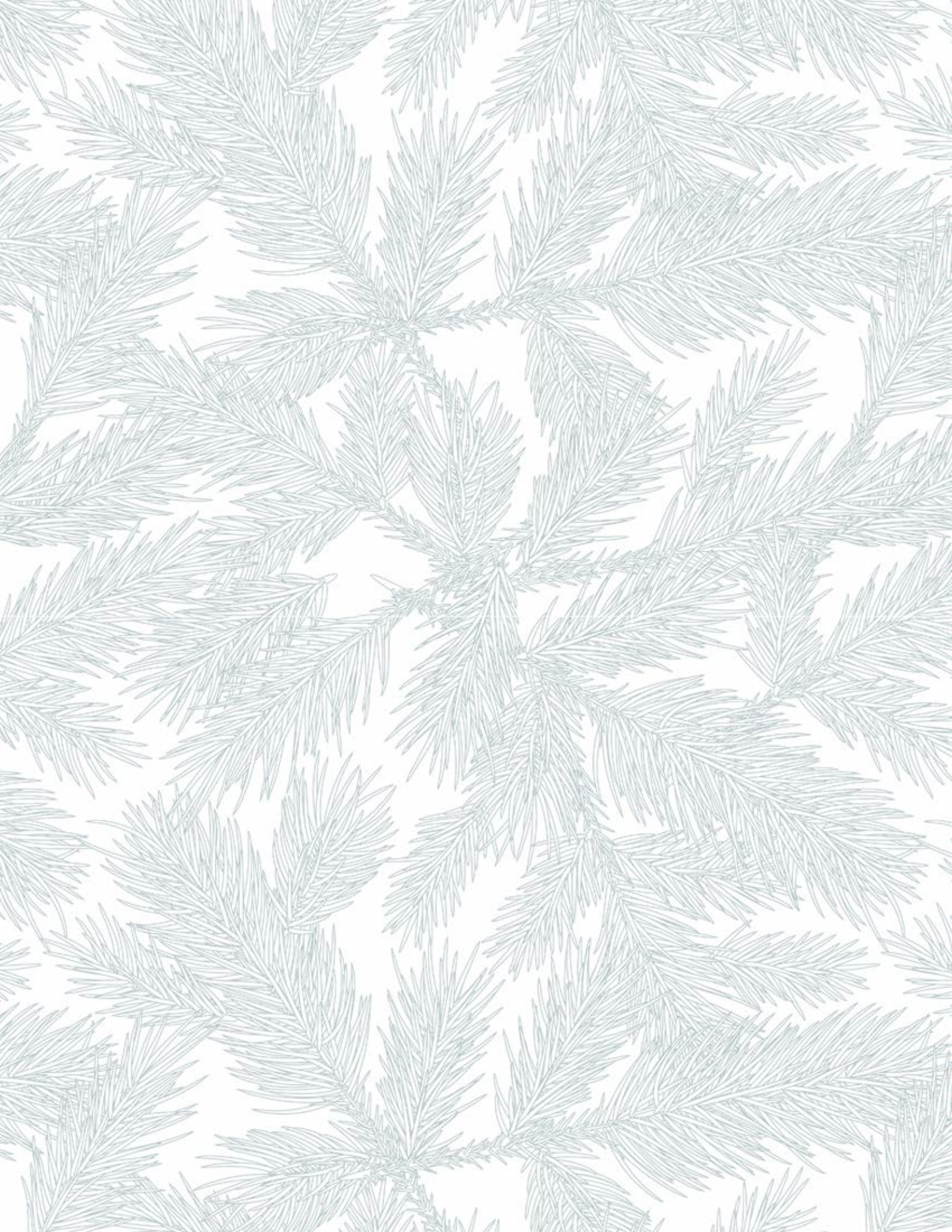
2019 Maine Shared
Community Health Needs Assessment

Sagadahoc County

Northern Light Health℠



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Key companion documents available at www.mainechna.org:

- Sagadahoc County Health Profile
- Cumberland County Health Profile
- Midcoast District Health Profile
- Maine State Health Profile
- Health Equity Data Summaries, including state level data by sex, race, Hispanic ethnicity, 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

Sagadahoc County is one of four counties that make up the Midcoast Public Health District. The population of Sagadahoc County is 35,134 and the population over the age 65 is 19.4%. The population is predominantly white (95.7%); 2.4% are two or more races and 1.5% are Hispanic. The median household income is $55,766. The high school graduation rate (84.8%) is lower than the state overall, while the percent of the population with an associate's degree or higher (42.5%) is higher.

TOP HEALTH PRIORITIES

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

Table 1: Sagadahoc County Health Priorities

PRIORITY AREA	% OF VOTES
Mental Health*	22%
Social Determinants of Health*	17%
Access to Care*	13%
Physical Activity, Nutrition, and Weight	13%
Substance Use*	11%
Older Adult Health/Healthy Aging*	11%

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 Internal Revenue Service (IRS) requirements for non-profit hospitals as well as Public Health Accreditation Board (PHAB) requirements for state and local public health departments, and to inform public health improvement plans at the district level. 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 listing of committee members please visit **www.mainechna.org** and click on "About Maine CHNA."

Significant analysis was conducted by epidemiologists at the Maine CDC 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

County 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 nine priorities that arose from group break-out sessions at forums held in Sagadahoc County. The priorities bolded are the six priorities that rose to the top.

This section provides a synthesis of findings for each of the 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 the Sagadahoc County Community Forum, and key informant interviews. See Appendix C for the complete methodology for all of these activities.

Table 2: Sagadahoc County Forum Voting Results

PRIORITY AREA	% OF VOTES
Mental Health*	**22%**
Social Determinants of Health*	**17%**
Access to Care*	**13%**
Physical Activity, Nutrition, and Weight	**13%**
Substance Use*	**11%**
Older Adult Health/ Healthy Aging*	**11%**
Tobacco Use	6%
Pregnancy and Birth Outcomes	5%
Intentional Injury	3%

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

MENTAL HEALTH

Mental health affects all segments of the population, regardless of age, socioeconomic status, race/ethnicity, or gender. Poor mental health contributes to a number of issues that affect both individuals and communities. 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 and 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

While many said there was a need for behavioral health services in general, those at forums identified several specific needs in the spectrum of treatment services: education and screening, prevention, psychiatry, social workers, crisis beds, and step-down care between hospitals and the home.

Though mental health issues affect all individuals, community forum participants identified youth and the lesbian, gay, bisexual, transgender, and queer/questioning (LGBTQ) community as segments of the populations who are at risk for poor mental health and had unique mental health needs. For youth, participants discussed the need for increased education, training, and child psychiatrists. For the LGBTQ community, participants identified the need for culturally competent providers. Key informants working with the LGBTQ population explained that medical professionals are provided with little training and education about how to meet the needs of non-heterosexual individuals. While LGBTQ populations face the same mental health issues as the rest of the population, they are more than three times as likely to experience major depression and anxiety disorder.[3]

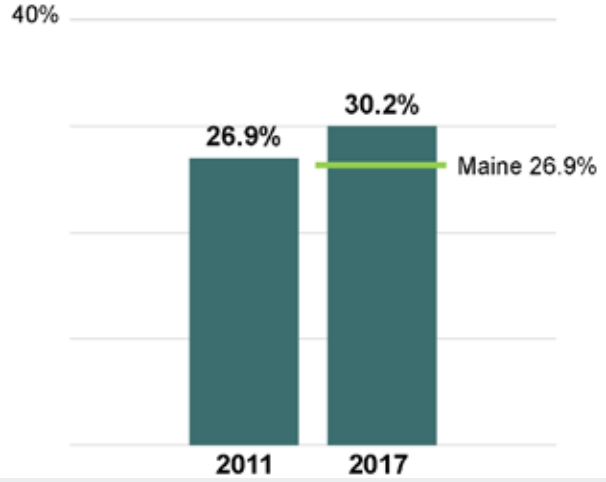
Stigma, or the disapproval or discrimination against a person based on a particular circumstance (e.g., mental health condition) was identified as a major barrier to care. Stigma prevents individuals from receiving the help they need, as individuals with a mental health issue may not seek care for fear that they will be shamed or discriminated against. To address stigma, community members called for more education and trainings for parents, families, teachers and providers; access to support services; and promotion of local resources.

QUANTITATIVE EVIDENCE

In Sagadahoc County:

- The percentage of high school students who reported that they had been sad/hopeless for more than two weeks in a row was significantly higher than the state overall (30.2% vs. 26.9%) in 2017

Figure 1: Sad/Hopeless for Two or More Weeks in a Row (High School)



- The percentage of high school students who reported having seriously considered suicide was significantly higher than the state overall (17.6% vs. 14.7%) in 2017.

See Key Indicators Table on page 20 as well as the Sagadahoc County Health Profile and other data reports on our website **www.mainechna.org**. These documents include information on data sources and definitions.

COMMUNITY RESOURCES TO ADDRESS MENTAL HEALTH

The table below 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 (Mental Health)

ASSETS	GAPS/NEEDS
• Midcoast Community Alliance (MCA) • Teen Centers in Bath & Brunswick • OUT Maine Lesbian, Gay, Bisexual, Transgender, Queer/Questioning (LGBTQ) support & trainings • Youth Mental Health Trainings – National Alliance on Mental Health (NAMI) Maine & Mid Coast Hospital • Mentorship programs (Big Brothers Big Sisters, Chewonki) • Teens to Trails & outing clubs • Trained, caring law enforcement, Crisis Intervention Teams (CIT) • School Counselors, Social workers, Teachers • Caring Adults • School Resource Officers • Sweetser – community & school based programs • Families CAN • Partners in Education/Resilience (PEAR), resiliency building for youth • Youth on boards- school boards, Midcoast Community Alliance, etc. • Maine Behavioral Health	• More caring adults • More access to treatment & support, and awareness of resources • Youth crisis beds in the Emergency Department (ER/ED) • Trauma informed training of teachers, health care providers • Step down care between hospital and home • More middle and high school outing clubs • More screening in youth wellness checks & schools • Psychiatrists – for youth • Lack of care • Parenting & family classes • LGBTQ services & trainings • Integrated mental health curriculum • Expanded youth mental health trainings • More social workers in youth agencies • Social Determinants of Health (SDOHs) – transportation, insurance, basic needs • Stigma reduction

SOCIAL DETERMINANTS OF HEALTH

The social determinants of health are the conditions in which people live, work, learn, and play that affect their health; factors include socioeconomic status (e.g., education, income, poverty), housing, transportation, social norms and attitudes (e.g., racism and discrimination), crime and violence, literacy, and availability of resources (e.g., food, health care). These conditions influence an individual's health and define quality of life for many segments of the population, but specifically those that are most vulnerable. According to the Kaiser Family Foundation, social factors like education, racism, and poverty accounted for over a third of total deaths in the United States.[4]

For example, lack of access to the use of a personal vehicle may be due to any number of factors including affording the vehicle itself, or the insurance, repairs, or even perhaps a license suspension or revocation. This is can be especially challenging in areas without reliable public transportation, like in rural Maine. This results in difficulty accessing health services, employment, and basic necessities (e.g., food, clothing, medication). This issue is further complicated for older adults with mobility impairments and individuals with disabilities who require specialized forms of transportation or extra assistance.

Food insecurity refers to a lack of resources to access enough nutritional food for a household. Food insecurity has both direct and indirect impacts on health for people of all ages, but is especially detrimental to children.[5] Chronic diseases and health conditions associated with food insecurity include asthma, low birthweight, diabetes, mental health issues, hypertension, and obesity.[6]

QUALITATIVE EVIDENCE

A dominant theme from key informant interviews and community forums was the tremendous impact that the underlying social determinants, transportation, housing, and food insecurity have on residents in Sagadahoc County. At the root of many of these issues is poverty; those in poverty are often deprived of access to health, community, and social resources, which perpetuates physical and mental health issues.[7]

Access to affordable and reliable forms of transportation was problematic, especially for older adults. While volunteer transportation system existed, these services were not always accessible or based on actual needs. Forum participants said that lack of coordination amongst different transportation services was a barrier to accessing these resources.

Food insecurity was identified as a concern, especially for youth and low-income families. Supplemental Nutrition Assistance Program (SNAP) benefits were identified as an asset; however, families' ability to access stores and markets can be challenged by lack of access to transportation and hours of operation. Participants suggested that emergency food bags be made available in schools, medical offices, and community sites.

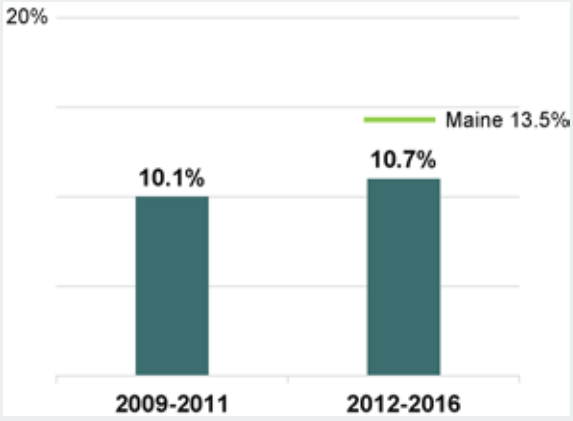
Access to affordable and safe housing is critical to health and well-being. Forum participants said there was a need for comprehensive services for those struggling with homelessness: medical treatment, health support, and education. Participants also identified a need to address stigma associated with homelessness.

QUANTITATIVE EVIDENCE

In Sagadahoc County:

- The median household income decreased slightly between 2007-2011 and 2012-2016, from $56,865 to $55,766.

Figure 2: Individuals Living in Poverty



- The percentage of high school students who reported having experienced at least three adverse childhood experiences was higher than the state overall (26.5% vs. 23.4%) in 2017.
- The percentage of children living in poverty was 17% between 2007-2011. Updated data was not available for 2012-2016.
- The percentage of individuals living in poverty was comparable in 2009-2011 and 2012-2016 (10.1% vs. 10.7%). This is lower than the state rate of individuals in poverty (13.5%) in 2012-2016.
- The food insecurity rate was 13.4% in 2012-2013 and 13.2% in 2014-2015. This is lower than the state of Maine rate of 15.1%.

See Key Indicators Table on page 20 as well as the Sagadahoc County Health Profile and other data reports on our website **www.mainechna.org.** These documents include information on data sources and definitions.

COMMUNITY RESOURCES TO ADDRESS SOCIAL DETERMINANTS OF HEALTH

The table below 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 (Social Determinants of Health)

ASSETS	GAPS/NEEDS
• Set for Success • Food for Thought (food for kids, for weekends) • OUT Maine, Maine Trans Net, Midcoast Queer Collective, Gay-Straight Alliances (GSAs) (LGBTQ support) • Teens to Trails • Food Banks • Mid Coast Hunger Prevention Program (MCHPP) • Gathering Place • Bus/trolley system – beginnings • Tedford Housing • National Alliance on Mental Illness (NAMI) Maine • Sexual Assault Support Service • Supplemental Nutrition Assistance Program (SNAP) • Women, Infants, and Children (WIC) • Merrymeeting Food Council, Gleaning project • Oasis Free Clinics	• Affordable, safe housing • Access to resources • LGBTQ services: Safe housing, special health needs, outing clubs • Lack of transportation – more regional, linkages • Expand MaineCare • Need more screening for youth • Food-quantity and quality, access for youth after hours • Linkage to treatment • Homeless services: treatment, safe housing, mental health support, prevention • Means to collected data on health outcomes around folks in danger of homelessness • Reduce homelessness stigma • Address poverty: access to resources, transportation and affordable housing; support to apply for services, job training for those with disabilities • Emergency food bags at schools, medical offices, community sites • Wage equity

ACCESS TO CARE

Whether an individual has health insurance—and the extent to which it helps to pay for needed acute services and access to a full continuum of high-quality, 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 is particularly important, since it greatly affects the individual's ability to receive regular preventive, routine and urgent care and to manage chronic conditions.

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 straight, 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. You can find more information on health disparities by race, ethnicity, education, sex, and sexual orientation in the Health Equity Data Summaries, available at www.mainechna.org.

QUALITATIVE EVIDENCE

Beyond the need for Medicaid expansion, which was signed into law on January 3, 2019, forum participants discussed the need for comprehensive and affordable health services, specifically primary care, prenatal care, and behavioral health services. There was significant discussion around access issues for LGBTQ individuals, especially youth. LGBTQ individuals typically have difficulty accessing health care for several reasons – they are less likely to have health insurance and may experience discrimination or prejudice from health care staff. Key informants shared that there was a serious gap in culturally competent health care services for this population, especially for LGBTQ youth, and a lack of training and education among health care providers. While there are no LGBTQ-specific health conditions, these individuals face a number of health disparities, including higher rates of depression and anxiety, higher prevalence of HIV and STDs, and higher rates of drug and alcohol use.[8]

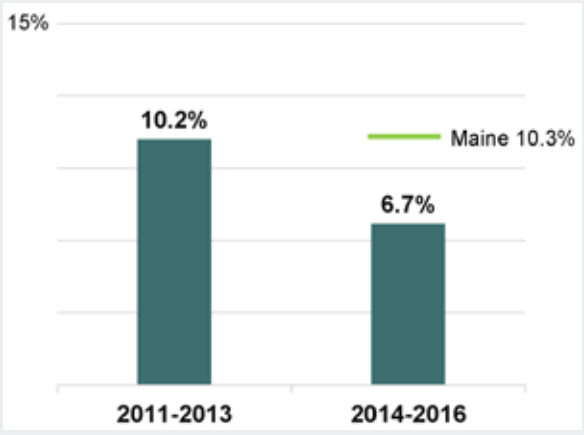
Even for those with insurance, deductibles, co-pays, and prescription medications are unaffordable and prevent people from seeking care. Participants identified a need for consumer assistance to navigate options, costs, and coverage associated with health insurance, including MaineCare.

QUANTITATIVE EVIDENCE

In Sagadahoc County:

- The percentage of the population that is uninsured was lower than the state overall (7.8% vs. 9.5%) in 2012-2016.
- The ratio of primary care physicians to 100,000 population was 36.3, compared to 67.3 for the state overall in 2017.
- The ratio of psychiatrists to 100,000 population was 1.7, compared to 8.4 for the state overall in 2017.

Figure 3: Individuals Unable to Afford Healthcare Due to Cost



- The percentage of Sagadahoc County's population who reported being unable to obtain health care due to cost was 6.7% in 2014-2016. It was one of two counties that had a percentage significantly lower than the state overall (10.3%).

See Key Indicators Table on page 20 as well as the Sagadahoc County Health Profile and other data reports on our website **www.mainechna.org**. These documents include information on data sources and definitions.

COMMUNITY RESOURCES TO ADDRESS ACCESS TO CARE

The table below 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 (Access to Care) in Sagadahoc County, 2018–2019

ASSETS	GAPS/NEEDS
• MaineCare Marketplace • 211 Maine • CarePartner's Program (Application assistance) • Home visit programs • Oasis Free Clinics	• Mental Health • Prenatal Care • Chronic condition self-management • Cost and availability of insurance • MaineCare forms available for youth • Points of contact for youth • Accessibility of care • Pediatric care for homeless youth • Support and for LGBTQ youth and education around the issues they face for all youth • Consumer assistance for insurance • MaineCare Expansion • No insurance options for people who make too much to qualify for MaineCare

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

Forum participants offered many ideas on the underlying risk and contributing factors for obesity, including sleep deprivation, anxiety, sedentary lifestyles, and screen time. While healthy food was available, forum participants felt that it was unaffordable for many people.

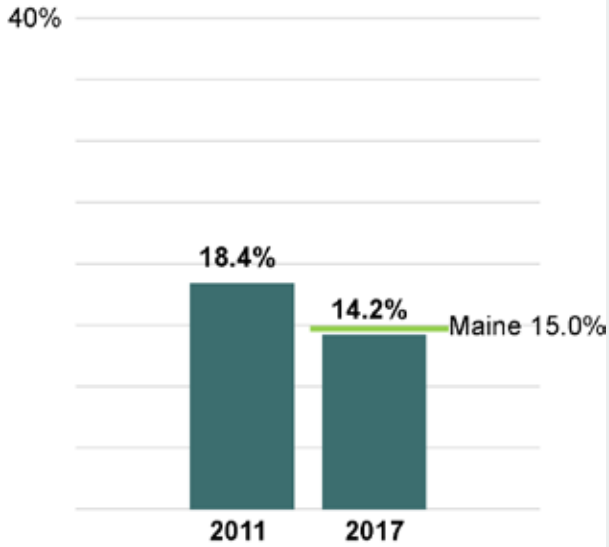
Forum participants suggested that there was a need for more education and prevention work in schools, more physical education, and parent/family support classes.

QUANTITATIVE EVIDENCE

In Sagadahoc County:

- The percentage of adults who are overweight was higher than the state overall (39.8% vs. 35.3%) in 2016.
- The percentage of adults who met aerobic physical activity recommendations decreased between 2011 and 2015, from 63.7% to 53.0%. This is comparable to the state rate of 53.9%.
- The percentage of adults who reported less than one serving per day of fruit was 27.8% in 2011 and 31.7% in 2017. This is not statistically different than the state rate of 35.2%.
- The percentage of high school students who met physical activity recommendations did not change between 2011 and 2017, from 22.7% to 22.1%.
- The percentage of high school students who are overweight increased between 2011 and 2017, from 14.0% to 16.8%
- The percent of high school students who consumed five or more fruits and vegetables a day was 17.8% in 2011 to 19.6% in 2017. This is not statistically different than the state rate of 15.6%.

Figure 4: Obesity (High School)



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

COMMUNITY RESOURCES TO ADDRESS PHYSICAL ACTIVITY, NUTRITION, AND WEIGHT

The table below is a summary of the assets and needs identified through these engagement activities. It is important to note that this is not a complete list of available resources or existing needs in the community; reference other resources, like 211 Maine, as a more comprehensive inventory.

Table 6: Assets and Gaps/Needs (Physical Activity, Nutrition, and Weight)

ASSETS	GAPS/NEEDS

• Let's Go!
• Food Pantries
• School Nutrition Program s
• Midcoast Community Alliance
• Maine Families First
• Head Start
• Women, Infants and Children Nutrition program (WIC)
• Lots of outdoor programs
• Mid Coast Center for Community Health & Wellness
• Obesity Group Visits
• Land Trusts, Parks and Recreation Departments and Trail Groups
• Local walking, hiking and biking trails
• Merrymeeting Food Council
• Sharing tables, easy access, no eligibility requirements
• Community meals & gardens
• Weight Watchers and other community programs
	• Obesity prevention
	• Post bariatric surgery support group
	• Healthy food availability
	• More access points in rural towns
	• Connections with emergency food resources for support services
	• More info about healthy food through health care system
	• Address food insecurity
	  • No onboarding process
	  • Integrate into community that isn't food insecure (e.g., neighborhood café, Harpswell aging at home meals)
	• More resources for hunger prevention programs
	• Formal partnerships for focused wellness projects/ grants
	• No time for physical activity
	• Too little physical education in schools
	• Declining Women, Infants, and Children Food and Nutrition Service (WIC) enrollment
	• Workplace interventions
	• Transportation
	• Integrate outdoor education into school curriculum
	• Grocery store in Bowdoin, Bowdoinham, Richmond, Dresden

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.[9] Tobacco, alcohol, marijuana, and nonmedical use of prescription pain relievers (e.g., OxyContin, Vicodin) are the leading substance use issues for adults.[10] 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.[11] Those with substance use disorders often face a number of barriers that limit access and hinder engagement in care; one study estimates that more than 50% of individuals with mental health and substance use issues are not engaged in needed services.[12] 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

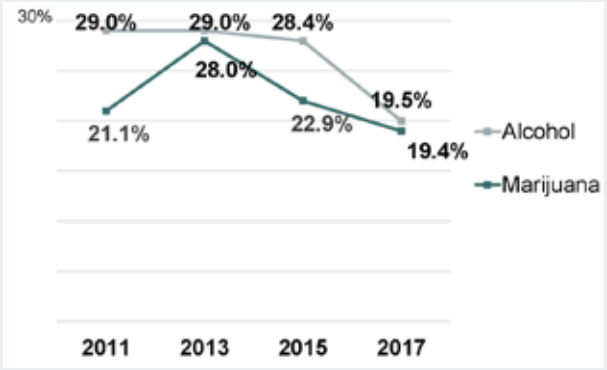
Forum participants identified opioid misuse, alcohol misuse, tobacco/e-cigarette use, and marijuana misuse as priorities in the realm of substance use. Specific substance misuse/services cited as needed in the community include more education and evidence-based programming, provider trainings, and long-term treatment options.

Marijuana was identified as an emerging issue, especially for youth. There is a lack of clarity on health effects, recreational vs. medicinal use, and the short-term and long-term impacts on both individuals and communities. Forum participants identified e-cigarette use (also known as “vaping” or “Juuling”) as another emerging issue. While originally marketed as a cessation tool and a healthier alternative to traditional cigarettes, these devices have evolved to become extremely popular with young people. Research has shown that young people who use e-cigarettes may be more likely to smoke cigarettes in the future.[13]

Key informants identified a number of priority health issues for Individuals with substance use disorders and those in treatment/recovery: education and outreach around how to access healthcare and treatment options, routine basic health care (primary care, dental care), and care that addresses co-occurring mental health and substance use issues. Informants also identified needs specific to youth, including information on where and how to access treatment and better access to confidential services. Another key theme was the need to provide better access to many of the resources that make up the social determinants of health: affordable, safe, and supportive housing; transportation; and nutritious foods. Forum participants shared that community education programs aimed at ending stigma around substance misuse and treatment was important in Sagadahoc County.

QUANTITATIVE EVIDENCE

Figure 5: Past-30-Day Alcohol and Marijuana Use, 2011-2017, (High School)



In Sagadahoc County:

- Binge drinking among high school students was significantly higher compared to the state overall (15.6% vs. 12.2%) in 2015.
- Past 30-day alcohol use among high school students did not change significantly over time. It was 29.0% in 2011 and 19.5% in 2017.
- Past-30-day cigarette smoking among high school students decreased from 17.3% in 2011 to 9.5% in 2017.
- Past-30-day marijuana use among high school students did not change significantly over time. It was 21.1% in 2011 and 19.4% in 2017.
- Chronic heavy drinking among adults was 8.5% in 2014-2016 and did not change significantly from 2011-2013 (7.0%.). The rate was comparable to the state rate of 7.6%.
- Overdose deaths were significantly lower in Sagadahoc County in 2012-2016 (10.3 per 100,000 population) compared to the state (18.1 per 100,000 population).

See Key Indicators Table on page 20 as well companion Health Profiles on our website at **www.mainechna.org**. These documents also contain information on data sources and definitions.

COMMUNITY RESOURCES TO ADDRESS SUBSTANCE USE

The table below 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, should be referenced as a more comprehensive inventory.

Table 7: Assets and Gaps/Needs (Substance Use) in Sagadahoc County, 2018–2019

ASSETS	GAPS/NEEDS
• Access Health – community coalition substance misuse prevention services (licensee trainings, compliance checks, policy support, education of laws, youth intervention) • Mid Coast Addiction Resource Center & Emergency Department – a model for Integrated Medication-Assisted Treatment (IMAT) & other best practices • Mid Coast Tobacco Prevention & Treatment Program • Mid Coast Youth Mental Health Training programs • Midcoast Community Alliance	• Address stigma • More evidence based programming • More info on electronic devices • More marijuana information • More education on effects of alcohol on youth and older adults • More youth prescriber trainings, weaning plans, discussions • Long term treatment

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 Maine 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 education and services to address 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. 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. With aging in place as a preferred lifestyle, concerns around isolation become more significant.

Limited access to transportation was identified as a key barrier to accessing health care and other needed goods and services (e.g., groceries, prescriptions, physical activity). Forum participants identified a need for free and/or low cost transportation options, including volunteer drivers.

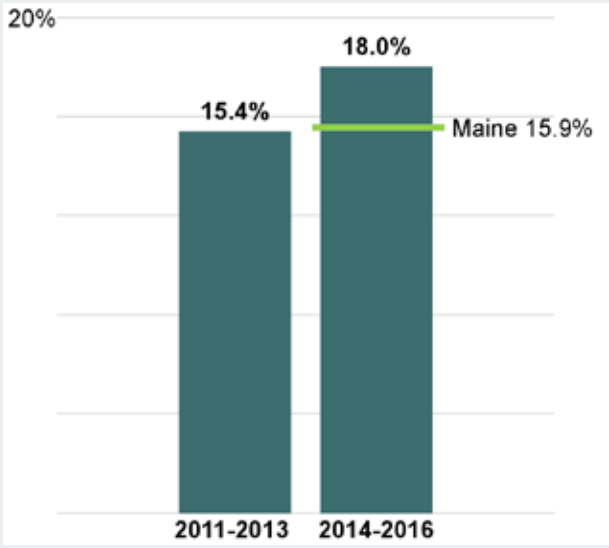
Participants identified unmet needs in the spectrum of health care services for older adults, including health navigators, fall prevention programs, and hospice/ end of life support. Forum participants were also concerned about abuse of older adults, both physical and financial. Cognitive decline, physical frailty, and isolation make older adults more vulnerable to financial abuse.[14]

QUANTITATIVE EVIDENCE

In Sagadahoc County:

- The percentage of adults (45+) reporting cognitive decline was 11.6% in 2016. This rate did not change significantly over time and is comparable to the state rate.
- The percentage of adults with arthritis was 36.8% in 2014-2016. This rate did not change significantly over time and is comparable to the state rate.
- Fall related injury (unintentional) emergency department rate per 10,000 was 335 per 10,000 in 2012-2014. This rate did not change significantly over time and is comparable to the state rate.

Figure 6: Adults with Three or More Chronic Conditions



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

COMMUNITY RESOURCES TO ADDRESS OLDER ADULT HEALTH/ HEALTHY AGING

The table below 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, should be referenced as a more comprehensive inventory.

Table 8: Assets and Gaps/Needs (Older Adult Health/Healthy Aging)

ASSETS	GAPS/NEEDS
• Agencies on Aging, Spectrum - Chronic disease self-management & other services • Age friendly initiatives – Bath area, Bowdoinham, Harpswell • Retirement facilities • AARP, Community Aging in Place – Advancing Better Living for Elders (CAPABLE), other Aging in place models that address social isolation • Community Health and Nursing Services (CHANS) Home Health & Hospice and other senior care • AARP • Rides in neighbors' cars (Harpswell) • People Plus senior center • Lots of public spaces for free physical activity and social interaction	• Services in shelters, safe housing • Increase connection between housing and health – aging in place • Affordable Transportation - Volunteer drivers/shuttles for food, medical appointments (multiple mentions) • Better understanding of needs of older adults • Healthy aging volunteers • Financial support/tax breaks for aging in place • Address social isolation (multiple mentions) • Navigators for services • Screening for cognitive decline, trauma • Protection from fraud/abuse • Food security • Fall prevention • Hospice, end of life support

COMMUNITY CHARACTERISTICS

AGE DISTRIBUTION

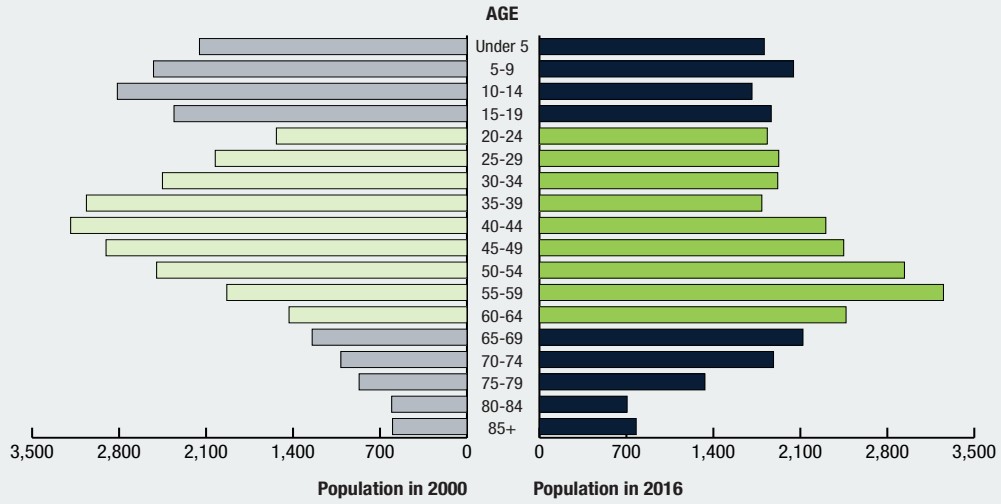
Age is a fundamental factor to consider when assessing individual and community health status. In particular, older individuals typically have more physical and mental health vulnerabilities, and are more likely to rely on immediate community resources for support compared to young people.[15] An aging population leads to 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.[16]

The following is a summary of findings related to community characteristics for Sagadahoc County. Conclusions come 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 Sagadahoc County, 19.4% of the population is 65 years of age or older.

Figure 7: Age Histogram of Sagadahoc County



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.[17] 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.[18,19] 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 Sagadahoc County:

- The population is predominantly White (95.7%); 2.4% of the population is two or more races and 1.5% are Hispanic

Table 9: Race/Ethnicity in Sagadahoc County, 2012–2016

	PERCENT/NUMBER
American Indian/Alaskan Native	0.4% / 143
Asian	0.7% / 240
Black/African American	.7% / 255
Hispanic	1.5% / 518
Some other race	0.1% / 30
Two or more races	2.4% / 857
White	95.7% / 33,609

SOCIOECONOMIC STATUS

Socioeconomic status (SES), as measured by income, poverty, employment, education, and the extent to which one lives in areas of economic disadvantage, is closely linked to morbidity, mortality, and overall health status. Low income status is highly correlated to a lower than average life expectancy.[20] 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 levels.[21] The health benefits of higher education typically include better access to resources, safer and more stable housing, and better engagement with providers. Proximate factors associated with low education that affect health outcomes include the inability to navigate the healthcare system, educational disparities in personal health behaviors, and exposure to chronic stress.[22] It is important to note that, while education affects health, poor health status may also be a barrier to education. Table 10, below, includes a number of data points comparing Sagadahoc County to the state overall.

Additionally, in Sagadahoc County:

- The estimated high school graduation rate was lower than the state overall (84.8% vs. 86.9%) in 2017.
- The percent of the population over 25 with an associate's degree or higher was higher than the state overall in 2017 (42.5% vs. 37.3%) in 2012-2016.

Table 10: Socioeconomic Status in Sagadahoc County, 2012–2016

	SAGADAHOC/MAINE
Median household income	$55,766 / $50,826
Unemployment rate	3.1% / 3.8%
Individuals living in poverty	10.7% / 13.5%
Children living in poverty	17.2% / 17.2%
65+ living alone	- / 45.3%

SPECIAL POPULATIONS

Through community engagement activities, several populations in Sagadahoc 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 older adult health and healthy aging were priorities in Sagadahoc 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, and depression/isolation.

Youth

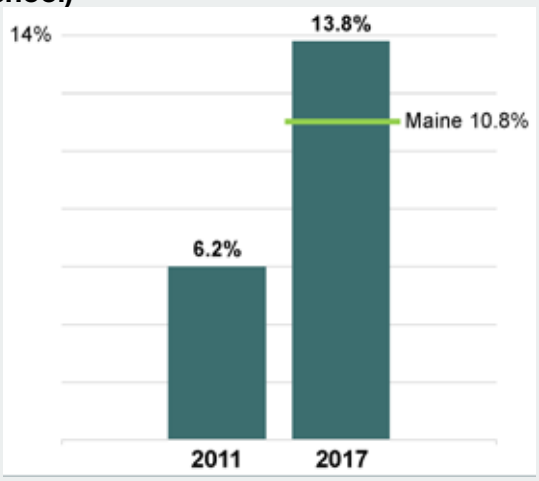
Youth were identified as a priority population in community forums. Specific issues of concern were youth mental health issues (specifically depression and stress), substance misuse (specifically opioids, marijuana, and tobacco), and lack of education and promotion around nutrition and physical activity. One key informant who works with youth identified a need for them to be able to access low-cost and anonymous health services, specifically reproductive and substance use treatment services, without parent permission.

LGBTQ

LGBTQ individuals, specifically youth, were identified as a population with significant and specialized health needs. Forum participants and interviewees discussed the need for more comprehensive and affordable mental health care for LGBTQ and non-binary adults and youth, as there is a lack of providers who have the cultural competency to treat these populations and address their health needs. Key informant interviewees identified a number of differences between the health status of LGBTQ and non-LGBTQ youth; LGBTQ youth are more likely to be depressed, experience violence, use tobacco and other substances, and self-harm.

Data from the Maine Integrated Youth Health Survey analysis shows that youth who identify as bisexual, gay or lesbian, or other sexual orientation experience higher rates of feeling sad or hopeless, considering suicide, being bullied on school property, and sexual assault, as compared to youth who identify as heterosexual. Statewide analysis of Behavioral Risk Surveillance Survey confirms, among adults, higher rates of depression diagnosis over the lifetime when comparing those who identify as bisexual, gay or lesbian, or other sexual orientation to those who identify as heterosexual. Besides the need for more mental health services, there is also a need for inclusive health insurance, specifically for transgender and non-binary people; better services for individuals in rural areas of the state; LGBTQ-inclusive sexual education in schools; and surgical resources specifically for transgender youth. The number of high school students in Sagadahoc County who identified as LGB (13.8%) is higher than state average (10.8%) and has increased over time from 2011 (6.2%) to 2017 (13.8%).

Figure 11: Gay, Lesbian, and Bisexual (High School)



In addition to the data collected and analyzed for the County Health Profiles, the Maine CDC created Health Equity Data Sheets (available at www.mainechna.org) which provides selected data for the statewide population, cut 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.

It should also be noted that during the summer months, Maine's population increases due to temporary and part-time residents with those who seek the beauty of the rocky coast, mountains, lakes, camps, and islands. For many communities, this poses unique opportunities – and challenges.

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

★	means Sagadahoc County is doing **significantly better** than the state or national average.
!	means Sagadahoc 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.

	SAGADAHOC COUNTY DATA			BENCHMARKS			
KEY INDICATOR	**POINT 1**	**POINT 2**	**CHANGE**	**MAINE**	**+/–**	**U.S.**	**+/–**
SOCIAL, COMMUNITY & PHYSICAL ENVIRONMENT							
Children living in poverty	2007-2011 **17.2%**	–	N/A	2012-2016 **17.2%**	N/A	2016 **21.1%**	N/A
Median household income	2007-2011 **$56,865**	2012-2016 **$55,766**	N/A	2012-2016 **$50,826**	N/A	2016 **$57,617**	N/A
Estimated high school student graduation rate	2014 **77.9%**	2017 **84.8%**	N/A	2017 **86.9%**	N/A	–	N/A
Food insecurity	2012-2013 **13.4%**	2014-2015 **13.2%**	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 **17.0%**	2014-2016 **24.1%**	○	2014-2016 **19.6%**	○	2016 **11.4%**	N/A
14 or more days lost due to poor mental health	2011-2013 **14.1%**	2014-2016 **15.8%**	○	2014-2016 **16.7%**	○	2016 **11.2%**	N/A
Years of potential life lost per 100,000 population	2010-2012 **4,779.6**	2014-2016 **5,724.0**	○	2014-2016 **6,529.2**	○	2014-2016 **6,658.0**	N/A
All cancer deaths per 100,000 population	2007-2011 **167.2**	2012-2016 **183.4**	○	2012-2016 **173.8**	○	2011-2015 **163.5**	!
Cardiovascular disease deaths per 100,000 population	2007-2011 **216.3**	2012-2016 **194.3**	○	2012-2016 **195.8**	○	2016 **218.2**	★
Diabetes	2011-2013 **9.5%**	2014-2016 **9.8%**	○	2014-2016 **10.0%**	○	2016 **10.5%**	○
Chronic obstructive pulmonary disease (COPD)	2011-2013 **6.5%**	2014-2016 **7.7%**	○	2014-2016 **7.8%**	○	2016 **6.3%**	○
Obesity (adults)	2011 **24.7%**	2016 **25.2%**	○	2016 **29.9%**	○	2016 **29.6%**	○
Obesity (high school students)	2011 **18.4%**	2017 **14.2%**	○	2017 **15.0%**	○	–	N/A
Obesity (middle school students)	2015 **15.1%**	2017 **13.5%**	○	2017 **15.3%**	○	–	N/A
Infant deaths per 1,000 live births	2007-2011 **3.3***	2012-2016 **5.4**	N/A	2012-2016 **6.5**	○	2012-2016 **5.9**	○
Cognitive decline	2012 **16.7*%**	2016 **11.6*%**	○	2016 **10.3%**	○	2016 **10.6%**	○
Lyme disease new cases per 100,000 population	2008-2012 **32.2**	2013-2017 **156.9**	N/A	2013-2017 **96.5**	N/A	2016 **11.3**	N/A
Chlamydia new cases per 100,000 population	2008-2012 **227.0**	2013-2017 **260.4**	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 **334.8**	2012-2014 **335.0**	○	2012-2014 **340.9**	○	–	N/A
Suicide deaths per 100,000 population	2007-2011 **12.5**	2012-2016 **15.7**	○	2012-2016 **15.9**	○	2016 **13.5**	○
Overdose deaths per 100,000 population	2007-2011 **6.1**	2012-2016 **10.3**	○	2012-2016 **18.1**	★	2016 **19.8**	★

	SAGADAHOC COUNTY DATA			BENCHMARKS			
KEY INDICATOR	**POINT 1**	**POINT 2**	**CHANGE**	**MAINE**	**+/–**	**U.S.**	**+/–**
HEALTH CARE ACCESS AND QUALITY							
Uninsured	2009-2011 **8.2%**	2012-2016 **7.8%**	N/A	2012-2016 **9.5%**	N/A	2016 **8.6%**	N/A
Ratio of primary care physicians to 100,000 population	–	2017 **36.3**	N/A	2017 **67.3**	N/A	–	N/A
Ratio of psychiatrists to 100,000 population	–	2017 **1.7**	N/A	2017 **8.4**	N/A	–	N/A
Ratio of practicing dentists to 100,000 population	–	2017 **37.1**	N/A	2017 **32.1**	N/A	–	N/A
Ambulatory care-sensitive condition hospitalizations per 10,000 population	–	2016 **66.0**	N/A	2016 **74.6**	N/A	–	N/A
Two-year-olds up-to-date with recommended immunizations	2014 **26.3%**	2017 **50.9%**	N/A	2017 **73.7%**	N/A	–	N/A
HEALTH BEHAVIORS							
Sedentary lifestyle – no leisure-time physical activity in past month (adults)	2011 **17.7%**	2016 **13.9%**	○	2016 **20.6%**	○	2016 **23.2%**	N/A
Chronic heavy drinking (adults)	2011-2013 **7.0%**	2014-2016 **8.5%**	○	2014-2016 **7.6%**	○	2016 **5.9%**	N/A
Past-30-day alcohol use (high school students)	2011 **29.0%**	2017 **19.5%**	○	2017 **22.5%**	○	–	N/A
Past-30-day alcohol use (middle school students)	2011 **9.3%**	2017 **4.3%**	○	2017 **3.7%**	○	–	N/A
Past-30-day marijuana use (high school students)	2011 **21.1%**	2017 **19.4%**	○	2017 **19.3%**	○	–	N/A
Past-30-day marijuana use (middle school students)	2011 **4.9%**	2017 **4.9%**	○	2017 **3.6%**	○	–	N/A
Past-30-day misuse of prescription drugs (high school students)	2011 **6.5%**	2017 **7.1%**	○	2017 **5.9%**	○	–	N/A
Past-30-day misuse of prescription drugs (middle school students)	2011 **4.5%**	2017 **1.2%**	★	2017 **1.5%**	○	–	N/A
Current (every day or some days) smoking (adults)	2011-2012 **21.2%**	2016 **17.0*%**	○	2016 **19.8%**	○	2016 **17.0%**	N/A
Past-30-day cigarette smoking (high school students)	2011 **17.3%**	2017 **9.5%**	○	2017 **8.8%**	○	–	N/A
Past-30-day cigarette smoking (middle school students)	2011 **6.0%**	2017 **2.6%**	★	2017 **1.9%**	○	–	N/A

Leading Causes of Death

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

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

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 that 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 1: 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 identify priorities among significant health issues and identify 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. See Sagadahoc County Health Profile at www.mainechna.org.
- **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 as 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.

Sagadahoc County Forum

One community forum was held in Sagadahoc County. Additionally, the Local Planning Committee surveyed a group of older adults in Brunswick.

Table 10: Community engagement activites in Sagadahoc County, 2018

TYPE OF ENGAGEMENT	LOCATION & DATE	FACILITATOR	ATTENDEES
Community Forum	Brunswick November 2, 2018	JSI	80
Survey	Brunswick January 2, 2019	Local Planning Committee	43 respondents

COMMUNITY ENGAGEMENT

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

- Access Health Community Health Coalition
- Bath Housing
- Bath Police Department
- Bath Iron Works
- Brunswick Downtown Association
- Brunswick School Department
- Brunswick Topsham Land Trust
- Cathance River Education Association
- Chewonki Foundation
- Community Members
- Curtis Memorial Library
- Health Centric Advisors
- Kennebec Estuary Land Trust
- Local Health Officer
- Maine Kids Count
- Martins Point Primary Care
- Maine State Legislature
- Mid Coast Hospital
- Mid Coast Hospital Behavioral Health
- Mid Coast Hospital, SNAP Ed Program
- Mid Coast- Parkview Health Board of Directors
- Midcoast Community Action Program
- Midcoast Community Alliance
- Midcoast Hunger Prevention
- Muskie School of Public Service
- Northern Light
- Oasis Free Clinics
- People Plus
- RSU 1School Department
- SAD 75 School Department and School Based Health Center
- Sagadahoc County
- Sagadahoc County Board of Health
- Sagadahoc County Emergency Management Agency (EMA)
- Sagadahoc County Sheriff
- Seniors
- Sexual Assault Support Services of Midcoast Maine
- Southern Maine Community College, Students
- Spectrum Generations
- State of Maine
- Sweetser
- Tedford Housing
- Town of Harpswell, Recreation
- University of Maine, Students

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 had either lived experience in or worked for an organization that focused on provided services or advocacy for the identified population. The ten medically underserved populations identified by the Steering Committee 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
- 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

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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