

2019 Maine Shared
Community Health Needs Assessment

Aroostook County



Northern Light
HealthSM

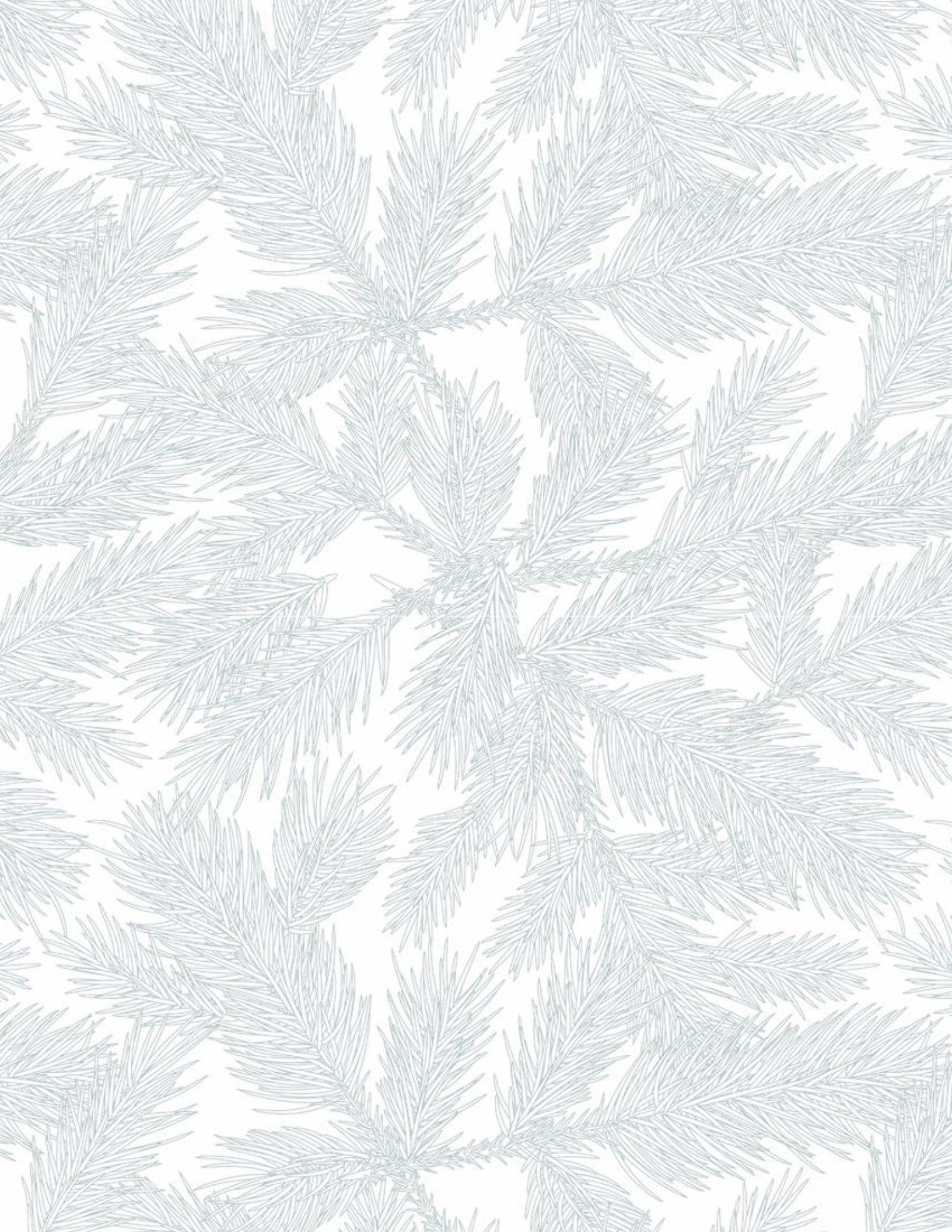


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Key companion documents available at www.mainechna.org:

- Aroostook County Health Profile
- Maine State Health Profile
- Health Equity Data Summaries, including state-level data by race, Hispanic ethnicity, sex, sexual orientation, educational attainment, and income

EXECUTIVE SUMMARY

PURPOSE

The Maine Shared Community Health Needs Assessment (Maine CHNA) is a collaborative effort amongst Central Maine Healthcare (CMHC), Northern Light Health (NLH), MaineGeneral Health (MGH), MaineHealth (MH), and the Maine Center for Disease Control and Prevention (Maine CDC). This unique public-private partnership is intended to assess the health needs of all who call Maine home.

- **Mission:** The Maine Shared CHNA is a dynamic public-private partnership that creates shared Community Health Needs Assessment reports, engages and activates communities, and supports data-driven health improvements for Maine people.
- **Vision:** The Maine Shared CHNA helps to turn data into action so that Maine will become the healthiest state in the US.

DEMOGRAPHICS

The Aroostook public health district covers all of Aroostook County. The population of Aroostook County is 69,405 and 21.3% of the population is 65 years or older. The population is predominantly white (95.2%); 1.6% are American Indian/Alaskan Native, 1.6% are two or more races, and 1.1% are Hispanic. The median household income is \$38,087, over \$10,000 less than the state average. The high school graduation rate (89.5%) is higher than the state overall, while the percent of the population with an associates' degree or higher (28.1%) is lower.

TOP HEALTH PRIORITIES

Forums held in Aroostook County identified a list of health issues in that community through a voting methodology. See Appendix C for a description of how priorities were chosen.

Table 1: Aroostook County Health Priorities

PRIORITY AREA	% OF VOTES
Physical Activity, Nutrition, and Weight*	18%
Mental Health*	18%
Substance Use*	13%
Access to Care*	10%
Older Adult Health/Healthy Aging*	9%
Cardiovascular Disease	6%

**Also a statewide priority. For a complete list of statewide priorities, see state health profile on our website, www.mainechna.org*

NEXT STEPS

This assessment report will be used to fulfill the Internal Revenue Service (IRS) requirements for non-profit hospitals as well as the Public Health Accreditation Board (PHAB) requirements for state and local public health departments. Required activities include:

- Obtaining input from the community, including providers and communities served, on leading health issues and unmet needs
- Evaluating previous actions taken to address needs identified in previous assessments
- Choosing (with justification) which health needs should be addressed
- For hospitals, creating an informed implementation strategy designed to address the identified needs
- For District Coordinating Councils, creating District Health Improvement Plans
- For the Maine CDC, creating an informed State Health Improvement Plan

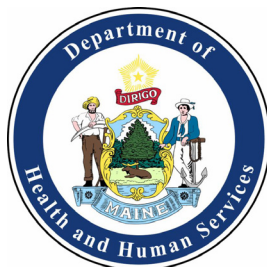
In the coming months and years, policymakers, non-profits, businesses, academics, and other community partners may also use these reports for their own strategic planning purposes.

ACKNOWLEDGEMENTS

Funding for the Maine Shared CHNA is provided by Central Maine Healthcare, Northern Light Health, MaineGeneral Health, and MaineHealth, with generous in-kind support from the Maine Center for Disease Control and Prevention, an office of the Department of Health and Human Services, and countless community partners and stakeholder groups. These stakeholder groups include the Metrics Committee, Data Analysis Workgroup, Community Engagement Committee, Local Planning Committees, and the Steering Committee. Special thanks to the Maine Health Data Organization for working with us to access their data. For a list of community members, please visit www.mainechna.org and click on “About Maine CHNA.”

Significant analysis was conducted by epidemiologists at the Maine Center for Disease Control and Prevention and the University of Southern Maine’s Muskie School of Public Service. John Snow, Inc. provided analysis, methodology, and design support.

In addition, the Steering Committee gratefully acknowledges the countless community volunteers who gave their time and passionately committed to hosting, facilitating, attending, and engaging in this effort. From Aroostook to York, Oxford to Washington County, almost 2,000 Mainers gave their time and talent to this effort. Thank you.



HEALTH PRIORITIES

Health priorities were developed through community participation and voting at community forums. The forums were an opportunity for review of the County Health Profile, discussion of community needs, and prioritization in small break-out sessions followed by a forum session vote. Table 2 lists all seventeen priorities which arose from group break-out sessions at forums held in Aroostook County. The priorities shaded are the six priorities which rose to the top.

This section provides a synthesis of findings for each of the bolded top priorities. The following discussion of each priority are from several sources including the data in the county health data profiles, the information gathered at community engagement discussions at the community forums, and key informant interviews. See Appendix C for the complete methodology for all of these activities.

Table 2: Aroostook County Forum Voting Results

PRIORITY AREA	% OF VOTES
Physical Activity, Nutrition, and Weight*	18%
Mental Health*	18%
Substance Use*	13%
Access to Care*	10%
Older Adult Health/Healthy Aging*	9%
Cardiovascular Disease	6%
Tobacco Use	5%
Diabetes	4%
Cancer	3%
Health Care Quality	2%
Respiratory Disease	2%
Medication (reconciliation, education, access)	2%
Children with Special Health Needs	1%
Intentional Injury	1%
Pregnancy and Birth Outcomes	1%
Unintentional Injury	1%
Social Determinants of Health	1%

**Also a statewide priority. For a complete list of statewide priorities, see state health profile on our website, www.mainechna.org*

PHYSICAL ACTIVITY, NUTRITION, AND WEIGHT

Lack of physical fitness and poor nutrition are among the leading risk factors associated with obesity and chronic health issues. Adequate nutrition helps prevent disease and is essential for the healthy growth and development of children and adolescents, while overall fitness and the extent to which people are physically active reduce the risk for many chronic conditions and are linked to good emotional health. Over the past two decades, obesity rates in the United States have doubled for adults and tripled for children. Overall, these trends have spanned all segments of the population, regardless of age, sex, race, ethnicity, education, income, or geographic region.

QUALITATIVE EVIDENCE

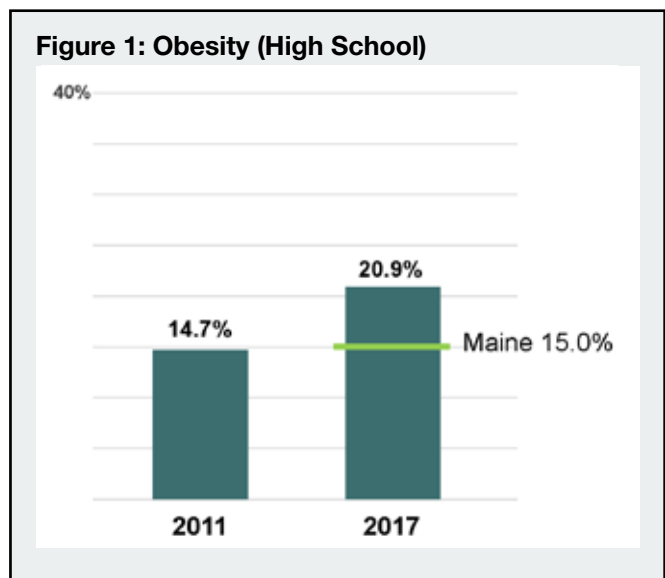
Aroostook identified poor nutrition, sedentary lifestyle, and lack of education around how to access and prepare healthy foods as the top priority health issue. The forum participants discussed addressing these risk factors to prevent development of chronic and complex conditions like diabetes, cardiovascular disease, and certain types of cancer.

Participants in community forums suggested activities or services that would address these issues, like better promotion and outreach around opportunities for physical activity, home economics and cooking classes to learn to prepare foods, and more nutritious free and low-cost food options. At a policy level, participants suggested that local employers increase insurance benefits for employee wellness initiatives, and offer nutrition assistance subsidies for local food production. Participants felt there were opportunities to address these issues in schools and recommended funding for after-school and summer meal programs.

QUANTITATIVE EVIDENCE

In Aroostook County:

- The percentage of adults who were obese was higher than the state overall (35.6% vs. 29.9%) in 2016.
- The percentage of high school students who were obese increased significantly between 2011 and 2017, from 14.7% to 20.9%. The percentage was significantly higher than the state overall (15.0%).
- The percentage of adults who lived a sedentary lifestyle with no leisure-time physical activity in the past month was significantly higher than the state overall (30.1% vs. 20.6%).
- The percentage of high school students who reported eating five or more fruits and vegetables a day was significantly lower than the state overall (11.8% vs. 15.6%) in 2017.



See Key Indicators on page 20 as well as companion Health Profiles on our website www.mainechna.org. Those documents also include information on data sources and definitions.

COMMUNITY RESOURCES TO ADDRESS PHYSICAL ACTIVITY, NUTRITION, AND WEIGHT

Table 3 is a summary of the assets and needs identified through the community engagement process, including review by local teams. It is important to note that this is not a complete list of available resources or existing needs in the community; other resources, like 211 Maine, and local/county resource guides should be referenced as a more comprehensive inventory.

Table 3: Assets and Gaps/Needs (Physical Activity, Nutrition, and Weight)

ASSETS	GAPS/NEEDS
<ul style="list-style-type: none"> • Nutrition education programs • Supplemental Nutritional Assistance Program Education (SNAP-Ed) in schools and community • Let's Go! • My Plate basics • Dietician consults and education conducted by hospital and Primary care • Endocrinology services • Healthy Houlton • Nutrition Assistance Programs: School Backpack program, Meals on Wheels, Food Banks, Community Cupboards, Farm Bucks, Senior Farm Share, Catholic Charities, Salvation Army, Friends of Aroostook, Adopt a Block, Frozen meals distributed post-discharge by local hospitals • Physical Activity: Winter Kids, Girls on the Run • Exercise facilities and classes (though some may be cost prohibitive) • School wellness teams • Local recreation departments 	<ul style="list-style-type: none"> • Insurance: Increased insurance benefits for employee wellness initiatives for small business < 100 employees; Payor sources reimbursing behavioral health interventions as part of primary care • Policy: Nutrition assistance subsidies for local healthy food production; Funding after-school and summer feeding programs; Less processed foods in schools; Remove cost as a barrier to activities/venues promoting physical activity • Education: Finance nutrition education programs for broader audiences (ex: parameters for Snap-Ed); increased education about the link between nutrition and health; Reinstitution of Home Economics classes; Cooking whole foods on a budget classes • Greater promotion of opportunities for physical activity • Support mental health component to overeating and sedentary lifestyle (ex: check in with a sponsor)

MENTAL HEALTH

Mental health affects all segments of the population, regardless of age, socioeconomic status, race/ethnicity, or gender. Mental health disorders, when left unmanaged, may affect an individual's ability to form and maintain relationships with others, cope with challenges, and lead a healthy and productive life. Individuals with serious mental illness (e.g., major depression or schizophrenia) are at a higher risk of developing other medical conditions, including cardiovascular disease, diabetes, stroke, and Alzheimer's disease. While the reason for this link is unclear, research suggests that those with mental illness may experience more barriers to medical care and prevention strategies may find it harder to care for themselves.¹

More than 25% of adults with a mental health disorder also have a substance use disorder; this comorbidity occurs more among adults with depression, anxiety disorders, schizophrenia, and personality disorders. While mental health conditions may lead to drug or alcohol use, the reverse can also be true—the use of certain substances may cause individuals to experience symptoms of a mental health disorder.²

QUALITATIVE EVIDENCE

Forum participants identified a need for more local providers, including clinicians, psychiatrists, and mid-level practitioners (e.g., nurse practitioners, physician's assistants) to address waitlists for behavioral health care. In the spectrum of care services, participants felt there was a need for more acute inpatient beds, outpatient resources, and telehealth options. Integrating behavioral health services with primary care was one suggestion to better meeting the needs of the population.

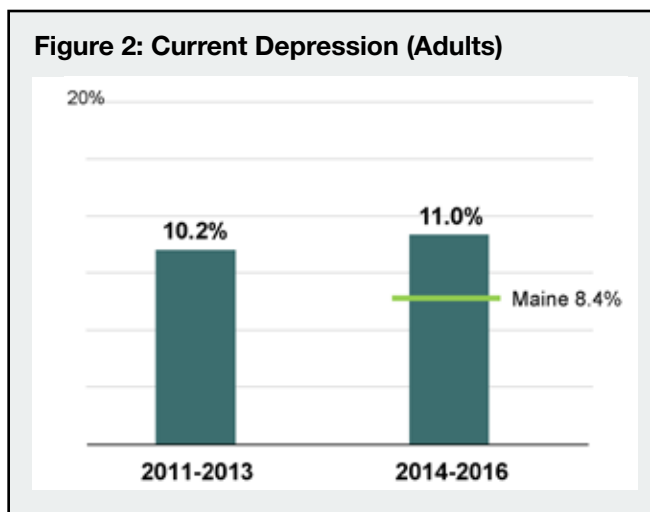
Participants also identified a need for individual and community-level support programs. Offering support groups in schools would improve access to services for youth. Supports for grandparents and caregivers, especially those caring for children as a result of substance use in the home or a traumatic event, was a missing community resource. Social supports like stable housing, access to transportation for services, and mentorship are especially important for adults who struggle with mental health issues.

Several participants identified stigma, or the disapproval or discrimination against a person based on a particular circumstance (e.g., mental health condition), as a major barrier to care. Community members called for more education around mental health issues to reduce the burden and stigma.

QUANTITATIVE EVIDENCE

In Aroostook County:

- The percentage of adults who reported that they lost 14 or more days due to poor mental health was significantly higher than the state overall (24.3% vs. 16.7%) in 2014-2016.
- The percentage of adults with current symptoms of depression was higher than the state overall (11% vs. 8.4%) in 2014-2016.
- The percentage of high school students who reported that they had been sad/hopeless for more than two weeks in a row increased between 2011 and 2017, from 22.6% to 28.3%.
- The ratio of psychiatrists to 100,000 population was 3.5, compared to 8.4 for the state overall, in 2017.



See Key Indicators on page 20 as well as companion Health Profiles on our website www.mainechna.org. Those documents also include information on data sources and definitions.

COMMUNITY RESOURCES TO ADDRESS MENTAL HEALTH

Table 4 is a summary of the assets and needs identified through the community engagement process, including review by local teams. It is important to note that this is not a complete list of available resources or existing needs in the community; other resources, like 211 Maine, and local/county resource guides should be referenced as a more comprehensive inventory.

Table 4: Assets and Gaps/Needs (Access to Care)

ASSETS	GAPS/NEEDS
<ul style="list-style-type: none"> • Quality providers • Aroostook Mental Health Center • Life by Design • Community Health and Counseling Services • Northern Lighthouse • Pines Health Services, Katahdin Valley Health Center, and Fish River Rural Health mental health providers/ teams • Telepsychiatry services • Northern Light AR Gould Hospital • School social workers • Behavioral Health Homes • Cognitive Behavioral Therapy (CBT) / Dialectical Behavioral Therapy (DBT) groups • Group homes • Crisis intervention available in the community 	<ul style="list-style-type: none"> • Access: Increased access for uninsured individuals; Increased number of local providers/clinicians/ psychiatrists/mid-levels to address waitlist issues; Increased insurance coverage for treatment of mental health conditions; Increased linkage to primary care; Increased availability of acute inpatient beds and outpatient mental health resources • Workforce: Increased partnering with all mental health agencies to meet the need, Increased utilization of telehealth services for mental health needs, Reimbursement of training costs • Social Supports: Support groups in schools (could also address healthy weight, substance use, and bullying); Supports for grandparents raising their grandchildren; Social supports (transportation, housing, mentorship, etc.) for vulnerable adults and those with mental health needs • Improved state process for involuntary admission • Increased instruction regarding coping skills • Normalization of mental health to reduce stigma

SUBSTANCE USE

The Substance Abuse and Mental Health Services Administration (SAMHSA) estimated that 8% of adults in the United States have had a substance use disorder in the past year.³ Tobacco, alcohol, marijuana, and nonmedical use of prescription pain relievers (e.g., OxyContin, Vicodin) are the leading substance use health issues for adults.⁴ Tobacco, alcohol, and marijuana are the most common substances misused by adolescents, followed by amphetamines (e.g., Adderall) and nonmedical use of prescription pain relievers.⁵ One study estimates that more than 50% of individuals with mental health and substance use issues are not engaged in needed services.⁶ Barriers to care include a lack of education, awareness, and understanding around the signs, symptoms, risk factors, and consequences associated with substance use, social stigma, and workforce shortages. Statewide, many forum participants and key informant interviewees identified gaps in access to substance use treatment and recovery services. Finally, those who are uninsured or underinsured are more likely to face barriers to care, and historically, coverage for substance use services has been less comprehensive than for physical health services. This is further complicated by the cost of co-pays, transportation, and medications, even for those who are eligible for free or discounted services, or for those with commercial insurance, as many private substance use treatment providers do not accept insurance and require cash payments.

QUALITATIVE EVIDENCE

Forum participants discussed the need to fund substance use prevention efforts in both schools and the community at-large, and felt they should start as early as possible (pre-kindergarten).

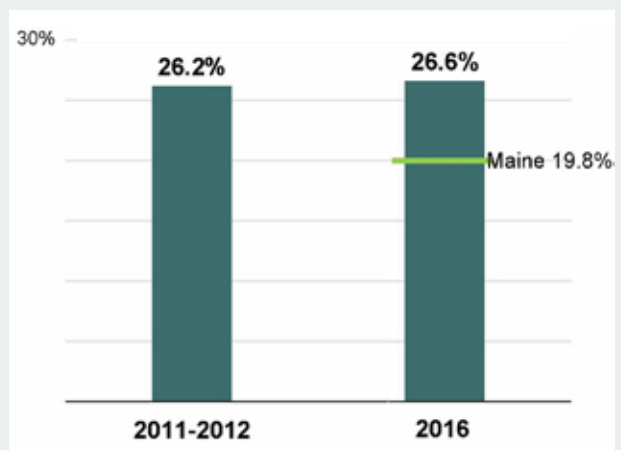
For those in need of substance use treatment, primary barriers discussed were the need for local residential care, medication-assisted treatment (MAT), and services that support patients through relapse and long term use. Key informants shared that the stigma attached to substance use disorder among communities and providers was a foundational barrier to access which requires community collaboration and engagement to address.

QUANTITATIVE EVIDENCE

In Aroostook County:

- The percentage of adults who currently smoke was significantly higher than the state overall (26.6% vs. 19.8%) in 2016.
- Past-30-day cigarette smoking among high school students was significantly higher than the state overall (13.4% vs. 8.8%) in 2017.
- Environmental tobacco smoke exposure among high school students (42.6%) and middle school students (30.7%) were significantly higher than the state overall (31.1% and 22.8%, respectively) in 2017.
- Overdose deaths per 100,000 population increased between 2007–2011 and 2012–2016, from 9.9 to 14.7.
- The percentage of high school students who reported binge drinking was significantly higher than the state overall (16.4% vs. 12.2%) in 2015.

Figure 3: Current Smoking (Adults)



See Key Indicators on page 20 as well as companion Health Profiles on our website www.mainechna.org. Those documents also include information on data sources and definitions.

COMMUNITY RESOURCES TO ADDRESS SUBSTANCE USE

Table 5 is a summary of the assets and needs identified through the community engagement process, including review by local teams. It is important to note that this is not a complete list of available resources or existing needs in the community; other resources, like 211 Maine, and local/county resource guides should be referenced as a more comprehensive inventory.

Table 5: Assets and Gaps/Needs (Substance Use)

ASSETS	GAPS/NEEDS
<ul style="list-style-type: none"> • Prevention work: Maine Substance Use Prevention Services grantees (Power of Prevention and Aroostook County Action Program, Inc. (ACAP), Drug-Free Communities, Community forums, Substance Abuse Resource guide/Directory • Treatment: Aroostook Mental Health Center, Medication Assisted Treatment, Residential Treatment Facility, Suboxone clinics, LADC/CADC providers, LMSW-C/LCSW providers • Community Support: Recovery Centers in Caribou (and Houlton shortly), Narcotics Anonymous/Alcoholics Anonymous support groups, Recovery Aroostook, Link for Hope • Workforce: Bachelor's of Science in Counseling offered by University of Maine at Fort Kent, Social Work degree offered at University of Maine at Presque Isle 	<ul style="list-style-type: none"> • Prevention: Increased funding for prevention; Prevention strategies for age birth and up; More prevention in schools • Treatment: Transition housing; structure/reimbursement for treatment services; treatment services; increased inpatient availability and outpatient follow-up and accountability; local residential care/methadone • Social Support: Greater access to sober house(s); jobs; advocacy for patients; Increased number of recovery coaches (potential opportunity for students)

ACCESS TO CARE

Timely and accessible preventive and disease management or follow-up services is critical to overall health and well-being. Access to a usual source of primary care greatly affects the individual's ability to receive regular preventive, routine, and urgent care and to manage chronic conditions. Though the percentage of uninsured individuals in Aroostook County has declined over time (from 10.5% in 2009–2011 to 9.5% in 2012–2016), lack of insurance and being underinsured remains a leading barrier to care in the region. Medicaid expansion, which holds the promise of providing health insurance coverage for an additional 70,000 Mainers, was signed into law on January 3, 2019.

Barriers to accessing care also include the availability and affordability of care. Low-income individuals, people of color, those with less than a high school diploma, and LGBTQ populations face even greater disparities in health insurance coverage compared to those who are heterosexual, white, and well-educated. For example, in Maine, over 20% of American Indian/Alaska Natives and Black/African American adults report they are unable to receive or have delayed medical care due to cost, compared to 10% of white adults. Compared to heterosexual residents (11.6%), 19.3% of bisexual residents, and 22.5% of residents who identified as something other than heterosexual, gay or lesbian, or bisexual, were uninsured.

More information on health disparities by race, ethnicity, education, sex, and sexual orientation can be found in the Health Equity Data Summaries, available at www.mainechna.org.

QUALITATIVE EVIDENCE

Many forum participants and key informants identified the social determinants of health—particularly the inability to access reliable and affordable forms of transportation—as significant barriers to care. For more details, please see the “Social Determinants of Health” section of this report.

Participants discussed the need for comprehensive and affordable health services, specifically primary care (open outside of regular working hours), dental care,

behavioral health, home health, and nursing homes.

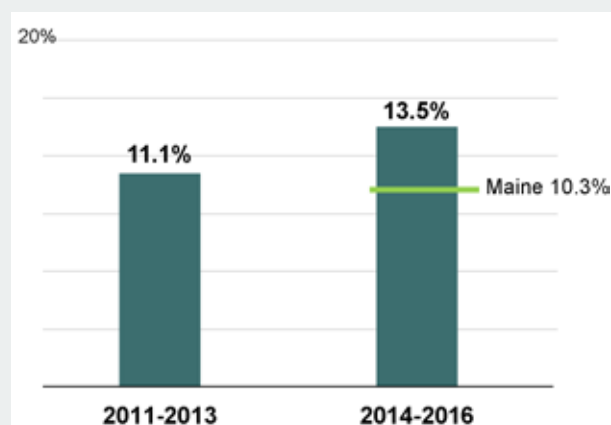
These forums were held before the expansion of Medicaid, which extended coverage to an additional 70,000 low-income adults throughout the state. However, even for those with insurance, deductibles, co-pays, and prescription medications are unaffordable and prevent people from seeking care.

QUANTITATIVE EVIDENCE

In Aroostook County:

- The percentage of the population who reported an inability to access healthcare due to cost was significantly higher than the state overall (13.5% vs. 10.3%) in 2014–2016.
- The ratio of primary care physicians to 100,000 population was 45.6, compared to 67.3 for the state overall in 2017.
- The percentage of adults who had a dental visit in the past year was lower than the state overall

Figure 4: Individuals Unable to Afford Healthcare Due to Cost



(57.7% vs. 63.3%) in 2016.

See Key Indicators on page 20 as well as companion Health Profiles on our website www.mainechna.org. Those documents also include information on data sources and definitions.

COMMUNITY RESOURCES TO ADDRESS ACCESS TO CARE

Table 6 is a summary of the assets and needs identified through the community engagement process, including review by local teams. It is important to note that this is not a complete list of available resources or existing needs in the community; other resources, like 211 Maine, and local/county resource guides should be referenced as a more comprehensive inventory.

Table 6: Assets and Gaps/Needs (Access to Care)

ASSETS	GAPS/NEEDS
<ul style="list-style-type: none"> • Insurance: MaineCare, Affordable Care Act • Patient Advocates: Healthcare navigators, Aroostook Agency on Aging (AAA) Medicare education Coordinator, Aroostook County Action Program (ACAP) Family Coaches, PCP Care managers, other Aroostook Agency on Aging (AAA) staff • Resources: Pathfinder resource directory, Public Health Nursing • Providers: Home Health agencies, Aroostook Regional Transportation System (ARTS) 	<ul style="list-style-type: none"> • Workforce: Greater availability at all levels of care (Home health, providers, care coordinators), increase home health workforce; recruitment/retention of providers • Policy: Increased funding for home-based / community-based care; improve insurance coverage; change on federal level so insurance is available for all; increased nursing home access • Extended hours • Transportation • Education on appropriate use of resources • Greater emphasis on medication education, reconciliation, affordability

OLDER ADULT HEALTH/HEALTHY AGING

The World Health Organization's definition of active aging and support services are those that "optimize opportunities for health, participation, and security in order to enhance quality of life as people age." Maine's older population is growing in all parts of the state, and it remains the oldest state in the nation as defined by median population—44.7 in 2017 compared to the national median age of 38. Gains in human longevity create an opportunity for active lives well after age 65. As this population grows in size, there is growing interest in wellness in addition to the infrastructure of health services for the older population.

QUALITATIVE EVIDENCE

Forum participants and key informants identified a need for more social opportunities to combat depression and isolation amongst older adults. Older adults experience loneliness for many reasons; it may come as a result of living alone; limited connections with family, friends, or communities; and impediments to living independently. Limited access to transportation is a key barrier to accessing health care but also hinders their ability to access other needed goods and services (e.g., groceries, prescriptions, physical activity).

The need for affordable and safe housing was another critical issue. While "aging in place" or aging in the home is a population concept, this may be impossible for some older residents, for financial, medical, or safety reasons. Social isolation becomes a more significant concern as aging in place becomes a preferred lifestyle. There were also concerns around home improvement/safety and falls prevention for those that remain in their homes.

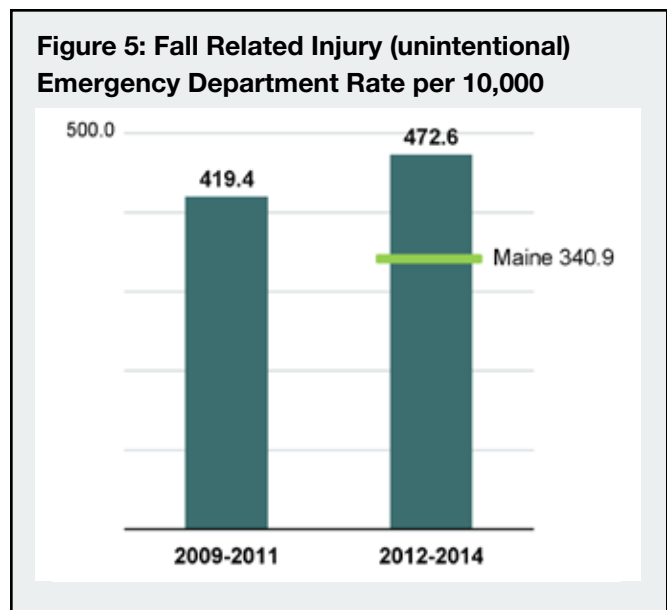
Finally, forum participants identified a need for more home health services, care coordination, and case management services. As many adults have multiple chronic conditions, care management is necessary to establish and monitor appointments, medication, and any interventions.

QUANTITATIVE EVIDENCE

In Aroostook County:

- The percentage of adults (45+) reporting a cognitive decline in the past 12 months was higher than the state overall (11.1%* vs. 10.3%) in 2016.
- The percentage of adults with arthritis was significantly higher than the state (36.4% vs. 32.0%) in 2014–2016.
- The fall-related injury (unintentional) emergency department rate per 10,000 increased significantly between 2009–2011 and 2012–2014, from 419.4 to 472.6. The rate was also significantly higher than the state overall (340.9).

**Due to small numbers, interpret with caution.*



See Key Indicators on page 20 as well as companion Health Profiles on our website www.mainechna.org. Those documents also include information on data sources and definitions.

COMMUNITY RESOURCES TO ADDRESS OLDER ADULT HEALTH/HEALTHY AGING

Table 7 is a summary of the assets and needs identified through the community engagement process, including review by local teams. It is important to note that this is not a complete list of available resources or existing needs in the community; other resources, like 211 Maine, and local/county resource guides should be referenced as a more comprehensive inventory.

Table 7: Assets and Gaps/Needs (Older Adult Health/Healthy Aging)

ASSETS	GAPS/NEEDS
<ul style="list-style-type: none"> • Aroostook Agency on Aging • Aroostook County Action Program, Inc. • U.S. Department of Agriculture • Personal support specialists • Legal services • Agency on Aging Day Care • More specialized providers • Personal support agencies • Meals on Wheels • Healthcare.org • Churches 	<ul style="list-style-type: none"> • Transportation • Care coordination • Staffing • Case management services so older adults don't get lost in the system • More social opportunities • Home visits for those who are homebound • Housing • Funding for home and community-based services • Housing improvement • Free education on health literacy • Fall prevention education • Increased home health and reimbursement

CARDIOVASCULAR DISEASE

Cardiovascular diseases are those that affect the structure or function of the heart, including coronary artery disease, heart attacks, arrhythmias, and cardiomyopathy. A number of health and behavioral risk factors, including obesity and physical inactivity, as well as the use of and environmental exposure to tobacco and alcohol, affects these conditions. Hypertension, or high blood pressure, increases the risk of more serious health issues, including heart failure, stroke, and other forms of major cardiovascular disease.

QUALITATIVE EVIDENCE

Forum participants discussed the need for nutrition education and support programs. Cardiac rehabilitation, follow-up education, and medication assistance were identified as critical needs for those with or recovering from cardiovascular disease.

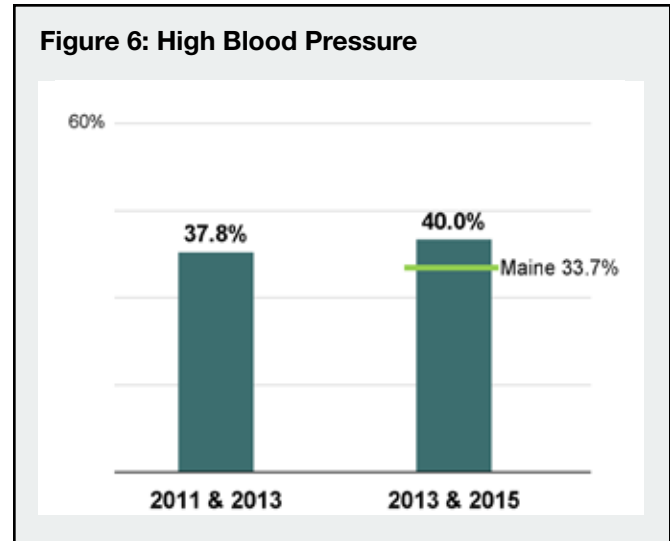
QUANTITATIVE EVIDENCE

In Aroostook County:

- The percentage of adults with high blood pressure was significantly higher than the state overall (40.0% vs. 33.7%) in 2013 and 2015.
- The rate of coronary heart disease deaths per 100,000 population was significantly higher than the state overall (106.3 vs. 84.1) in 2012–2016. It was also significantly higher than the national rate (94.3).
- The rate of heart attack deaths per 100,000 population was significantly higher than the state overall (35.9 vs. 26.0) in 2012–2016. It was also significantly higher than the national rate (29.1).
- The rate of heart attack hospitalizations per 10,000 population was significantly higher than the state

overall (34.2 vs. 23.4) in 2016.

See Key Indicators on page 20 as well as



companion Health Profiles on our website www.mainechna.org. Those documents also include information on data sources and definitions.

COMMUNITY RESOURCES TO ADDRESS CARDIOVASCULAR HEALTH

Table 8 is a summary of the assets and needs identified through the community engagement process, including review by local teams. It is important to note that this is not a complete list of available resources or existing needs in the community; other resources, like 211 Maine, and local/county resource guides should be referenced as a more comprehensive inventory.

Table 8: Assets and Gaps/Needs (Cardiovascular Health)

ASSETS	GAPS/NEEDS
<ul style="list-style-type: none"> • Cardiologists (Northern Light AR Gould Hospital) • Cardiac Rehab departments at Northern Light AR Gould Hospital and Cary Medical Center • Million Hearts Movement • Blood pressure clinics/telemetry programs • Educational offerings • Healthy You 	<ul style="list-style-type: none"> • Additional opportunities for Cardiac rehabilitation across all regions of the District • Nutrition support • Follow-up education • Medication assistance

COMMUNITY CHARACTERISTICS

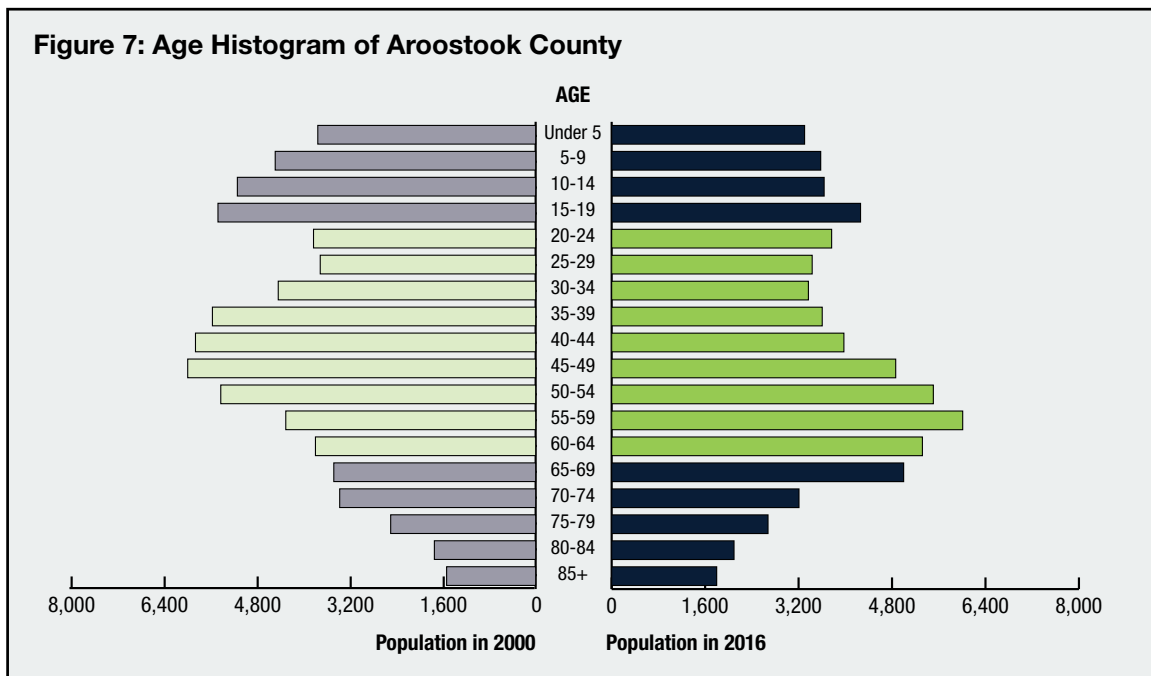
AGE DISTRIBUTION

Age is a fundamental factor to consider when assessing individual and community health status; older individuals typically have more physical and mental health vulnerabilities and are more likely to rely on immediate community resources for support compared to young people.⁷ With an aging population comes increased pressure on the healthcare system and shortages in the healthcare workforce, especially geriatricians, nurses, social workers, and direct care workers like home health aides and certified nursing assistants, to meet the needs of older adults.⁸

The following is a summary of findings related to community characteristics for Aroostook County. Conclusions were drawn from quantitative data and qualitative information collected through forums and key informant interviews.

For key companion documents visit www.mainechna.org and click on “Health Profiles.”

- In Aroostook County, 21.3% of the population was 65 years or older.



RACE/ETHNICITY

An extensive body of research illustrates the health disparities that exist for racial/ethnic minorities, non-English speakers, and foreign-born populations. According to the US Center for Disease Control, non-Hispanic Blacks have higher rates of premature death, infant mortality, and preventable hospitalization than non-Hispanic Whites.⁹ Individuals with limited English proficiency (LEP), defined as the ability to read, speak, write, or understand English “less than very well,” have lower levels of health literacy or

comprehension of medical information. This leads to higher rates of medical issues and complications, such as adverse reactions to medication.^{10,11} Cultural differences such as, but not limited to, the expectations of who is involved in medical decisions can also impact access to health care and to health information. These disparities show the disproportionate and often avoidable inequities that exist within communities and reinforce the importance of understanding the demographic makeup of a community to identify populations more likely to experience adverse health outcomes.

In Aroostook County:

- The population is predominantly White (95.2%); 1.6% of the population are two or more races, and 1.1% of the population is Hispanic.
- Aroostook County has 1,144 American Indian residents, 1.6% of the total population, and is also home to one of four federally recognized Tribes of Maine, the Aroostook Band of Micmacs.

Table 9: Race/Ethnicity in Aroostook County 2012–2016

	PERCENT/NUMBER
American Indian/Alaskan Native	1.6% / 1,144
Asian	0.5% / 320
Black/African American	0.9% / 597
Hispanic	1.1% / 736
Some other race	0.2% / 161
Two or more races	1.6% / 1,122
White	95.2% / 66,055

SOCIOECONOMIC STATUS

Socioeconomic status (SES) is measured by such things as income, poverty, employment, education, and neighborhood characteristics. Individuals with low SES are more likely to have chronic health issues, die prematurely, and have overall poor health. Low-income status is highly correlated to a lower than average life expectancy¹². Lack of gainful employment is linked to several barriers to care, such as lack of health insurance, inability to pay for health care services, and inability to pay for transportation to receive services. Higher education is associated with improved health outcomes and social development at individual and community levels¹³. The health benefits of higher education typically include better access to resources, safer and more stable housing, and better engagement with providers. Factors associated with low education impact an individual’s ability to navigate the healthcare system, disparities in personal health behaviors, and exposure to chronic stress. It is important to note that, while education affects health, poor health status may also be a barrier to education. Table 10 includes a number of data points comparing Aroostook County to the state overall.

Additionally, in Aroostook County:

- The estimated high school graduation rate was higher than the state overall (89.5% vs. 86.9%) in 2017.
- The percent of the population over 25 with an associates’ degree or higher was lower than the state overall in 2012–2016 (28.1% vs. 37.3%).

Table 10: Socioeconomic Status

	AROOSTOOK/MAINE
Median household income	\$38,087 / %50,826
Unemployment rate	5.5% / 3.8%
Individuals living in poverty	17.7% / 13.5%
Children living in poverty	23.6% / 17.2%
65+ living alone	47.7% / 45.3%

SPECIAL POPULATIONS

Through community engagement activities, several populations in Aroostook County were identified as being particularly vulnerable or at-risk for poor health or health inequities.

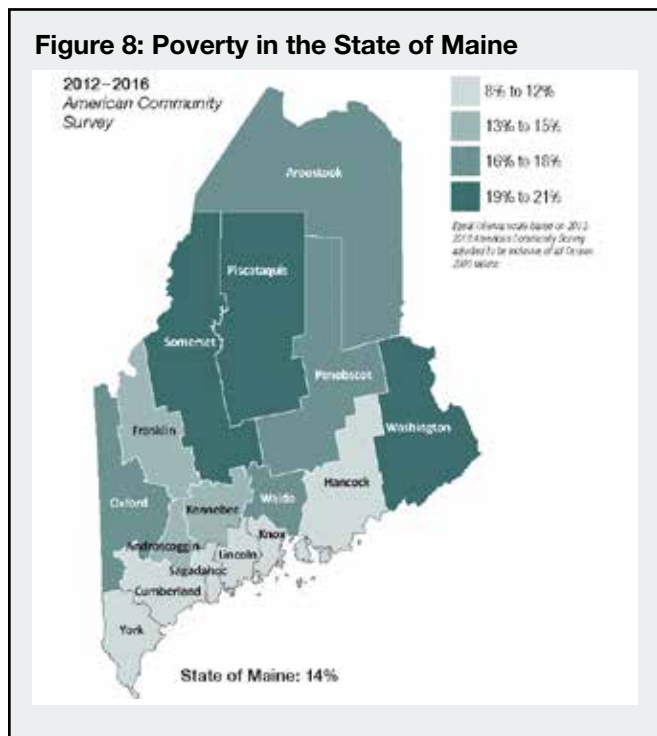
Older Adults

Maine is the oldest state in the nation by median age. Older adults are more likely to develop chronic illnesses and related disabilities, such as heart disease, hypertension, diabetes, depression, anxiety, Alzheimer’s disease, Parkinson’s disease, and dementia. They also lose the ability to live independently at home. According to qualitative information gathered through interviews and forums, issues around the health of older adults and healthy aging were priorities in Aroostook County—specifically barriers to access to care for older adults, including lack of transportation, inability to pay for needed healthcare services/high cost of medications, depression/isolation, and lack of home health services.

Low-Income/Rural

Nationally, an ever-evolving economic structure has placed extra strain on individuals and families living in large rural areas with low population density; some of the most well-known causes and conditions of hardship include a lack of and outsourcing of jobs, limited long-term employment opportunities, barriers to accessing health care services, and the need for a personal vehicle. Generational poverty—when a family has lived in poverty for at least two generations—differs from situational poverty in that it typically includes the constant presence of hopelessness. This lack of hope and a near-constant state of perpetual crisis creates a cycle of poverty that persists from one generation to the next. Forum participants in Aroostook County identified low-income individuals, families, and older adults as populations that were particularly vulnerable to poor health.

In addition to the data collected and analyzed for the County Health Profiles, the Maine CDC created Health Equity Data Summaries (available at www.mainechna.org) which provides selected data analyzed by sex, race, ethnicity, sexual orientation, education, and income. These data are at the state level, as much of the county level data would be suppressed due to small numbers and privacy concerns, and the previous analyses have shown that health disparities found at the state level are generally similar in individual counties.



KEY INDICATORS

The Key Indicators provide an overview of the health of each county. They are a broad sampling of health topics, including health behaviors, outcomes, living conditions, and health care quality and access. See the Aroostook County Health Profile for a full set of data. The table uses symbols to show whether there are important changes in each indicator over time and to show if local data is notably better or worse than the state or the nation. See the box below for a key to the symbols:

CHANGE shows **statistically significant changes** in the indicator over time, based on 95% confidence interval (see description above).

- ★ means the health issue or problem is **getting better** over time.
- ! means the health issue or problem is **getting worse** over time.
- means the change was not statistically significant.
- N/A means there is not enough data to make a comparison.

BENCHMARK compares Aroostook County data to state and national data, based on 95% confidence interval (see description above).

- ★ means Aroostook County is doing **significantly better** than the state or national average.
- ! means Aroostook County is doing **significantly worse** than the state or national average.
- means there is no statistically significant difference between the data points.
- N/A means there is not enough data to make a comparison.

ADDITIONAL SYMBOLS

- * means results may be statistically unreliable due to small numbers, use caution when interpreting.
- means data is unavailable because of lack of data or suppressed data due to a small number of respondents.

	AROOSTOOK COUNTY DATA			BENCHMARKS			
KEY INDICATOR	POINT 1	POINT 2	CHANGE	MAINE	+/-	U.S.	+/-
SOCIAL, COMMUNITY & PHYSICAL ENVIRONMENT							
Children living in poverty	2007-2011 21.6%	2012-2016 23.6%	N/A	2012-2016 17.2%	N/A	2016 21.1%	N/A
Median household income	2007-2011 \$37,138	2012-2016 \$38,087	N/A	2012-2016 \$50,826	N/A	2016 \$57,617	N/A
Estimated high school student graduation rate	2014 88.1%	2017 89.5%	N/A	2017 86.9%	N/A	—	N/A
Food insecurity	2012-2013 16.9%	2014-2015 16.9%	N/A	2014-2015 15.1%	N/A	2015 13.4%	N/A
HEALTH OUTCOMES							
14 or more days lost due to poor physical health	2011-2013 27.3%	2014-2016 26.5%	○	2014-2016 19.6%	!	2016 11.4%	N/A
14 or more days lost due to poor mental health	2011-2013 22.1%	2014-2016 24.3%	○	2014-2016 16.7%	!	2016 11.2%	N/A
Years of potential life lost per 100,000 population	2010-2012 7,400.7	2014-2016 7,808.6	○	2014-2016 6,529.2	!	2014-2016 6,658.0	N/A
All cancer deaths per 100,000 population	2007-2011 199.6	2012-2016 174.7	★	2012-2016 173.8	○	2011-2015 163.5	○
Cardiovascular disease deaths per 100,000 population	2007-2011 239.6	2012-2016 221.5	○	2012-2016 195.8	!	2016 218.2	○
Diabetes	2011-2013 14.2%	2014-2016 13.0%	○	2014-2016 10.0%	!	2016 10.5%	○
Chronic obstructive pulmonary disease (COPD)	2011-2013 10.5%	2014-2016 11.1%	○	2014-2016 7.8%	!	2016 6.3%	!
Obesity (adults)	2011 34.2%	2016 35.6%	○	2016 29.9%	○	2016 29.6%	○
Obesity (high school students)	2011 14.7%	2017 20.9%	!	2017 15.0%	!	—	N/A
Obesity (middle school students)	2015 17.9%	2017 15.8%	○	2017 15.3%	○	—	N/A
Infant deaths per 1,000 live births	2007-2011 5.5*	2012-2016 9.0	○	2012-2016 6.5	○	2012-2016 5.9	!
Cognitive decline	2012 19.2*%	2016 11.1*%	○	2016 10.3%	○	2016 10.6%	○
Lyme disease new cases per 100,000 population	2008-2012 12.5	2013-2017 8.4	N/A	2013-2017 96.5	N/A	2016 11.3	N/A
Chlamydia new cases per 100,000 population	2008-2012 141.5	2013-2017 182.7	N/A	2013-2017 293.4	N/A	2016 494.7	N/A
Fall-related injury (unintentional) emergency department rate per 10,000 population	2009-2011 419.4	2012-2014 472.6	!	2012-2014 340.9	!	—	N/A
Suicide deaths per 100,000 population	2007-2011 13.7	2012-2016 21.4	○	2012-2016 15.9	○	2016 13.5	!
Overdose deaths per 100,000 population	2007-2011 9.9	2012-2016 14.7	○	2012-2016 18.1	○	2016 19.8	○

KEY INDICATOR	AROOSTOOK COUNTY DATA			BENCHMARKS			
	POINT 1	POINT 2	CHANGE	MAINE	+/-	U.S.	+/-
HEALTH CARE ACCESS AND QUALITY							
Uninsured	2009-2011 10.5%	2012-2016 9.5%	N/A	2012-2016 9.5%	N/A	2016 8.6%	N/A
Ratio of primary care physicians to 100,000 population	—	2017 45.6	N/A	2017 67.3	N/A	—	N/A
Ratio of psychiatrists to 100,000 population	—	2017 3.5	N/A	2017 8.4	N/A	—	N/A
Ratio of practicing dentists to 100,000 population	—	2017 24.8	N/A	2017 32.1	N/A	—	N/A
Ambulatory care-sensitive condition hospitalizations per 10,000 population	—	2016 95.3	N/A	2016 74.6	N/A	—	N/A
Two-year-olds up-to-date with recommended immunizations	2014 84.9%	2017 86.0%	N/A	2017 73.7%	N/A	—	N/A
HEALTH BEHAVIORS							
Sedentary lifestyle – no leisure-time physical activity in past month (adults)	2011 27.0%	2016 30.1%	○	2016 20.6%	!	2016 23.2%	N/A
Chronic heavy drinking (adults)	2011-2013 4.7%	2014-2016 5.8%	○	2014-2016 7.6%	○	2016 5.9%	N/A
Past-30-day alcohol use (high school students)	2011 26.9%	2017 23.1%	○	2017 22.5%	○	—	N/A
Past-30-day alcohol use (middle school students)	2011 5.2%	2017 5.6%	○	2017 3.7%	○	—	N/A
Past-30-day marijuana use (high school students)	2011 16.7%	2017 14.5%	○	2017 19.3%	★	—	N/A
Past-30-day marijuana use (middle school students)	2011 4.0%	2017 4.5%	○	2017 3.6%	○	—	N/A
Past-30-day misuse of prescription drugs (high school students)	2011 5.2%	2017 5.4%	○	2017 5.9%	○	—	N/A
Past-30-day misuse of prescription drugs (middle school students)	2011 2.2%	2017 1.7%	○	2017 1.5%	○	—	N/A
Current (every day or some days) smoking (adults)	2011-2012 26.2%	2016 26.6%	○	2016 19.8%	!	2016 17.0%	N/A
Past-30-day cigarette smoking (high school students)	2011 16.8%	2017 13.4%	○	2017 8.8%	!	—	N/A
Past-30-day cigarette smoking (middle school students)	2011 4.8%	2017 3.5%	○	2017 1.9%	○	—	N/A

Leading Causes of Death

The following chart compares the leading causes of death for the state of Maine and Aroostook County.

RANK	STATE OF MAINE	AROOSTOOK COUNTY
1	Cancer	Cancer
2	Heart disease	Heart disease
3	Chronic lower respiratory diseases	Chronic lower respiratory diseases
4	Unintentional injuries	Unintentional injuries
5	Stroke	Stroke

APPENDIX A: REFERENCES

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APPENDIX B: HISTORY AND GOVERNANCE

Maine is one of the few states in the nation that conducts a shared public-private statewide community health needs assessment—the Maine Shared CHNA—which was born out of a unique public-private partnership. The partnership began as the OneMaine Health Collaborative in 2007, involving Northern Light Health (formerly Eastern Maine Healthcare Systems), MaineGeneral Health, and MaineHealth. After conversations with the Statewide Coordinating Council for Public Health, the Maine Center for Disease Control and Prevention, an office of the Department of Health and Human Services joined in 2012. In 2013, Central Maine Healthcare (CMHC) joined the group and in 2014, leadership from the signatory partners signed a formal Memorandum of Understanding outlining mutual goals and expectations. A charter was drafted by all five partners to guide a statewide assessment process.

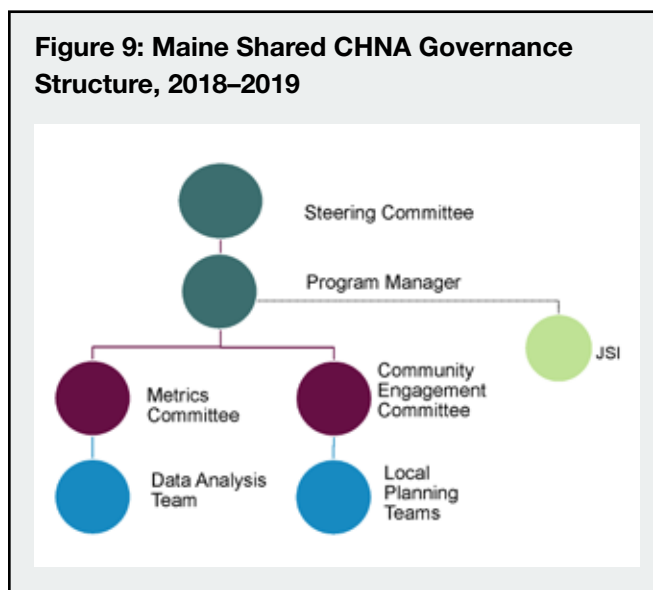
The Maine Shared CHNA is intended to coordinate state and county needs assessments to meet the needs of hospitals, to support state and local public health accreditation efforts, and to provide valuable population health assessment data for a wide variety of organizations across Maine. Our vision is to turn data into action so that Maine will become the healthiest state in the nation.

The Metrics Committee drafted the list of data indicators, and the Community Engagement Committee drafted a method to ensure a robust community engagement process—both of which were approved by the Steering Committee. Each committee was led by the Program Manager, who was the primary point of contact for all entities and partners and was responsible for drafting and implementing the work plans which drove this process. A more detailed outline of these efforts follows. For more information about the committee structure and our partners, please visit the, "About Us" page on our website www.mainechna.org.

The Metrics Committee is charged with updating the common set of health indicators; developing the preliminary data analysis plan; reviewing indicators on emerging health issues; making recommendations for

annual data-related activities; and estimating projected costs associated with these recommendations. Members of the Metrics Committee create processes and deliverables for the Steering Committee to review and approve. Members of the Metrics Committee include representatives of the Steering Committee, public health system partners, Federally Qualified Health Centers, academia, non-profits, and others with experience in epidemiology.

Figure 9: Maine Shared CHNA Governance Structure, 2018–2019



The Community Engagement Committee is charged with making recommendations for approval by the Steering Committee outlining a consistent and robust community engagement process. This process should outline methods of disseminating shared CHNA state and county-level results; identifying priorities among significant health issues; and identifying local, regional, or statewide assets and resources that may potentially address the significant health needs identified. Members of the Community Engagement Committee share their expertise create processes and deliverables for the Steering Committee to review and approve. Members of the Community Engagement committee include representatives of the Steering Committee, public health system partners, Federally Qualified Health Centers, academia, and Maine non-profits such as United Ways, Community Action Programs, and others with an interest in broad community representation and input..

APPENDIX C: METHODOLOGY

Per the Maine Shared CHNA charter, the effort was conducted by the Steering Committee, Metrics Committee, and Community Engagement Committee. The Community Engagement Committee was led by the program manager who was the point of contact for all entities and partners and was responsible for meeting planning and facilitation. These committees worked in partnership with the Maine CDC and the contracted vendor, JSI. Maine CDC and its epidemiology contractor, University of Southern Maine, provided a significant amount of data analyses, technical support, and website development. JSI was contracted to support forum facilitation, a subset of data analysis, profile development, and report writing.

The Maine Shared CHNA process was rolled out in three stages:

Data Analysis

- **County Health Profiles** were released in September 2018. Two hundred indicators were selected to describe health outcomes, health behaviors, healthcare access and quality, and the social, community, and physical environments that affect health and wellness.
- **District Health Profiles** were released in November 2018.
- **City Health Profiles** for Lewiston/Auburn, Bangor, and Portland were released in January 2019.

Outreach and Engagement

- **Community outreach** was conducted between September 2018 and January 2019. Community forums with residents and service providers were held in all 16 counties. All forms of engagement included forums and key informant interviews. Some local planning teams also conducted additional targeted outreach, focus groups, and surveys. The purpose of this outreach was to gather feedback on data and to identify health priorities, community assets, and gaps in resources to be used in health improvement planning.

Final Reports

- **Final CHNA reports** for the state, each county, and districts were released in April 2019. These reports included information from the health data profiles, summaries of qualitative information gathered from engagement activities, and a presentation of community health priorities.

DATA ANALYSIS

The Metrics committee identified the approximately 200 health indicators from over 30 sources to be used for the Maine Shared CHNA. The initial list was based on the indicators from the 2016 effort. This list was first scored against the following set of criteria:

- Was it already analyzed for a MeCDC program?
- Is the data from this indicator collected within the last few years?
- Does it “round out” the description of population health?
- Does it address one or more social determinants of health?
- Describe an emerging health issue?
- Does it measure something “actionable” or “impactful”?
- Does the indicator measure an issue that is known to have high health and social costs?

Further refinement included ensuring a mix of Outcomes, Behaviors, Healthcare Access and Quality, as well as Social, Community, and Physical Environment Measures. The final list was then arranged under the current 24 health topics as outlined in the Data Health Profiles.

The Metrics Committee, led by Maine CDC staff, then drafted a data analysis plan that included which indicator was to be analyzed by which demographic characteristics (i.e. gender, race/ethnicity, sexual orientation, income, educational attainment, and insurance status), and geographic stratification (state, public health district, county, and city). This analysis plan was then approved by the Steering Committee.

The **Data Analysis Workgroup** used the set of indicators and the data analysis plan, as laid out by the Metrics Committee, and collected and analyzed the data. Members of the Data Analysis Workgroup shared their years of epidemiological and data analysis experience and knowledge of best practices to inform all aspects of the final health profiles at the county, public health district, city, and state level. This included not only the data analysis but recommendations on best practices for data presentation and visualization.

The Data Analysis Workgroup met weekly from March through August 2018 to discuss and coordinate an approach for analysis and data sharing between the University of Southern Maine (USM), Maine CDC, and John Snow, Inc. (JSI). The group developed rules regarding time frame (e.g., comparisons across time were to be of periods of equal duration; the most recent data used was from 2010 to present), handling complexity (e.g., how to combine years of data when an indicator's data definition changed over time, such as ICD9/ICD10 coding or BRFSS question changes), benchmarking, map and graph formats, and iconography to be used in profile tables. Some of the methodologies are documented in the Data Definitions section of each health profile. More is provided in the "2018 Maine Shared CHNA Data Analysis Technical Definitions" posted on the Maine Shared CHNA website.

OUTREACH AND ENGAGEMENT

Community outreach and engagement for the Maine Shared CHNA included coordination at both the statewide, public health district, and county level. The statewide Community Engagement Committee met monthly from March 2018 through January 2019 to review and provide input on every aspect of engagement process.

In addition to the state-level Community Engagement Committee, a **Local Community Engagement Planning Committee** in each of Maine's 16 counties planned and implemented the logistics of community forums and events within each district. These committees were comprised of hospitals, public health district liaisons, and a variety of additional partners.

Data Health Profiles include:

- 1 State Health Profile
- 16 County Health Profiles
- 5 Public Health District Profiles (One for each of the geographically-based multi-county district. A Tribal District Profile was not possible at this time.)
- 3 City Health Profiles (Bangor, Lewiston/Auburn, and Portland)
- 6 Health Equity Data Sheets, one for each of the following demographic characteristics:
 - Sex
 - Race
 - Hispanic ethnicity
 - Sexual orientation
 - Educational attainment
 - Insurance status

These reports, along with an interactive data form, can be found under the Health Profiles tab at www.mainechna.org.

The 2018 Community Engagement Toolkit was designed to assist the Local Community Engagement Planning Committees in this effort.

Forums and Health Priorities

Criteria for visualizing data included areas identified as a health priority in the last CHNA, significant changes in the data over time, or where a county's data was notably better or worse than the state or the nation. Forum agenda items included remarks from health leaders; a review of previous health improvement efforts; a review of county-level data, discussion, and prioritization in small groups; and an overall forum-wide voting process. The Community Engagement and Steering Committees created and approved a rubric to guide the selection criteria for the subset of data to be presented in each forum's PowerPoint presentations.

Small groups had 35-45 minutes to discuss the data in the presentation and the full county profile, and to share their own experiences in order to identify their top county health priorities. Table facilitators guided these discussions using key questions and worksheets

for reporting purposes. Health priorities identified during these small groups were collated and presented to the larger plenary session, where each attendee voted for their top four priorities. Votes were tallied and a hierarchy emerged.

The summary votes for each forum were used to develop the county level priorities. If multiple forums were held in a county, the forum results for forums held with the general community were included in the total votes for the county. In cases where a forum was held with a specific population, for example, LGBTQ youth or older adults, then the results of their voting and discussion were included in the section describing the needs of that particular population. To arrive at the

top countywide community health issues, votes from the broad community forums were combined for each of the priority areas to identify priority areas which fell within 70% of the combined voting total.

The community forum participants also shared knowledge on gaps and assets available in their communities to address each of the top four priorities identified. The information gathered in this report is a start for further asset and gap mapping for each priority selected by the county.

Aroostook County Forums

Three community engagement activities were held in Aroostook County (Table 11).

Table 11: Community engagement activities in Aroostook County, 2018

TYPE OF ENGAGEMENT	LOCATION & DATE	FACILITATOR	ATTENDEES
Community Forum	Fort Kent 09/17/2018	JSI	21
Community Forum	Houlton 09/17/2018	JSI	17
Community Forum	Presque Isle 09/17/2018	JSI	38

COMMUNITY ENGAGEMENT

Persons representing broad interests of the community who were consulted during the engagement process:

- Aroostook Agency on Aging
- Aroostook County Action Program
- Aroostook County Health Network/ Pines Health Services
- Aroostook Mental Health Center
- Aroostook Public Health District
- Aroostook Substance Abuse Prevention
- Cary Medical Center
- Community Member
- E.D. Bells
- Fiddlehead Focus
- Fish River Rural Health
- Greater Fort Kent Chamber of Commerce
- Health Services Foundation
- Hope and Justice Project
- Houlton Family Practice and Pain Clinic
- Houlton-Pediatrics-Houlton Regional Hospital
- Houlton Regional Hospital
- Houlton Regional Hospital and Link for Hope
- Katahdin Valley Health Center
- Kristen Wells Consulting
- Life by Design
- Maine CDC
- Maine CDC – Public Health Nursing
- MSAD #27
- Northern Light Health
- Northern Light Acadia Healthcare
- Northern Light Acadia Hospital
- Northern Light AR Gould Hospital
- Northern Light Home Care & Hospice
Northern Maine Community College
- Northern Maine Medical Center
- Power of Prevention
- Presque Isle Star-Herald
- St. John Valley Pediatrics
- Seniors Achieving Greater Education

- The Northern Lighthouse, Inc.
- United Way of Aroostook
- University of Maine Cooperative Extension

Key informant interviews

The Steering Committee identified ten categories of medically underserved and vulnerable populations to ensure their input was heard and captured. A list of 80 potential interview subjects was created with statewide input. Selected key informants either had lived experience in or had worked for an organization that focused on providing services or advocacy to a population. No Tribal representatives were able to be interviewed. In the future, we hope to include this important group in the CHNA process. The populations identified included:

- Veterans
- Tribal communities
- Adults ages 65 and older who are isolated or have multiple chronic conditions
- Non-English speakers, undocumented individuals, immigrants, and refugees
- Deaf individuals and those with other physical disabilities
- Adolescents/youth
- LGBTQ
- People with mental health conditions and developmental disabilities
- Rural individuals
- Individuals in substance use disorder recovery/substance use disorder prevention and treatment professionals

The following is a list of organizations who participated in Key Informant Interviews conducted both by JSI and local planning committee members:

- Alpha One
- Androscoggin Home Healthcare + Hospice
- Bingham Foundation
- Cary Medical Center

- Catholic Charities of Maine
- Community Concepts
- Community Caring Collaborative
- Edmund Ervin Pediatric Center, MaineGeneral Health
- EqualityMaine
- Family Medicine Institute
- Frannie Peabody Center
- Greater Portland Council of Governments
- Healthy Acadia
- Healthy Androscoggin
- Healthy Communities of the Capitol Area
- Kennebec Valley Council of Governments
- Long Creek Youth Development Center
- Maine Access Immigrant Network
- Maine Alliance for Addiction and Recovery
- Maine Alliance to Prevent Substance Abuse
- Maine Chapter Multiple Sclerosis Society
- Maine Council on Aging
- Maine Migrant Health
- Maine Seacoast Mission
- Millinocket Chamber of Commerce
- National Alliance on Mental Illness
- Nautilus Public Health
- Northern Light Maine Coast Hospital
- Office of Aging and Disability Services
- Penquis Community Action Agency
- Portland Public Health
- Seniors Plus
- Sunrise Opportunities
- Tri-County Mental Health Services
- United Ambulance Service
- Veterans Administration Maine Healthcare System
- York County Community Action Corporation

The key informant interview guide was developed with input from the Community Engagement and Steering Committee members and consisted of the following five questions.

- We are interested in learning more about the priority health needs for this population (reference population(s) of expertise of interviewee). How would you characterize the health needs for this population? How are they different than for the general population?
- From where you sit and the work you do, what do you feel are the most important health needs to address? Why?
- What do you see as the major resource gaps with respect to health and wellness for this population?
- Are you currently working on anything that contributes to community health and wellness for this population? Are there any areas of health you would like to work on in partnership with others?
- Are there any particular assets or resources to address the needs of this population that can be leveraged?

Thirty-one interviews were conducted by JSI and 11 by members of Local Community Engagement Planning Committees. Information gathered from the key informant interviews is included in discussions where applicable in the county level report within each of the county priorities. For example, when discussing substance use, a discussion of the needs of vulnerable populations within this priority was also included. The state level report provides a summary of key findings from these interviews for each of the ten vulnerable populations.

Data collection

All outcomes from these efforts were collected via the Community Outreach Reporting Tool or the Key Informant Reporting tool. Both of these collection tools were online surveys within Survey Monkey. Other data collection tools included Table Facilitators notes, forum registrations, and sign-ins.

FINAL REPORTS

Integrated analysis of all quantitative and qualitative activities and findings was conducted between December 2018 and January 2019. These were used to develop a full description of the risk factors underlying the health priorities for each county.

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