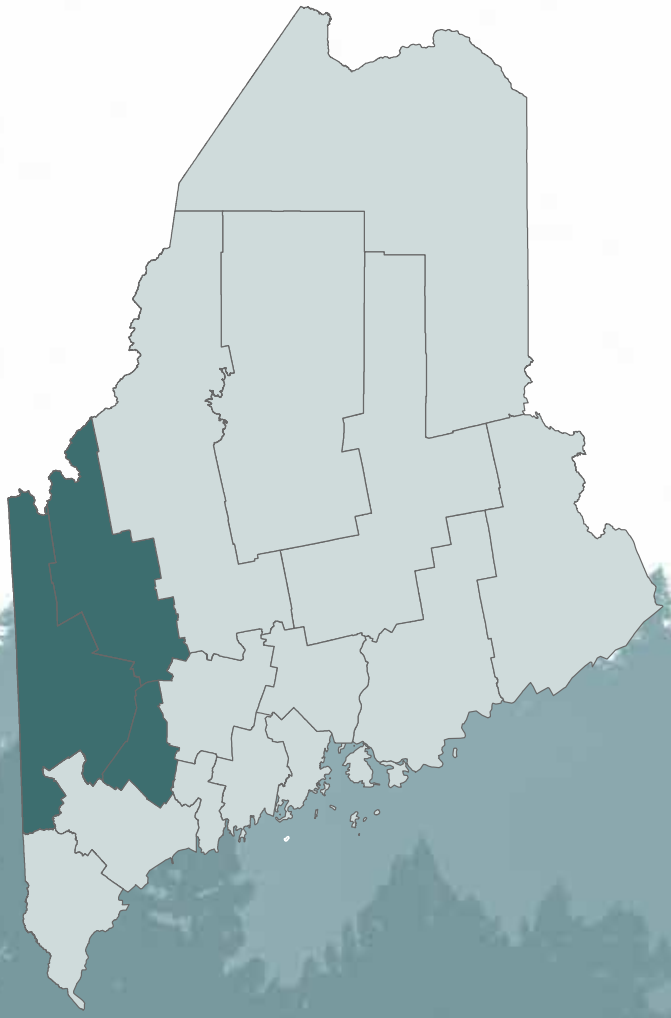
WESTERN DISTRICT

2019 Maine Shared Community Health Needs Assessment Report



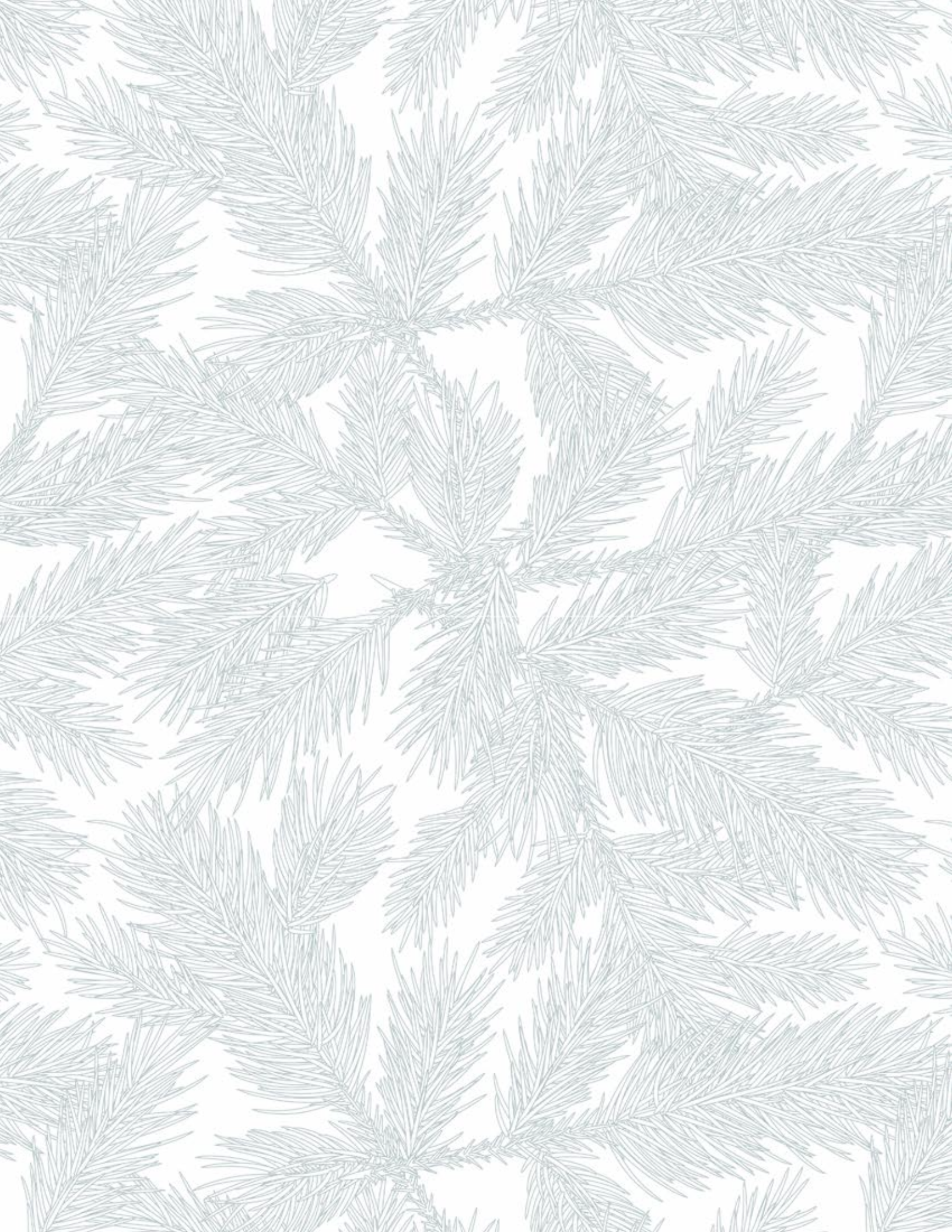


TABLE OF CONTENTS

Executive Summary 2
Acknowledgements 4
Health Priorities 5
Social Determinants of Health 6
Mental Health 9
Access to Care 12
Substance Use 16
Community Characteristics 19
Key Indicators 23
Appendix A: References 27
Appendix B: History and Governance 28
Appendix C: Methodology 29

Key companion documents available at www.mainechna.org:

- Androscoggin County Health Profile and CHNA Report
- Franklin County Health Profile and CHNA Report
- Oxford County Health Profile and CHNA Report
- Maine State Health Profile and CHNA Report
- Western District Health Profile
- Health Equity Data Summaries, including state level data by sex, race, Hispanic ethnicity, sexual orientation, educational attainment, and income

EXECUTIVE SUMMARY

PURPOSE

The Maine Shared Community Health Needs Assessment (Maine 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 U.S.

Table 1: Population (2012-2016)

	ANDROSCOGGIN COUNTY	FRANKLIN COUNTY	OXFORD COUNTY	WESTERN DISTRICT	MAINE
Population Count	107,376	30,270	57,299	194,945	1,329,923
Population 65 years of age or older	15.8%	20.2%	19.2%	17.4%	18.2%
White	92.3%	96.7%	96.7%	94.3%	94.8%
Black/African American	1.8%	0.4%	0.3%	1.1%	1.5%
Hispanic	1.7%	1.3%	1.2%	1.5%	1.1%
Two or more races	4.9%	1.5%	1.7%	3.4%	2.0%

More information on the population characteristics of the Western District can be found in the Community Characteristics section on page 19.

TOP HEALTH PRIORITIES

Forums held in Western District Counties identified health issues in their communities through a voting methodology outlined in the Methodology section of this report (Appendix C). Table 2 includes a list of the priorities that were identified in all three Counties (Androscoggin, Franklin, and Oxford).

Table 2: Top Priorities in Western District Counties

ANDROSCOGGIN COUNTY PRIORITY AREA	% OF VOTES
Social Determinants of Health*	25%
Mental Health*	19%
Substance Use*	14%
Access to Care*	12%
FRANKLIN COUNTY PRIORITY AREA	**% OF VOTES**
Access to Care*	21%
Social Determinants of Health*	16%
Mental Health*	14%
Substance Use*	13%
OXFORD COUNTY PRIORITY AREA	**% OF VOTES**
Mental Health*	22%
Substance Use*	20%
Social Determinants of Health*	19%
Access to Care*	17%

**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 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** 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 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 Western District. The priorities in bold font represent the top priorities within each County. The shaded priorities are those that were common across Androscoggin, Franklin, and Oxford Counties. Please see Appendix C for a 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 Western District Health Profiles, 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: Western County Forum Voting Results

	ANDROSCOGGIN COUNTY	FRANKLIN COUNTY	OXFORD COUNTY
PRIORITY AREA	**% OF VOTES**	**% OF VOTES**	**% OF VOTES**
Social Determinants of Health*	**25%**	**16%**	**19%**
Mental Health*	**19%**	**14%**	**22%**
Substance Use*	**14%**	**13%**	**20%**
Access to Care*	**12%**	**21%**	**17%**
Physical Activity, Nutrition, and Weight*	1%	14%	6%
Tobacco Use	9%	4%	N/A
Diabetes	N/A	9%	N/A
Older Adult Health/Healthy Aging*	N/A	2%	5%
Cancer	2%	4%	5%
Health Education	6%	N/A	N/A
Infectious Disease	6%	N/A	N/A
Oral Health	N/A	N/A	5%
Envionrmental Health	4%	N/A	N/A
Intentional Injury	1%	2%	N/A

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

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.[1]

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.[2] Chronic diseases and health conditions associated with food insecurity include asthma, low birthweight, diabetes, mental health conditions, hypertension, and obesity.[3]

QUALITATIVE EVIDENCE

A dominant theme from key informant interviews and community forums was the tremendous impact that the underlying social determinants of health have on residents in the Western District. The impact of poverty was a dominant theme across counties and engagement activities. Forum participants in all counties discussed how poverty affects people's ability to access goods and services (e.g., healthcare, groceries, and transportation).

- In Franklin County, participants were concerned about the impacts of generational poverty – when families have lived in poverty for at least two generations. Participants cited a need for economic development and education on basic life skills like budgeting and money management.

Issues related to housing were identified as a leading social determinant of health in all three counties.

- In Androscoggin County, exposure to lead was an issue of concern for young children and those that live in older homes and buildings.
- Youth homelessness was raised as a concern in Franklin County.

Forum participants in all three counties reported that transportation challenged residents' ability to access health care services. Lack of a personal vehicle may be due to any number of factors including affording the vehicle itself, insurance, repairs, or a license suspension or revocation. This can be especially challenging in rural areas without reliable public transportation. This results in difficulty accessing health services, employment, and 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.

- In Franklin County, forum participants felt that availability of transportation services to get to and from health and social services was limited for those outside of Farmington.

In Franklin and Androscoggin Counties, forum participants were concerned about food insecurity. In Androscoggin County, this was an issue specifically for youth.

Adverse Childhood Experiences (ACEs) were a leading social determinant in Androscoggin and Oxford Counties.

In Androscoggin County, people with limited English language skills, including immigrants and refugees, face additional health disparities and barriers to care. Forum participants felt that the lack of well-trained interpreters and culturally competent health care providers created obstacles to obtaining services and understanding health care information.

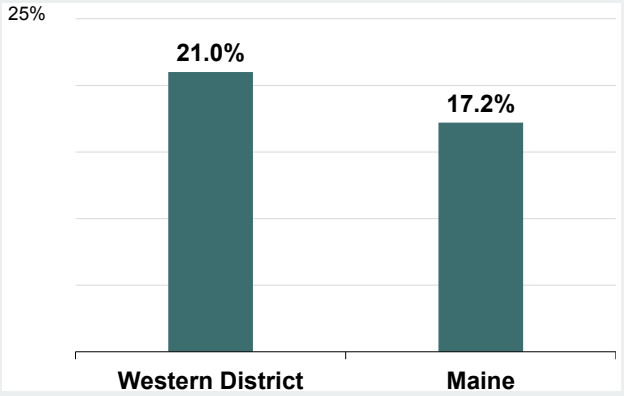
QUANTITATIVE EVIDENCE

In the Western District:

- The percentage of children living in poverty was higher than the state overall (21.0% vs. 17.2%) in 2012-2016.
- The estimated high school graduation rate was lower than the state overall (83.5% vs. 86.9%) in 2017.

- In Androscoggin County, the unemployment rate was 3.6%, one of the lowest in the state (2015-2017).
- In Franklin County, the percentage of the population with an associates' degree or higher among those over 25 was lower than the state overall (35.4% vs. 37.3%) in 2012-2016.
- In Oxford County, the percentage of high school students who reported having experienced at least three adverse child experiences was higher than the state overall (25.7% vs. 23.4%) in 2017.
- In Androscoggin County, 16% of households were food insecure (lacking enough food to maintain a healthy and active lifestyles for all household members).
- In Franklin County, 14.7% of households were food insecure.
- In Oxford County, 15.4% of households were food insecure.

Figure 1: Children Living in Poverty 2012-2016



See Key Indicators on page 23 as well as the Western 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 common across two or more of the Western District Counties

Table 4: Assets and Gaps/Needs (Social Determinants of Health) in the Western District

ANDROSCOGGIN COUNTY	
ASSETS	**GAPS/NEEDS**
• Lewiston Auburn Lead Program • Community Health Outreach Workers • **Community Connections/Concepts** • Housing and Urban Development Department • Environmental Protection Agency • Dedicated local partners • United Ambulance • Good Shepherd Food Bank • Boys and Girls Club • Tree Street Youth • The Root Cellar • St. Mary's Nutrition Center	• More housing inspections • Affordable and safe housing • Long-term funding • Rental programs • **Medical/public transportation** • Medicaid expansion • **Job/work training programs** • More farmers markets that accept EBT

COMMUNITY RESOURCES TO ADDRESS SOCIAL DETERMINANTS OF HEALTH (CONTINUED)

Table 4: Assets and Gaps/Needs (Social Determinants of Health) in the Western District (Continued)

FRANKLIN COUNTY	
ASSETS	**GAPS/NEEDS**
• School food pantry • Western Maine Community Action • Community support figures • Healthy Communities Coalition of Greater Franklin County • United Way of the Tri-Valley Area • Franklin County Children's Task Force • Western Maine Transportation • Western Maine Homeless Outreach • Adult Education • **Community Concepts**	• More heat funding • Community agencies collaboration • Neighbors helping neighbors • Screening for insecurities • **Volunteer drivers** • **Workforce development including: education about work ethics, skills training, professionals to come into schools and talk to kids about job opportunities, student success, post-secondary education and training** • Innovation center and funding • Adult role models • **Instability in the home** • **Lack of vehicles and transportation**
OXFORD COUNTY	
ASSETS	**GAPS/NEEDS**
• Oxford County Wellness Collaborative • County wide collaboration on grants • Western district collaboration • Rural community research project • Western Maine Pediatrics Screens for ACEs • Oxford County Resilience Project • Oxford County Mental Health Services • Center for Mental Health Services • **Community Concepts**	• Connecting providers • Bethel practice • Residential treatment facilities • School based resources • Resources to handle once screened and identified • **Family based understanding and knowledge**

MENTAL HEALTH

Mental health affects all segments of the population, regardless of age, socioeconomic status, race/ethnicity, or gender. Poor mental health contributes to a number of issues that affect both individuals and communities. Mental health 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.[4]

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.[5]

QUALITATIVE EVIDENCE

Across the Western District, forum participants cited depression, anxiety, stress, suicidality, and isolation as major issues in the realm of mental health. Forum participants identified specific service needs in their communities.

- In Androscoggin County, participants discussed a need for more behavioral health screening and education.
- In Franklin County, participants cited a need for psychiatrists, resources for parents, resources for youth, and resources for isolated older adults.
- In Oxford County, participants cited a need for more education and engagement for youth.

Youth mental health was a key theme. In all three counties, participants identified the impact of ACEs as a critical issue. Forum participants suggested that schools would be an ideal setting for intervention.

- In Franklin County, there was also discussion about the mental health impacts on children whose parents have substance use issues. Forum participants identified a need for behavioral health interventions across multiple settings (e.g., schools, home, healthcare providers, community services).

Across counties, forum participants identified social isolation as a contributor to mental health conditions. Some related the isolation to increased use of technology and the limit it puts on personal interaction. Participants identified a need for more free recreational opportunities, community building and social events, and faith-based community support services.

- In Franklin County, isolation was a concern for older adults. Participants cited a need for more senior centers and opportunities for socialization.
- In Androscoggin County, forum participants called for more activities aimed at engaging youth and young adults.

QUANTITATIVE EVIDENCE

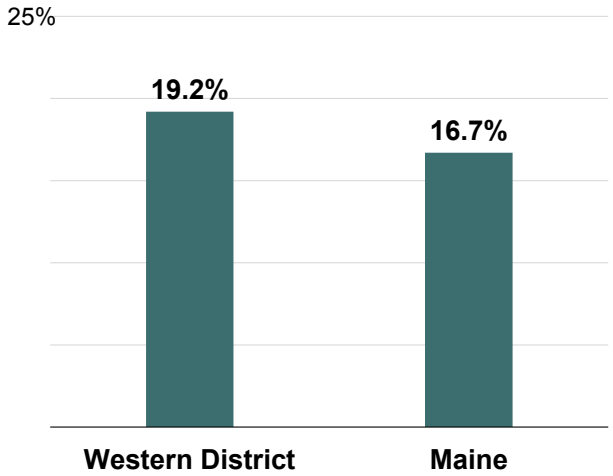
In the Western District:

- The percentage of adults who reported 14 or more days lost due to poor mental health was higher than the state overall (19.2% vs. 16.7%) in 2014-2016.
- In Androscoggin County, the percentage of adults who had ever been told by a healthcare provider that they had a depressive disorder was significantly higher than the state overall (26.6% vs 22.8%) in 2014-2016.
- In Androscoggin County, the percentage of adults who had ever been told by a healthcare provider that they had an anxiety disorder was significantly higher than Maine overall (25.4% vs. 20.7%) in 2014-2016.
- In Androscoggin County, the percentage of middle school students who reported having seriously considered suicide increased significantly between 2011 and 2017, from 14.5% to 18.8%.
- In Franklin County, the percentage of high school students who reported being sad or hopeless for more than two weeks in a row increased significantly (19.7% to 26.2%) between 2011 and 2017.

- In Oxford County, the percentage of high school students who reported being sad or hopeless for more than two weeks in a row increased between 2011 and 2017, from 25.2% to 28.2%.
- The rate of psychiatrists to 100,000 population was lower than the state overall (6.0 vs. 8.4) in 2017.

See Key Indicators on page 23 as well as the Western 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: Adults Reporting 14+ Days Lost Due to Poor Mental Health, 2014-2016



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 common across two or more of the Western District Counties

Table 5: Assets and Gaps/Needs (Mental Health) in the Western District

ANDROSCOGGIN COUNTY	
ASSETS	**GAPS/NEEDS**
• **Tri-County Mental Health Services** • Spurwink • Tree Street Youth • New Beginnings • Public Safety • **Community Clinical Services: outpatient counseling, school-based health services, integrated primary care, and psychiatry services**	• **More education about ACEs to build resiliency** • **Reduce barriers and stigma** • **MaineCare** • Increase reimbursement • Low barrier access • **Peer to peer activities** • Employee protection laws • More shelters • **Free recreational events** • Free work trainings • Increased access to services for all ages • Community building/social events • More inpatient beds • Family separation/trauma

COMMUNITY RESOURCES TO ADDRESS MENTAL HEALTH

Table 5: Assets and Gaps/Needs (Mental Health) in the Western District

FRANKLIN COUNTY	
ASSETS	**GAPS/NEEDS**
• Mt. Blue Success and Innovation Center (youth) • **Multiple community mental health agencies (Tri-County, Evergreen, online support)** • Sexual Assault Prevention and Response Services • Guidance counselors/social workers in schools • Social workers in office practices • **Community para-medicine**	• **Peer support advocacy, earlier interventions, parents support, network social groups (child mental health)** • Mentors for families, for students who don't have good network at home • **Childhood mental health care, especially related to Adverse Childhood Experiences** • **Isolation relief—rideshare network, safe gathering places** • Generational trauma—substance use prevention/ treatment, poverty, dedicated learning for social emotional needs, teacher/parent education • More behavioral health home teams • Copings skills education • Teaching compassion • More screening and bullying education • Role model—youth/older adult pairing • More mental health workers • **Insurance** • Family supports • Addressing root causes • Respite opportunities • **Educational/stigma awareness**
OXFORD COUNTY	
ASSETS	**GAPS/NEEDS**
• Public health sector is recognizing its impact on health • Sense of community in Norway and Bethel • More mental health providers are trauma informed • Oxford County Mental Health Services • Center for Mental Health Services • **Tri-County Mental Health Services** • Crooked River Counseling • Common Ground Counseling • Law enforcement support	• Education programs • Cyberbullying prevention • More mental health providers • **Reduction of stigma** • **Lack of insurance** • **Focus on impact of isolation** • **Community center** • Big Brothers/Big Sisters, Boys and Girls Club, YMCA • Community networking & collaboration • Expanded services in primary care • Integrated inpatient services • Psychiatry/medication management providers • Masters level clinicians • University internship partnerships

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. Lack of insurance and underinsurance remains a leading barrier to care in the region. Medicaid expansion, which holds the promise of providing health insurance coverage for an additional 70,000 Mainers, was signed into law on January 3, 2019.

Barriers to accessing care also include the availability and affordability of care. Low-income individuals, people of color, those with less than a high school diploma, and lesbian, gay, bisexual, transgender, and/or queer/questioning (LGBTQ) populations face even greater disparities in health insurance coverage compared to those who are heterosexual, white, and well educated. For example, in Maine, over 20.3% 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 on **www.mainechna.org**.

Many forum participants and key informants identified the social determinants of health—particularly inability to access reliable and affordable forms of transportation and poverty/low wages—as significant barriers to accessing care. These are discussed in more detail in the "Social Determinants of Health" priority section of this report.

QUALITATIVE EVIDENCE

Across counties, participants discussed the need for comprehensive and affordable health services for low-income individuals. Even for those with insurance, deductibles, co-pays, and prescription medications are often unaffordable and prevent people from seeking care. Dental and behavioral health services were identified as gaps in all three counties. Free care programs and MaineCare do not cover preventative oral health services for adults.

- In Androscoggin County, forum participants reported that immigrants and refugees had difficulty accessing culturally and linguistically appropriate care. There was a need for professional and well-trained medical interpreters. Additionally, some forum participants felt that providers were discriminatory, biased, and/or hostile towards immigrant and refugee patients and made assumptions about their ability to speak and understand English. These factors affect this population's ability to access care.
- There was a need for services with developmental disabilities in Androscoggin County. Participants reported that lack of intervention was affecting children's behavior and ability to perform in schools.

Key informants reported bias and stigma for those with physical disabilities, mental health conditions, and substance use disorders. An additional barrier for some populations is provider capacity to service their unique needs. This includes those with physical or developmental disabilities that experience limitations in specific services (e.g., providers with accessible equipment and capacity to provide dental and gynecology services.)

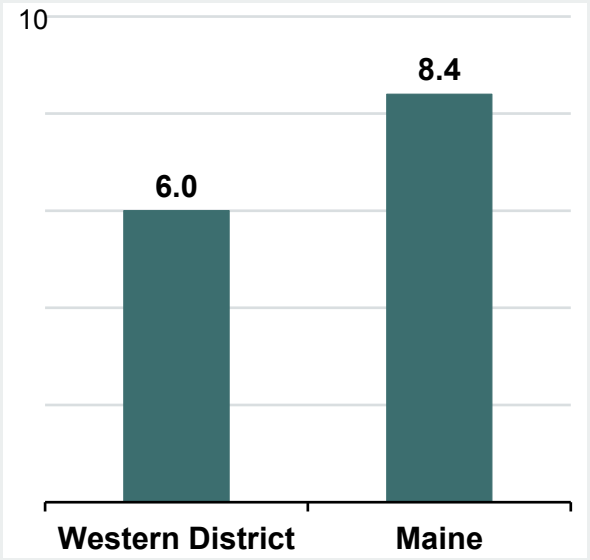
QUANTITATIVE EVIDENCE

In the Western District:

- The percentage of the population that was uninsured was similar to the state overall (9.7% vs. 9.5%) in 2012-2016.
- In Androscoggin County, the percentage of individuals who reported being unable to obtain healthcare due to cost was significantly higher compared to the state overall (14.5% vs. 10.3%) in 2014-2016.
- The ratio of practicing dentists to 100,000 population was lower than the state overall (25.3 vs. 32.1) in 2017.
- In Franklin County, the percentage of the population who reported a primary care visit to any primary care provider in the past year was significantly lower than the state overall (65.9% vs. 71.8%) in 2014–2016.

See Key Indicators on page 23 as well as the Western 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: Ratio of Practicing Dentists to 100,000 Population, 2017



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 common across two or more of the Western District Counties.

Table 6: Assets and Gaps/Needs (Access to Care) in the Western District

ANDROSCOGGIN COUNTY	
ASSETS	**GAPS/NEEDS**
• Federally Qualified Health Centers • Prescription assistance programs • Central Maine Medical Center • St. Mary's • Insurance • Free Clinics • MaineCare	• Health education for 0-6 year-olds and services to identify issues earlier • **Transportation** • Health centers closer to the community • Universal healthcare for all • Medicaid expansion • Preventative services • Affordable prescriptions • **Insurance/financial resources, discounted payment plans** • Involving immigrants in communities • Culturally and linguistically competent nutrition education • Food to make sure food pantries have healthy options • Bike share • Walk-in clinics • **Primary care providers with more appointment options** • School-based clinics • In-home mental health treatment for families

COMMUNITY RESOURCES TO ADDRESS ACCESS TO CARE (CONTINUED)

Table 6: Assets and Gaps/Needs (Access to Care) in the Western District (Continued)

FRANKLIN COUNTY	
ASSETS	**GAPS/NEEDS**
• **Western Maine Transportation** • Franklin Healthy Communities Network • Private practices • Healthy Community Coalition of Greater Franklin County • United Way of the Tri-Valley Area • Community para-medicine	• Increase use of nurse practitioners and physician assistants for acute care • Education/outreach to connect people with existing resources • **Transportation (rural)** • Case managers/coaches • **Free care and reduced costs for preventive services before urgent needs arise** • **Access to specialty care** • Better broadband • Access to care providers • Parenting support/education • Wellness coaches • Increased health literacy • Health navigators • Communication specialists • Telemedicine • Patient education (not just computer printouts) • **More capacity for primary care providers** • Community care teams • More mental health workers
OXFORD COUNTY	
ASSETS	**GAPS/NEEDS**
• **Western Maine Transportation Services** • Maine Behavioral Healthcare • MaineAccess	• **Specialty providers at the hospital one time a month** • **Transportation** • Suicide awareness • Jobs

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.[6] Tobacco, alcohol, marijuana, and nonmedical use of prescription pain relievers (e.g., OxyContin, Vicodin) are the leading substance use issues for adults.[7] Tobacco, alcohol, and marijuana are the most common substances used by adolescents, followed by amphetamines (e.g., Adderall) and nonmedical use of prescription pain relievers.[8] 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 both mental health and substance use issues are not engaged in needed services.[9] 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

Substance use emerged as a priority issue across all three counties.

- Opioid use was the primary issue of concern in Androscoggin and Oxford Counties.
- In Franklin County, forum participants were concerned about the use of e-cigarettes and discussed the need for policy changes to limit marketing aimed at youth.
- In Oxford County, marijuana was identified as an emerging issue.

Participants also identified several gaps in behavioral health services in their counties.

- In Androscoggin County, most gaps were related to opioid use. Forum participants identified a need for more harm reduction services (e.g., needle exchange) and medication-assisted treatment. There was also a need for inpatient services, supportive housing, and substance use disorder specialists.
- In Oxford County, participants cited a need for residential care, local inpatient services, counselors and peer recovery coaches, and substance use education.
- In Franklin County, participants felt there was a lack of support services for children whose parents were affected by substance use disorders.

Key informants identified a number of priority health issues for individuals with substance use disorders and those in treatment/recovery: the need for education and outreach around how to access healthcare and treatment options, the need for 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

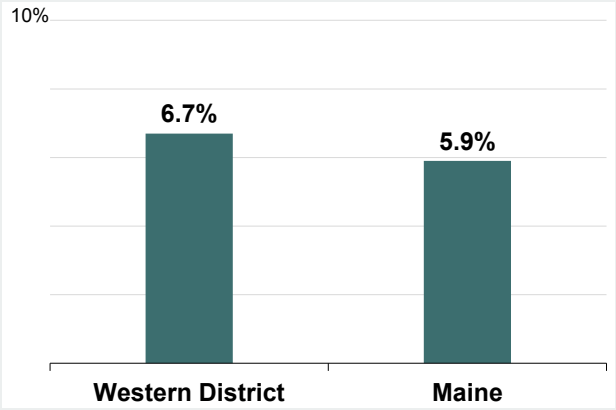
In Western District:

- Past-30-day misuse of prescription drugs amongst high school students was higher than the state overall (6.7% vs. 5.9%) in 2017.
- In Androscoggin County, the rate of overdose deaths increased between 2007-2011 and 2012-2016, from 12.5 to 18.3 per 100,000.

- In Androscoggin County, the rate of overdose emergency medical service responses per 10,000 was significantly higher than the state overall (112.5 vs. 93.0) in 2016-2017.
- In Oxford County, the opiate poisoning emergency department rate per 10,000 population more than doubled between 2010–2011 and 2013–2014, from 2.5 to 5.2.
- Past-30-day cigarette smoking amongst high school students was higher than the state overall (9.9% vs. 8.8%) in 2017.

See Key Indicators on page 23 as well as the Western 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 4: Past-30-Day Misuse of Prescription Drugs (High School, 2017)



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 common across two or more of the Western District Counties.

Table 7: Assets and Gaps/Needs (Substance Use) in the Western District

ANDROSCOGGIN COUNTY	
ASSETS	**GAPS/NEEDS**
• Healthy Androscoggin • St. Mary's • **Intensive outpatient programs** • Grace Street Recovery • **Narcotics/Alcoholics Anonymous** • Community clinical Services: psychiatry, outpatient counseling, and primary care services • Primary care physicians • More funding for policy/environmental work • Treatment facilities • **Medication-Assisted Treatment (MAT)** • **Tri-County Mental Health**	• Additional Medication-Assisted Treatment (MAT) programs • Resilience/substance use training and education for children • **Reduction of stigma around getting help** • **More outpatient/group services** • **More specialists available** • **More inpatient services**

COMMUNITY RESOURCES TO ADDRESS SUBSTANCE USE (CONTINUED)

Table 7: Assets and Gaps/Needs (Substance Use) in the Western District (Continued)

FRANKLIN COUNTY	
ASSETS	**GAPS/NEEDS**
• **Intensive outpatient program** • Evergreen Behavioral Health Services • **Tri-County/Mental Health** • Hospital doctors • **Medication-Assisted Treatment (MAT)** • Healthy Community Coalition (substance use related initiatives) • Multiple independent counselors • Kennebec Behavioral Health • **Self-help/support programs**	• Limited access to care/health insurance • **Bias/stigma training** • Treatment match person • Understanding how to treat disease vs. crime • More community support • **More education** • Educate students about dangers of vaping • **Education and rehab** • Peer-to-peer • Access to Juul, and limiting Juul marketing • One central number to call for emergency services • Harm reduction program • Support for new moms with substance use disorder
OXFORD COUNTY	
ASSETS	**GAPS/NEEDS**
• Emily Eastman • **Stephens/Rumford physicians trained in integrated medication-assisted treatment** • River Valley Healthy Communities Coalition • Healthy Oxford Hills • Western Maine Addiction Recovery Initiative • Availability of Narcan • Law enforcement support • Beacon House	• Communication between kids and parents • **Licensed alcohol and drug counselors** • Standing prescription for Narcan • **No local inpatient treatment** • Emergency rooms providing Suboxone • **Neonatal treatment** • **Local residential care** • **Substance use disorder treatment providers** • Support groups • **Inpatient treatment** • More recovery coaches • **More education/awareness** • **Maternity program**

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.[10] 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.[11]

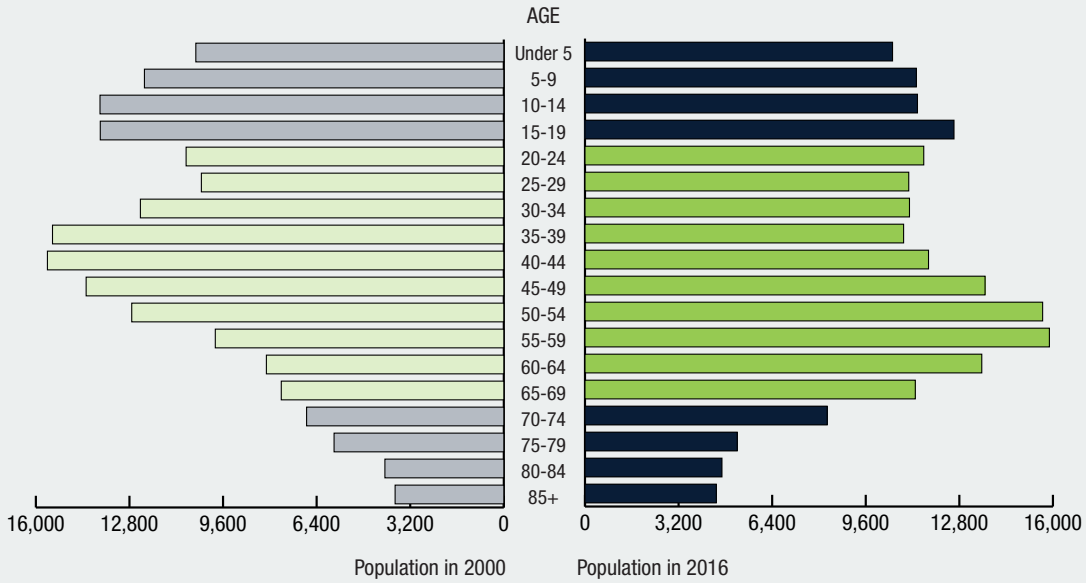
- In Androscoggin County, 15.8% of the population is 65 years of age or older.
- In Franklin County, 20.2% of the population is 65 years of age or older.
- In Oxford County, 19.2% of the population is 65 years of age or older.

The following is a summary of findings related to community characteristics for Western 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**:

- Androscoggin County Health Profile and CHNA Report
- Franklin County Health Profile and CHNA Report
- Oxford County Health Profile and CHNA Report
- Maine State Health Profile and CHNA Report
- Western District Health Profile
- Health Equity Data Summaries

Figure 5: Age Histogram of Western District



RACE/ETHNICITY AND FOREIGN BORN

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.[12] 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.[13,14] 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 Androscoggin County, the population is predominantly white (92.3%), but it is important to note that in Lewiston, 4.3% of the population is black/African American, and 6.2% are two or more races.[15] Lewiston's community and immigrant leaders estimate the actual rate and total number is higher due to an undercount during the 2010 Census and additional arrivals of secondary immigrants and asylum seekers. In 2013-2017, 5.2% of Lewiston's population was foreign-born; 51.8% of the foreign-born population were born in Africa.[16]

Table 8: Race/Ethnicity in Western District 2012-2016

	PERCENT/NUMBER
American Indian/Alaskan Native	0.3% / 556
Asian	0.7% / 1,320
Black/African American	1.1% / 2,211
Hispanic	1.5% / 2,933
Some other race	0.2% / 406
Two or more races	3.4% / 6,634
White	94.3% / 183,777

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 gainful employment is linked to several barriers to care, such as lack of health insurance, inability to pay for health care services, and inability to pay for transportation to receive services. Higher education is associated with improved health outcomes and social development at individual and community levels.

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 Western District counties to the state of Maine overall.

Table 9: Socioeconomic Status in the Western District

	ANDROSCOGGIN/MAINE
Median household income	$48,728 / $50,826
Unemployment rate*	3.6% / 3.8%
Individuals living in poverty	14.8% / 13.5%
Children living in poverty	21.3% / 17.2%
65+ living alone	47.5% / 45.3%
	FRANKLIN/MAINE
Median household income	$43,007 / $50,826
Unemployment rate*	4.3% / 3.8%
Individuals living in poverty	14.1% / 13.5%
Children living in poverty	16.2% / 17.2%
65+ living alone	— / 45.3%
	OXFORD/MAINE
Median household income	$42,197 / $50,826
Unemployment rate*	4.7% / 3.8%
Individuals living in poverty	16.7% / 13.5%
Children living in poverty	22.6% / 17.2%
65+ living alone	43.1% / 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 the Western District were identified as being particularly vulnerable or at-risk for poor health or health inequities.

Youth/Adolescents

Youth were identified as a priority population in all three Counties.

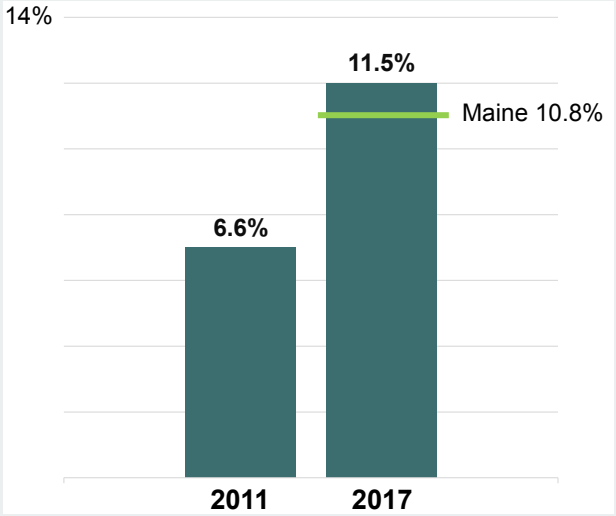
- In Androscoggin County, specific issues of concern were youth mental health (specifically stress, depression, and anxiety); substance use (specifically opioids, marijuana, and vaping/Juuling), lack of education and promotion around nutrition and physical activity, and unsupervised youth.
- In Oxford County, specific issues of concern were youth mental health, ACEs, substance use (specifically vaping/Juuling and marijuana), and lack of mentorship/engagement opportunities (i.e. Boys and Girls Clubs, Big Brother/Big Sister programs).
- In Franklin County, specific issues of concern were youth mental health (in particular depression, suicidality, and the impact of adverse childhood experiences [ACEs]); substance use (specifically vaping/Juuling and the impact of parents with substance use issues), lack of education around nutrition and physical activity, and the impacts of poverty (specifically food insecurity and access to care).

One key informant who works with youth identified a need for youth to be able to access low-cost and anonymous health services, specifically reproductive and substance use services, without parent permission.

LGBTQ

LGBTQ individuals, specifically youth, were identified as a population with significant and specialized health needs. Forum participants and interviewees discussed the need for more comprehensive and affordable mental health care for LGBTQ and non-binary adults and youth; there is a lack of providers who have the cultural competency to treat these populations and address their health needs. Key informant interviewees identified a number of differences between the health status of LGBTQ and non-LGBTQ youth. For instance, 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 are more likely to of feel sad or hopeless, consider suicide, be bullied on school property and be victims of sexual assault as compared to youth who identify as heterosexual. A 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).

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



Immigrants and Refugees

In addition to the two community forums held in Androscoggin County, a forum was held with refugees and immigrants to specifically address health issues in their communities. Key informants were also interviewed to speak to the needs of this population. Mental health was identified as one of the leading health issues for this population, specifically trauma and stress around immigration status in the current political climate, separation from families, and experiences in their home country. Oral health was another clinical issue identified across several community engagement activities. Interviewees and forum participants also identified a need for health services that are linguistically and culturally appropriate and increased efforts to improve health literacy around chronic disease management, substance use, and life skills (e.g., how to keep a healthy home, how to dress appropriately for cold weather). Many health needs for this population fall into the category of social determinants of health: policy change to make health insurance more accessible and comprehensive, safer and more affordable housing, better access to transportation, and the need for more opportunities to bolster community relations and social cohesion.

Older Adults

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

Rural/Low-Income

Approximately 83% of the population in Franklin County lives in a rural area, compared to 61% of the state overall. Many of those who participated in community forums and other community engagement events mentioned the difficult aspects of rural living, especially for those that are low-income. 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. This is not limited to rural areas.

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.

INDICATOR	BENCHMARK MAINE	WESTERN DISTRICT DISTRICT	+/–	ANDRO.	+/–	FRANKLIN	+/–	OXFORD	+/–
SOCIAL, COMMUNITY & PHYSICAL ENVIRONMENT									
Children living in poverty	2012-2016 **17.2%**	2012-2016 **21.0%**	N/A	2012-2016 **21.3%**	N/A	2012-2016 **16.2%**	N/A	2012-2016 **23.4%**	N/A
Median household income	2012-2016 **$50,826**	–	N/A	2012-2016 **$48,728**	N/A	2012-2016 **$43,007**	N/A	2012-2016 **$42,197**	N/A
Estimated high school student graduation rate	2017 **86.9%**	2017 **83.5%**	N/A	2017 **80.9%**	N/A	2017 **89.5%**	N/A	2017 **84.5%**	N/A
Food insecurity	2014-2015 **15.1%**	–	N/A	2014-2015 **16.0%**	N/A	2014-2015 **14.7%**	N/A	2014-2015 **15.4%**	N/A
HEALTH OUTCOMES									
14 or more days lost due to poor physical health	2014-2016 **19.6%**	2014-2016 **20.6%**	○	2014-2016 **20.9%**	○	2014-2016 **27.6%**	!	2014-2016 **19.6%**	○
14 or more days lost due to poor mental health	2014-2016 **16.7%**	2014-2016 **19.2%**	○	2014-2016 **19.6%**	○	2014-2016 **27.4%**	!	2014-2016 **17.5%**	○
Years of potential life lost per 100,000 population	2014-2016 **6,529.2**	–	N/A	2014-2016 **7,253.8**	○	2014-2016 **6,341.6**	○	2014-2016 **6,345.2**	○
All cancer deaths per 100,000 population	2012-2016 **173.8**	2012-2016 **178.2**	○	2012-2016 **178.0**	○	2012-2016 **164.0**	○	2012-2016 **186.1**	○
Cardiovascular disease deaths per 100,000 population	2012-2016 **195.8**	2012-2016 **208.4**	!	2012-2016 **218.0**	!	2012-2016 **218.8**	!	2012-2016 **187.2**	○
Diabetes	2014-2016 **10.0%**	2014-2016 **10.4%**	○	2014-2016 **10.9%**	○	2014-2016 **9.9%**	○	2014-2016 **9.8%**	○
Chronic obstructive pulmonary disease (COPD)	2014-2016 **7.8%**	2014-2016 **10.2%**	!	2014-2016 **10.3%**	!	2014-2016 **10.3%**	○	2014-2016 **9.9%**	○
Obesity (adults)	2016 **29.9%**	2016 **30.9%**	○	2016 **28.0%**	○	2016 **32.0%**	○	2016 **35.7%**	○
Obesity (high school students)	2017 **15.0%**	2017 **17.2%**	○	2017 **17.4%**	○	2017 **17.7%**	○	2017 **16.9%**	○
Obesity (middle school students)	2017 **15.3%**	2017 **19.1%**	!	2017 **18.4%**	!	2017 **21.5%**	○	2017 **18.6%**	○
Infant deaths per 1,000 live births	2012-2016 **6.5**	2012-2016 **6.3**	○	2012-2016 **7.3**	○	2012-2016 **5.5***	N/A	2012-2016 **4.7***	○
Cognitive decline	2016 **10.3%**	2016 **10.1%**	○	2016 **8.9*%**	○	2016 **14.0*%**	○	2016 **9.3*%**	○
Lyme disease new cases per 100,000 population	2013-2017 **96.5**	2013-2017 **69.3**	N/A	2013-2017 **67.6**	N/A	2013-2017 **71.0**	N/A	2013-2017 **71.6**	N/A

	BENCHMARK	WESTERN DISTRICT							
INDICATOR	**MAINE**	**DISTRICT**	**+/–**	**ANDRO.**	**+/–**	**FRANKLIN**	**+/–**	**OXFORD**	**+/–**
HEALTH OUTCOMES (CONTINUED)									
Chlamydia new cases per 100,000 population	2013-2017 **293.4**	2013-2017 **393.1**	N/A	2013-2017 **495.9**	N/A	2013-2017 **246.1**	N/A	2013-2017 **277.6**	N/A
Fall-related injury (unintentional) emergency department rate per 10,000 population	2012-2014 **340.9**	2012-2014 **413.3**	!	2012-2014 **435.4**	!	2012-2014 **356.9**	!	2012-2014 **403.0**	!
Suicide deaths per 100,000 population	2012-2016 **15.9**	2012-2016 **15.9**	○	2012-2016 **17.4**	○	2012-2016 **13.8**	○	2012-2016 **14.0**	○
Overdose deaths per 100,000 population	2012-2016 **18.1**	2012-2016 **15.2**	○	2012-2016 **18.3**	○	2012-2016 **8.8**	★	2012-2016 **12.2**	○
HEALTH CARE ACCESS AND QUALITY									
Uninsured	2012-2016 **9.5%**	2012-2016 **9.7%**	N/A	2012-2016 **8.6%**	N/A	2012-2016 **10.9%**	N/A	2012-2016 **11.0%**	N/A
Ratio of primary care physicians to 100,000 population	2017 **67.3**	2017 **71.3**	N/A	2017 **86.3**	N/A	2017 **47.6**	N/A	2017 **56.1**	N/A
Ratio of psychiatrists to 100,000 population	2017 **8.4**	2017 **6.0**	N/A	2017 **10.0**	N/A	2017 **3.3**	N/A	2017 **0.0**	N/A
Ratio of practicing dentists to 100,000 population	2017 **32.1**	2017 **25.3**	N/A	2017 **28.1**	N/A	2017 **14.3**	N/A	2017 **25.9**	N/A
Ambulatory care-sensitive condition hospitalizations per 10,000 population	2016 **74.6**	2016 **80.8**	N/A	2016 **83.9**	N/A	2016 **90.8**	N/A	2016 **71.8**	N/A
Two-year-olds up-to-date with recommended immunizations	2017 **73.7%**	2017 **72.0%**	N/A	2017 **65.8%**	N/A	2017 **86.1%**	N/A	2017 **78.1%**	N/A
HEALTH BEHAVIORS									
Sedentary lifestyle – no leisure-time physical activity in past month (adults)	2016 **20.6%**	2016 **23.8%**	○	2016 **22.2%**	○	2016 **25.0%**	○	2016 **26.1**	○
Chronic heavy drinking (adults)	2014-2016 **7.6%**	2014-2016 **6.8%**	○	2014-2016 **6.6%**	○	2014-2016 **8.6%**	○	2014-2016 **6.2%**	○
Past-30-day alcohol use (high school students)	2017 **22.5%**	2017 **22.6%**	○	2017 **20.4%**	○	2017 **26.4%**	○	2017 **23.2%**	○
Past-30-day alcohol use (middle school students)	2017 **3.7%**	2017 **4.3%**	○	2017 **3.6%**	○	2017 **8.8%**	○	2017 **2.8%**	○
Past-30-day marijuana use (high school students)	2017 **19.3%**	2017 **21.6%**	○	2017 **20.2%**	○	2017 **22.5%**	!	2017 **22.7%**	○
Past-30-day marijuana use (middle school students)	2017 **3.6%**	2017 **5.2%**	○	2017 **4.7%**	○	2017 **7.7%**	○	2017 **4.5%**	○

INDICATOR	BENCHMARK MAINE	WESTERN DISTRICT DISTRICT	+/–	ANDRO.	+/–	FRANKLIN	+/–	OXFORD	+/–
HEALTH BEHAVIORS (CONTINUED)									
Past-30-day misuse of prescription drugs (high school students)	2017 **5.9%**	2017 **6.7%**	○	2017 **7.5%**	○	2017 **6.0%**	○	2017 **6.4%**	○
Past-30-day misuse of prescription drugs (middle school students)	2017 **1.5%**	2017 **1.5%**	○	2017 **1.6%**	○	2017 **1.6%**	○	2017 **1.2%**	○
Current (every day or some days) smoking (adults)	2016 **19.8%**	2016 **22.7%**	○	2016 **25.0%**	○	2016 **18.4%**	○	2016 **21.0%**	○
Past-30-day cigarette smoking (high school students)	2017 **8.8%**	2017 **9.9%**	○	2017 **7.7%**	○	2017 **13.1%**	!	2017 **10.6%**	!
Past-30-day cigarette smoking (middle school students)	2017 **1.9%**	2017 **2.9%**	○	2017 **3.1%**	○	2017 **3.5%**	○	2017 **2.0%**	○

APPENDIX A: REFERENCES

1 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

2 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

3 Food Research and Action Center, Hunger and Health

4 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

5 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

6 Substance Abuse and Mental Health Services Administration. (2016). Mental health and substance use disorders. Retrieved from https://www.samhsa.gov/disorders.

7 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

8 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

9 Mental Health America. (2017). Access to care. Retrieved from http:// www. mentalhealthamerica.net/issues/mental-health-america-access-care-data

10 Lyons, L. (2013, March 11). Age, religiosity, and rural America. Retrieved from http://www.gallup.com/poll/7960/age-religiosity-rural-america.aspx

11 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

12 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

13 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.

14 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.

15 US Census Bureau, 2013-2017

16 US Census Bureau, 2013-2017

APPENDIX B: HISTORY AND GOVERNANCE

Maine was the first and is still 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 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**.*

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.

Western District Forums

Ten community forums were held in the Western District.

Table 10: Community engagement activites in the Western District, 2018-2019

ANDROSCOGGIN COUNTY			
TYPE OF ENGAGEMENT	**LOCATION & DATE**	**FACILITATOR**	**ATTENDEES**
Community Forum	Lewiston 10/15/2018	JSI	48
Community Forum	Lewiston 10/11/2018	Local Facilitators	31
County Health Rankings Health Action Forum	Lewiston, 06/27/2018	Dr. Heather Shattuck-Heidorn and Kristine Jenkins	37
FRANKLIN COUNTY			
TYPE OF ENGAGEMENT	**LOCATION & DATE**	**FACILITATOR**	**ATTENDEES**
Greater Franklin County Health Survey	09/06/18 - 09/22/2018	Healthy Community Coalition of Franklin County	317
Community Forum	Farmington 09/25/2018	JSI	41
Focus Group with Franklin Resource Collaborative	Farmington 11/14/2018	Healthy Community Coalition of Franklin County	14
Physician Survey	12/03/18 - 12/14/2018	Healthy Community Coalition of Franklin County	15
OXFORD COUNTY			
TYPE OF ENGAGEMENT	**LOCATION & DATE**	**FACILITATOR**	**ATTENDEES**
Community Forum	Bethel 10/10/2018	JSI	9
Community Forum	Rumford 10/16/2018	Local Facilitators	25
Community Forum	South Paris 10/22/2018	JSI	20

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 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 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 Androscoggin, Franklin, and Oxford 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**