	72%	28%	22%	63%
Incarceration or institutionalization	100%	41%	29%	94%
Social attitudes such as discrimination	90%	36%	30%	91%
Social support and interactions	95%	27%	17%	84%
Caregiver support	94%	40%	18%	62%
Health and Health care				
Access to behavioral care/mental health care	97%	24%	10%	79%
Access to primary care	90%	42%	21%	76%
Access to other health care	90%	16%	13%	74%
Access to oral health	97%	36%	16%	84%
Health care insurance	97%	32%	23%	81%
Health literacy	97%	57%	43%	87%
Crime and violence	100%	53%	26%	84%
Neighborhood and Built Environment				
Access to healthy foods	97%	38%	27%	91%
Access to physical activity opportunities	92%	46%	23%	78%
Environmental conditions	86%	29%	21%	57%
Quality of housing	94%	27%	12%	79%
Transportation	98%	17%	12%	86%

An additional follow-up question asked respondents to identify the resources that were available to address the health factor (if they agreed that sufficient resources were available) or to identify the resources that were not available but that were needed (if they did not agree that sufficient resources were available). A summary of respondent statements for these questions is provided below for the top health factors in the state as identified by stakeholders.

Table 38. Resources and Assets Identified by Stakeholders for Top Health Factors

Health Factor		Resources Available or Needed
Poverty (14 percent agreed that sufficient resources are available)	Available	Federal, state, and local programs; General assistance.
	Needed	Greater economic development; Increased mentoring services; More skills trainings; More employment opportunities at a livable wage; Better transportation; Better education.
Access to Behavioral Care/Mental Health care (10 percent agreed that sufficient resources are available)	Available	Mental health agencies.
	Needed	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.
Transportation (12 percent agreed that sufficient resources are available)	Available	-
	Needed	More/better transportation systems; Better access to public transportation; Additional funding for organizations that help with rides to medical appointments; Additional resources for transportation for the elderly and disabled.
Health Care Insurance (23 percent agreed that sufficient resources are available)	Available	Obamacare (Affordable Care Act); Free care.
	Needed	Broader coverage for all individuals; Making insurance more affordable; Universal health care; More stable health care system; More state assistance.
Employment (18 percent agreed that sufficient resources are available)	Available	Adult education programs; Career centers.
	Needed	More job creations; More trainings; More employment opportunities at livable wages; Greater economic development; More funding for education.
Health Literacy (43 percent agreed that sufficient resources are available)	Available	Head Start Maine; Hospital systems; Primary care providers; Clinics; Social service agencies.
	Needed	-
Food Security (27 percent agreed that sufficient resources are available)	Available	Local food sources (farms, fisheries, etc.); Farmers markets; Food pantries; SNAP; Local churches; Backpack for hungry kids programs.
	Needed	Access to free or reduced meals; Greater access to healthy food and locally grown food; Greater support for food pantries.
Housing Stability (23 percent agreed that sufficient resources are available)	Available	Maine Affordable Housing Coalition; Low-income housing/section 8 programs.
	Needed	-

Stakeholders also were asked to share their thoughts on the populations experiencing health disparities among each of the health factors that they selected. Table 39 presents these results for the top 10 health factors identified by stakeholders.

Table 39. Populations with Disparities among Top Health Factors in Maine (Percentage who agreed that significant disparities exist for a specific health factor)

Health Disparities	Employment	Food Security	Housing Stability	Poverty	Adverse Childhood Experiences	Access to Behavioral Care/Mental Health Care	Health Literacy	Transportation	Health Care Insurance	Access to Oral Health
Deaf and hard-of-hearing people	12%	6%	6%	9%	16%	10%	20%	13%	8%	2%
Gay, lesbian, bisexual, or transgender people	6%	5%	16%	10%	34%	22%	8%	3%	10%	<1%
Less than a high school education and/or low literacy	76%	71%	55%	81%	69%	52%	80%	45%	47%	48%
Limited or no English proficiency	36%	26%	27%	41%	29%	26%	54%	25%	34%	21%
Low-income, including those below the federal poverty limit	76%	90%	86%	-	86%	79%	79%	82%	78%	92%
Medically underserved, including uninsured and underinsured	36%	41%	38%	66%	55%	73%	62%	48%	81%	75%
Members of any Federally-recognized Tribe	9%	14%	6%	22%	24%	10%	18%	9%	11%	2%
Military veterans	13%	12%	23%	19%	18%	29%	10%	13%	12%	5%
People with disabilities – physical, mental, or intellectual	48%	47%	61%	61%	53%	57%	57%	65%	30%	30%
Racial/ethnic minority populations	7%	13%	14%	14%	21%	7%	16%	7%	16%	3%
Refugees/immigrants	18%	19%	17%	28%	29%	19%	26%	12%	24%	11%
Specific age group	5%	21%	9%	9%	8%	9%	5%	21%	13%	13%
Very rural and/or geographically isolated people	46%	62%	30%	66%	50%	49%	49%	71%	38%	43%
Women	11%	13%	28%	30%	27%	15%	15%	9%	20%	3%
Other	6%	6%	13%	4%	12%	9%	7%	7%	11%	5%

For each health factor selected, stakeholders identified the entities or organizations that were responsible for improving status of the factor. Items selected by more than 50 percent of respondents are highlighted in Table 17.

Table 40. Entity Responsible for Improving Health Factors and Their Adverse Effects (Percentage who attributed responsibility to agency/organization for corresponding health factor)

Agency/Organization	Employment	Food Security	Housing Stability	Poverty	Adverse Childhood Experiences	Access to Behavioral Care/Mental Health Care	Health Literacy	Transportation	Health Care Insurance	Access to Oral Health
Businesses	76%	34%	26%	46%	19%	14%	33%	28%	26%	8%
Charities	7%	44%	17%	34%	26%	15%	40%	25%	6%	13%
Community organizations	34%	61%	55%	52%	57%	42%	69%	55%	14%	33%
Families and Individuals	40%	47%	41%	57%	81%	37%	69%	36%	20%	37%
Federal government/agencies	58%	69%	67%	69%	47%	61%	61%	57%	73%	49%
Hospital/health care system	12%	24%	8%	26%	57%	70%	76%	18%	38%	44%
Insurance companies, Medicare, MaineCare, or other payers	9%	8%	8%	31%	38%	60%	63%	19%	68%	60%
Local behavioral health/mental health agencies	10%	9%	24%	31%	79%	80%	67%	13%	13%	5%
Local public health departments	9%	30%	17%	27%	44%	45%	66%	25%	17%	39%
Local social service agencies	22%	52%	42%	46%	75%	55%	63%	39%	14%	25%
Maine State Legislature	63%	61%	60%	71%	53%	59%	51%	58%	77%	44%
Maine's public schools	32%	43%	4%	36%	60%	24%	64%	7%	4%	17%
Other local government agencies	31%	37%	47%	37%	25%	22%	33%	41%	13%	15%
Other state government agencies	35%	34%	46%	40%	25%	27%	34%	40%	28%	16%
Primary care providers/organizations	7%	16%	8%	22%	60%	47%	80%	11%	24%	25%
The State's local public health organizations	10%	42%	13%	31%	46%	35%	59%	27%	21%	23%
The State's public health agency (Maine CDC)	7%	36%	17%	29%	47%	37%	61%	18%	23%	29%
Other	6%	5%	4%	7%	8%	3%	4%	5%	13%	4%

Agencies/Organizations mentioned by over 50% of respondents for a health factor are highlighted in grey.

Finally, stakeholders were asked to rank broad health categories in order of how they felt resources in the state should be allocated towards addressing them. A rating of one means "highest priority," while eight means "lowest priority." The average for each category is presented in the table below.

Risk factors that lead to poor health (including physical inactivity, poor nutrition, overweight and obesity, and tobacco use) were the highest rated item out of the group, followed by mental health and community capacity (the ability to sustain a high quality of life, including access to employment, education, and housing).

Figure 9: Rank of Health Issues and Factors According to How Respondents Think Resources in Area Should Be Allocated

Risk Factors That Lead to Poor Health — 3.08
Mental Health — 3.49
Substance Abuse Behaviors — 3.71
Community Capacity — 3.93
Chronic Diseases — 4.05
Family Health — 4.81
Environmental Issues — 5.36
Injuries — 6.52

Maine Shared CHNA Stakeholder Survey, June 2015, n=1,639
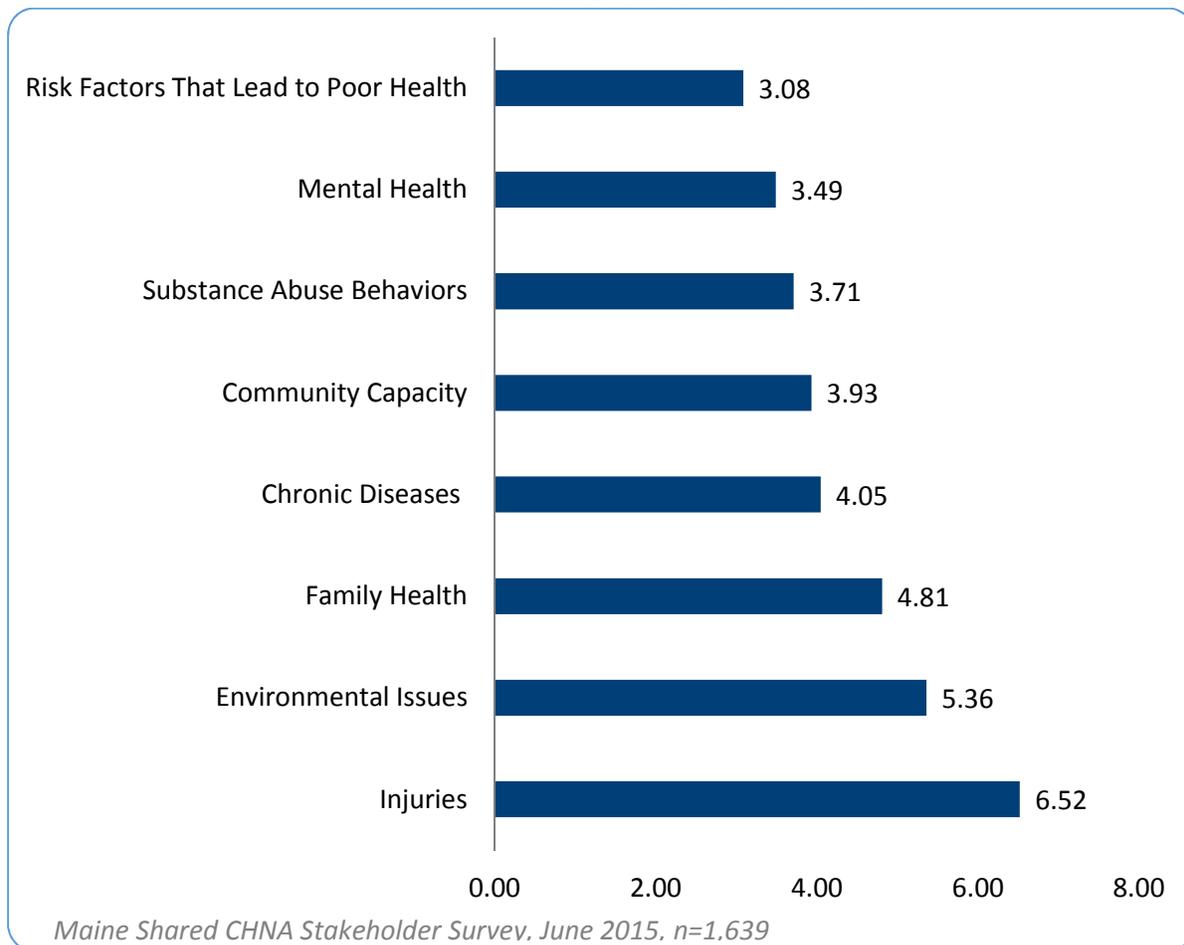
Means of respondents' rankings (where one is "highest priority" and eight is "lowest priority").

The following table presents the ranking of health categories by county. The top-rated issue for every county is highlighted in the table below.

Table 41. Rank of Health Issues and Factors According to How Respondents Think Resources in Area Should be Allocated (Table shows means, on a five point scale)

County	Risk Factors That Lead to Poor Health	Mental Health**	Substance Abuse	Community Capacity**	Chronic Diseases**	Family Health**	Environmental Issues**	Injuries
Androscoggin	3.57	3.26	3.98	3.53	4.63	4.74	5.08	6.31
Aroostook	3.21	3.87	3.59	4.28	3.12	4.87	5.72	6.58
Cumberland	3.17	3.30	3.71	3.97	4.07	5.12	5.26	6.54
Franklin	3.41	3.38	3.46	3.97	4.78	5.14	5.32	6.32
Hancock	2.54	3.77	3.52	3.96	4.11	4.88	5.46	6.61
Kennebec	3.10	3.27	3.68	3.84	3.92	4.90	5.50	6.55
Knox	3.34	3.29	3.26	4.23	4.63	4.63	5.11	6.83
Lincoln	2.66	3.24	3.32	3.92	4.61	5.21	4.89	6.87
Oxford	3.16	3.40	4.04	3.20	5.44	4.80	5.27	6.58
Penobscot	2.87	3.80	3.56	4.57	3.78	5.09	5.33	6.26
Piscataquis	3.09	3.61	3.95	3.66	4.33	4.81	5.89	6.47
Sagadahoc	2.87	3.23	3.73	4.03	4.60	5.13	4.47	6.97
Somerset	2.66	3.50	3.54	3.26	4.26	4.61	5.43	6.72
Waldo	2.83	3.46	3.52	3.96	4.73	4.85	5.23	7.02
Washington	2.98	3.54	3.05	3.38	3.80	4.32	5.63	6.58
York	3.14	3.07	3.86	4.11	4.39	5.32	5.32	6.19
Statewide	**3.08**	**3.49**	**3.71**	**3.93**	**4.05**	**4.81**	**5.36**	**6.52**

Means of respondents' rankings (where one is "highest priority" and eight is "lowest priority"). Top issue for each county is highlighted.

**

Mental Health: *conditions that impact how people think, feel and act as they cope with life.*
Community Capacity: *ability to sustain a high quality of life, including access to employment, education and housing*
Chronic Diseases: *such as heart disease, cancer, diabetes, and asthma*
Family Health: *including teen pregnancy, prenatal care and healthy behaviors during pregnancy*
Environmental Issues: *access to healthy foods, access to recreation, clean air, water, lead exposure, etc.*

Appendix A: Stakeholder Survey Findings

Detailed Findings from SHNAPP Stakeholder Survey, June 2015	
Survey Questions and Top Responses	
	Maine
Demographics	
Which of the following sectors best describes your role or organization? (twelve choices, picked one)	
	n=1,639
Medical care provider	22%
Other non-profit or social service agency	14%
Other	13%
Public health	11%
Business owner or employee	9%
Educator	8%
Other type of health care organization	8%
Behavioral/mental health provider	6%
Local government	4%
Other governmental agency	3%
Youth-serving organization	2%
Faith-based organization	1%
Do you work for or represent: (five choices, picked one)	
None of the above	49%
Hospital/Health-care system	38%
Local public health agency	10%
Maine CDC	3%
Tribal health	<1%
Please identify the type of geographical area that you primarily serve? (six choices, picked one)	
Town or region	27%
Hospital/Health service area	26%
Statewide	22%
State	18%
Other area	4%
Public health district	3%

Demographics	
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	24%
Somewhat	47%
No	29%
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)	
	n=1159
Don't Know	5%
Low-income, including those below the federal poverty limit, or defined as low-income by some other definition	77%
Medically-underserved - including uninsured and underinsured	63%
People with disabilities - physical, mental, or intellectual	58%
Very rural and/or geographically isolated people	47%
Less than a high school education and/ or low literacy (low reading or math skills)	47%
Women	44%
Limited or no English proficiency	38%
Gay, lesbian, bisexual or transgendered people	36%
Deaf and hard of hearing people	35%
Military veterans	34%
Refugees/immigrants	28%
Racial/ethnic minority populations	27%
Members of any federally recognized tribe	25%
Specific age group	21%
Other	15%
Overall, to what degree to you feel the health needs of your area are being addressed?	
	n=1639
Not addressed at all	<1%
Mostly unaddressed	10%
Somewhat addressed	55%
Mostly addressed	30%
Completely addressed	2%
Don't know	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 state who rated issue as a major or critical problem in their area)	
	n=1639
Family Health	
Adolescent health	25%
Child developmental issues	34%
Childhood obesity	58%
Elder health	55%
Infant mortality	4%
Maternal and child health	23%
Chronic Diseases	
Cancer	50%
Cardiovascular disease	63%
Depression	67%
Diabetes	63%
Musculoskeletal diseases	28%
Neurological diseases	35%
Obesity	78%
Respiratory disease	60%
Infectious Diseases	
Infectious diseases	22%
Sexually transmitted diseases/HIV/AIDS	13%
Healthy Behaviors	
Drug and alcohol abuse	80%
Physical activity and nutrition	69%
Tobacco use	63%
Other Health Issues	
Lead poisoning and other environmental health issues	17%
Mental health	71%
Oral health	53%
Suicide and self-harm	37%
Unintentional injury	34%
Violence	38%

Please indicate how much of a problem each issue is in area and leads to poor health outcomes for residents. (*Percentage of stakeholders in state who rated factor as a major or critical problem in their area)	
	n=1639
Economic Stability	
Employment	64%
Food security	58%
Housing stability	57%
Poverty	78%
Education	
Enrollment in higher education	35%
Early childhood education/development	43%
High school graduation	31%
Language and literacy	34%
Social and Community Context	
Adverse childhood experiences	56%
Civic participation	30%
Incarceration or institutionalization	35%
Social attitudes such as discrimination	38%
Social support and interactions	50%
Caregiver support	46%
Health and Health Care	
Access to behavioral care/Mental health care	67%
Access to primary care	39%
Access to other health care	41%
Access to oral health	56%
Health care insurance	64%
Health literacy	62%
Neighborhood and Built Environment	
Access to healthy foods	53%
Access to physical activity opportunities	42%
Crime and violence	27%
Environmental conditions	12%
Quality of housing	34%
Transportation	67%

Please rank each health issue according to how you think resources in your area should be allocated. (one=highest priority and eight=lowest priority) (mean)	
	n=1168
Risk factors that lead to poor health.	3.08
Mental health - conditions that impact how people think, feel and act as they cope with life.	3.49
Substance abuse behaviors - including excessive drinking, smoking, and other drug use.	3.71
Community capacity - ability to sustain a high quality of life, including access to employment, education and housing.	3.93
Chronic diseases - such as heart disease, cancer, diabetes, and asthma	4.05
Family health - including teen pregnancy, prenatal care, and healthy behaviors during pregnancy.	4.81
Environmental issues - access to healthy foods, access to recreation, clean air, water, lead exposure, etc.	5.36
Injuries - intentional and unintentional	6.52

Appendix B: Health Indicators Results from Secondary Data Sources

The state level summary of health indicators analyzed from secondary data sources is presented in the table below. Results are displayed for the state and U.S. (where 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).

<table>
<tr><td style="background-color:#a9c47f">   </td><td>*Indicates Maine is significantly better than U.S. average (using a 95% confidence level).*</td></tr>
<tr><td style="background-color:#f5c28c">   </td><td>*Indicates Maine is significantly worse than U.S. average (using a 95% confidence level).*</td></tr>
</table>

+ Indicates an improvement in the indicator over time at the state level (using a 95% confidence level)

− Indicates a worsening in the indicator over time at the state level (using a 95% confidence level)

Blanks for trend data indicate there is no significant trend in either direction over time.

† Results may be statistically unreliable due to small numerator, use caution when interpreting.

NA = Data not available for indicator or for trend comparison.

The years used in the trend comparison varies depending on the data source. For a complete list of data sources and years, please see the data sources table in Appendix C.

Maine Shared Community Health Needs Assessment State-Level Summary: 2015			
Maine Shared CHNA Health Indicators	**Maine**	**Maine Trend**	**U.S.**
Demographics			
Total Population	1,330,089		319 Mil
Population - % ages 0-5	4.9%		6.2%
Population - % ages 0-17	19.5%		23.1%
Population - % ages 18-64	62.2%		62.4%
Population - % ages 65+	18.3%		14.5%
Population - % White	95.0%		77.4%
Population - % Black or African American	1.4%		13.2%
Population - % American Indian and Alaska Native	0.7%		1.2%
Population - % Asian	1.2%		5.4%
Population - % Hispanic	1.5%		17.4%
Population - % Two or more races	1.6%		2.5%
Population - % with a disability	16.3%		12.1%
Population density (per sq. mile)	43.1		87.4
Socioeconomic Status Measures			
Unemployment rate	5.7%	+	6.2%
Individuals living in poverty	*13.6%*		15.4%
Children living in poverty	*18.5%*		21.6%
Percentage of people living in rural areas	66.4%	NA	NA
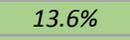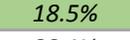
Maine Shared Community Health Needs Assessment State-Level Summary: 2015

Maine Shared CHNA Health Indicators	Maine	Maine Trend	U.S.
Socioeconomic Status Measures			
Median household income	$48,453		$53,046
High school graduation rate	86.5%	+	81%
Single-parent families	29.1%	NA	33.2%
65+ living alone	40.1%		37.7%
General Health Status			
Adults who rate their health fair to poor	14.9%		16.7%
Adults with 14+ days lost due to poor mental health	11.9%		NA
Adults with 14+ days lost due to poor physical health	12.8%		NA
Adults with three or more chronic conditions	27.9%		NA
Mortality			
Life expectancy (Female)	81.5		81.2
Life expectancy (Male)	76.7		76.4
Overall mortality rate per 100,000 population	753.8	NA	731.9
Access			
Adults with a usual primary care provider	87.4%		76.6%
Individuals who are unable to obtain or delay obtaining necessary medical care due to cost	10.1%		15.3%
MaineCare enrollment	27.0%	NA	23.0%
Percent of children ages 0-19 enrolled in MaineCare	41.8%	NA	48.0%
Percent uninsured	10.1%		11.7%
Health Care Quality			
Ambulatory care-sensitive condition hospital admission rate per 100,000 population	1499.3	+	1457.5
Ambulatory care-sensitive condition emergency department rate per 100,000 population	4258.8	NA	NA
Oral Health			
Adults with visits to a dentist in the past 12 months	65.3%	NA	67.2%
MaineCare members under 18 with a visit to the dentist in the past year	55.1%	NA	NA
Chronic Disease			
Cancer			
Mortality – all cancers per 100,000 population	181.7		168.7
Incidence – all cancers per 100,000 population	488.7	+	453.4
Bladder cancer incidence per 100,000 population	28.6		20.2
Female breast cancer mortality per 100,000 population	16.9		21.5
Female breast cancer late-stage incidence per 100,000 population	42.3	NA	43.7
Female breast cancer incidence per 100,000 population	125.0		124.1
Mammograms females age 50+ in past two years	82.1%	NA	77.0%
Colorectal cancer mortality per 100,000 population	15.0		15.1
Colorectal late-stage incidence per 100,000 population	22.0	NA	22.9
Colorectal cancer incidence per 100,000 population	41.1	+	42.0
Colorectal screening	72.2%		NA
Lung cancer mortality per 100,000 population	51.8	+	46.0
Lung cancer incidence per 100,000 population	74.0	+	58.6
Melanoma incidence per 100,000 population	22.2		21.3

Maine Shared Community Health Needs Assessment State-Level Summary: 2015

Maine Shared CHNA Health Indicators	Maine	Maine Trend	U.S.
Cancer			
Pap smears females ages 21-65 in past three years	*88.0%*	NA	78.0%
Prostate cancer mortality per 100,000 population	19.7		20.8
Prostate cancer incidence per 100,000 population	*118.4*	+	140.8
Tobacco-related neoplasms, mortality per 100,000 population	*37.9*		34.3
Tobacco-related neoplasms, incidence per 100,000 population	*91.9*		81.7
Cardiovascular Disease			
Acute myocardial infarction hospitalizations per 10,000 population	23.4	+	NA
Acute myocardial infarction mortality per 100,000 population	33.4		32.4
Cholesterol checked every five years	*81.4%*		76.4%
Coronary heart disease mortality per 100,000 population	89.5	+	102.6
Heart failure hospitalizations per 10,000 population	20.1	NA	NA
Hypertension prevalence	33.3%		31.4%
High cholesterol	39.7%		38.4%
Hypertension hospitalizations per 100,000 population	28.0		NA
Stroke hospitalizations per 10,000 population	19.6	+	NA
Stroke mortality per 100,000 population	33.3		36.2
Diabetes			
Diabetes prevalence (ever been told)	9.6%		9.7%
Pre-diabetes prevalence	7.4%	NA	NA
Adults with diabetes who have eye exam annually	71.2%	NA	NA
Adults with diabetes who have foot exam annually	83.3%	NA	NA
Adults with diabetes who have had an A1C test twice per year	73.2%	NA	NA
Adults with diabetes who have received formal diabetes education	60.0%	NA	55.80%
Diabetes emergency department visits (principal diagnosis) per 100,000 population	235.9		NA
Diabetes hospitalizations (principal diagnosis) per 10,000 population	11.4		NA
Diabetes long-term complication hospitalizations	59.1		NA
Diabetes mortality (underlying cause) per 100,000 population	20.4		21.2
Respiratory			
Asthma emergency department visits per 10,000 population	66.2	NA	NA
COPD diagnosed	7.1%		6.5%
COPD hospitalizations per 100,000 population	216.3		NA
Current asthma (Adults)	*11.9%*		9.0%
Current asthma (Youth 0-17)	9.1%	NA	9.2%
Pneumonia emergency department rate per 100,000 population	719.9	–	NA
Pneumonia hospitalizations per 100,000 population	329.4		NA
Environmental Health			
Children with confirmed elevated blood lead levels (% among those screened)	2.1%	+	NA
Children with unconfirmed elevated blood lead levels (% among those screened)	4.1%	+	NA
Homes with private wells tested for arsenic	43.3%	NA	NA
Lead screening among children age 12-23 months	49.2%	NA	NA
Lead screening among children age 24-35 months	27.6%	NA	NA

Maine Shared Community Health Needs Assessment State-Level Summary: 2015

Maine Shared CHNA Health Indicators	Maine	Maine Trend	U.S.
Immunization			
Adults immunized annually for influenza	44.1%	+	NA
Adults immunized for pneumococcal pneumonia (ages 65 and older)	*73.8%*		69.5%
Immunization exemptions among kindergarteners for philosophical reasons	3.7%	NA	NA
Two-year-olds up to date with "Series of Seven Immunizations" 4-3-1-3-3-1-4	75%		NA
Infectious Disease			
Hepatitis A (acute) incidence per 100,000 population	0.6	NA	0.4
Hepatitis B (acute) incidence per 100,000 population	0.9	NA	0.9
Hepatitis C (acute) incidence per 100,000 population	2.3	NA	0.7
Lyme disease incidence per 100,000 population	105.3	–	10.5
Tuberculosis incidence per 100,000 population	1.1		3.0
Incidence of past or present hepatitis C virus (HCV) per 100,000 population	107.1	NA	NA
Incidence of newly reported chronic hepatitis B virus (HBV) per 100,000 population	8.1	NA	NA
Pertussis incidence per 100,000 population	41.9	–	10.3
STD/HIV			
AIDS incidence per 100,000 population	2.1		8.4
Chlamydia incidence per 100,000 population	265.5	NA	452.2
Gonorrhea incidence per 100,000 population	17.8	NA	109.8
HIV incidence per 100,000 population	4.4		11.2
HIV/AIDS hospitalization rate per 100,000 population	21.4		NA
Syphilis incidence per 100,000 population	1.6		19.9
Injury			
Intentional Injury			
Domestic assaults reports to police per 100,000 population	413.0		NA
Firearm deaths per 100,000 population	10.9		10.4
Intentional self-injury (Youth)	17.9%		NA
Lifetime rape/non-consensual sex (among females)	11.3%		NA
Nonfatal child maltreatment per 1,000 population	14.6	–	9.1
Reported rape per 100,000 population	27.0		25.2
Suicide deaths per 100,000 population	*17.4*	–	12.6
Violence by current or former intimate partners in past 12 months (among females)	0.8%		NA
Violent crime rate per 100,000 population	125.0		367.9
Unintentional Injury			
Unintentional fall related injury emergency department visits among older adults per 10,000 population	361.3		NA
Unintentional fall related deaths per 100,000 population	8.7	–	8.5
Unintentional motor vehicle traffic crash related deaths per 100,000 population	10.2		10.5
Always wear seatbelt (Adults)	85.2%	NA	NA
Always wear seatbelt (High School Students)	61.6%	NA	54.7%
Traumatic brain injury related emergency department visits (all intents) per 10,000 population	81.4	–	NA

Maine Shared Community Health Needs Assessment State-Level Summary: 2015

Maine Shared CHNA Health Indicators	Maine	Maine Trend	U.S.
Unintentional Injury			
Unintentional and undetermined intent poisoning deaths per 100,000 population	12.6		13.2
Occupational Health			
Deaths from work-related injuries (number)	19		4,585
Nonfatal occupational injuries (number)	13,205		NA
Maternal and Child Health			
Pregnancy and Birth Outcomes			
Infant deaths per 1,000 live births	7.0		6.0
Live births for which the mother received early and adequate prenatal care	86.4%		84.8%
Low birth weight (<2500 grams)	6.6%		8.0%
Live births to 15-19 year olds per 1,000 population	19.2	+	26.5
Children with Special Health Care Needs			
Children with special health care needs	*23.6%*		19.8%
Mental Health			
Adults who have ever had anxiety	18.8%		NA
Adults who have ever had depression	*23.4%*		18.7%
Adults with current symptoms of depression	9.9%		NA
Co-morbidity for persons with mental illness	33.3%		NA
Mental health emergency department rates per 100,000 population	1,972.1		NA
Adults currently receiving medication or treatment for mental health from a health care provider	17.4%		NA
Sad/hopeless for two weeks in a row (High School Students)	24.3%	−	29.9%
Seriously considered suicide (High School Students)	14.6%	−	17.0%
Physical Activity, Nutrition and Weight			
Obesity (Adults)	28.9%		29.4%
Obesity (High School Students)	12.7%		13.7%
Overweight (Adults)	36.0%		35.4%
Overweight (High School Students)	16.0%	−	16.6%
Fewer than two hours combined screen time (High School Students)	33.9%	NA	NA
Fruit and vegetable consumption (High School Students)	16.8%	+	NA
Fruit consumption among Adults 18+ (less than one serving per day)	*34.0%*	NA	39.2%
Met physical activity recommendations (Adults)	53.4%	NA	50.8%
Physical activity for at least 60 minutes per day on five of the past seven days (High School Students)	43.7%	+	47.3%
Sedentary lifestyle – no leisure-time physical activity in past month (Adults)	23.3%		25.3%
Soda/sports drink consumption (High School Students)	26.2%	NA	27.0%
Vegetable consumption among Adults 18+ (less than one serving per day)	*17.9%*	NA	22.9%
Substance and Alcohol Abuse			
Alcohol-induced mortality per 100,000 population	8.5		8.2
Binge drinking of alcoholic beverages (High School Students)	14.8%	+	20.8%
Binge drinking of alcoholic beverages (Adults)	17.2%		16.8%
Chronic heavy drinking (Adults)	7.2%		6.2%
Drug-affected baby referrals received as a percentage of all live births	7.8%	NA	NA
Drug-induced mortality per 100,000 population	13.9		14.6

Maine Shared Community Health Needs Assessment State-Level Summary: 2015

Maine Shared CHNA Health Indicators	Maine	Maine Trend	U.S.
Substance and Alcohol Abuse			
Emergency medical service overdose response per 100,000 population	391.5	NA	NA
Opiate poisoning (ED visits) per 100,000 population	25.1		NA
Opiate poisoning (hospitalizations) per 100,000 population	13.2		NA
Past-30-day alcohol use (High School Students)	26.0%	+	34.9%
Past-30-day inhalant use (High School Students)	3.2%	+	NA
Past-30-day marijuana use (Adults)	7.8%		NA
Past-30-day marijuana use (High School Students)	21.6%		23.4%
Past-30-day nonmedical use of prescription drugs (Adult)	1.1%		NA
Past-30-day nonmedical use of prescription drugs (High School Students)	5.6%	+	NA
Prescription Monitoring Program opioid prescriptions (days supply/pop)	6.8	NA	NA
Substance-abuse hospital admissions per 100,000 population	328.1		NA
Tobacco Use			
Current smoking (Adults)	20.2%	+	19.0%
Current smoking (High School Students)	12.9%	+	15.7%
Current tobacco use (High School Students)	18.2%	+	22.4%
Secondhand smoke exposure (Youth)	38.3%	+	NA

Appendix C: List of Data Sources and Years for Quantitative Health Indicators

Indicator	Data Source	Year(s)	Comparison Year for Trends	Other Notes
Maine Shared Community Health Needs Assessment Data Sources				
Demographics				
Population	U.S. Census	2014	NA	2014 data was used for all age, racial and ethnic groups.
Population with a disability	U.S. Census	2013	NA	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	NA	Based on 2010 U.S. Census population.
Socioeconomic Status Measures				
Individuals living in poverty	U.S. Census	2009-2013	2008	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	2008	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	2009-10 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	2008	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	NA	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

Maine Shared Community Health Needs Assessment Data Sources

Indicator	Data Source	Year(s)	Comparison Year for Trends	Other Notes
Socioeconomic Status Measures				
Single-parent families	U.S. Census	2013	NA	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	2009	Unemployment rate of the civilian noninstitutionalized population averaged for the full year of 2014.
65+ living alone	U.S. Census	2013	2009	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	2013	2011	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	2013	2011	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	2013	2011	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	2013	2011	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	NA	Life expectancy at birth.
Life expectancy (Male)	National Center for Health Statistics	2012	NA	Life expectancy at birth.
Overall mortality rate per 100,000 population	DRVS	2013	NA	All deaths are defined as deaths in which the underlying cause of death was coded as ICD-10 any listed.
Access				
Adults with a usual primary care provider	BRFSS	2013	2011	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	2013	2011	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.

Maine Shared Community Health Needs Assessment Data Sources

Indicator	Data Source	Year(s)	Comparison Year for Trends	Other Notes
Access				
MaineCare enrollment	MaineCare	2015	NA	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	NA	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	2014	2009	Estimated number of Maine people who do not currently have health insurance.
Health Care Quality				
Ambulatory care-sensitive condition hospital admission rate per 100,000 population	MHDO	2011	2008	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	NA	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	NA	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	NA	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.

Maine Shared Community Health Needs Assessment Data Sources

Indicator	Data Source	Year(s)	Comparison Year for Trends	Other Notes
Chronic Disease				
Cancer				
Mortality – all cancers per 100,000 population	MCR	2011	2006	All cancer: SEER Cause of Death Recode: 20010-37000 (which include ICD-10 codes: C00-C97).
Incidence – all cancers per 100,000 population	MCR	2009-2011	2004-2006	All cancer: SEER Site Recode: 20010-37000 (which include ICD-O-3 codes: C00-C797).
Bladder cancer incidence per 100,000 population	MCR	2009-2011	2004-2006	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	2011	2006	Cancer Deaths: Deaths with malignant cancer as the underlying cause of death.
Female breast cancer late-stage incidence per 100,000 population	Maine Cancer Registry (MCR)	2009-2011	NA	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	2009-2011	2004-2006	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	NA	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	2011	2006	Cancer Deaths: Deaths with malignant cancer as the underlying cause of death.
Colorectal late-stage incidence per 100,000 population	MCR	2009-2011	NA	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	2009-2011	2004-2006	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	NA	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.

Maine Shared Community Health Needs Assessment Data Sources

Indicator	Data Source	Year(s)	Comparison Year for Trends	Other Notes
Cancer				
Lung cancer mortality per 100,000 population	MCR	2011	2006	Cancer Deaths: Deaths with malignant cancer as the underlying cause of death.
Lung cancer incidence per 100,000 population	MCR	2009-2011	2004-2006	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	2009-2011	2004-2006	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.
Pap smears females ages 21-65 in past three years	BRFSS	2012	NA	Females with intact cervix, that have received a pap smear within the past three years.
Prostate cancer mortality per 100,000 population	MCR	2011	2006	Cancer Deaths: Deaths with malignant cancer as the underlying cause of death.
Prostate cancer incidence per 100,000 population	MCR	2009-2011	2004-2006	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	2011	2006	Cancer Deaths: Deaths with malignant cancer as the underlying cause of death.
Tobacco-related neoplasms, incidence per 100,000 population	MCR	2009-2011	2004-2006	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	2012	2007	ICD-9 CM - 410
Acute myocardial infarction mortality per 100,000 population	Maine CDC Vital Records	2013	2008	ICD-10 I21-I22
Cholesterol checked every five years	BRFSS	2013	2011	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	2013	2008	ICD-10 I20-I25

Maine Shared Community Health Needs Assessment Data Sources

Indicator	Data Source	Year(s)	Comparison Year for Trends	Other Notes
Cardiovascular Disease				
Heart failure hospitalizations per 10,000 population	MHDO	2012	NA	ICD-9 CM - 428
Hypertension prevalence	BRFSS	2013	2011	Adults who have ever been told by a doctor, nurse, or other health professional that they have high blood pressure.
High cholesterol	BRFSS	2013	2011	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	2007	ICD-9 CM - 401, 402, 403, 404
Stroke hospitalizations per 10,000 population	MHDO	2012	2007	ICD-9 CM - 430-438
Stroke mortality per 100,000 population	Maine CDC Vital Records	2013	2008	ICD-10 I60-I69
Diabetes				
Diabetes prevalence (ever been told)	BRFSS	2013	2011	Adults that have ever been told by a doctor or other health professional that they have diabetes.
Pre-diabetes prevalence	BRFSS	2013	NA	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	NA	Adults with diabetes who report having an eye exam in which the pupils were dilated within the past year.
Adults with diabetes who have foot exam annually	BRFSS	2011-2013	NA	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	NA	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	2013	NA	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	2006	ICD-9 CM - 250
Diabetes hospitalizations (principal diagnosis) per 10,000 population	MHDO	2012	2007	ICD-9 CM - 250
Diabetes long-term complication hospitalizations	MHDO	2011	2007	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.

Maine Shared Community Health Needs Assessment Data Sources

Indicator	Data Source	Year(s)	Comparison Year for Trends	Other Notes
Diabetes				
Diabetes mortality (underlying cause) per 100,000 population	Maine CDC Vital Records	2013	2008	ICD-10 E10-E14
Respiratory				
Asthma emergency department visits per 10,000 population	MHDO	2011	NA	ICD-9 CM - 493
COPD diagnosed	BRFSS	2013	2011	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	2007	ICD-9 CM - 490, 491, 492, 494, 496
Current asthma (Adults)	BRFSS	2013	2011	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	NA	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	2007	ICD-9 CM - 480-486
Pneumonia hospitalizations per 100,000 population	MHDO	2011	2007	ICD-9 CM - 480-486
Environmental Health				
Children with confirmed elevated blood lead levels (% among those screened)	Maine CDC Lead Program	2013	2008	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	2013	2008	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	NA	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	NA	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

Indicator	Data Source	Year(s)	Comparison Year for Trends	Other Notes
Environmental Health				
Lead screening among children age 24-35 months	Maine CDC Lead Program	2009-2013	NA	A blood lead test is considered a "screening test" only when a child has no prior history of a confirmed elevated blood lead level.
Immunization				
Adults immunized annually for influenza	BRFSS	2013	2011	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	2013	2011	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	NA	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	2012	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	NA	Defined as the number of new infections during 2014.
Hepatitis B (acute) incidence per 100,000 population	MIDSS	2014	NA	Defined as the number of new infections during 2014.
Hepatitis C (acute) incidence per 100,000 population	MIDSS	2014	NA	Defined as the number of new infections during 2014.
Incidence of past or present hepatitis C virus (HCV) per 100,000 population	MIDSS	2014	NA	New diagnoses, regardless of when infection occurred or stage of disease at diagnosis.

Maine Shared Community Health Needs Assessment Data Sources

Indicator	Data Source	Year(s)	Comparison Year for Trends	Other Notes
Incidence of newly reported chronic hepatitis B virus (HBV) per 100,000 population	MIDSS	2014	NA	New diagnoses, regardless of when infection occurred or stage of disease at diagnosis.
Infectious Disease				
Lyme disease incidence per 100,000 population	MIDSS	2014	2009	Defined as the number of new infections during 2014.
Pertussis incidence per 100,000 population	MIDSS	2014	2009	Incidence is defined as the number of new infections during 2014.
Tuberculosis incidence per 100,000 population	MIDSS	2014	2008	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	2008	Incidence is defined as the number of new infections during 2014.
Chlamydia incidence per 100,000 population	Maine CDC STD Program	2014	NA	Incidence is defined as the number of new infections during 2014.
Gonorrhea incidence per 100,000 population	Maine CDC STD Program	2014	NA	Incidence is defined as the number of new infections during 2014.
HIV incidence per 100,000 population	Maine CDC HIV Program	2014	2009	Incidence is defined as the number of new infections during 2014.
HIV/AIDS hospitalization rate per 100,000 population	MHDO	2011	2007	DRG-MDC 25
Syphilis incidence per 100,000 population	Maine CDC STD Program	2014	2009	Incidence is defined as the number of new infections during 2014.
Injury				
Intentional Injury				
Domestic assaults reports to police per 100,000 population	Maine Dept. of Public Safety	2013	2009	All offenses of assault between family or household members are reported as domestic assault.
Firearm deaths per 100,000 population	Maine CDC Vital Records	2013	2008	ICD-10 W32-W34 ,X72-X74, X93-X95, Y22-Y24, Y350 or U014.
Intentional self-injury (Youth)	MIYHS	2013	2009	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	2011	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	2008	Rates are unique child victims per 1,000 population under age 18.
Reported rape per 100,000 population	Maine Dept. of Public Safety	2013	2009	Includes rape by force and attempted forcible rape. Excludes carnal abuse without force (statutory rape) and other sex offenses.

Maine Shared Community Health Needs Assessment Data Sources

Indicator	Data Source	Year(s)	Comparison Year for Trends	Other Notes
Suicide deaths per 100,000 population	Maine CDC Vital Records	2013	2008	ICD-10 U03 X60-X84 or Y87.0
Violence by current or former intimate partners in past 12 months (among females)	BRFSS	2012	2011	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	2008	Reported violent crime offenses. Violent crime includes murder, rape, robbery and aggravated assault.
Unintentional Injury				
Always wear seatbelt (Adults)	BRFSS	2013	NA	Adults reporting they always use seatbelts when they drive or ride in a car.
Always wear seatbelt (High School Students)	MIYHS	2013	NA	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	2006	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.
Unintentional and undetermined intent poisoning deaths per 100,000 population	Maine CDC Vital Records	2013	2008	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	2013	2008	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	NA	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	2013	2008	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				

Maine Shared Community Health Needs Assessment Data Sources

Indicator	Data Source	Year(s)	Comparison Year for Trends	Other Notes
Deaths from work-related injuries (number)	Maine Dept. of Labor	2013	2009	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	2009	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.
Maternal and Child Health				
Pregnancy and Birth Outcomes				
Infant deaths per 1,000 live births	Maine CDC Vital Records	2008-2012	2006	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 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	2007	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	2012	2007	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	2007	Low birth weight defined as less than 2500 grams.
Children with Special Health Care Needs				
Children with special health care needs	National Survey of Children with Special Health Care Needs	2011-2012	2009-2010	Survey respondents who reported that their child has a special health care need.
Mental Health				
Adults who have ever had anxiety	BRFSS	2013	2011	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	2013	2011	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	2013	2011	Indicator of current depression coded using two items from the PHQ-2 depression screener.
Adults currently receiving medication or treatment for mental health from a health care provider	BRFSS	2013	2011	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	2013	2011	Adults with current symptoms of depression from the PHQ-2 depression screener with 3 or more chronic conditions.

Maine Shared Community Health Needs Assessment Data Sources

Indicator	Data Source	Year(s)	Comparison Year for Trends	Other Notes
Mental health emergency department rates per 100,000 population	MHDO	2011	2007	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	2011	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".
Seriously considered suicide (High School Students)	MIYHS	2013	2011	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	NA	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	2009	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	NA	Adults with less than one serving per day of fruits or fruit juice.
Met physical activity recommendations (Adults)	BRFSS	2013	NA	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	2009	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	2013	2011	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	NA	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	NA	Adults with less than one serving per day of vegetables.
Obesity (Adults)	BRFSS	2013	2011	Adults with a BMI of 30 or more.
Obesity (High School Students)	MIYHS	2013	2009	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.

Maine Shared Community Health Needs Assessment Data Sources

Indicator	Data Source	Year(s)	Comparison Year for Trends	Other Notes
Overweight (Adults)	BRFSS	2013	2011	Adults with a BMI between 25.0 and 29.9.
Overweight (High School Students)	MIYHS	2013	2009	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.
Substance and Alcohol Abuse				
Alcohol-induced mortality per 100,000 population	Maine CDC Vital Records	2013	2008	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	2011	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.
Substance and Alcohol Abuse				
Binge drinking of alcoholic beverages (Adults)	BRFSS	2013	2011	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	2013	2011	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	NA	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	2013	2009	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	NA	Includes overdoses from drugs/medication, alcohol and inhalants.
Opiate poisoning (ED visits) per 100,000 population	MHDO	2011	2007	ICD-9 - 9650, 96500, 96501, 96502, 96509
Opiate poisoning (hospitalizations) per 100,000 population	MHDO	2011	2007	ICD-9 - 9650, 96500, 96501, 96502, 96509
Past-30-day alcohol use (High School Students)	MIYHS	2013	2009	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	2011	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	2013	2011	During the past 30 days, have you used marijuana?

Maine Shared Community Health Needs Assessment Data Sources

Indicator	Data Source	Year(s)	Comparison Year for Trends	Other Notes
Past-30-day marijuana use (High School Students)	MIYHS	2013	2009	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	2013	2011	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	2009	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.
Substance and Alcohol Abuse				
Prescription Monitoring Program opioid prescriptions (days supply/pop)	Prescription Monitoring Program	2014-2015	NA	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	2007	DRG-MDC 20
Tobacco Use				
Current smoking (Adults)	BRFSS	2013	2011	Adults that reported having smoked at least 100 cigarettes in their lifetime and currently smoke.
Current smoking (High School Students)	MIYHS	2013	2009	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	2011	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	2011	Percentage of students who were in the same room with someone who was smoking cigarettes at least 1 day during the past 7 days.

Appendix D: List of Data Sources and Years of United States Data for Quantitative Health Indicators

Indicator	Data Source	Year(s)	Other Notes
Maine Shared Community Health Needs Assessment: 2015 **United States Data Sources**			
Demographics			
Population	U.S. Census	2014	2014 data was used for all age, racial and ethnic groups.
Population with a disability	U.S. Census	2010	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			
Unemployment rate	Bureau of Labor Statistics	2014	Unemployment rate of the civilian noninstitutionalized population averaged for the full year of 2014.
Adults 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.
Percentage of people living in rural areas	NA	NA	Data not available.
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.
High school graduation rate	U.S. Department of Education, National Center for Education Statistics	2012-13 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 percent or more publicly funded students.
Single-parent families	U.S. Census	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.
65+ living alone	U.S. Census	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	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	NA	NA	Data not available: National BRFSS does not analyze this data in this manner

Maine Shared Community Health Needs Assessment: 2015
United States Data Sources

Indicator	Data Source	Year(s)	Other Notes
General Health Status			
Adults with 14+ days lost due to poor physical health	NA	NA	Data not available: National BRFSS does not analyze this data in this manner
Adults with three or more chronic conditions	NA	NA	Data not available: National BRFSS does not analyze this data in this manner
Mortality			
Life expectancy (Female)	CDC/National Center for Health Statistics	2012	Life expectancy at birth.
Life expectancy (Male)	CDC/National Center for Health Statistics	2012	Life expectancy at birth.
Overall mortality rate per 100,000 population	CDC/National Center for Health Statistics, National Vital Statistics System	2013	All deaths are defined as deaths in which the underlying cause of death was coded as ICD-10 any listed.
Access			
Adults with a usual primary care provider	BRFSS	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	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.
Medicaid enrollment	U.S. Department of Health & Human Services, Centers for Medicare & Medicaid Services	2013	The percent of individuals participating in Medicaid.
Percent of children ages 0-19 enrolled in Medicaid	U.S. Department of Health & Human Services, Centers for Medicare & Medicaid Services	2013	The percent of individuals participating in Medicaid.
Percent uninsured	U.S. Census	2014	Estimated number of U.S. people who do not currently have health insurance.
Health Care Quality			
Ambulatory care-sensitive condition hospital admission rate per 100,000 population	Agency for Healthcare Research and Quality	2012	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	NA	NA	Data not available.
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.

Maine Shared Community Health Needs Assessment: 2015
United States Data Sources

Indicator	Data Source	Year(s)	Other Notes
Oral Health			
Medicaid members under 18 with a visit to the dentist in the past year	NA	NA	Data not available.
Cancer			
Mortality – all cancers per 100,000 population	SEER	2011	All cancer: SEER Cause of Death Recode: 20010-37000 (which include ICD-10 codes: C00-C97).
Incidence – all cancers per 100,000 population	SEER	2009-2011	All cancer: SEER Site Recode: 20010-37000 (which include ICD-O-3 codes: C00-C797).
Bladder cancer incidence per 100,000 population	SEER	2009-2011	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	SEER	2011	Cancer Deaths: Deaths with malignant cancer as the underlying cause of death.
Female Breast cancer late-stage incidence per 100,000 population	SEER	2009-2011	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	SEER	2009-2011	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	SEER	2011	Cancer Deaths: Deaths with malignant cancer as the underlying cause of death.
Colorectal late-stage incidence per 100,000 population	SEER	2009-2011	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	SEER	2009-2011	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	2013	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	SEER	2011	Cancer Deaths: Deaths with malignant cancer as the underlying cause of death.
Lung cancer incidence per 100,000 population	SEER	2009-2011	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: 2015
United States Data Sources

Indicator	Data Source	Year(s)	Other Notes
Cancer			
Melanoma incidence per 100,000 population	SEER	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.
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	SEER	2011	Cancer Deaths: Deaths with malignant cancer as the underlying cause of death.
Prostate cancer incidence per 100,000 population	SEER	2009-2011	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	SEER	2011	Cancer Deaths: Deaths with malignant cancer as the underlying cause of death.
Tobacco-related neoplasms, incidence per 100,000 population	SEER	2009-2011	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	NA	NA	Data not available.
Acute myocardial infarction mortality per 100,000 population	CDC/National Center for Health Statistics, National Vital Statistics System	2013	ICD-10 I21-I22
Cholesterol checked every five years	BRFSS	2013	Adults reporting that they last had their blood cholesterol checked within the past 5 years.
Coronary heart disease mortality per 100,000 population	CDC/National Center for Health Statistics, National Vital Statistics System	2013	ICD-10 I20-I25
Heart failure hospitalizations per 10,000 population	NA	NA	Data not available.
Hypertension prevalence	BRFSS	2013	Adults who have ever been told by a doctor, nurse, or other health professional that they have high blood pressure.
High cholesterol	BRFSS	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	NA	NA	Data not available.
Stroke hospitalizations per 10,000 population	NA	NA	Data not available.

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Indicator	Data Source	Year(s)	Other Notes
Stroke mortality per 100,000 population	CDC/National Center for Health Statistics, National Vital Statistics System	2013	ICD-10 I60-I69
Diabetes			
Diabetes prevalence (ever been told)	BRFSS	2013	Adults that have ever been told by a doctor or other health professional that they have diabetes.
Pre-diabetes prevalence	NA	NA	Data not available: not a national core measure
Adults with diabetes who have eye exam annually	NA	NA	Data not available: not a national core measure
Adults with diabetes who have foot exam annually	NA	NA	Data not available: not a national core measure
Adults with diabetes who have had an A1C test 2x per year	NA	NA	Data not available: not a national core measure
Adults with diabetes who have received formal diabetes education	BRFSS	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	NA	NA	Data not available.
Diabetes hospitalizations (principal diagnosis) per 10,000 population	NA	NA	Data not available.
Diabetes long-term complication hospitalizations	NA	NA	Data not available.
Diabetes mortality (underlying cause) per 100,000 population	CDC/National Center for Health Statistics, National Vital Statistics System	2013	ICD-10 E10-E14
Respiratory			
Asthma emergency department visits per 10,000 population	NA	NA	Data not available.
COPD diagnosed	BRFSS	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	NA	NA	Data not available.
Current asthma (Adults)	BRFSS	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	2013	Children that have been told by a doctor, nurse or health professional that they had asthma and that they still have asthma.

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Indicator	Data Source	Year(s)	Other Notes
Respiratory			
Pneumonia emergency department rate per 100,000 population	NA	NA	Data not available.
Pneumonia hospitalizations per 100,000 population	NA	NA	Data not available.
Environmental Health			
Children with confirmed elevated blood lead levels (percent among those screened)	NA	NA	Data not available.
Children with unconfirmed elevated blood lead levels (percent among those screened)	NA	NA	Data not available.
Homes with private wells tested for arsenic	NA	NA	Data not available.
Lead screening among children age 12-23 months	NA	NA	Data not available.
Lead screening among children age 24-35 months	NA	NA	Data not available.
Immunization			
Adults immunized annually for influenza	NA	NA	Data not available.
Adults immunized for pneumococcal pneumonia (ages 65 and older)	BRFSS	2013	Risk factor for adults ages 65 years and older that have ever had a pneumonia shot.
Immunization exemptions among kindergarteners for philosophical reasons	NA	NA	Data not available.
Two-year-olds up to date with "Series of Seven Immunizations" 4-3-1-3-3-1-4	NA	NA	Data not available.
Infectious Disease			
Hepatitis A (acute) incidence per 100,000 population	CDC/Division of Viral Hepatitis and National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention	2014	Defined as the number of new infections during 2014.
Hepatitis B (acute) incidence per 100,000 population	CDC/Division of Viral Hepatitis and National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention	2014	Defined as the number of new infections during 2014.
Hepatitis C (acute) incidence per 100,000 population	CDC/Division of Viral Hepatitis and National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention	2014	Defined as the number of new infections during 2014.

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Indicator	Data Source	Year(s)	Other Notes
Infectious Disease			
Lyme disease per 100,000 population	Centers for Disease Control and Prevention	2014	Defined as the number of new infections during 2014.
Newly diagnosed tuberculosis cases per 100,000 population	Centers for Disease Control and Prevention	2014	New diagnoses, regardless of when infection occurred or stage of disease at diagnosis.
Newly reported cases of past or present hepatitis C virus (HCV) infection per 100,000 population	NA	NA	Data not available.
Newly reported chronic hepatitis B virus (HBV) infections per 100,000 population	NA	NA	Data not available.
Pertussis incidence per 100,000 population	Centers for Disease Control and Prevention	2014	Incidence is defined as the number of new infections during 2014.
STD/HIV			
AIDS incidence per 100,000 population	CDC/Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention	2014	Incidence is defined as the number of new infections during 2014.
Chlamydia incidence per 100,000 population	CDC/Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention	2014	Incidence is defined as the number of new infections during 2014.
Gonorrhea incidence per 100,000 population	CDC/Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention	2014	Incidence is defined as the number of new infections during 2014.
HIV incidence per 100,000 population	CDC/Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention	2014	Incidence is defined as the number of new infections during 2014.
HIV/AIDS hospitalization rate per 100,000 population	NA	NA	Data not available.
Syphilis incidence per 100,000 population	CDC/Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention	2014	Incidence is defined as the number of new infections during 2014.

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Indicator	Data Source	Year(s)	Other Notes
Injury			
Intentional Injury			
Domestic assaults reports to police per 100,000 population	NA	NA	All offenses of assault between family or household members are reported as domestic assault.
Firearm deaths per 100,000 population	CDC/National Center for Health Statistics, National Vital Statistics System	2013	ICD-10 W32-W34 ,X72-X74, X93-X95, Y22-Y24, Y350 or U014.
Intentional self-injury (Youth)	NA	NA	Data not available.
Lifetime rape/non-consensual sex (among females)	NA	NA	Data not available.
Nonfatal child maltreatment per 1,000 population	U.S. Department of Health & Human Services, Administration for Children and Families, Administration on Children, Youth and Families, Children's Bureau	2011	Rates are unique child victims per 1,000 population under age 18. U.S. rate for 2011.
Reported rape per 100,000 population	FIB Uniform Crime Reports	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	CDC/National Center for Health Statistics, National Vital Statistics System	2013	ICD-10 U03 X60-X84 or Y87.0
Violence by current or former intimate partners in past 12 months (among females)	NA	NA	Data not available.
Violent crime rate per 100,000 population	FIB Uniform Crime Reports	2013	Reported violent crime offenses. Violent crime includes murder, rape, robbery and aggravated assault.
Unintentional Injury			
Unintentional fall related injury emergency department visits among older adults per 10,000 population	NA	NA	Data not available.
Unintentional fall related deaths per 100,000 population	CDC/National Center for Health Statistics, National Vital Statistics System	2013	Deaths of U.S. residents for which the underlying cause of death is ICD-10 W00-W19.

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Indicator	Data Source	Year(s)	Other Notes
Unintentional Injury			
Unintentional motor vehicle traffic crash related deaths per 100,000 population	CDC/National Center for Health Statistics, National Vital Statistics System	2013	Deaths of U.S. 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."
Always wear seatbelt (adults)	NA		Data not available.
Always wear seatbelt (high school students)	YRBS	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	National Center for Health Statistics, Health Indicators Warehouse	2010	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.
Unintentional and undetermined intent poisoning deaths per 100,000 population	CDC/National Center for Health Statistics, National Vital Statistics System	2013	If you want the complete definition, it's "deaths of U.S. residents for which the underlying cause of death is ICD-10 X40-X49 or Y10-Y19.
Occupational Health			
Deaths from work-related injuries (number)	U.S. 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)	NA	NA	Data not available.
Maternal and Child Health			
Pregnancy and Birth Outcomes			
Infant deaths per 1,000 live births	CIA World Factbook	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 underestimated due to possible missing out-of-state deaths of U.S. infants in 2010.
Live births for which the mother received early and adequate prenatal care	CDC/National Center for Health Statistics, National Vital Statistics System	2013	Defined as an adequate or adequate-plus rating on the Kotelchuck Adequacy of Prenatal Care Utilization Index.
Low birth weight (<2500 grams)	U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau	2013	Low birth weight defined as less than 2500 grams.
Live births to 15-19 year olds per 1,000 population	CDC/National Center for Health Statistics, National Vital Statistics System	2013	Defined as the number of live births among 15- to 19-year-old U.S. women per 1,000 population.

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Indicator	Data Source	Year(s)	Other Notes
Children with Special Health Needs			
Children with special health care needs	National Survey of Children with Special Health Care Needs	2009-2010	Survey respondents who reported that their child has a special health care need.
Mental Health			
Adults who have ever had anxiety	NA	NA	Data not available.
Adults who have ever had depression	BRFSS	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	NA	NA	Data not available.
Co-morbidity for persons with mental illness	NA	NA	Data not available.
Mental health emergency department rates per 100,000 population	NA	NA	Data not available.
Adults currently receiving medication or treatment for mental health from a health care provider	NA	NA	Data not available.
Sad/hopeless for two weeks in a row (High School Students)	YRBS	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".
Seriously considered suicide (High School Students)	YRBS	2013	During the past 12 months, did you ever seriously consider attempting suicide? Percentage of students who answered "Yes".
Physical Activity, Nutrition and Weight			
Obesity (Adults)	BRFSS	2013	Adults with a BMI of 30 or more.
Obesity (High School Students)	YRBS	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)	YRBS	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.
Fewer than two hours combined screen time (Youth)	NA	NA	Data not available.
Fruit and vegetable consumption (High School Students)	NA	NA	Data not available.
Fruit consumption among Adults 18+ (<1 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)	YRBS	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.

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Indicator	Data Source	Year(s)	Other Notes
Physical Activity, Nutrition and Weight			
Sedentary lifestyle – no leisure-time physical activity in past month (Adults)	BRFSS	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)	YRBS	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 percent fruit juice.) per day during the past week.
Vegetable consumption among Adults 18+ (<1 serving per day)	BRFSS	2013	Adults with less than one serving per day of vegetables.
Substance and Alcohol Abuse			
Alcohol-induced mortality per 100,000 population	CDC/National Center for Health Statistics, National Vital Statistics System	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)	YRBS	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	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	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	NA	NA	Data not available.
Drug-induced mortality per 100,000 population	CDC/National Center for Health Statistics, National Vital Statistics System	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	NA	NA	Data not available.
Opiate poisoning (ED visits) per 100,000 population	NA	NA	Data not available.
Opiate poisoning (hospitalizations) per 100,000 population	NA	NA	Data not available.
Past-30-day alcohol use (High School Students)	YRBS	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)	NA	NA	Data not available.
Past-30-day marijuana use (Adults)	NA	NA	Data not available.

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Indicator	Data Source	Year(s)	Other Notes
Substance and Alcohol Abuse			
Past-30-day marijuana use (High School Students)	YRBS	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)	NA	NA	Data not available.
Past-30-day nonmedical use of prescription drugs (High School Students)	NA	NA	Data not available.
Prescription Monitoring Program opioid prescriptions (days supply/pop)	NA	NA	Data not available.
Substance-abuse hospital admissions per 100,000 population	NA	NA	Data not available.
Tobacco Use			
Current smoking (Adults)	BRFSS	2013	Adults that reported having smoked at least 100 cigarettes in their lifetime and currently smoke.
Current smoking (High School Students)	YRBS	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)	YRBS	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)	NA	NA	Data not available.

We wish to thank many people who provided input to this report.

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Maine Hospital Association
Maine Office of Substance Abuse and Mental Health Services
Maine Primary Care Association
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