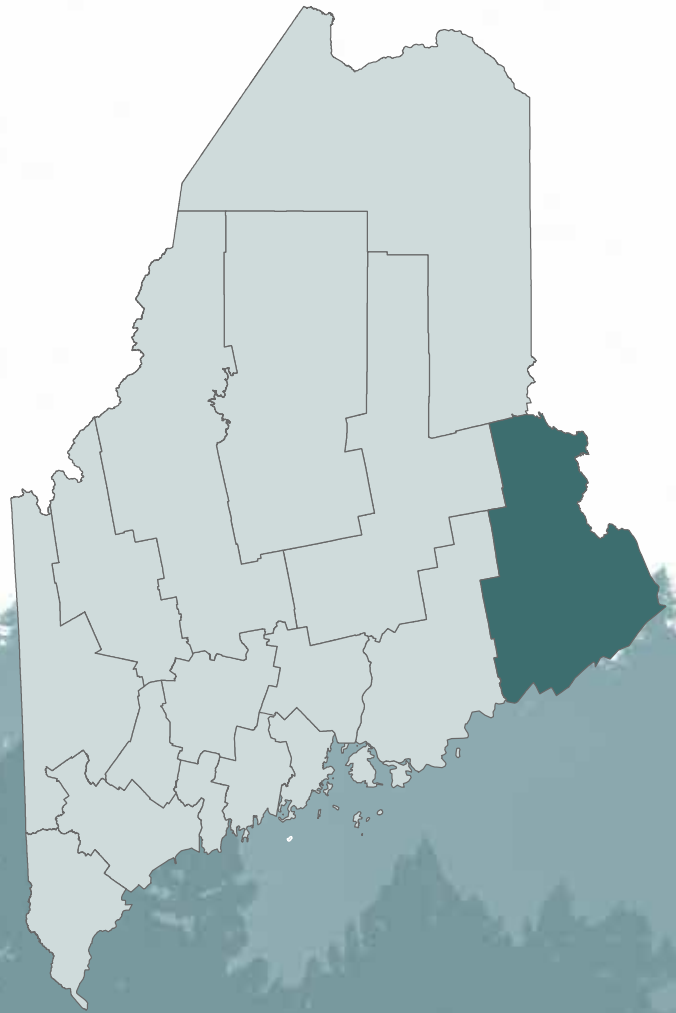
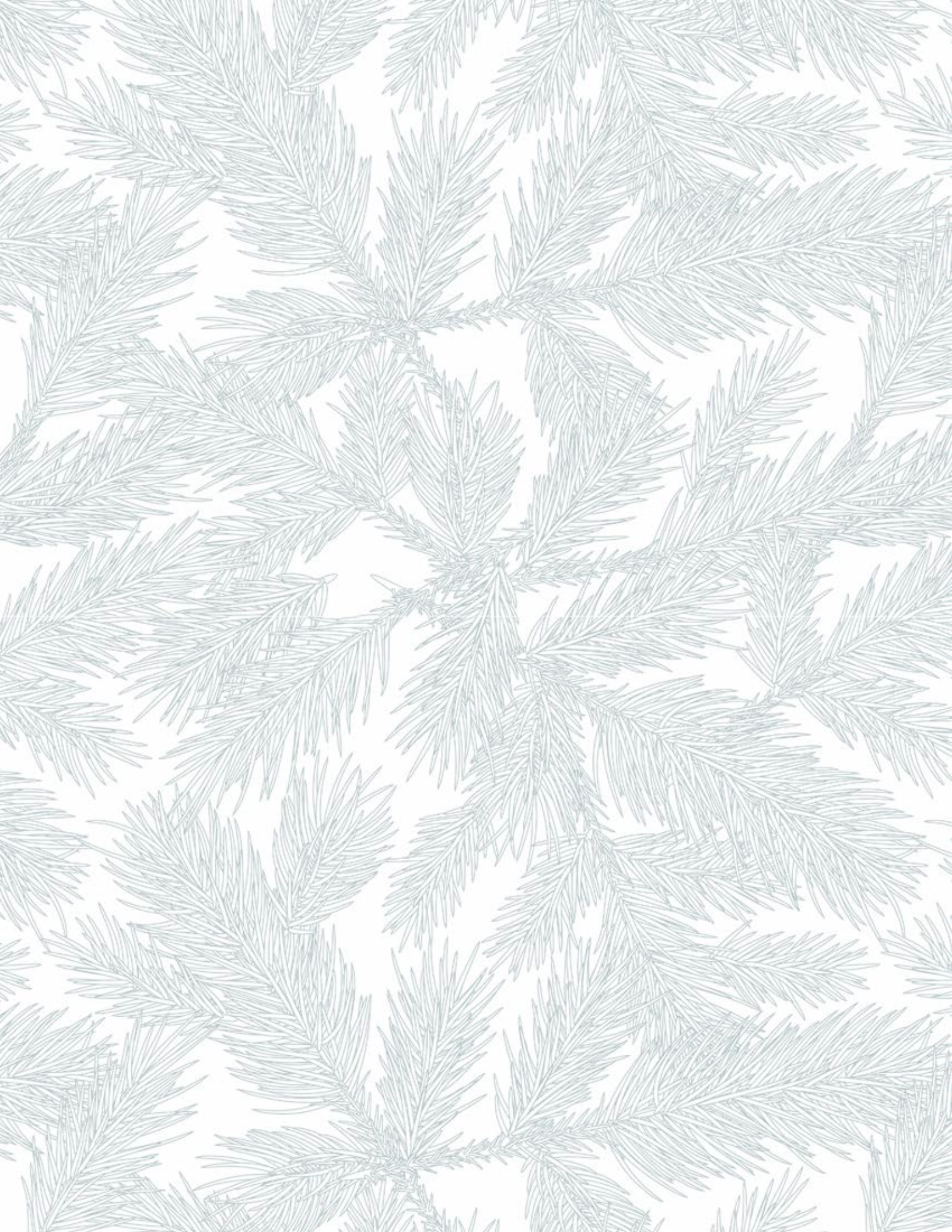


# WASHINGTON COUNTY

2019 Maine Shared Community Health  
Needs Assessment Report





# TABLE OF CONTENTS

Executive Summary.....	2
Acknowledgements.....	3
Health Priorities .....	4
Mental Health .....	5
Substance Use.....	7
Access To Care .....	9
Older Adult Health/Healthy Aging .....	11
Social Determinants Of Health.....	13
Community Characteristics .....	15
Key Indicators.....	19
Appendix A: References .....	22
Appendix B: History and Governance.....	23
Appendix C: Methodology .....	24

**Key companion documents available at [www.mainechna.org](http://www.mainechna.org):**

- Washington County Health Profile
- Downeast District 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 Shared CHNA) is a collaborative effort amongst Central Maine Healthcare (CMHC), MaineGeneral Health (MGH), MaineHealth (MH), Northern Light Health (NLH), 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

Washington County is one of two counties in the Downeast Public Health District. The population of Washington County is 31,925 and 21.9% of the population is 65 years of age or older. The population is predominantly white (91.4%); 1.8% are Hispanic, and 2.6% are two or more races. The median household income is \$39,469, over \$10,000 less than the state average. The high school graduation rate (87.7%) is higher than the state overall, while the percent of the population with an associate's degree or higher (29.1%) is lower.

## TOP HEALTH PRIORITIES

Forums held in Washington 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: Washington County Health Priorities**

PRIORITY AREA	% OF VOTES
Mental Health*	23%
Substance Use*	20%
Access to Care*	18%
Older Adult Health/Healthy Aging*	16%
Social Determinants of Health*	15%

*\*Also a statewide priority. For a complete list of statewide priorities, see state health profile on our website, [www.mainechna.org](http://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, MaineGeneral Health, MaineHealth, and Northern Light Health, 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](http://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, over 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 eight priorities which arose from group break-out sessions at forums held in Washington County. The priorities shaded are the five priorities which rose to the top.

This section provides a synthesis of findings for each of the shaded 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: Washington County Forum Voting Results**

PRIORITY AREA	% OF VOTES
<b>Mental Health*</b>	<b>23%</b>
<b>Substance Use*</b>	<b>20%</b>
<b>Access to Care*</b>	<b>18%</b>
<b>Older Adult Health/ Healthy Aging</b>	<b>16%</b>
<b>Social Determinants of Health*</b>	<b>15%</b>
Cancer	5%
Intentional Injury	2%
Physical Activity, Nutrition, and Weight	1%

*\*Also a statewide priority. For a complete list of statewide priorities, see state health profile on our website, [www.mainechna.org](http://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 conditions that affect both individuals and communities. Mental health conditions, 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.<sup>1</sup>

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.<sup>2</sup>

## QUALITATIVE EVIDENCE

Forum participants cited depression and stress as the two leading mental health issues of concern. While many said there was a need for behavioral health services in general, inpatient services, in-school counseling, group homes, and support groups were specifically identified as needs and/or gaps in the spectrum of behavioral health care. Residents and key informants were particularly concerned about the recruitment and retention of behavioral health providers, especially psychiatrists, psychologists, psychiatric nurses, counselors, and qualified therapists. Many participants discussed the need for increased education, screening, and support services in the school setting, and behavioral health providers who specialize in youth and adolescent issues. The impact of parental mental health issues on children, and negative effects on the overall health and functionality of the family unit was identified as a contributing factor to youth

mental health issues. Participants identified a need for positive modeling in the home and increased support for struggling families.

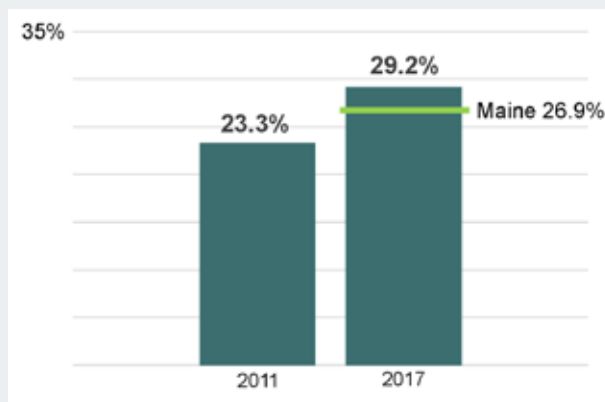
For the LGBTQ community, participants identified the need for accessible and culturally competent providers. Key informants working with the LGBTQ population explained that medical professionals are provided with little training and education about how to meet the needs of non-heterosexual individuals. 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.<sup>3</sup>

## QUANTITATIVE EVIDENCE

### In Washington County:

- The percentage of adults with current symptoms of depression was higher than the state overall (9.7% 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 significantly between 2011 and 2017, from 23.3% to 29.2%.
- The percentage of high school students who reported having seriously considered suicide increased significantly between 2011 and 2017, from 11.8% to 16.1%.

**Figure 1: Sad/Hopeless for 2+ Weeks (High School)**



- The ratio of psychiatrists to 100,000 population was 1.5, compared to 8.4 for the state overall, in 2017. See Key Indicators on page 19 as well as companion Health Profiles on our website [www.mainechna.org](http://www.mainechna.org). Those documents also 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
<ul style="list-style-type: none"> <li>• Aroostook Mental Health Center</li> <li>• Northern Light Acadia Hospital</li> <li>• Community Health and Counseling Services</li> <li>• Behavioral health homes</li> <li>• Community integration</li> <li>• Down East Community Hospital</li> <li>• School nurses</li> <li>• Collaboration between providers and other resources</li> <li>• Healthy Acadia</li> <li>• Washington County resource guides</li> <li>• Counseling</li> <li>• Tele-psychiatry</li> <li>• Local mental health agencies with long histories of care and expertise</li> <li>• Counselors in schools</li> <li>• Experienced providers</li> <li>• Commitment by community to support mental health initiatives</li> <li>• Calais High School LGBTQ</li> <li>• St. Croix LGBTQ Club</li> </ul>	<ul style="list-style-type: none"> <li>• Outreach in elementary schools</li> <li>• Help for youth</li> <li>• More resources to address individual needs</li> <li>• Affordable access to services for young children</li> <li>• Transportation to services</li> <li>• Insurance</li> <li>• Medication management</li> <li>• Tele-medicine</li> <li>• More mental health professionals (psychiatrists, psychologists, psychiatric nurses, counselors, qualified therapists)</li> <li>• Inpatient psychiatric beds</li> <li>• Integrated behavioral health services</li> <li>• Behavioral health screening in schools</li> <li>• Group homes</li> <li>• Early childhood screening for depression and anxiety</li> <li>• Peer counseling</li> <li>• Support groups</li> <li>• Resources for when there is a crisis during school hours</li> <li>• Support for parents and families</li> <li>• Affordable care</li> <li>• Stigma</li> <li>• Long-term management</li> <li>• School social workers</li> <li>• Support for Trans people</li> <li>• LGBTQ Care</li> <li>• Staff training in hospitals and schools</li> <li>• Availability of providers</li> <li>• Recruitment and retention of providers</li> </ul>



# 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.<sup>4</sup> Tobacco, alcohol, marijuana, and nonmedical use of prescription pain relievers (e.g., OxyContin, Vicodin) are the leading causes of substance use disorders for adults.<sup>5</sup> 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.<sup>6</sup> 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.<sup>7</sup> 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 — many private substance use treatment providers do not accept insurance and require cash payments.

## QUALITATIVE EVIDENCE

Opioid use disorder was the leading substance use issue discussed in community forums. Participants discussed the need for more comprehensive, accessible, and affordable services. The need for education and prevention, substance use specialists, detoxification and rehabilitation, and medication-assisted treatment (e.g., Suboxone) were identified as gaps in the spectrum of substance use treatment.

Similar to the discussion around mental health issues, participants expressed concern around the effect that parental substance use has on children. In community

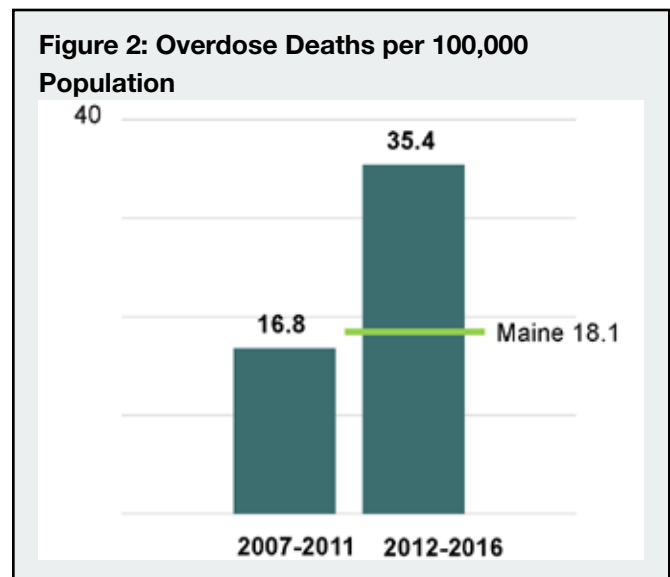
forums, residents identified a need for more free and accessible community events and activities to bolster community cohesion and model positive behaviors and relationships.

Key informants identified a number of priority health issues for substance users 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.

## QUANTITATIVE EVIDENCE

### In Washington County:

- Past-30-day cigarette smoking amongst high school students was significantly higher than the state overall (12.3% vs. 8.8%) in 2017.
- Environmental tobacco smoke exposure amongst high school students was significantly higher than the state overall (43.9% vs. 31.1%) in 2017.



- Environmental tobacco smoke exposure amongst middle school students was significantly higher than the state overall (39.1% vs. 22.8%) in 2017.
- Overdose deaths per 100,000 population were significantly higher than the state overall (35.4 vs. 18.1) in 2012-2016.
- Alcohol-induced deaths per 100,000 population were significantly higher than the state overall (16.6 vs. 9.7) in 2012-2016.

See Key Indicators on page 19 as well as companion Health Profiles on our website [www.mainechna.org](http://www.mainechna.org). Those documents also include 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, and local/county resource guides should be referenced as a more comprehensive inventory.

**Table 4: Assets and Gaps/Needs (Substance Use)**

ASSETS	GAPS/NEEDS
<ul style="list-style-type: none"> <li>• Methadone Treatment</li> <li>• Providers beginning to take interest in Medication-Assisted Treatment</li> <li>• Strong movement to mobilize</li> <li>• Experienced providers</li> <li>• Coordination/support groups</li> <li>• Available trainings</li> <li>• Recovery coaches</li> <li>• Three step treatment at home</li> <li>• Washington County Substance Use Response Collaborative</li> <li>• Good education</li> <li>• Stigma reduction</li> <li>• Arise support groups</li> <li>• Aroostook Mental Health Center</li> <li>• Alcoholics Anonymous/Narcotics Anonymous</li> </ul>	<ul style="list-style-type: none"> <li>• Navigation</li> <li>• Transportation</li> <li>• Drug addicted infant support</li> <li>• Funding for unidentified patients</li> <li>• Education</li> <li>• Financial treatment supports</li> <li>• Medication-Assisted Treatment in the community</li> <li>• Treating providers</li> <li>• Public Health Nursing Services</li> <li>• Drug education early on</li> <li>• Programs</li> <li>• Educating at young ages</li> <li>• Prenatal education</li> <li>• Subutex</li> <li>• More youth preventative programs</li> <li>• Transitional housing for those in recovery</li> <li>• Detox/rehab center</li> <li>• Group homes</li> <li>• Better community education</li> <li>• Support councilors</li> <li>• Cost resources</li> </ul>

# 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 heterosexual, white, and well-educated. 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 sex, race, Hispanic ethnicity, educational attainment, and income can be found in the Health Equity Data Summaries, available at [www.mainechna.org](http://www.mainechna.org).

## QUALITATIVE EVIDENCE

Many forum participants and key informants identified the social determinants of health—particularly inability to access reliable and affordable forms of transportation and safe and affordable housing—as significant barriers that impede access to health care. These issues are discussed in more details in the “Social Determinants of Health” section of this report. Beyond the need for Medicaid expansion (which was signed into law on January 3, 2019), participants discussed the need for comprehensive and affordable health services, specifically primary care. Reducing barriers to accessing primary care would increase opportunities for education, health promotion, and routine screenings, all of which contribute to better management and reduced prevalence of chronic and complex conditions such as diabetes, hypertension, and asthma.

Participants identified a need for more health care navigators, and programs that provide education on

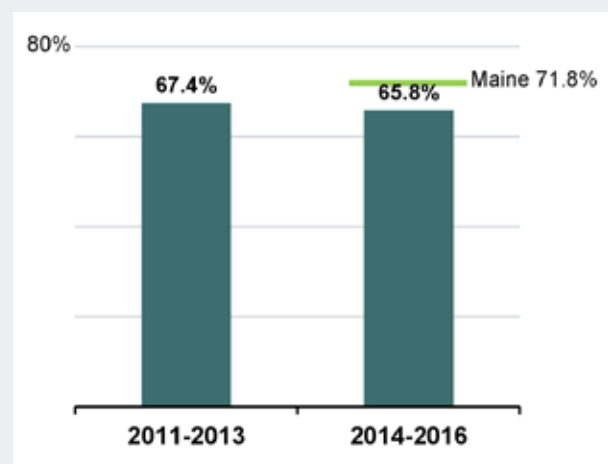
health insurance, specifically for older adults seeking information on how to enroll and utilize Medicare and associated companion plans.

## QUANTITATIVE EVIDENCE

### In Washington County:

- The percentage of the population that was uninsured was higher than the state overall (12.7% vs. 9.5%) in 2012-2016.
- The percentage of the population who reported an inability to access healthcare due to cost was higher than the state overall (12.1% vs. 10.3%) from 2014-2016.
- The percentage of the population with a usual primary care provider was significantly lower than the state overall (81.6% vs. 87.6%) in 2014-2016.
- The percentage of the population with a primary care visit to any provider in the past year was significantly lower than the state overall (65.8% vs. 71.8%) in 2014-2016.

**Figure 3: Population With a Visit to Any Primary Care Provider in the Past Year**



See Key Indicators on page 19 as well as companion Health Profiles on our website [www.mainechna.org](http://www.mainechna.org). Those documents also 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)**

ASSETS	GAPS/NEEDS
<ul style="list-style-type: none"> <li>• Downeast Community Partners/Mainecare rides</li> <li>• Veterans Administration provides transportation</li> <li>• Skilled nursing facilities</li> <li>• Federally Qualified Health Centers</li> <li>• Private practices</li> <li>• Behavioral health agencies</li> <li>• Visiting nurses</li> </ul>	<ul style="list-style-type: none"> <li>• Free or low-cost and reliable transportation services</li> <li>• Nursing homes</li> <li>• Access for those with Alzheimer’s/Dementia</li> <li>• Psychiatrists</li> <li>• Telemedicine</li> <li>• More nurses/providers</li> <li>• Medical homes</li> <li>• Cost of care</li> <li>• Caregivers</li> <li>• Medical support staff</li> <li>• Community volunteers</li> <li>• More funding</li> <li>• Clearer explanations of Medicare and companion plans</li> <li>• Mainecare expansion</li> <li>• Oncologists</li> <li>• Uber Rural</li> <li>• Eastern Area Agency on Aging</li> <li>• Aroostook Mental Health Center school</li> <li>• Health Navigators</li> </ul>

# 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.”<sup>8</sup> 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 an older population.<sup>9</sup>

## QUALITATIVE EVIDENCE

Residents at community forums identified several social determinants of health that affect older adults’ ability to maintain good health and age safely in their homes or chosen space. This included transportation and food insecurity, while also issues for the population at large, may be especially problematic for older adults with no or limited financial means, impaired mobility, or family/caregiver support. The need for affordable and safe housing was another issue identified by residents and key informants. While “aging in place” or aging in the home is a popular 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.

Forum participants and key informants identified the need for education and services to address issues around the management of chronic disease. Some older adults, especially those with multiple chronic conditions, may have difficulty with pain control and medication management, which can contribute to issues of substance use (both intentional and unintentional).

Several physical and mental health issues were identified as specific conditions of concern such as Alzheimer’s, dementia, mobility and falls, and depression. Participants also identified gaps in the spectrum of care for older adults including home health, adult day care, assisted living and long-term care, and geriatric psychiatry.

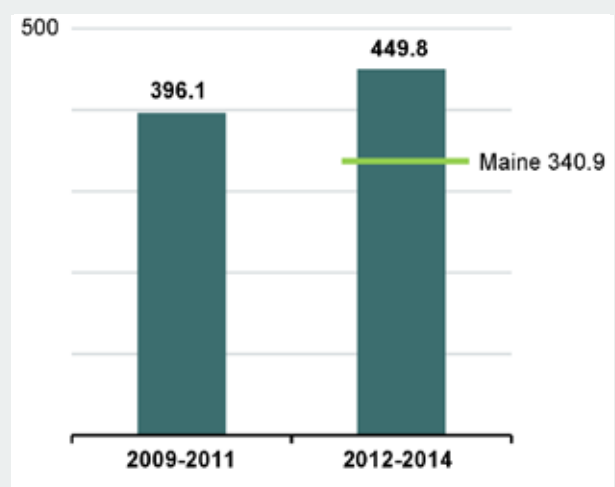
## QUANTITATIVE EVIDENCE

### In Washington County:

- The percentage of adults with arthritis was significantly higher than the state (36.4% vs. 32.0%) in 2014-2016.
- The percentage of adults (45+) reporting cognitive decline in the past 12 months was higher than the state overall (15.5%\* vs. 10.3%) in 2016.
- The fall-related injury (unintentional) emergency department rate per 10,000 was significantly higher than the state overall (449.8 vs. 340.9) between 2012–2014.

*\*Due to small numbers, this should be interpreted with caution.*

**Figure 4: Fall Related Injury (Unintentional) ED Rate per 10,000**



See Key Indicators on page 19 as well as companion Health Profiles on our website [www.mainechna.org](http://www.mainechna.org). Those documents also include 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, and local/county resource guides should be referenced as a more comprehensive inventory.

**Table 6: Assets and Gaps/Needs (Older Adult Health/Healthy Aging)**

ASSETS	GAPS/NEEDS
<ul style="list-style-type: none"> <li>• Sunrise Senior College</li> <li>• Support groups</li> <li>• Downeast Community Partners</li> <li>• Navigator for older adults</li> <li>• Downeast Resource Hospice</li> <li>• St. Paul</li> <li>• Thriving in Place</li> <li>• Food Portions</li> <li>• Meals for Me</li> </ul>	<ul style="list-style-type: none"> <li>• Geriatric psychiatry</li> <li>• Geriatrician</li> <li>• Physical therapy</li> <li>• Dementia/Alzheimer's beds</li> <li>• Long term care facilities</li> <li>• Home care or nursing home placement</li> <li>• Wellness class</li> <li>• Help with burned out families</li> <li>• Transportation</li> <li>• Lapses in care</li> <li>• Older adult orphans</li> <li>• Violence with patients</li> <li>• More Licensed Social Workers paperwork advocates</li> <li>• Mental health screening</li> <li>• Day care</li> <li>• Aging in place</li> <li>• Waiting period for home based cared</li> <li>• Dentures, hearing aids, etc.</li> <li>• Meals on Wheels</li> </ul>

# 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 individuals' health and define quality of life for many segments of the population, 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.<sup>10</sup>

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.

Another example is food insecurity which 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.<sup>11</sup> Chronic diseases and health conditions associated with food insecurity include asthma, low birthweight, diabetes, mental health issues, hypertension, and obesity.<sup>12</sup>

## QUALITATIVE EVIDENCE

A dominant theme from key informant interviews and community forums was the tremendous impact that the underlying social determinants, particularly housing, transportation, and food insecurity have on residents in Washington County. At the root of many of these issues is poverty, which also affects people's ability to afford and access appropriate and comprehensive medical care. At a community level,

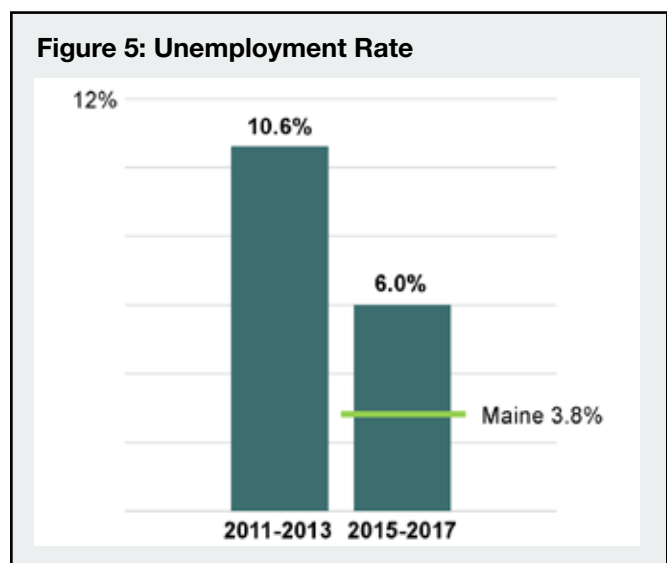
key informants identified a need for increased education and collaboration on the causes and impacts of poverty to combat stigma and to break the cycle of generation poverty that persists through generations.

Participants also identified a need for affordable and safe housing, especially for low-income seniors. Finally, food insecurity was identified as a priority issue for older adults and low-income families with children. Poverty and lack of transportation are linked to this issue, as they hinder people's ability to access fresh produce, which may be expensive and cost prohibitive. Forum participants said that local food pantries were making an effort to offer more nutritious foods and higher quality meats to combat this issue, but there remains a need for education and on planning and preparing healthy meals.

## QUANTITATIVE EVIDENCE

### In Washington County:

- The unemployment rate was higher than the state overall (6.0% vs. 3.8%) in 2015–2017.
- The percentage of individuals living in poverty was higher than the state overall (18% vs. 13.5%) in 2012–2016.
- The percentage of children living in poverty was higher than the state overall (22.1% vs. 17.2%) in 2012–2016.



- The median household income was over \$10,000 less than the state overall– \$39,469 vs. \$50,826 in 2012-2016.
- The percentage of households without a vehicle was higher than the state overall (3.4% vs. 2.4%) in 2012-2016.

- The percentage of households that lack enough food to maintain healthy, active lifestyles for all household members was similar to the state overall (16.9% vs. 15.1%) in 2014-2015.

See Key Indicators on page 19 as well as companion Health Profiles on our website [www.mainechna.org](http://www.mainechna.org). Those documents also 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 7: Assets and Gaps/Needs (Social Determinants of Health)**

ASSETS	GAPS/NEEDS
<ul style="list-style-type: none"> <li>• Aroostook Mental Health Center</li> <li>• Northern Light Acadia Hospital</li> <li>• Community Health and Counseling Services</li> <li>• Behavioral Health Homes</li> <li>• Community Integration</li> <li>• Down East Community Hospital</li> <li>• School nurses</li> <li>• Collaboration with outside providers/resources</li> <li>• Telepsychiatry</li> <li>• Washington County resource guides</li> <li>• Experienced providers</li> <li>• Available counselors in schools</li> </ul>	<ul style="list-style-type: none"> <li>• School based support services</li> <li>• Untreated depression</li> <li>• More social workers, counselors, psychologists, psychiatrists</li> <li>• Support groups needed</li> <li>• Support for transgender people</li> <li>• Mental health beds</li> <li>• Staff training in hospitals and schools</li> <li>• Bullying</li> <li>• Uninsured</li> <li>• Cost of care</li> <li>• Stigma</li> <li>• LGBTQ care</li> <li>• Increased availability</li> <li>• Difficult distances</li> <li>• Affordable access to youth services</li> <li>• Nowhere to go for crisis during school hours</li> <li>• Support for parents</li> <li>• Seven day a week support</li> <li>• Inpatient beds</li> <li>• Community engagement around mental health</li> </ul>



# COMMUNITY CHARACTERISTICS

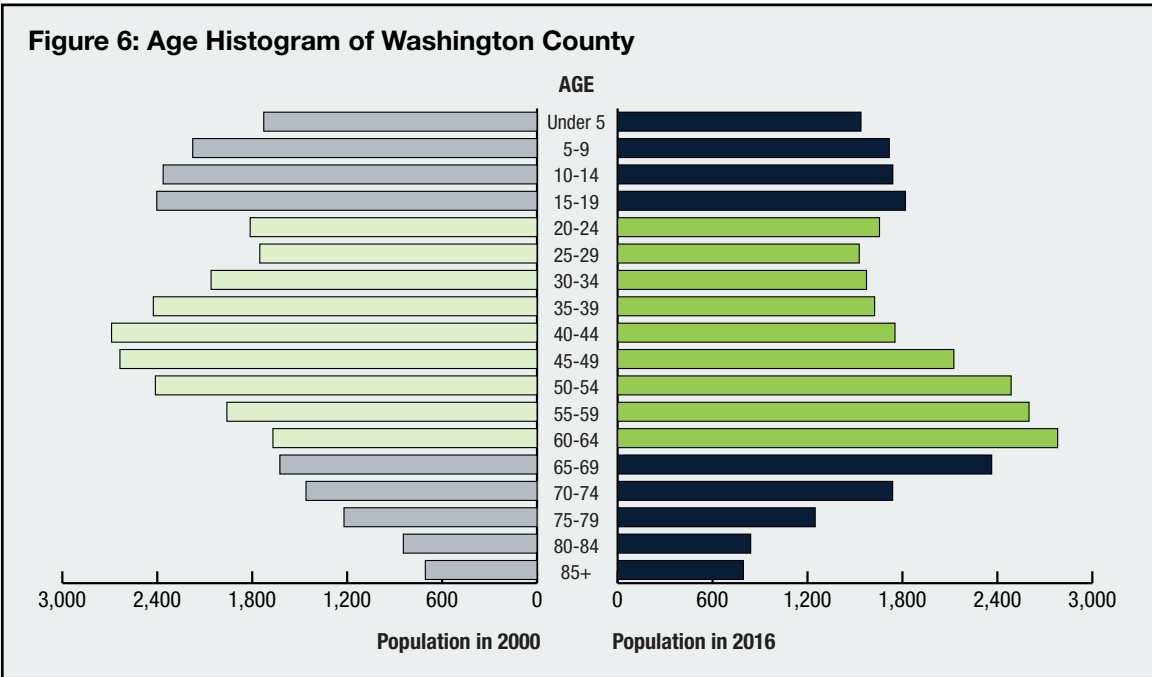
## AGE DISTRIBUTION

Age is a fundamental factor to consider when assessing individual and community health status; older adults with multiple chronic conditions typically have more physical and mental health vulnerabilities and are more likely to rely on immediate community resources for support compared to young people.<sup>13</sup> 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.<sup>14</sup>

The following is a summary of findings related to community characteristics for Washington 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](http://www.mainechna.org) and click on “Health Profiles.”

- In Washington County, 21.9% of the population is 65 years of age 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 U.S. Centers for Disease Control and Prevention (CDC), non-Hispanic Blacks have higher rates of premature death, infant mortality and preventable hospitalization than non-Hispanic Whites.<sup>15</sup> 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 medical comprehension. This leads to higher rates of medical issues and complications, such as adverse reactions to medication.<sup>16,17</sup> 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 Washington County:**

- The population is predominantly White (91.4%); 4.5% of the population is American Indian/Alaskan Native, 1.8% are Hispanic, and 2.6% are two or more races.
- Washington County has the highest percentage of American Indian/Alaskan Native of all counties in Maine. There are two distinct self-governing Passamaquoddy communities in Washington County (Pleasant Point and Indian Township).

**Table 8: Race/Ethnicity in Washington County 2012-2016**

	PERCENT/NUMBER
American Indian/Alaskan Native	4.5% / 1,438
Asian	0.5% / 154
Black/African American	0.4% / 137
Hispanic	1.8% / 581
Some other race	0.5% / 172
Two or more races	2.6% / 843
White	91.4% / 29,167

**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 expectancy. 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 the inability to pay for transportation to receive services. Higher education is associated with improved health outcomes and social development at individual and community levels. 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 9 includes a number of data points comparing Washington County to the state overall.

**Additionally, in Washington County:**

- The estimated high school graduation rate was higher than the state overall (87.7% vs. 86.9%) in 2017.
- The percent of the population over 25 with an associate’s degree or higher was lower than the state overall (29.1% vs. 37.3%) in 2012-2016.

**Table 9: Socioeconomic Status**

	WASHINGTON/MAINE
Median household income	\$39,469 / \$50,826
Unemployment rate	6.0% / 3.8%
Individuals living in poverty	18.0% / 13.5%
Children living in poverty	22.1% / 17.2%
65+ living alone	– / 45.3%

**SPECIAL POPULATIONS**

Through community engagement activities, several populations in Washington 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 adults and healthy aging were priorities in Washington County. Specific barriers being access to care for older adults, including lack of transportation, affordability and safety of housing, food insecurity, poverty, chronic disease management, aging in place, and the need for specific health care services (e.g., geriatric psychiatry, home health, long-term care, health care navigators).

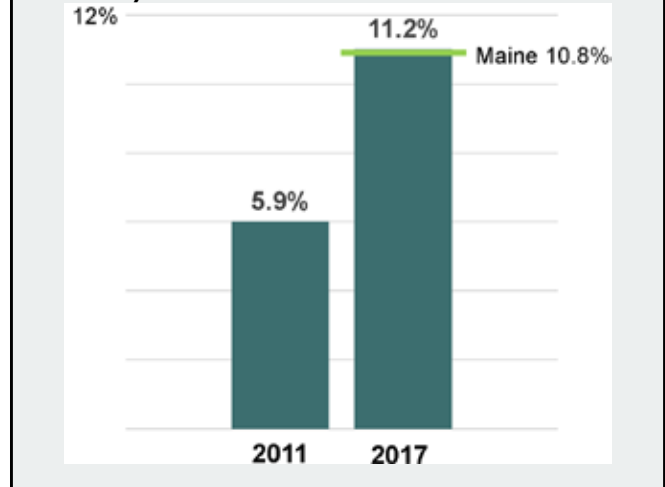
## LGBTQ

LGBTQ individuals were identified as a population with significant and specialized health needs. Forum participants and interviewees discussed the need for more comprehensive and culturally competent health care for LGBTQ and non-binary individuals. 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 express 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. A statewide analysis of Behavioral Risk Surveillance Survey confirms, among adults, higher rates of depression diagnosis over the lifetime when comparing those who identify as heterosexual as compared to those who identify as bisexual, gay or lesbian, or other sexual orientation. 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).

## 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 use (specifically the impact of parental substance use), and the impacts of generational poverty. 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 services, without parent permission.

**Figure 7: Gay, Lesbian, and Bisexual (High School)**



## 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 near-constant state of perpetual crisis creates a cycle of poverty that persists from one generation to the next. Forum participants and key informants in Washington County identified low-income individuals, families, and older adults in Washington family as a population that was 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](http://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.

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

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

	WASHINGTON COUNTY DATA			BENCHMARKS			
KEY INDICATOR	POINT 1	POINT 2	CHANGE	MAINE	+/-	U.S.	+/-
<b>SOCIAL, COMMUNITY &amp; PHYSICAL ENVIRONMENT</b>							
Children living in poverty	—	2012-2016 22.1%	N/A	2012-2016 17.2%	N/A	2016 21.1%	N/A
Median household income	2007-2011 \$35,272	2012-2016 \$39,469	N/A	2012-2016 \$50,826	N/A	2016 \$57,617	N/A
Estimated high school student graduation rate	2014 89.4%	2017 87.7%	N/A	2017 86.9%	N/A	—	N/A
Food insecurity	2012-2013 17.6%	2014-2015 16.9%	N/A	2014-2015 15.1%	N/A	2015 13.4%	N/A
<b>HEALTH OUTCOMES</b>							
14 or more days lost due to poor physical health	2011-2013 22.7%	2014-2016 22.8%	○	2014-2016 19.6%	○	2016 11.4%	N/A
14 or more days lost due to poor mental health	2011-2013 19.3%	2014-2016 20.1%	○	2014-2016 16.7%	○	2016 11.2%	N/A
Years of potential life lost per 100,000 population	2010-2012 7,264.8	2014-2016 9,152.7	○	2014-2016 6,529.2	!	2014-2016 6,658.0	N/A
All cancer deaths per 100,000 population	2007-2011 216.7	2012-2016 207.3	○	2012-2016 173.8	!	2011-2015 163.5	!
Cardiovascular disease deaths per 100,000 population	2007-2011 239.5	2012-2016 222.3	○	2012-2016 195.8	!	2016 218.2	○
Diabetes	2011-2013 10.4%	2014-2016 12.8%	○	2014-2016 10.0%	!	2016 10.5%	○
Chronic obstructive pulmonary disease (COPD)	2011-2013 8.5%	2014-2016 9.7%	○	2014-2016 7.8%	○	2016 6.3%	!
Obesity (adults)	2011 34.3%	2016 35.4%	○	2016 29.9%	○	2016 29.6%	○
Obesity (high school students)	2011 14.0%	2017 20.4%	○	2017 15.0%	○	—	N/A
Obesity (middle school students)	2015 20.0%	2017 24.1%	○	2017 15.3%	!	—	N/A
Infant deaths per 1,000 live births	2007-2011 4.4*	2012-2016 5.3*	N/A	2012-2016 6.5	○	2012-2016 5.9	○
Cognitive decline	2012 17.7*%	2016 15.5*%	○	2016 10.3%	○	2016 10.6%	○
Lyme disease new cases per 100,000 population	2008-2012 21.9	2013-2017 50.4	N/A	2013-2017 96.5	N/A	2016 11.3	N/A
Chlamydia new cases per 100,000 population	2008-2012 174.2	2013-2017 225.6	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 396.1	2012-2014 449.8	!	2012-2014 340.9	!	—	N/A
Suicide deaths per 100,000 population	2007-2011 17.3	2012-2016 20.0	○	2012-2016 15.9	○	2016 13.5	○
Overdose deaths per 100,000 population	2007-2011 16.8	2012-2016 35.4	!	2012-2016 18.1	!	2016 19.8	!

KEY INDICATOR	WASHINGTON COUNTY DATA			BENCHMARKS			
	POINT 1	POINT 2	CHANGE	MAINE	+/-	U.S.	+/-
<b>HEALTH CARE ACCESS AND QUALITY</b>							
Uninsured	2009-2011 13.6%	2012-2016 12.7%	N/A	2012-2016 9.5%	N/A	2016 8.6%	N/A
Ratio of primary care physicians to 100,000 population	—	2017 30.0	N/A	2017 32.1	N/A	—	N/A
Ratio of psychiatrists to 100,000 population	—	2017 1.5	N/A	2017 8.4	N/A	—	N/A
Ratio of practicing dentists to 100,000 population	—	2017 30.0	N/A	2017 32.1	N/A	—	N/A
Ambulatory care-sensitive condition hospitalizations per 10,000 population	—	2016 119.9	N/A	2016 74.6	N/A	—	N/A
Two-year-olds up-to-date with recommended immunizations	2014 90.3%	2017 87.2%	N/A	2017 73.7%	N/A	—	N/A
<b>HEALTH BEHAVIORS</b>							
Sedentary lifestyle – no leisure-time physical activity in past month (adults)	2011 28.8%	2016 25.3%	○	2016 20.6%	○	2016 23.2%	N/A
Chronic heavy drinking (adults)	2011-2013 8.0%	2014-2016 7.3%	○	2014-2016 7.6%	○	2016 5.9%	N/A
Past-30-day alcohol use (high school students)	2011 27.1%	2017 23.4%	○	2017 22.5%	○	—	N/A
Past-30-day alcohol use (middle school students)	2011 9.0%	2017 2.5%	★	2017 3.7%	○	—	N/A
Past-30-day marijuana use (high school students)	2011 19.5%	2017 19.8%	○	2017 19.3%	○	—	N/A
Past-30-day marijuana use (middle school students)	2011 4.2%	2017 4.9%	○	2017 3.6%	○	—	N/A
Past-30-day misuse of prescription drugs (high school students)	2011 5.2%	2017 5.0%	○	2017 5.9%	○	—	N/A
Past-30-day misuse of prescription drugs (middle school students)	2011 2.0%	2017 1.6%	○	2017 1.5%	○	—	N/A
Current (every day or some days) smoking (adults)	2011-2012 23.4%	2016 23.6%	○	2016 19.8%	○	2016 17.0%	N/A
Past-30-day cigarette smoking (high school students)	2011 21.9%	2017 12.3%	○	2017 8.8%	!	—	N/A
Past-30-day cigarette smoking (middle school students)	2011 4.7%	2017 2.5%	○	2017 1.9%	○	—	N/A

### Leading Causes of Death

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

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

# APPENDIX A: REFERENCES

- 1 National Institute of Mental Health. (n.d.).Chronic illness & mental health. Retrieved from <https://www.nimh.nih.gov/health/publications/chronic-illness-mental-health/index.shtml>
- 2 National Institute of Mental Health. (2017). Mental health and substance use disorders. Retrieved from <https://www.mentalhealth.gov/what-to-look-for/mental-health-substance-use-disorders>
- 3 National Alliance on Mental Health. (n.d.). LGBTQ. Retrieved from <https://www.nami.org/find-support/lgbtq>
- 4 Substance Abuse and Mental Health Services Administration. (2016). Mental health and substance use disorders. Retrieved from <https://www.samhsa.gov/disorders>.
- 5 Lipari, R.N. & Van Horn, S.L. (2017). Trends in substance use disorders among adults aged 18 or older. Retrieved from [https://www.samhsa.gov/data/sites/default/files/report\\_2790/ShortReport-2790.html](https://www.samhsa.gov/data/sites/default/files/report_2790/ShortReport-2790.html)
- 6 National Institute on Drug Abuse. (2014). Principles of adolescent substance use disorder treatment: A research based guide. What drugs are most frequently used by adolescents? Retrieved from <https://www.drugabuse.gov/publications/principles-adolescent-substance-use-disorder-treatment-research-based-guide/frequently-asked-questions/what-drugs-are-most-frequently-used-by-adolescents>
- 7 Mental Health America. (2017). Access to care. Retrieved from <http://www.mentalhealthamerica.net/issues/mental-health-america-access-care-data>
- 8 World Health Organization. Ageing and lifecourse. Retrieved from <https://www.who.int/ageing/healthy-ageing/en/>
- 9 University of Pittsburgh: Stern Center for Evidence-Based Policy. Addressing the health needs of an aging America. Retrieved from <https://www.healthpolicyinstitute.pitt.edu/sites/default/files/SternCtrAddressingNeeds.pdf>
- 10 Bernazzani, S. (2016). The importance of considering the social determinants of health. Retrieved from <https://www.ajmc.com/contributor/sophia-bernazzani/2016/05/the-importance-of-considering-the-social-determinants-of-health>
- 11 Food Research and Action Center. (2017). Hunger and health: The impact of poverty, food insecurity, and poor nutrition on health and well-being. Retrieved from <http://frac.org/wp-content/uploads/hunger-health-impact-poverty-food-insecurity-health-well-being.pdf>
- 12 Food Research and Action Center, Hunger and Health
- 13 Lyons, L. (2013, March 11). Age, religiosity, and rural America. Retrieved from <http://www.gallup.com/poll/7960/age-religiosity-rural-america.aspx>
- 14 Rowe, J.W. et al. (2016, September 19). Preparing for better health and health care for an aging population: A vital direction for health and health care. Retrieved from <https://nam.edu/wp-content/uploads/2016/09/Preparing-for-Better-Health-and-Health-Care-for-an-Aging-Population.pdf>
- 15 Centers for Disease Control and Prevention. (2015, September 10). CDC Health Disparities and Inequalities Report (CHDIR). Retrieved from <https://www.cdc.gov/minorityhealth/chdireport.html>, September 10, 2015
- 16 Wilson, E., Chen, A.H., Grumbach, K., Wang, F., & Fernandez, A. (2005). Effects of limited English proficiency and physician language on health care comprehension. *Journal of General Internal Medicine*, 20(9), 800-806.
- 17 Coren, J.S., Filipetto, F.A., & Weiss, L.B. (2009). Eliminating barriers for patients with limited English proficiency. *Journal of the American Osteopathic Association*, 109(12), 634-640.



# 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.

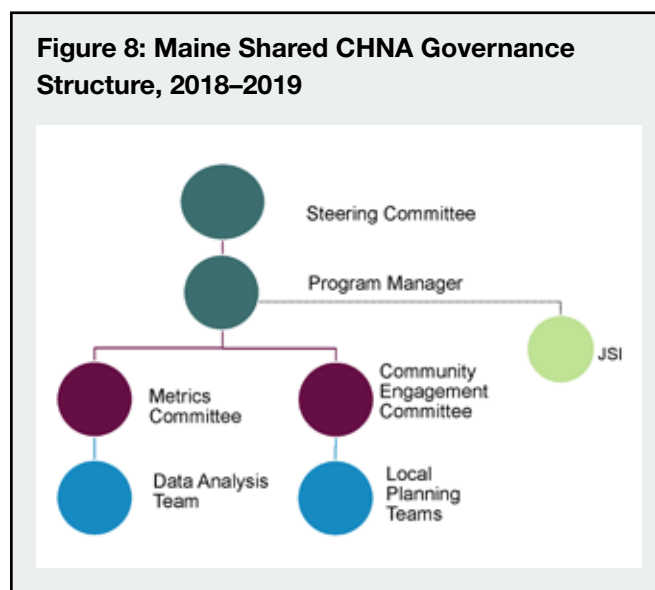
The Maine Shared CHNA is intended to coordinate state and county needs assessments to meet the needs of hospitals, to support state and local public health accreditation efforts, and to provide valuable population health assessment data for a wide variety of organizations across Maine. Our vision is 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](http://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 8: 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 Washington County Health Profile on [www.mainechna.org](http://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 the spring of 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?
- Does it 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 (for those Public Health Districts comprised of multiple counties)
- 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](http://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.

### Washington County Forums

Two community engagement activities were held in Washington County.

**Table 10: Community engagement activities in Washington County, 2018**

TYPE OF ENGAGEMENT	LOCATION & DATE	FACILITATOR	ATTENDEES
Community Forum	Machias 09/20/2018	JSI	39
Community Forum	Calais 09/26/2018	JSI	24

# COMMUNITY ENGAGEMENT

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

- Aroostook Mental Health Center
- Calais Regional Hospital
- Calais Regional Medical Services
- City of Calais
- City of Eastport
- Community Health & Counseling Services
- County of Washington
- Down East Community Hospital
- Downeast Hospice
- Downeast Public Health District
- Eastern Area Agency on Aging
- Eastern Maine Development Corp
- Eastport Healthcare Inc.
- Healthways Regional Medical Center Lubec
- Healthy Acadia
- I Care2
- Maine CDC
- Maine CDC Public Health Nursing
- Maine Seacoast Mission
- Maine State Legislature
- Maine Veterans Home
- Marshall Healthcare Facility
- National Alliance on Mental Illness (NAMI)
- Next Step Domestic Violence Project
- Northern Light Acadia Hospital
- Northern Light Health
- Office of Aging and Disability Services, DHHS
- St. Croix Regional Family Health Center
- Sunrise County Economic Council
- Sunrise Opportunities
- Sunrise Senior College
- The Quoddy Tides
- Town of Baileyville
- Town of Machias
- United Way of Eastern Maine

- Washington County Emergency Management

## Key informant interviews

The Steering Committee identified several 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 populations identified included:

- Veterans
- 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**

Final CHNA reports for the state, each county, and districts were released in the spring of 2019. These were used to develop health improvement plans to address the identified health priorities and evaluate previous actions taken. In the upcoming years policy makers, non-profits, businesses, academics, and other community partners may also use these reports to inform their strategic planning, policy making, or grant writing purposes.

For more information, contact: [info@mainechna.org](mailto:info@mainechna.org)

