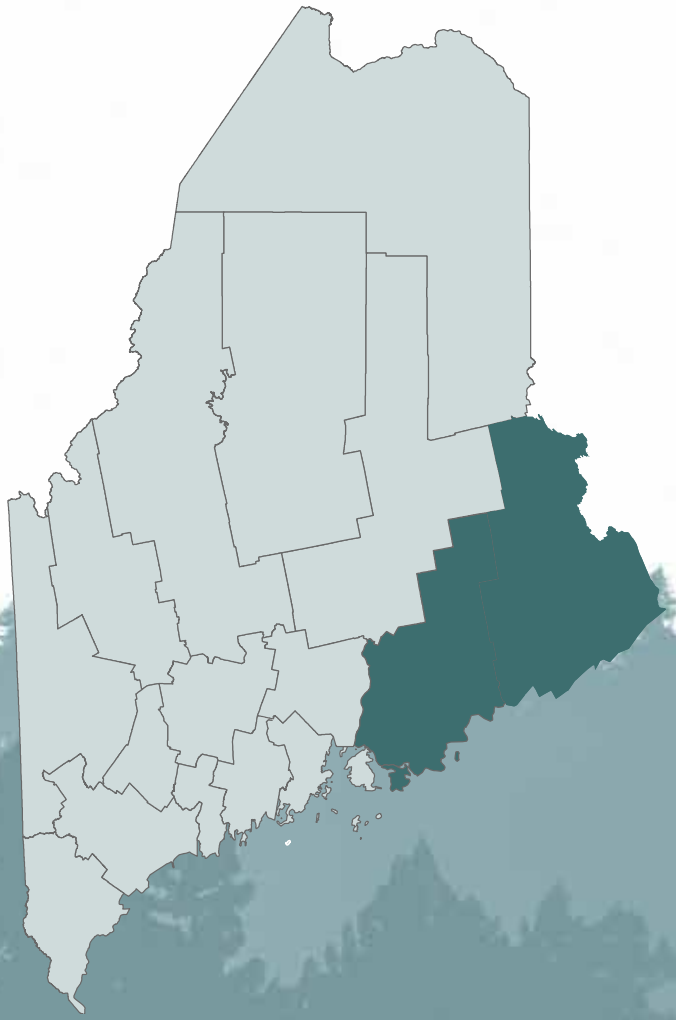
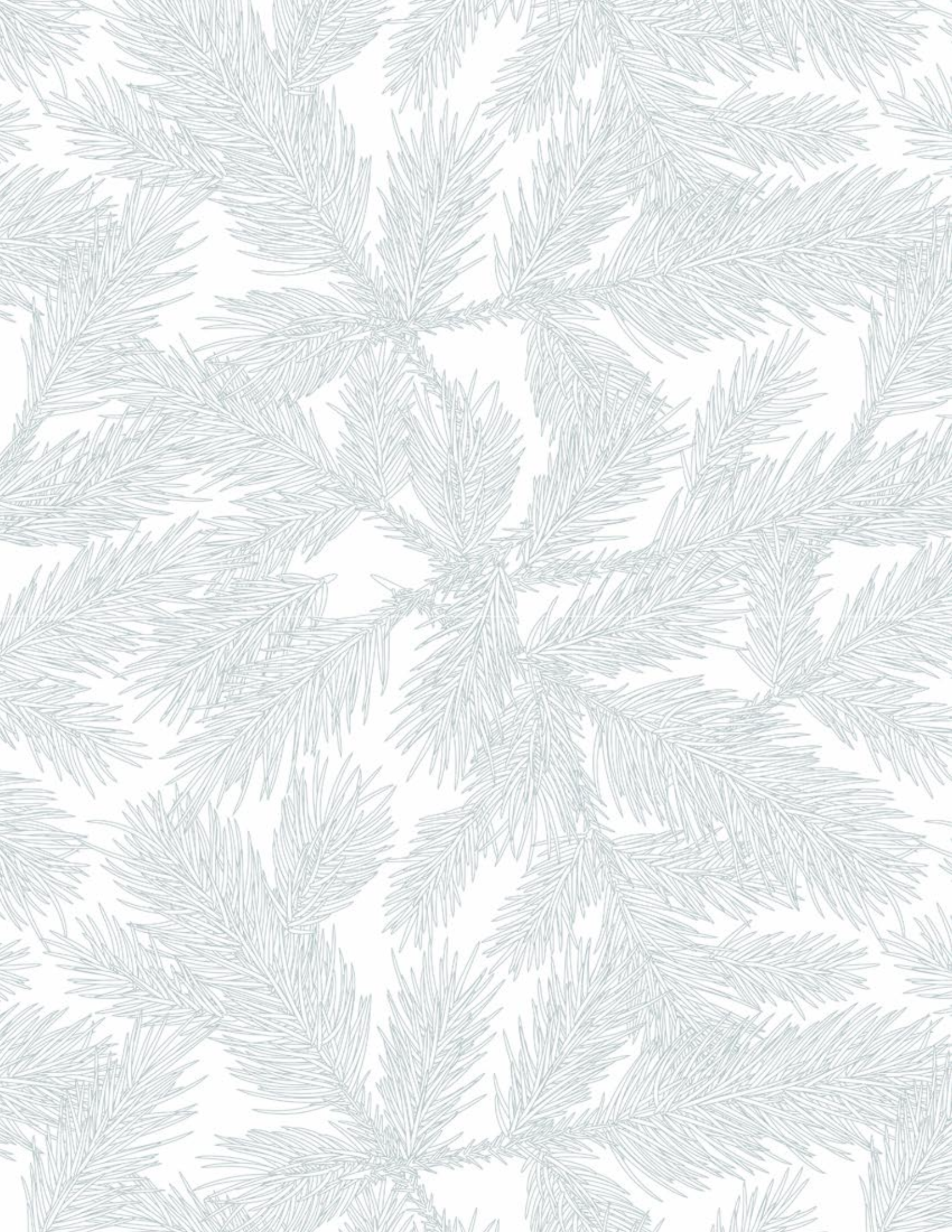
DOWNEAST DISTRICT

2019 Maine Shared Community Health Needs Assessment Report





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Key companion documents available at www.mainechna.org:

- Hancock County Health Profile and CHNA Report
- Washington County Health Profile and CHNA Report
- Downeast District Health Profile
- Maine State Health Profile and CHNA Report
- 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 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), an office of Maine Department of Health and Human Services. 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.

Table 1: Population (2012-2016)

	HANCOCK COUNTY	WASHINGTON COUNTY	DOWNEAST DISTRICT	MAINE
Population Count	54,483	31,925	86,408	1,329,923
Population 65 years of age or older	21.4%	21.9%	21.6%	18.2%
White	96.3%	91.4%	94.5%	94.8%
Hispanic	1.3%	1.8%	1.5%	1.5%
American Indian/ Alaskan Native	0.4%	4.5%	1.9%	0.6%
Two or more races	1.7%	2.6%	2.1%	2.0%

More information on the population characteristics of the Downeast District can be found in the Community Characteristics section on page 21.

TOP HEALTH PRIORITIES

Forums held in the Downeast District 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 includes a list of only those priorities that were identified in both Hancock and Washington Counties.

Table 2: Top Priorities in Downeast District Counties

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

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 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 four healthcare systems: Central Maine Healthcare, MaineGeneral Health, MaineHealth, and Northern Light Health, with generous in-kind support from the Maine CDC, 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 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. (JSI) 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 for the county, public health district, and the state were developed through community participation and voting at community forums. The forums were an opportunity for review of the County Health Profiles, discussion of community needs, and prioritization in small breakout sessions followed by forum session votes. Table 3 lists all priorities that arose from group breakout sessions in each of the counties that make up the Downeast District. The priorities in bold font represent the top priorities within each county. The shaded priorities are those that were common across both Hancock and Washington Counties. Please see Appendix C for full description of the methodology used in identifying top priorities.

This section provides a synthesis of findings for each of the top priorities that arose in each county. The discussion of each priority draws from several sources, including the data in the Downeast District Health Profile, information gathered through community engagement discussions at the community forums, and key informant interviews. See Appendix C for the complete methodology for all of these activities.

Table 3: Downeast District County Forum Voting Results

	HANCOCK COUNTY	WASHINGTON COUNTY
PRIORITY AREA	**% OF VOTES**	**% OF VOTES**
Mental Health*	**18%**	**23%**
Substance Use*	**18%**	**20%**
Access to Care*	**15%**	**18%**
Social Determinants of Health*	**16%**	**15%**
Older Adult Health/ Healthy Aging*	**15%**	**16%**
Physical Activity, Nutrition, and Weight*	10%	1%
Health Care Quality	6%	N/A
Cancer	1%	5%
Cardiovascular Disease	1%	N/A
Intentional Injury	N/A	1%

**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, sexual orientation, or gender. Poor mental health contributes to a number of issues 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.[1]

More than 25% of adults with a mental health condition 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 condition.[2]

QUALITATIVE EVIDENCE

Across the Downeast District forums, participants identified depression, stress, isolation, trauma, family separation, and suicidality as issues and conditions of note.

In both counties, forum participants identified a need for behavioral health services in general and for inpatient services, but also cited specific missing resources:

- In Hancock County, participants identified a need for counseling, screening for Adverse Childhood Experiences (ACEs), pediatric providers, and psychiatry.
- In Washington County, participants identified a need for in-school counseling, group homes, and support groups. Residents and key informants were also concerned about the recruitment and retention of behavioral health providers, especially psychiatrists, psychologists, psychiatric nurses, counselors, and qualified therapists.

Forum participants in both counties were particularly concerned about youth mental health conditions. Forum participants suggested that more education, screening, and training could be done in the school setting to address these issues.

- In Hancock County, rising rates of depression among high school students was a concern, and there were questions about the contribution of technology and social media to isolation and bullying. Forum participants also discussed the need for increased education, training, and resources about the mental health effects of ACEs, particularly sexual assault, housing insecurity, food insecurity, parental substance use, and removal from the home.
- In Washington County, the impact of parental mental health conditions 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 conditions. Participants identified a need for positive modeling in the home and increased support for struggling families.

In Washington County, a final key theme from discussions about mental health was lack of community cohesion. Several forum participants identified social isolation as a critical determinant of mental health conditions, which some related to the increased use of technology and how that limits personal interaction. There were several needs identified in this area, including the need for free recreational opportunities, free community building and social events, increased community resilience, and more faith-based community support services.

QUANTITATIVE EVIDENCE

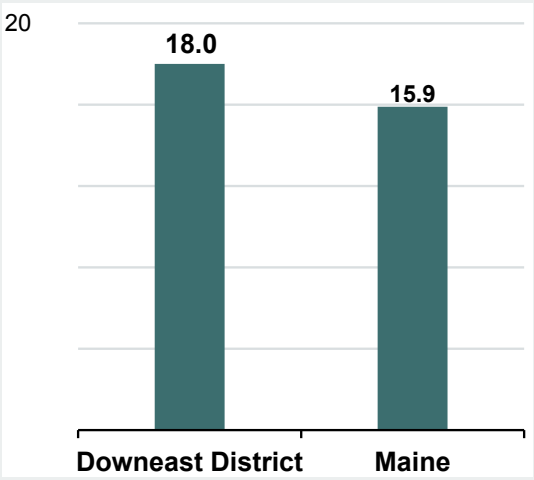
In the Downeast District:

- Suicide deaths per 100,000 were higher than the state overall (18.0 vs. 15.9) in 2012-2016.

- In Washington County, the percentage of high school students who reported having seriously considered suicide increased significantly between 2011 and 2017, from 11.8% to 16.1%.
- In Washington County, 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%.

See Key Indicators on page 25 as well as the Downeast District Health Profile and individual county data reports on our website www.mainechna.org. Those documents also include information on data sources and definitions.

Figure 1: Suicide Deaths per 100,000, 2012-2016



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. Assets and gaps/needs in bold text were identified in both Hancock and Washington Counties.

Table 4: Assets and Gaps/Needs (Mental Health) in the Downeast District

HANCOCK COUNTY	
ASSETS	**GAPS/NEEDS**
• **Northern Light Acadia Hospital** • **Aroostook Mental Health Center** • Local counselors • **Behavioral health and primary care provider integration** • Depression screening • Many medications are affordable • Downeast Treatment center • Sweetser outreach • Crisis response • School resiliency training • Education in schools • **Tele-psychiatry** • Hub and spoke model	• **Lack of resources** • **Stigma** • Poor internet • **Lack of counseling centers** • **More primary care providers/mental health/ substance use providers** • **More inpatient options** • Adverse Childhood Experiences (ACEs) screening • Breaks in insurance • **More treatment slots/inpatient beds** • **Support groups/rehabilitation options** • Counseling/education in schools • **Pediatric providers** • Motivational interviewing • **Reduction of stigma** • **Transportation** • Better tobacco education • Medication-Assisted Treatment (MAT) availability • More suboxone providers

COMMUNITY RESOURCES TO ADDRESS MENTAL HEALTH (CONTINUED)

Table 4: Assets and Gaps/Needs (Mental Health) in the Downeast District (continued)

WASHINGTON COUNTY	
ASSETS	**GAPS/NEEDS**
• **Aroostook Mental Health Center** • **Northern Light Acadia Hospital** • Community Health and Counseling Services • **Behavioral health homes** • Community integration • Down East Community Hospital • School nurses • Collaboration between providers and other resources • Healthy Acadia • Washington County resource guides • Counseling • **Tele-psychiatry** • Local mental health agencies with long histories of care and expertise • Counselors in schools • Experienced providers • Commitment by community to support mental health initiatives • Calais High School LGBTQ • St. Croix LGBTQ Club	• Outreach in elementary schools • **Help for youth** • **More resources to address individual needs** • **Affordable access to services for young children** • **Transportation to services** • Insurance • Medication management • Tele-medicine • **More mental health professionals (psychiatrists, psychologists, psychiatric nurses, counselors, qualified therapists)** • **Inpatient psychiatric beds** • Integrated behavioral health services • Behavioral health screening in schools • Group homes • **Early childhood screening for depression and anxiety** • Peer counseling • **Support groups** • Resources for when there is a crisis during school hours • **Support for parents and families** • Affordable care • **Stigma** • Long-term management • School social workers • Support for transgender people • LGBTQ Care • Staff training in hospitals and schools • **Availability of providers** • **Recruitment and retention of providers**

SUBSTANCE USE

The Substance Abuse and Mental Health Services Administration (SAMHSA) estimated that 8% of adults in the United States have had a substance use disorder in the past year.[3] Tobacco, alcohol, marijuana, and nonmedical use of prescription pain relievers (e.g. OxyContin, Vicodin) are the leading substance use health issues for adults.[4] Tobacco, alcohol, and marijuana are the most common substances misused by adolescents, followed by amphetamines (e.g. Adderall) and nonmedical use of prescription pain relievers.[5]

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.[6] Barriers to care include a lack of education, awareness, and understanding around the signs, symptoms, risk factors, and consequences associated with substance use, social stigma, and workforce shortages. Statewide, many forum participants and key informant interviewees identified gaps in access to substance use treatment and recovery services.

Finally, those who are uninsured or underinsured are more likely to face barriers to care, and historically, coverage for substance use services has been less comprehensive than for physical health services. This is further complicated by the cost of co-pays, transportation, and medications, even for those who are eligible for free or discounted services, or for those with commercial insurance, as many private substance use treatment providers do not accept insurance and require cash payments.

QUALITATIVE EVIDENCE

Opioid use was the leading substance use issue discussed in both Hancock and Washington Counties. Forum participants discussed the need for more comprehensive, accessible, and affordable services to help those in need. Participants in both counties specifically identified a need for medication-assisted treatment (MAT) and substance use prevention specialists.

- In Hancock County, forum participants identified the need for harm-reduction services (e.g., needle exchange), inpatient services, and supportive housing for recovery. The criminalization of substance use was seen as problematic for engaging people in treatment, as well as a challenge when offering a continuity of treatment services while people are in jail and after they are released.
- In Washington County, education, prevention, detoxification, and rehabilitation were identified as gaps in the spectrum of substance use treatment.

Many concerns in the realm of substance use were focused on youth.

- In Hancock County, some forum participants were concerned about the use of marijuana and prescription drugs to cope with unaddressed mental health conditions. There were also concerns about accessing medication in the home. Finally, residents reported that the number of grandparents raising grandchildren has risen, and there is a need to address resiliency for youth, caregivers, and communities affected by substance use disorder.
- In Washington County, 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 many priority health issues for those who use substances 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.

QUANTITATIVE EVIDENCE

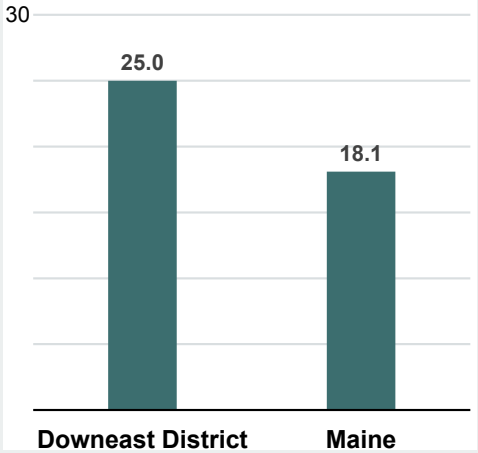
In the Downeast District:

- The rate of overdose deaths per 100,000 population was significantly higher than the state overall (25.0 vs. 18.1) in 2012-2016.

- Past-30-day alcohol use amongst high school students was higher than the state overall (24.3% vs. 22.5%) in 2017.
- In Washington County, alcohol-induced deaths per 100,000 population were significantly higher than the state overall (16.6 vs. 9.7) in 2012-2016.
- The percentage of adults who currently smoke was higher than the state overall (22.1% vs. 19.8%) in 2016.

See Key Indicators on page 25 as well as the Downeast District Health Profile and individual county data reports on our website www.mainechna.org. Those documents also include information on data sources and definitions.

Figure 2: Overdose Deaths per 100,000, 2012-2016



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. Assets and gaps/needs in bold text were identified in both Hancock and Washington Counties.

Table 5: Assets and Gaps/Needs (Substance Use) in the Downeast District

HANCOCK COUNTY	
ASSETS	**GAPS/NEEDS**
• Northern Light Acadia Hospital • **Aroostook Mental Health Center** • Local counselors • Behavioral health and primary care provider integration • Depression screening • Many medications are affordable • Downeast Treatment center • Sweetser outreach • Crisis response • School resiliency training • **Education in schools** • Tele-psychiatry • Hub and Spoke Model	• Lack of resources • Stigma • Poor internet • Lack of counseling centers • **More Primary Care Providers/mental health/ substance use providers** • More inpatient options • Adverse Childhood Experiences (ACEs) screening • Breaks in insurance • More treatment slots/inpatient beds • Support groups/rehabilitation options • **Counseling/education in schools** • Pediatric providers • Motivational interviewing • Reduction of stigma • **Transportation** • Better tobacco education • **Medication assisted treatment availability** • More suboxone providers

COMMUNITY RESOURCES TO ADDRESS SUBSTANCE USE (CONTINUED)

Table 5: Assets and Gaps/Needs (Substance Use) in the Downeast District (continued)

WASHINGTON COUNTY	
ASSETS	**GAPS/NEEDS**
• Methadone treatment • Providers beginning to take interest in Medication-Assisted Treatment • Strong movement to mobilize • Experienced providers • Coordination/support groups • Available trainings • Recovery coaches • Three step treatment at home • Washington County Substance Use Response Collaborative • **Good education** • Stigma reduction • Arise support groups • **Aroostook Mental Health Center** • Alcoholics Anonymous/Narcotics Anonymous	• Navigation • **Transportation** • Drug addicted infant support • Funding for unidentified patients • **Education** • Financial treatment supports • **Medication-Assisted Treatment in the community** • **Treating providers** • Public Health Nursing Services • Drug education early on • Educating at young ages • Prenatal education • Subutex • More youth preventative programs • Transitional housing for those in recovery • **Detox/rehab center** • Group homes • Better community education • **Support councilors** • Cost resources

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 20.3% of American Indian/ Alaska Native adults report they are unable to receive or have delayed medical care due to cost, compared to 10.3% of white adults. Compared to heterosexual residents (11.6%), 19.3% of bisexual residents, and 22.5% of residents who identified as something other than heterosexual, gay or lesbian, or bisexual, were uninsured. More information on health disparities by race, ethnicity, education, sex, and sexual orientation can be found in the Health Equity Data Summaries, available at **www.mainechna.org**.

QUALITATIVE EVIDENCE

Many forum participants and key informants identified the social determinants of health, particularly the inability to access reliable and affordable forms of transportation, safe and affordable housing, and poverty/low wages, as significant barriers to care. The "Social Determinants of Health" priority area discusses this in more detail.

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.

- In Hancock County, forum participants discussed the need for several specific services including palliative care, collaborative care, and pediatrics. To address rural health access, the community discussed the potential uses of telemedicine and the challenges in making it a reality, such as broadband connection, equipment needs, and knowledge of patients and providers on how to use the tool effectively. There was also concern that use of telemedicine, while improving access, does not address the isolation of individuals.
- In Washington County, participants reported that there was a need to reduce barriers to accessing primary care to increase opportunities for education, health promotion, and routine screenings, all of which contribute to better management and reduced prevalence of chronic and complex conditions. Participants also identified a need for more health navigators, especially for older adults.

Key informants in Washington County identified treatment biases that impact access for medically underserved populations, including those with physical disabilities, mental health conditions, and substance use disorders. An additional barrier to care was provider capacity to serve unique populations. Unique needs include accommodating patients with physical or developmental disabilities when healthcare sites experience limitations in specific services (e.g., accessible equipment and capacity to provide dental and gynecology services).

QUANTITATIVE EVIDENCE

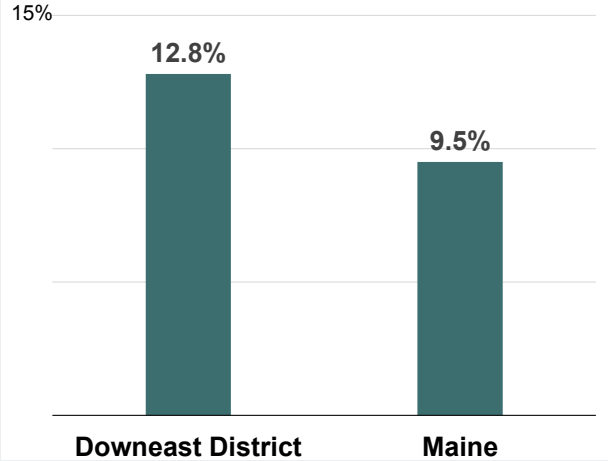
In the Downeast District:

- The percentage of the population without health insurance was higher than the state overall (12.8% vs. 9.5%) in 2012-2016.
- In Hancock County, the percentage of the population who experienced cost barriers to care increased between 2011-2013 and 2014-2016, from 9.9% to 11.2%. The percentage is higher than the state average (10.3%).
- In Washington County, 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 ratio of primary care physicians to 100,000 population was lower than the state overall (52.6 vs. 67.3) in 2017.
- In Washington County, 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.
- In Washington County, 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.

See Key Indicators on page 25 as well as the Downeast District Health Profile and individual county data reports on our website www.mainechna.org. Those documents also include information on data sources and definitions.

Figure 3: Population Without Health Insurance, 2012-2016



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. Assets and gaps/needs in bold text were identified in both Hancock and Washington Counties.

Table 6: Assets and Gaps/Needs (Access To Care) in the Downeast District

HANCOCK COUNTY	
ASSETS	**GAPS/NEEDS**
• **Downeast Community Partners, Connector, Transportation** • Faith in Action • Food pantries • Transportation Services, Friends in Action • Island Connections • Home Health and Hospice • MaineCare • Community paramedicine professionals • Eastern Area Agency on Aging • Neighbor for Neighbor	• **Medicaid expansion** • **Funding** • **Transportation** • **Insurance** • **Lack of providers** • **Telemedicine/broadband** • In home visits • Collaborative care • Lack of providers • **Cost of care** • Walkable communities • Palliative care • Early childhood healthcare • Better health/development education

COMMUNITY RESOURCES TO ADDRESS ACCESS TO CARE (CONTINUED)

Table 6: Assets and Gaps/Needs (Access To Care) in the Downeast District (continued)

WASHINGTON COUNTY	
ASSETS	**GAPS/NEEDS**
• **Downeast Community Partners/MaineCare rides** • Veterans Administration provides transportation • Skilled nursing facilities • Federally Qualified Health Centers • Private practices • Behavioral health agencies • Visiting nurses	• **Free or low-cost and reliable transportation services** • Nursing homes • Access for those with Alzheimer's/dementia • **Psychiatrists** • **Telemedicine** • **More nurses/providers** • Medical homes • **Cost of care** • Caregivers • **Medical support staff** • Community volunteers • **More funding** • **Clearer explanations of Medicare and companion plans** • **MaineCare expansion** • **Oncologists** • **Uber Rural** • Eastern Area Agency on Aging • Aroostook Mental Health Center school • Health Navigators

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, 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.[7]

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.[8] Chronic diseases and health conditions associated with food insecurity include asthma, low birthweight, diabetes, mental health conditions, hypertension, and obesity.[9]

QUALITATIVE EVIDENCE

A dominant theme from key informant interviews and community forum was the tremendous impact that the underlying social determinants, particularly food insecurity, transportation, housing, and social interaction/community cohesion have on residents in the Downeast District. 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.

- In Washington County, 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 generational, when a family has lived in poverty for at least two generations.

In both counties, transportation was identified a major barrier to accessing health care and a contributing factor to patients not showing up for medical appointments. 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 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 was another issue identified in both counties.

- In Hancock County, forum participants reported that while food pantries support immediate access to food, there were no long-term solutions for feeding individuals and families. Supplemental Nutrition Assistance Program (SNAP) benefits were identified as an asset; however, transportation issues challenge families' ability to access stores and markets.
- In Washington County, 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 on planning and preparing healthy meals.

In Washington County, two additional barriers to access were identified:

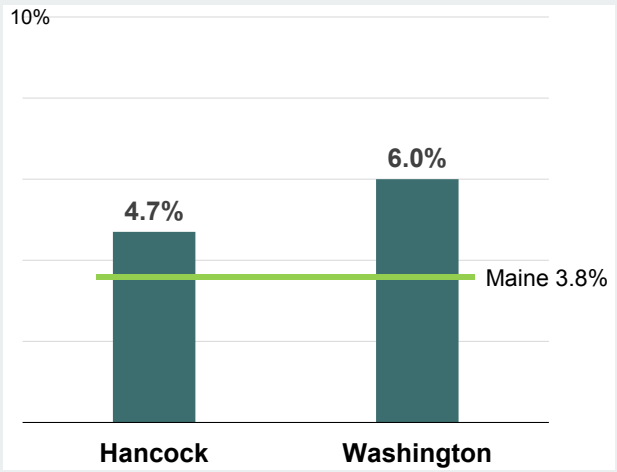
- Forum participants felt that there were cultural issues amongst some older adults that stopped them from seeking care or accepting services (e.g., stigma associated with assistance, belief that others need more support than they do).
- The availability and affordability of housing was a need identified in all Washington County engagement activities. Multiple family generations are living together due to housing costs and there is a need for affordable temporary and permanent housing. For older adults, there was a need for affordable home maintenance and support to allow people to remain in their homes.

QUANTITATIVE EVIDENCE

In the Downeast District:

- The percentage of children living in poverty was higher than the state overall (18.0% vs. 17.2%).
- In Washington County, the median household income was over $10,000 less than the state overall– ($39,469 vs. $50,826) in 2012-2016.
- In Hancock County, the unemployment rate was higher than the state overall (4.7% vs. 3.8%) in 2015-2017.
- In Washington County, the unemployment rate was higher than the state ovearall (6.0% vs. 3.8%) from 2015-2017.
- In Washington County, the percentage of households without a vehicle was higher than the state overall (3.4% vs. 2.4%) in 2012-2016.
- In Hancock County, 15.3% of households lack enough food to maintain healthy, active lifestyles for all household members (vs. 15.1% for the state overall).
- In Washington County, 16.9% of households lack enough food to maintain healthy, active lifestyles for all household members (vs. 15.1% for the state overall).

Figure 4: Unemployment Rate, 2012-2016



See Key Indicators on page 25 as well as the Downeast District Health Profile and individual county data reports on our website 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. Assets and gaps/needs in bold text were identified in both Hancock and Washington Counties.

Table 7: Assets and Gaps/Needs (Social Determinants of Health) in the Downeast District

HANCOCK COUNTY	
ASSETS	**GAPS/NEEDS**
• Food and clothing drives • Health food options • Community events • Healthy Acadia • Healthy Peninsula • Integrated screenings • Mount Desert Island Hospital integrated care team • Care coordinators • Telemonitoring program • **Aroostook Mental Health Center clinic** • Community Health and Counseling Services provider clinics	• **User friendly transportation** • Telehealth • **Cost of services/insurance** • **Lack of providers** • Child care • Food pantries/access to healthy shopping • Community health workers/nurses/social workers • Education on services available • Lack of mental health • Housing options/affordability • Social service systems • Community resources for connection
WASHINGTON COUNTY	
• **Aroostook Mental Health Center** • Northern Light Acadia Hospital • Community Health and Counseling Services • Behavioral Health Homes • **Community Integration** • Down East Community Hospital • School nurses • Collaboration with outside providers/resources • Telepsychiatry • Washington County resource guides • Experienced providers • Available counselors in schools	• School based support services • Untreated depression • **More social workers, counselors, psychologists, psychiatrists** • Support groups needed • Support for transgender people • Mental health beds • Staff training in hospitals and schools • Bullying • Uninsured • **Cost of care** • Stigma • LGBTQ care • Difficult distances • Affordable access to youth services • Nowhere to go for crisis during school hours • Support for parents • Seven day a week support • **Inpatient beds** • Community engagement around mental health

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."[10] 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.[11]

QUALITATIVE EVIDENCE

Forum participants in both counties identified several concerns in the realm of older adult health. Many of these concerns center around the social determinants of health: the need for safe and affordable housing, accessible transportation, and healthy foods. These are also issues for the community at-large, but may be especially problematic for older adults with limited or no financial means, impaired mobility, or family/caregiver support.

- In Washington County, forum participants also discussed the need for technological support for older adults.

In both counties, participants identified a number of health issues and missing support services specific to older adults.

- In Hancock County, falls were a primary concern. Participants suggested educating middle-aged adults on the importance of exercise to support health as they age and to improve physical activity, mental health, and mobility. Forum participants in Hancock County also discussed the need for more home-based care, nursing homes, and long-term care options. Finally, social isolation and its impact on social and physical health was identified as a concern.
- In Washington County, forum participants identified a need for services to address issues around chronic disease management, especially for those who experience pain and need medication management. Additionally, Alzheimer's, dementia, and depression were mentioned as specific issues. Participants identified a need for more home health, adult day care, assisted living services, and geriatric psychiatry.

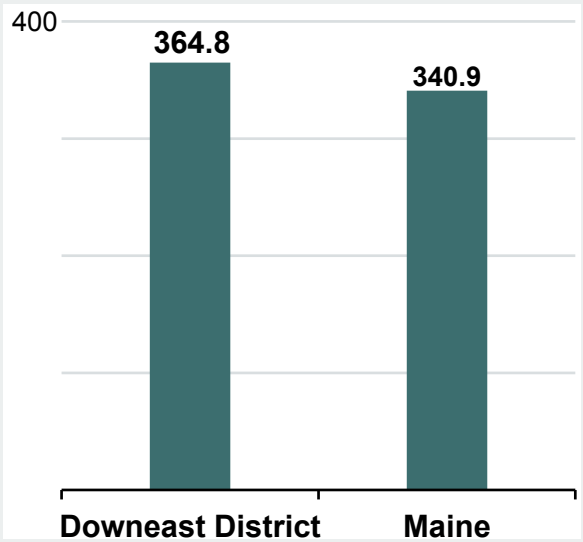
QUANTITATIVE EVIDENCE

In the Downeast District:

- The percentage of adults 45 years of age and older with cognitive decline was higher than the state overall (11.5% vs. 10.3%) in 2016.
- The rate of fall-related injury (unintentional) emergency department rate per 10,000 population was significantly higher than the state overall (364.8 vs. 340.9) in 2012-2016.

See Key Indicators on page 25 as well as the Downeast District Health Profile and individual county data reports on our website **www.mainechna.org**. Those documents also include information on data sources and definitions.

Figure 5: Fall-Related Injury (Unintentional) ED Rate, 2012-2016



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. Assets and gaps/needs in bold text were identified in both Hancock and Washington Counties.

Table 8: Assets and Gaps/Needs (Older Adult Health/Healthy Aging) in the Downeast District

HANCOCK COUNTY	
ASSETS	**GAPS/NEEDS**
• Changing culture/reducing stigma • Programs that allow people to age in place/age friendly communities • Friends in Action • Strong community networks/volunteers • Friendship Cottage • Food programs like magic food bus • Eastern Area Agency on Aging • Falls prevention assessment/services • Supplemental Nutrition Assistance Program Education (SNAP-Ed) • Healthy Acadia • Healthy Peninsula • Moose Senior Center • Church/Community Groups	• Local initiatives/networks/centers • Social networking/involvement • **Transportation** • Access to cheap and healthy food • **Isolation** • Lack of income/insurance/affordable services • More in home help for aging, Alzheimer's • Lack of funding for family caregivers • Communication/broadband • Resources for families to support elderly care • Lack of volunteers and supports for older adults • Lack of promotion of fall prevention training

COMMUNITY RESOURCES TO ADDRESS OLDER ADULT HEALTH/ HEALTHY AGING (CONTINUED)

Table 8: Assets and Gaps/Needs (Older Adult Health/Healthy Aging) in the Downeast District (continued)

WASHINGTON COUNTY	
ASSETS	**GAPS/NEEDS**
• Sunrise Senior College • Support Groups • Downeast Community Partners • Navigator for older adults • Downeast Resource Hospice • St. Paul • Thriving in Place • Food portions • Meals for Me	• Geriatric psychiatry • Geriatrician • Physical therapy • Dementia/Alzheimer's beds • Long term care facilities • Home care NH placement • Wellness class • Help with burned out families • **Transportation** • Lapses in care • Older adult orphans • Violence with patients • More Licensed Social Workers • Paperwork advocates • Mental health screening • Day care • Aging in place

COMMUNITY CHARACTERISTICS

AGE DISTRIBUTION

Age is a fundamental factor to consider when assessing individual and community health status; older individuals typically have more physical and mental health vulnerabilities and are more likely to rely on immediate community resources for support compared to young people.[12] 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.[13]

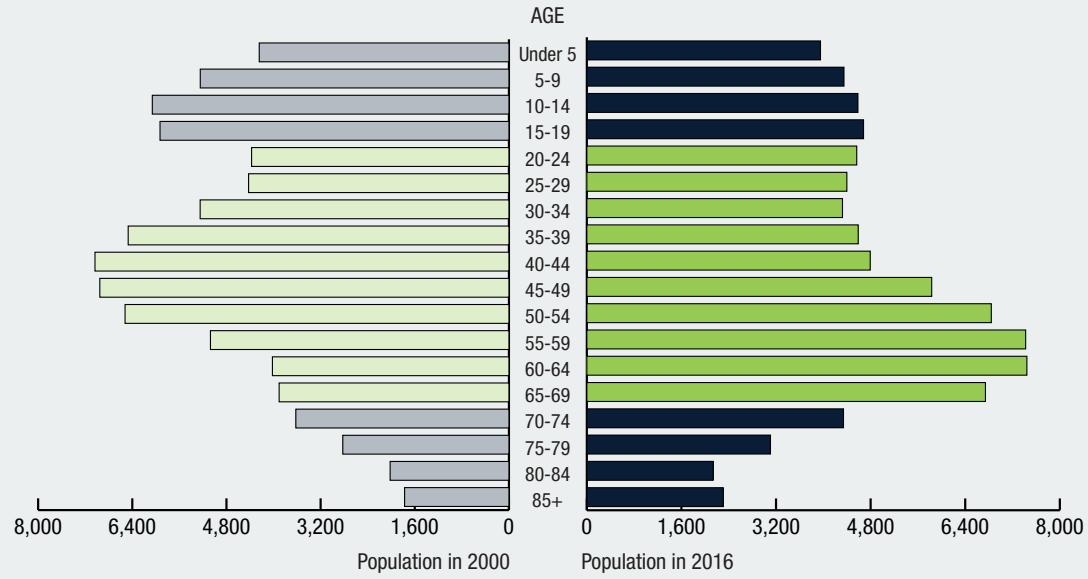
- In Hancock County, 21.4% of the population is 65 years of age or older.
- In Washington County, 21.9% of the population is 65 years of age or older.

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

The following companion reports are available at **www.mainechna.org**.

- Hancock County Health Profile and CHNA Report
- WashingtonCounty Health Profile and CHNA Report
- Downeast District Health Profile
- Maine State Health Profile and CHNA Report
- Health Equity Data Summaries

Figure 6: Age Histogram of the Downeast District



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.[14]

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.[15,16] 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.

Table 8: Race/Ethnicity in the Downeast District 2012-2016

	PERCENT/NUMBER
American Indian/Alaskan Native	1.9% / 1,649
Asian	0.8% / 672
Black/African American	0.5% / 457
Hispanic	1.5% / 1,292
Some other race	0.2% / 191
Two or more races	2.1% / 1,781
White	94.5% / 81,629

Data Source: US Census Bureau, American Community Survey, 2012-2016

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 employment is linked to 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 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. Tables 9 includes a number of data points comparing Downeast District counties to the state of Maine overall.

Table 9: Socioeconomic Status in Hancock and Washington Counties

	HANCOCK/MAINE
Median household income	$50,037/ $50,826
Unemployment rate*	4.7% / 3.8%
Individuals living in poverty	12.1% / 13.5%
Children living in poverty	15.5% / 17.2%
65+ living alone	46.2% / 45.3%
	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%

Data Source: US Census Bureau, American Community Survey, 2012-2016
**US Bureau of Labor Statistics, 2015-2017*

SPECIAL POPULATIONS

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

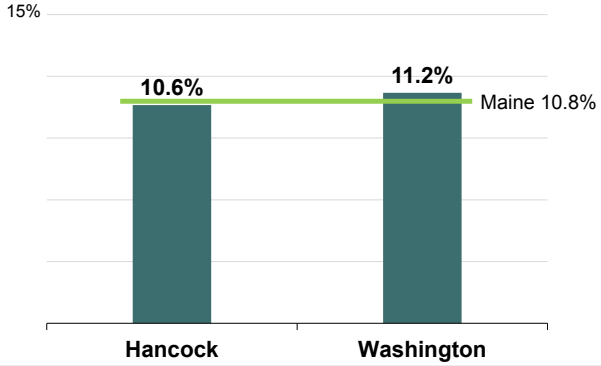
Youth

Youth were identified as a priority population in Hancock and Washington Counties. Specific issues of concern were youth mental health conditions (specifically stress, depression, and anxiety); substance use (specifically opioids, marijuana, vaping/Juuling, and the impact of parental substance use), lack of education and promotion around nutrition and physical activity, unsupervised youth, 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.

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 to access to care for older adults include a 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).

Figure 6: Gay, Lesbian, and Bisexual (High School, 2017)



LGBTQ (Washington County)

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 have 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 Factor 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).

Low-Income/Rural (Washington County)

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 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) which provides selected data analyzed by sex, race, ethnicity, sexual orientation, education, and income. These data are at the state level, as much of the county level data would be suppressed due to small numbers and privacy concerns, and the previous analyses have shown that health disparities found at the state level are generally similar in individual counties.

KEY INDICATORS

The Key Indicators provide an overview of the health of the district and of each county within the district. They are a broad sampling of health topics, including health behaviors, outcomes, living conditions, and health care quality and access.

The tables use symbols to show if the data for each district or each county within the district is notably better or worse than the state.

BENCHMARK, as indicated by the **+/–** in the table, compares district and county data to state data, based on 95% confidence interval.

★	means the district or county is doing **significantly better** than the state.
!	means the district or county is doing **significantly worse** than the state.
○	means there is no statistically significant difference between the district or county and the state.
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.

	BENCHMARK	DOWNEAST DISTRICT					
INDICATOR	**MAINE**	**DISTRICT**	**+/–**	**HANCOCK**	**+/–**	**WASHINGTON**	**+/–**
SOCIAL, COMMUNITY & PHYSICAL ENVIRONMENT							
Children living in poverty	2012-2016 **17.2%**	2012-2016 **18.0%**	N/A	2012-2016 **15.5%**	N/A	2012-2016 **22.1%**	N/A
Median household income	2012-2016 **$50,826**	**–**	N/A	2012-2016 **$50,037**	N/A	2012-2016 **$39,469**	N/A
Estimated high school student graduation rate	2017 **86.9%**	2017 **88.1%**	N/A	2017 **88.3%**	N/A	2017 **87.7%**	N/A
Food insecurity	2014-2015 **15.1%**	**–**	N/A	2014-2015 **15.3%**	N/A	2014-2015 **16.9%**	N/A
HEALTH OUTCOMES							
14 or more days lost due to poor physical health	2014-2016 **19.6%**	2014-2016 **18.5%**	○	2014-2016 **16.9%**	○	2014-2016 **22.8%**	○
14 or more days lost due to poor mental health	2014-2016 **16.7%**	2014-2016 **14.8%**	○	2014-2016 **12.2%**	○	2014-2016 **20.1%**	○
Years of potential life lost per 100,000 population	2014-2016 **6,529.2**	**–**	○	2014-2016 **6,912.1**	○	2014-2016 **9,152.7**	!
All cancer deaths per 100,000 population	2012-2016 **173.8**	2012-2016 **177.5**	○	2012-2016 **160.2**	○	2012-2016 **207.3**	!
Cardiovascular disease deaths per 100,000 population	2012-2016 **195.8**	2012-2016 **203.0**	○	2012-2016 **191.3**	○	2012-2016 **222.3**	!
Diabetes	2014-2016 **10.0%**	2014-2016 **9.7%**	○	2014-2016 **7.8%**	★	2014-2016 **12.8%**	!
Chronic obstructive pulmonary disease (COPD)	2014-2016 **7.8%**	2014-2016 **7.1%**	○	2014-2016 **5.5%**	★	2014-2016 **9.7%**	○
Obesity (adults)	2016 **29.9%**	2016 **29.2%**	○	2016 **25.8%**	○	2016 **35.4%**	○
Obesity (high school students)	2017 **15.0%**	2017 **15.6%**	○	2017 **13.5%**	○	2017 **20.4%**	○
Obesity (middle school students)	2017 **15.3%**	2017 **15.3%**	○	2017 **12.0%**	○	2017 **24.1%**	!
Infant deaths per 1,000 live births	2012-2016 **6.5**	2012-2016 **6.0**	○	2012-2016 **6.0***	○	2012-2016 **5.3***	○
Cognitive decline	2016 **10.3%**	2016 **11.5%**	○	2016 **8.9*%**	○	2016 **15.5*%**	○
Lyme disease new cases per 100,000 population	2013-2017 **96.5**	2013-2017 **153.8**	N/A	2013-2017 **213.8**	N/A	2013-2017 **50.4**	N/A

	BENCHMARK	DOWNEAST DISTRICT					
INDICATOR	**MAINE**	**DISTRICT**	**+/–**	**HANCOCK**	**+/–**	**WASHINGTON**	**+/–**
HEALTH OUTCOMES (CONTINUED)							
Chlamydia new cases per 100,000 population	2013-2017 **293.4**	2013-2017 **192.7**	N/A	2013-2017 **173.6**	N/A	2013-2017 **225.6**	N/A
Fall-related injury (unintentional) emergency department rate per 10,000 population	2012-2014 **340.9**	2012-2014 **364.8**	!	2012-2014 **314.9**	★	2012-2014 **449.8**	!
Suicide deaths per 100,000 population	2012-2016 **15.9**	2012-2016 **18.0**	○	2012-2016 **16.9**	○	2012-2016 **20.0**	○
Overdose deaths per 100,000 population	2012-2016 **18.1**	2012-2016 **25.0**	!	2012-2016 **19.1**	○	2012-2016 **35.4**	!
HEALTH CARE ACCESS AND QUALITY							
Uninsured	2012-2016 **9.5%**	2012-2016 **12.8%**	N/A	2012-2016 **12.9%**	N/A	2012-2016 **12.7%**	N/A
Ratio of primary care physicians to 100,000 population	2017 **67.3**	2017 **52.6**	N/A	2017 **64.5**	N/A	2017 **30.0**	N/A
Ratio of psychiatrists to 100,000 population	2017 **8.4**	2017 **3.7**	N/A	2017 **5.0**	N/A	2017 **1.5**	N/A
Ratio of practicing dentists to 100,000 population	2017 **32.1**	2017 **27.6**	N/A	2017 **26.1**	N/A	2017 **30.0**	N/A
Ambulatory care-sensitive condition hospitalizations per 10,000 population	2016 **74.6**	2016 **96.6**	N/A	2016 **82.8**	N/A	2016 **119.9**	N/A
Two-year-olds up-to-date with recommended immunizations	2017 **73.7%**	2017 **77.5%**	N/A	2017 **72.0%**	N/A	2017 **87.2%**	N/A
HEALTH BEHAVIORS							
Sedentary lifestyle – no leisure-time physical activity in past month (adults)	2016 **20.6%**	2016 **18.0%**	○	2016 **14.0%**	★	2016 **25.3%**	○
Chronic heavy drinking (adults)	2014-2016 **7.6%**	2014-2016 **8.9%**	○	2014-2016 **9.9%**	○	2014-2016 **7.3%**	○
Past-30-day alcohol use (high school students)	2017 **22.5%**	2017 **24.3%**	○	2017 **24.9%**	○	2017 **23.4%**	○
Past-30-day alcohol use (middle school students)	2017 **3.7%**	2017 **3.4%**	○	2017 **3.8%**	○	2017 **2.5%**	○
Past-30-day marijuana use (high school students)	2017 **19.3%**	2017 **18.8%**	○	2017 **18.6%**	○	2017 **19.8%**	○
Past-30-day marijuana use (middle school students)	2017 **3.6%**	2017 **3.0%**	○	2017 **2.2%**	○	2017 **4.9%**	○

	BENCHMARK	DOWNEAST DISTRICT					
INDICATOR	**MAINE**	**DISTRICT**	**+/–**	**HANCOCK**	**+/–**	**WASHINGTON**	**+/–**
HEALTH BEHAVIORS (CONTINUED)							
Past-30-day misuse of prescription drugs (high school students)	2017 **5.9%**	2017 **4.2%**	★	2017 **3.7%**	★	2017 **5.0%**	○
Past-30-day misuse of prescription drugs (middle school students)	2017 **1.5%**	2017 **1.1%**	○	2017 **0.9%**	○	2017 **1.6%**	○
Current (every day or some days) smoking (adults)	2016 **19.8%**	2016 **22.1%**	○	2016 **21.3%**	○	2016 **23.6%**	○
Past-30-day cigarette smoking (high school students)	2017 **8.8%**	2017 **8.8%**	○	2017 **7.0%**	○	2017 **12.3%**	!
Past-30-day cigarette smoking (middle school students)	2017 **1.9%**	2017 **1.7%**	○	2017 **1.3%**	○	2017 **2.5%**	○

APPENDIX A: REFERENCES

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APPENDIX B: HISTORY AND GOVERNANCE

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

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

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

The Metrics Committee is charged with updating the common set of health indicators; developing the preliminary data analysis plan: reviewing indicators on emerging health issues; making recommendations for annual data-related activities; and estimating projected costs associated with these recommendations. Members of the Metrics Committee create processes and deliverables for the Steering Committee to review and approve. Members of the Metrics Committee include representatives of the Steering Committee, public health system partners, Federally Qualified Health Centers, academia, non-profits, and others with experience in epidemiology.

Figure 7: 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 to create processes and deliverables for the Steering Committee to review and approve. Members of the Community Engagement Committee include representatives of the Steering Committee, public health system partners, Federally Qualified Health Centers, academia, and Maine non-profits such as United Ways, Community Action Programs, and others with an interest in broad community representation and input.

APPENDIX C: METHODOLOGY

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

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

Data Analysis

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

Outreach and Engagement

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

Final Reports

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

DATA ANALYSIS

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

- Was it already analyzed for a Maine CDC 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**.*

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.

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. Priorities that fell within the 70% combined voting total received an in-depth analysis within the Maine Shared CHNA county report.

Downeast District Forums

Three community forums were held in the Downeast District.

Table 10: Community engagement activites in the Downeast District, 2018

HANCOCK COUNTY			
TYPE OF ENGAGEMENT	**LOCATION & DATE**	**FACILITATOR**	**ATTENDEES**
Community Forum	Ellsworth 10/30/2018	JSI	53
WASHINGTON COUNTY			
TYPE OF ENGAGEMENT	**LOCATION & DATE**	**FACILITATOR**	**ATTENDEES**
Community Forum	Machias 09/20/2018	JSI	39
Community Forum	Calais 09/20/2018	JSI	24

Key informant interviews

The Steering Committee identified ten categories of medically underserved and vulnerable populations to ensure their input was heard and captured. A list of 80 potential interview subjects was created with statewide input. Selected key informants either had lived experience in the category and/or worked for an organization that focused on providing services or advocacy to a population. The populations identified include:

- 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 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.

For full lists of individuals representing broad interests of the community who were consulted during the engagement process, please see Hancock and Washington Needs Assessment Reports at **www.mainechna.org.**

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.

For more information, contact: **Info@mainechna.org**