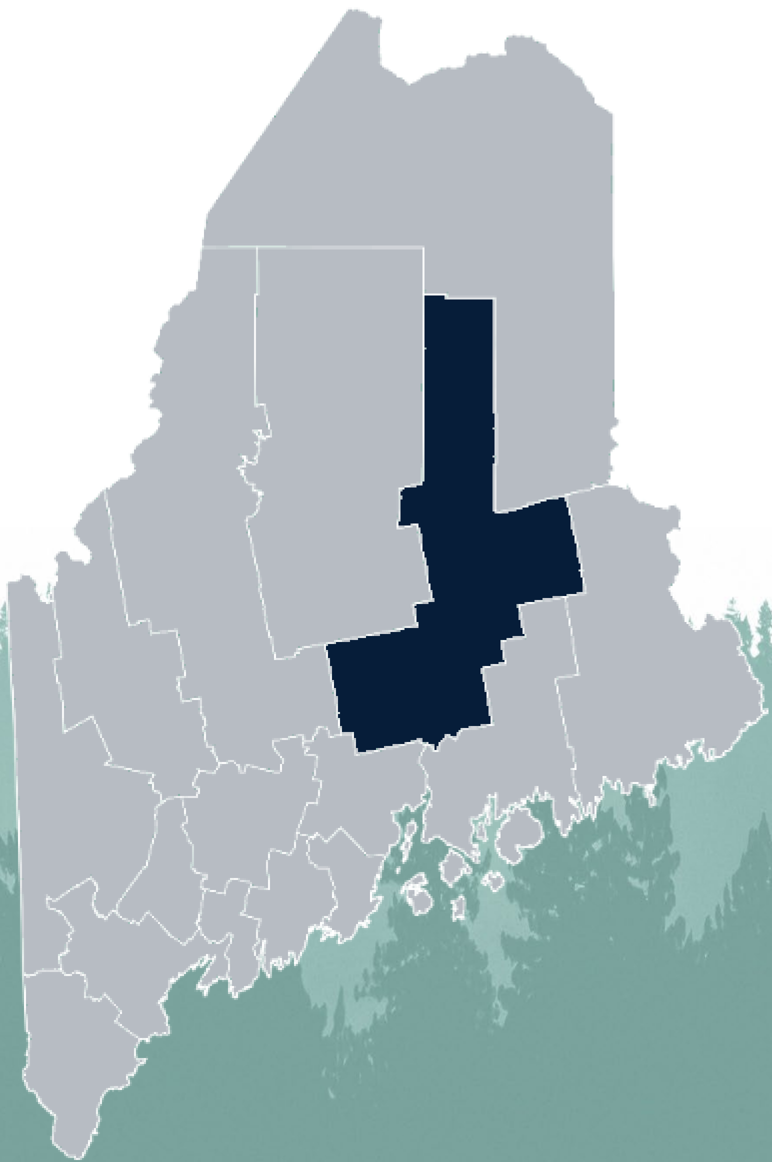
PENOBSCOT COUNTY

Maine Shared Community Health Needs Assessment Report

2022



COVID-19 AND OUR HEALTH

While our quantitative data pre-dates the COVID-19 pandemic, the 2021 community health needs assessment outreach took place during the pandemic, and participants noted its impacts in deep and meaningful ways. It was impossible not to recognize the pandemic's impacts on healthcare, health outcomes, behavioral health, and social support systems, especially for those who experience systemic disadvantages.

Challenges in accessing care have impacted chronic disease management and caused delays in non-emergency procedures. Rates of those seeking medical care for even acute health events such as heart attack, stroke, and uncontrolled high blood sugar were low during the early phase of the pandemic due to COVID-19 concerns. This occurred even while the use of telemedicine increased (Kendzerska, et al., 2021). Later in the pandemic, health care usage data from July 2020 through July 2021 show that increases in ICU bed occupancy were followed weeks later by a higher number of deaths not caused by COVID than typically seen before the pandemic. ICU bed occupancy had exceeded 75% of capacity nationwide for at least 12 weeks as of October 25, 2021 (French G., et al., 2021).

Previous disasters have shown that the secondary impacts on population health are long-lasting. For instance, 10 years after Hurricane Katrina, Tulane University Health Sciences Center saw a significant increase in heart disease and related risk factors such as increases in A1C levels, blood pressure, and LDL cholesterol (Fonseca, et al., 2009). The after-effects of disasters such as the Iraqi occupation in Kuwait in 1990, the London bombings in 2005, and the tidal waves and the nuclear meltdown in Fukushima, Japan in 2011 have revealed the need for immediate as well as long-term mental health care (McFarlane & Williams, 2012).

Emerging concerns on the lasting impacts of this pandemic also include the long-term effects of COVID infection as our newest chronic disease. A recent systematic review estimates that more than half of COVID-19 survivors worldwide continue to have COVID-related health problems six months after recovery from acute COVID-19 infection (Groff, et al., 2021). New evidence shows increases in adult diagnoses of diabetes, the risk for diabetes among children, and worsening diabetes among those who already had diabetes after COVID-19 infection (Barrett, et al, 2022).

There are some concerns that the pandemic has had negative impacts on health behaviors. However, the evidence is not yet clear. In Maine, newly available 2020 Maine Behavioral Risk Factors Surveillance System (BRFSS) data on a few key measures give us an early snapshot of the health of Maine adults in the first year of the pandemic. These data do not show any evidence of adverse impacts on trends in smoking, alcohol use, overweight, obesity, or physical activity. Self-reported alcohol use, binge drinking, and current smoking in 2020 were at the lowest levels since 2011 (Maine CDC, unpublished analysis). Drug overdose deaths increased by 33% in 2020 and by another estimated 23% in 2021 according to preliminary findings (Maine Attorney General's Office); it is not clear whether this is a continuation of previous trends, other factors, or due to the pandemic.

The pandemic is affecting different segments of the population more than others. The August 2021/COVID Resilience Survey showed that younger people, people of color, and those with lower incomes all had elevated stress (American Psychological Association). In Maine, Black or African Americans experience a disproportionate share of the COVID-19 burden as they are only 1.4% of Maine's total population yet, as of January 19, 2022, makeup 3.1% of cases and hospitalizations (Maine DHHS).

Thus, the findings in the 2022 Maine Shared CHNA Reports which show the most often identified priorities such as mental health, substance and alcohol use, access to care, and social determinants of health take on new meaning and an increased sense of urgency.

References:

American Psychological Association (2021). Stress in America™ 2021: Stress and Decision-Making During the Pandemic. Last accessed 4/5/2022: https://www.apa.org/news/press/releases/stress/2021/october-decision-making

Barrett CE, Koyama AK, Alvarez P, et al. (2022). Risk for Newly Diagnosed Diabetes >30 Days After SARS-CoV-2 Infection Among Persons Aged <18 Years — United States, March 1, 2020–June 28, 2021. *Morbidity and Mortal Weekly Report*. January 14, 2022;*71*(2); 59–65. DOI: http://dx.doi.org/10.15585/mmwr.mm7102e2

French G, Hulse M, Nguyen D, et al. (2021). Impact of Hospital Strain on Excess Deaths During the COVID-19 Pandemic — United States, July 2020–July 2021. *Morbidity and Mortal Weekly Report*. November 19, 2021;70(46);1613–1616. DOI: http://dx.doi.org/10.15585/mmwr.mm7046a5

Fonseca, V. A., Smith, H., Kuhadiya, N., et al. (2009). Impact of a Natural Disaster on Diabetes, *American Diabetes Association Diabetes Care.* September, 2009. 32(9); 1632-1638, DOI: 10.2337/dc09-0670. Last accessed 4/5/2022: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2732170/

Groff, D., Sun, A., Ssentongo, A. E., et al. (2021). Short-term and Long-term Rates of Postacute Sequelae of SARS-CoV-2 Infection: A Systematic Review. *JAMA network open*, 4(10), e2128568. https://doi.org/10.1001/jamanetworkopen.2021.28568

Kendzerska, T., Zhu, D. T., Gershon, A. S., et al. (2021). The Effects of the Health System Response to the COVID-19 Pandemic on Chronic Disease Management: A Narrative Review. *Risk management and healthcare policy*. Volume 2021:14, 575–584. https://doi.org/10.2147/RMHP.S293471

Maine Attorney General's Office, Overdose Data. Last accessed 4/5/2022: https://www.maine.gov/ag/news/article.shtml?id=5041404

Maine Department of Health and Human Services, (Maine DHHS) COVID-19 Dashboard, last accessed 1/20/2022: https://www.maine.gov/dhhs/mecdc/infectious-disease/epi/airborne/coronavirus/data.shtml

McFarlane, A.C., Williams., R. (2012). Mental Health Services Required after Disasters, *Depression Research and Treatment.* Volume 2012, Article ID 970194, DOI: 10.1155/2012/970194 10.1155/2012/970194. Last accessed 4/5/2022: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3395273/pdf/DRT2012-970194.pdf

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INTRODUCTION

The **Maine Shared Community Health Needs Assessment (Maine Shared CHNA)** is a collaboration between Central Maine Healthcare (CMHC), Maine Center for Disease Control and Prevention (Maine CDC), MaineGeneral Health (MGH), MaineHealth (MH), and Northern Light Health (NLH). The vision of the Maine Shared CHNA is to turn health data into action so that Maine will become the healthiest state in the U.S.

The mission of the Maine Shared CHNA is to:

- Create Shared CHNA Reports,
- Engage and activate communities, and
- Support data-driven health improvements for Maine people.

This is the fourth Maine Shared CHNA and the third conducted on a triennial basis. The Collaboration began with the One Maine initiative published in 2010. The project was renamed to the Shared Health Needs Assessment and Planning Process in 2015 which informed the 2016 final reports, and renamed to the Maine Shared CHNA in 2018, which informed the 2019 final reports. The 2021 community engagement cycle has informed the 2022 final reports.

New this cycle is an expanded effort to reach those who may experience systemic disadvantages and therefore experience a greater rate of health disparities. Two types of outreach were piloted in this effort. One effort included nine community sponsored events hosted by organizations representing the following communities: Black or African Americans; people who are deaf or hard of hearing; people with a mental health diagnosis; people with a disability; people who define themselves or identify as lesbian, gay, bisexual, transgender, and queer and/or questioning (LGBTQ+); people with low income; older adults; people who are homeless or formerly homeless; and youth. In addition to these events, 1,000 oral surveys were conducted in collaboration with eight ethnic-based community organizations' community health workers to better reach Maine's immigrant population. A complete description of how these efforts were deployed and a listing of those who provided input is provided in the Methodology section on page 21.

All of the County, District, and State reports and additional information and data can be found on our web page: www.mainechna.org.

EXECUTIVE SUMMARY

LEADING CAUSES OF DEATH

One way to view the top health priorities is to consider their contributions to Maine's morbidity, mortality, and overall quality of life issues. It is important to note Maine's leading causes of death to put the community-identified health priorities into perspective. This includes underlying causes of death such as tobacco use, substance and alcohol use, and obesity.

Table 1. Leading Causes of Death

RANK	MAINE	PENOBSCOT COUNTY
1	Cancer	Cancer
2	Heart Disease	Heart Disease
3	Unintentional Injury	Unintentional Injury
4	Chronic Lower Respiratory Disease	Chronic Lower Respiratory Disease
5	Stroke	Stroke

TOP HEALTH PRIORITIES

The participants of the Penobscot County forum have identified the following health priorities:

Table 2. Top Health Priorities for Penobscot County

PRIORITIES	% OF VOTES
Mental Health	59%
Substance and Alcohol Use	46%
Access to Care	42%
Social Determinants of Health	40%

Statewide, participants in engagement activities identified similar top four priorities in the 2021 engagement process as was in 2018.

Table 3. Top Health Priorities for County/State

PRIORITIES	2018	2021
Mental Health	✓ ●	✓ ●
Substance and Alcohol Use	✓ ●	✓ ●
Access to Care	✓ ●	✓ ●
Social Determinants of Health	✓ ●	✓ ●
Older Adult Health	●	
Physical Activity, Nutrition, and Weight	✓ ●	

✓ County Priority ● State Priority

Common themes identified by participants in 2021 include an emerging mental health crisis; challenges in access to healthcare, including mental health providers; issues related to poverty, transportation, and other social determinants of health in a rural state; and increasing rates of substance and alcohol use.

The following pages describe each of these priorities in more detail including the **major health concerns** identified by participants in the community engagement process. There is a description of community-identified resources available to address those concerns as well as any related gaps or needs. Where available, there is also information for certain groups that are at higher risk due to systemic disadvantages. Finally, following the sections that discuss each of the health priorities is a listing of other health issues that were raised by community members but were not identified as priorities.

DEMOGRAPHICS

Penobscot has the third-largest population in the state. It has a lower income and educational attainment with higher rates of those living in poverty or with a disability. The county has a younger population than the state overall.

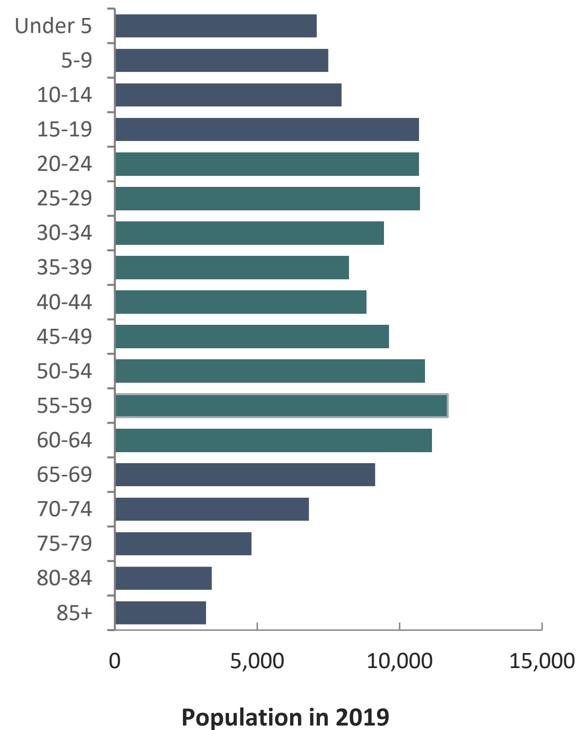
Table 4. Selected Demographics

	COUNTY	MAINE
Population numbers	151,774	1.34M
Median household income	$50,808	$57,918
Unemployment rate	5.4%	5.4%
Individuals living in poverty	14.8%	11.8%
Children living in poverty	13.9%	13.8%

Table 4. Selected Demographics (continued)	COUNTY	MAINE
65+ living alone	29.4%	29.0%
Associate's degree or higher (age 25+)	38.3%	41.9%
Gay, lesbian, and bisexual (adults)	3.7%	3.5%
Persons with a disability	19.0%	16.0%
Veterans	9.1%	9.6%

Table 5. Race/Ethnicity in Penobscot County	PERCENT	NUMBER
American Indian/Alaskan Native	1.3%	1,910
Asian	1.0%	1,492
Black/African American	0.9%	1,291
Native Hawaiian or other Pacific Islander	-	-
White	94.5%	143,465
Some other race	0.3%	462
Two or more races	2.0%	3,096
Hispanic	1.4%	2,061
Non-Hispanic	98.6%	149,713

Figure 1. Age distribution for Penobscot County



HEALTH EQUITY

There is significant agreement between the priorities chosen during county forums and those identified through community-sponsored events and oral surveys. The underlying root causes for those who may experience systemic disadvantages differ depending on local resources and unique characteristics and cultural norms for each sub-population. These differences are best identified through further collaboration at the community level.

For a detailed look at what each community identified as priority health topics, as well as any gaps or barriers and resources or assets, please see the State Report, found on the Maine Shared CHNA website, www.mainechna.org.

For a quantitative look at how these differences affect health outcomes, see the Health Equity Data Sheets, also found on the Maine Shared CHNA 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. The next steps include:

- For hospitals, create an informed implementation strategy designed to address the identified needs.
- For District Coordinating Councils, create District Health Improvement Plans.
- For the Maine CDC, create an informed State Health Improvement Plan.

This report will also be used by policymakers, non-profits, businesses, academics, and countless community partners to support strategic planning, coalition building, and grant writing. Taken together, these steps can lead to Maine becoming the healthiest state in the nation.

PRIORITY: MENTAL HEALTH

KEY TAKEAWAYS FOR PENOBSCOT COUNTY

Mental Health was the top priority identified in Penobscot County. It was also identified as a top health concern in all other counties and underserved communities across the state. Mental health includes emotional, psychological, and social well-being. It affects how we think, feel, and act. It also helps determine how we handle stress, relate to others, and make healthy choices.[1]

During an event with those with a mental health diagnosis, participants noted extremely long waitlists for services, highlighting a need for more high-quality mental health services. Participants also suggested the need for more case management, supportive, and wrap-around services, as those with a mental health diagnosis required varied and nuanced care and treatment.

"Mental health - concern for the population overall - but especially for youth and adolescents (ACEs, suicide, screen time, lack of social connection)"

Availability of mental health providers in Penobscot County was the most frequently mentioned indicator related to mental health. Community members noted the low availability of mental health providers in the area, both for inpatient and outpatient care. They also noted long waitlists to access mental health care services. The over use of the **emergency department** to address mental health needs was identified by 42% of community forum participants. In Penobscot County, mental health emergency department rate per 10,000 was 178.2. This rate is is similar to Maine overall (181.5).

During the 2015-2017 time period, 28.5% (1 in 4) **adults reported experiencing depression** in their lifetime, which is significantly higher than the state during the same time period (23.7%).

Mental health issues among youth were concerning to those in the community, particularly the rate at which youth experience **suicidal ideation** and feeling **sad and hopeless**. In 2019, 32.5% of high school students and 21.1% of middle school students in Penobscot County reported feeling sad or hopeless for two or more weeks in a row. This was a significant increase for high school students.

In addition, 16.2% of high school students and 18.6% of middle school students seriously considered suicide during the same period. These rates were similar to Maine overall. There were concerns about the impact of the COVID-19 pandemic on youth, including potential increases in adverse childhood experiences (ACEs) resulting from the pandemic which forced homeschooling in potentially unsafe situations while decreasing access to school-based supports.

"We lack vision and spend vast sums treating symptoms of SUDS and mental health and far too little on prevention and early intervention."

Youth with disabilities who experience mental health issues are a particularly vulnerable population. They require access to providers who can connect and communicate in ways to meet their unique needs.

Participants mentioned community resources such as federal Substance Abuse and Mental Health Services Administration (SAMSHA) grants for community navigators, Maine's Crisis and Suicides Hotlines, 211 Maine, National Alliance on Mental Illness (NAMI), and Maine's services like weekly support groups.

For more information about how those who may experience systemic disadvantages are impacted by this priority health topic area, please see the State CHNA Report.

[1] Centers for Disease Control and Prevention. Available from: https://www.cdc.gov/mentalhealth/index.htm

MAJOR HEALTH CONCERNS FOR PENOBSCOT COUNTY

	PENOBSCOT COUNTY			BENCHMARKS			
INDICATOR	**POINT 1**	**POINT 2**	**CHANGE**	**MAINE**	**+/-**	**U.S.**	**+/-**
MENTAL HEALTH							
Mental health emergency department rate per 10,000 population	—	2016-2018 **178.2**	N/A	2016-2018 **181.5**	○	—	N/A
Depression, current symptoms (adults)	2012-2014 **9.8%**	2015-2017 **11.6%**	○	2015-2017 **9.5%**	○	—	N/A
Depression, lifetime	2012-2014 **24.3%**	2015-2017 **28.5%**	○	2015-2017 **23.7%**	!	2017 **19.1%**	N/A
Anxiety, lifetime	2012-2014 **19.8%**	2015-2017 **23.9%**	○	2015-2017 **21.4%**	○	—	N/A
Sad/hopeless for two weeks in a row (high school students)	2017 **28.3%**	2019 **32.5%**	!	2019 **32.1%**	○	—	N/A
Sad/hopeless for two weeks in a row (middle school students)	2017 **23.0%**	2019 **21.1%**	○	2019 **24.8%**	○	—	N/A
Seriously considered suicide (high school students)	2017 **15.4%**	2019 **16.2%**	○	2019 **16.4%**	○	—	N/A
Seriously considered suicide (middle school students)	2017 **15.7%**	2019 **18.6%**	○	2019 **19.8%**	○	—	N/A
Chronic disease among persons with depression	—	2011-2017 **37.6%**	N/A	2011-2017 **30.8%**	○	—	N/A
Ratio of population to psychiatrists	—	2019 **14,006.0**	N/A	2019 **12,985.0**	N/A	—	N/A
Currently receiving outpatient mental health treatment (adults)	2012-2014 **18.2%**	2015-2017 **20.2%**	N/A	2015-2017 **18.0%**	N/A	—	N/A

CHANGE columns shows statistically significant changes in the indicator over time.	
★	means the health issue or problem is getting better over time.
!	means the health issue or problem is getting worse over time.
○	means the change was not statistically significant.
N/A	means there is not enough data to make a comparison.
BENCHMARK columns compare the county data to the state and national data.	
★	means the county is doing significantly better than the state or national average.
!	means the county is doing significantly worse than the state or national average.
○	means there is no statistically significant difference between the data points.
N/A	means there is not enough data to make a comparison.
ADDITIONAL SYMBOLS	
*	means results may be statistically unreliable due to small numbers, use caution when interpreting.
—	means data is unavailable because of lack of data or suppressed data due to a small number of respondents.

COMMUNITY RESOURCES TO ADDRESS MENTAL HEALTH

Community members identified multiple available treatment options and the presence of youth mental health resources as assets available for the Penobscot County community. The community also identified barriers to care, including a lack of mental health providers, a need for additional youth mental health services, a lack of focus on prevention, and the potentially serious consequences of untreated mental health issues as ongoing challenges Penobscot County will need to overcome.

The following information was gathered from participants during a group activity. Participants were asked to share their knowledge of the gaps and needs or resources and assets in their communities regarding the identified health priorities. The numbers in parentheses indicate the number of times community members mentioned or concurred with what was listed.

Table 6. Gaps/Needs and Available Resources (Mental Health)

AVAILABLE RESOURCES	GAPS/NEEDS
Collaboration The community wants to see things get better (6) Community Health Leadership Board (3) This Community Health Needs Assessment (CHNA) process (3) Media Engagement - local papers, social media **Treatment** Northern Light Acadia Hospital and Acadia CARES (Child-Adolescent Resource and Educational Series) (14) Telehealth (7) Public health nurses that go to homes (2) Penobscot Community Health Centers (PCHC) Substance Abuse and Mental Health Services Administration (SAMSHA) grants for community navigators (4) Maine's Crisis and Suicides Hotlines (3) National Alliance on Mental Illness (NAMI) Maine's services like weekly support groups (2) Together Place community center **Prevention** Access to culture and arts Awareness/stigma More people are open to having conversations early and increased awareness of mental health (5) Increased education in emergency departments	**Collaboration** Need better coordination (3) **Providers** Not enough providers in general (32) Lack of skills and education necessary among providers on addressing mental health (9) Not enough providers, and social workers in schools (5) **Barriers to Treatment** Long waitlists and times (14) Lack of inpatient beds (13) Poor access to outpatient services (6) Local access issues (3 Sometimes only affiliated through Primary Care (2) Lack of insurance coverage for mental health services Need more Insurance access The social stigma of mental health (19); General lack of education and knowledge of mental health (4) Lack of reporting of intimate partner violence and child abuse (3) General lack of support services (2) Broadband access issues for telehealth (3) **Stress/Isolation** General lack of hope (3) Too much stress on families, e.g., work schedules, poverty, low pay jobs (2) Isolation caused by COVID (3) Not enough support for employees' mental health for those on front lines, e.g., DHHS (2)

Table 6. Gaps/Needs and Available Resources (Mental Health) (Continued)

AVAILABLE RESOURCES	GAPS/NEEDS
Schools/Youth More school systems addressing mental health, e.g., by using school guidance counselors (4) Brewer School Department helps PCHC work better through school counseling School-based health centers Federal grants that focus on increasing quality and decreasing wait times for children's services	**Equity** Inequitable access for minorities and immigrants (2) **Schools/Youth** Youth exercise required in school Need more screening for mental health in schools (2) Lack of awareness and support of mental health in school Not enough youth mental health services and providers (3) **Law Enforcement** Law enforcement training (2) **Funding** Inadequate reimbursements for providers (2) Inadequate funding Not enough resources to pay for gaps/barriers **Data** Lack of COVID mental health impact related data available **Health Care Quality** Lack of skills and education necessary among providers on addressing mental health (9) Lack of knowledge of how to handle a mental health situation vs. medical emergency (4) Lack of integrated care Backlog in the emergency department; emergency departments are the first access points and that is a problem due to lack of training and not a therapeutic environment (8) Need more screening for mental health in schools (2)

PRIORITY: SUBSTANCE & ALCOHOL USE

KEY TAKEAWAYS FOR PENOBSCOT COUNTY

Substance and alcohol use was selected as a top priority in Penobscot County. It was also identified as one of the top health concerns in all other counties and underserved communities across the state.

Recurring use of alcohol and/or drugs can cause clinically significant impairment, including health problems, disability, and failure to meet major responsibilities at work, school, or home. Substance and alcohol use has also been linked to co-occurring mental health issues such as anxiety, depression, and attention-deficit/hyperactivity disorder (ADHD), among others.[2]

"Concerns over substance use increasing, and I'm anticipating these numbers will look worse because of the pandemic"

Overdose deaths was mentioned by 48% of forum participants as a concerning health indicator in Penobscot County. In 2020, the rate of overdose deaths per 100,000 population in Penobscot County was 62.0, a significant increase from 34.8 in 2019. This is also a significantly higher rate than in Maine (37.3) in 2020. Similarly, **drug-induced deaths** per 100,000 increased significantly in Penobscot county from 14.0 during the 2007-2011 time period to 33.9 during the 2015-2019 time period. **Overdose emergency medical service response** per 10,000 was also significantly higher in Piscataquis County (92.5) than the state overall (76.7).

Hospital utilization was the second most frequently mentioned health indicator for substance and alcohol use. In 2016-2018, the rate of opiate poisoning hospitalizations per 10,000 population in Penobscot County was 1.6. This is similar to the state overall (1.4).

The **misuse of prescription drugs** was mentioned by 33% of forum participants. During the 2013-2017 time period, 1.5% of Penobscot County adults had misused prescription medication. This is similar to the state rate (1.0%).

Drug-affected infants were the fourth most frequently mentioned health indicator related to substance use in Penobscot County. The rate of drug-affected infant reports per 1,000 births in Penobscot County was 90.2 in 2018-2019. This rate is significantly higher than the state overall (73.7).

Community forum participants expressed concerns about multiple drug and alcohol use health indicators. The rate of **alcohol-induced deaths** in Penobscot County was 12.7 per 100,000 residents during the 2015-2019 time period. This is significantly higher than was reported during the 2007-2011 time period (7.4).

Community members facing systemic disadvantages, including the formerly homeless or homeless, low-income adults, and the LGBTQ+ community mentioned a lack of treatment and recovery resources in the state. They noted a lack of harm-reduction programming, a need for supportive living environments, and skill-building programs for independent living.

Participants mentioned a common barrier to addressing substance and alcohol use in Penobscot County is a lack of substance and alcohol use treatment programs, including those that offer Medication-Assisted Treatment (MAT). Participants also mentioned resources to address the issue in the area include the recovery community and access to Northeastern Workforce Development Board in Bangor.

For more information about how those who may experience systemic disadvantages are impacted by this priority health topic area, please see the State CHNA Report.

[2] Mental Health and Substance Use Disorders. Substance Abuse and Mental Health Services Administration (SAMHSA). Available from: https://www.samhsa.gov/find-help/disorders

MAJOR HEALTH CONCERNS FOR PENOBSCOT COUNTY

	PENOBSCOT COUNTY			BENCHMARKS			
INDICATOR	**POINT 1**	**POINT 2**	**CHANGE**	**MAINE**	**+/-**	**U.S.**	**+/-**
SUBSTANCE USE							
Overdose deaths per 100,000 population	2019 **34.8**	2020 **62.0**	!	2020 **37.3**	!	2019 **21.5**	N/A
Drug-induced deaths per 100,000 population	2007-2011 **14.0**	2015-2019 **33.9**	!	2015-2019 **29.5**	○	2019 **22.8**	N/A
Alcohol-induced deaths per 100,000 population	2007-2011 **7.4**	2015-2019 **12.7**	!	2015-2019 **11.6**	○	2019 **10.4**	N/A
Alcohol-impaired driving deaths per 100,000 population	2018 **2.0**	2019 **3.9**	N/A	2019 **3.8**	N/A	2019 **3.1**	N/A
Drug-affected infant reports per 1,000 births	2017 **116.6**	2018-2019 **90.2**	○	2018-2019 **73.7**	!	—	N/A
Chronic heavy drinking (adults)	2012-2014 **5.5%**	2015-2017 **7.8%**	○	2015-2017 **8.5%**	○	2017 **6.2%**	N/A
Binge drinking (adults)	2012-2014 **17.4%**	2015-2017 **19.9%**	○	2015-2017 **17.9%**	○	2017 **17.4%**	N/A
Past-30-day marijuana use (adults)	2013-2016 **12.2%**	2017 **16.9%**	○	2017 **16.3%**	○	—	N/A
Past-30-day misuse of prescription drugs (adult)	2012-2016 **0.9%**	2013-2017 **1.5%***	N/A	2013-2017 **1.0%**	○	—	N/A
Past-30-day alcohol use (high school students)	2017 **19.9%**	2019 **19.3%**	○	2019 **22.9%**	○	—	N/A
Past-30-day alcohol use (middle school students)	2017 **3.6%**	2019 **4.0%**	○	2019 **4.0%**	○	—	N/A
Binge drinking (high school students)	2017 **7.7%**	2019 **5.6%**	○	2019 **8.2%**	★	—	N/A
Binge drinking (middle school students)	2017 **1.1%**	2019 **1.3%**	○	2019 **1.3%**	○	—	N/A
Past-30-day marijuana use (high school students)	2017 **16.5%**	2019 **17.4%**	○	2019 **22.1%**	★	—	N/A
Past-30-day marijuana use (middle school students)	2017 **2.7%**	2019 **3.9%**	○	2019 **4.1%**	○	—	N/A
Past-30-day misuse of prescription drugs (high school students)	2017 **5.0%**	2019 **3.9%**	○	2019 **5.0%**	○	—	N/A
Past-30-day misuse of prescription drugs (middle school students)	2017 **1.7%**	2019 **3.4%**	○	2019 **3.0%**	○	—	N/A
Narcotic doses dispensed per capita by retail pharmacies	2019 **11.5**	2020 **11.3**	N/A	2020 **12.1**	N/A	—	N/A
Overdose emergency medical service responses per 10,000 population	2019 **87.0**	2020 **92.5**	○	2020 **76.7**	!	—	N/A
Opiate poisoning emergency department rate per 10,000 population	—	2016-2018 **9.2**	N/A	2016-2018 **9.9**	○	—	N/A
Opiate poisoning hospitalizations per 10,000 population	—	2016-2018 **1.6**	N/A	2016-2018 **1.4**	○	—	N/A

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*	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.

COMMUNITY RESOURCES TO ADDRESS SUBSTANCE & ALCOHOL USE

Community members in Penobscot County identified peer recovery and treatment resources available as potential strengths to address substance and alcohol use in their county, along with harm reduction strategies and funding sources. Additionally, barriers to substance and alcohol use issues were identified by community members, including a lack of available treatment programs, a need for additional recovery coaches, widely available addictive substances, and a lack of youth resources.

The following information was gathered from participants during a group activity. Participants were asked to share their knowledge of the gaps and needs or resources and assets in their communities regarding the identified health priorities. The numbers in parentheses indicate the number of times community members mentioned or concurred with what was listed.

Table 7. Gaps/Needs and Available Resources (Substance & Alcohol Use)

AVAILABLE RESOURCES	GAPS/NEEDS
Collaboration This Community Health Needs Assessment (CHNA) process (3) Collaboration among unrelated organizations Vested partners Media Engagement - local papers, social media **Prevention** Strong prevention programs **Recovery** Recovery Community and other recovery centers (6) Community recovery navigators Together Place (3) Access to Northeastern Workforce Development Board's "Recovery Friendly Employers" and other initiatives (2) **Treatment** Low barrier to Medication-Assisted Treatment (MAT) and increased availability (4) Penobscot Community Health Center (PCHC) Bridge Clinic (2) Whole patient-focused care for new moms Lots of treatment locally, including detoxes **Harm Reduction** Harm reduction initiatives like Bangor's needle exchange or Narcan programs (8) Overdose Response Team Pilot (2) **Organizations** Bangor Public Health, in general, doing amazing work (2) Northeastern Workforce Development Board in Bangor	**Treatment** Lack of access to services in general including long waitlists (8) Lack of Medication-Assisted Treatment (MAT) programs (3) **Recovery** Lack of recovery and rehabilitation services (8) Need updated employer and insurance regulations and policy for those with felony and criminal history (2) Lack of healthy coping skills Lack of access to substance use support groups and general support (2) More programs are needed to support the social determinants of health and the whole person Isolation caused by COVID (3) **Funding/Resources** Not enough resources and programs (8) Irregular funding streams (3) **Harm Reduction** Not enough harm reduction initiatives, such as needle exchanges (4) **Ease of access substances** Lack of data around where individuals find drugs (3) Increased access and acceptance of marijuana use Need education on marijuana use effects on prenatal breastfeeding and adolescents Social acceptability of alcohol use, e.g., televised images encouraging use (2) Lack of education in general (2) More drug abusers and dealers entering the state

Table 7. Gaps/Needs and Available Resources (Substance & Alcohol Use) (Continued)

AVAILABLE RESOURCES	GAPS/NEEDS
Funding The focus of federal funding (3) **Youth** School counselors and resource officers	**Youth/families** Lack of parenting/family programs to address issues (2) No childcare for those seeking MAT (2) Need targeted education for youth to address e-cigarette and alcohol use (2) Lack of awareness and support of students with substance use disorders in school (7) **Stigma** Stigma (24) Treating substance use as a criminal issue, not a health issue (2) **Equity** Inequitable access for minorities and immigrants

PRIORITY: ACCESS TO CARE

KEY TAKEAWAYS FOR PENOBSCOT COUNTY

Access to care was identified as the third top priority in Penobscot County. It was also identified as a top health concern in all other counties and underserved communities across the state. Access to care means having the timely use of health services to achieve the best possible health outcomes. It consists of four main components: availability of insurance coverage, availability of services, timeliness of access, and the health care workforce.

Community members in Penobscot County mentioned the area lacks health care providers, especially those providing mental health care, specialty care, and care that is more specific to older adults (such as geriatricians or long term care). The area has issues related to lack of those with insurance and transportation. Wider availability of telehealth services has increased access in some ways, but not everyone has access to broadband or possess the technology and know-how to take advantage of those services.

"Need for more health supports for older adults – memory care, long term care, and home health."

Cost barriers to care were the most frequently identified health indicator related to access to care. During the 2015-2017 time period, 12.3% of adults reported that there was a time during the last 12 months when they needed to see a doctor but could not because of the cost. This is similar to Maine overall (10.6%).[3]

A lack of health insurance was another health indicator frequently mentioned by community members. From 2015-2019, the rate of **uninsured** individuals in Penobscot County was 8.8%. While this is a significant improvement from the 10.6% of those uninsured during the 2009-2022 time period, it is still significantly higher than the state rate of people without health insurance, 7.9% in the most recent time period.

Availability of primary care providers in Penobscot County was also a frequently mentioned health indicator related to access to care. In 2019, 14.5% of Penobscot County residents needed to travel 30 miles or more to be seen by a primary care provider. It was also identified as an area of concern by 21% of forum participants.

The percentage of those with a **usual primary care provider** was 86.7% between 2015-2017. This is similar to Maine overall (87.9%) during the same period. According to recent data, 72.1% of Penobscot County residents were seen by **any primary care provider** in the past year. This is a similar rate to Maine overall (72.0%). This means almost 1 in 3 were at risk of not receiving preventative health care services.

Disparate communities experience barriers related to access differently. Black or African American community members expressed concerns about representation and culturally competent care, as well as issues with health literacy. Similarly, individuals with disabilities noted a lack of provider training in care and communication with the population. Additionally, the LGBTQ+ community identified a need for primary care, behavioral health, and other providers who offer affirming care for the LGBTQ+ population.

Despite the challenges that Penobscot County faces with access to care, community forum participants noted the area has Penobscot Community Health Centers and Benevolence Care at St. Joseph.

For more information about how those who may experience systemic disadvantages are impacted by this priority health topic area, please see the State CHNA Report.

MAJOR HEALTH CONCERNS FOR PENOBSCOT COUNTY

	PENOBSCOT COUNTY			BENCHMARKS			
INDICATOR	**POINT 1**	**POINT 2**	**CHANGE**	**MAINE**	**+/-**	**U.S.**	**+/-**
ACCESS							
Uninsured	2009-2011 **10.6%**	2015-2019 **8.8%**	★	2015-2019 **7.9%**	!	2019 **9.2%**	N/A
MaineCare enrollment (all ages)	2019 **28.2%**	2020 **32.1%**	N/A	2020 **29.1%**	N/A	**2020** **24.1%**	N/A
MaineCare enrollment (ages 0-19)	2019 **40.6%**	2020 **44.7%**	N/A	2020 **43.8%**	N/A	—	N/A
Ratio of population to primary care physicians	—	2019 **1,324.0**	N/A	2019 **1,332.0**	N/A	—	N/A
Usual primary care provider (adults)	2012-2014 **86.0%**	2015-2017 **86.7%**	○	2015-2017 **87.9%**	○	2017 **76.8%**	N/A
Primary care visit to any primary care provider in the past year	2012-2014 **72.7%**	2015-2017 **72.1%**	○	2015-2017 **72.0%**	○	2017 **70.4%**	N/A
Cost barriers to health care	2011-2013 **11.0%**	2015-2017 **12.3%**	○	2015-2017 **10.6%**	○	2016 **12.0%**	N/A
Primary care visits that were more than 30 miles from the patient's home	—	2019 **14.5%**	N/A	2019 **20.0%**	N/A	—	N/A

CHANGE columns shows statistically significant changes in the indicator over time.	
★	means the health issue or problem is getting better over time.
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N/A	means there is not enough data to make a comparison.
BENCHMARK columns compare the county data to the state and national data.	
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ADDITIONAL SYMBOLS	
*	means results may be statistically unreliable due to small numbers, use caution when interpreting.
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COMMUNITY RESOURCES TO ADDRESS ACCESS TO CARE

Available resources in Penobscot County to address issues related to access include cohesion of the community, the presence of community organizations that increase access to care, emerging technologies, alternatives to in-office care, health care education, and a development plan for the health care workforce. Community members were also able to identify potential barriers to care. These included limited numbers of healthcare providers, a lack of specialist services, the need for transportation resources in an extremely rural area, and a lack of resources for youth healthcare.

The following information was gathered from participants during a group activity, where participants were asked to share their knowledge of the gaps and needs or resources and assets in their communities about the identified health priorities. The numbers in parentheses indicate the number of times community members mentioned or concurred with what was listed.

Table 8. Gaps/Needs and Available Resources (Access to Care)

AVAILABLE RESOURCES	GAPS/NEEDS
Community Cohesion Community Health Leadership Board (3) Rural communities taking more initiative and collaborating (2) Collaboration among unrelated organizations in general Vested partners This Community Health Needs Assessment (CHNA) process (3) **Community Organizations** Penobscot Community Health Centers (6) Benevolence Care at St. Joseph (3) **Technology** Increased telehealth access (8) Telehealth for mental health providers **Access alternatives** State insurance for those who qualify/MaineCare (6) Number of available providers (3) Dental programs, especially those covered by MaineCare (2) In-school health clinics Transportation services like Mobilize Katahdin and Lynx transportation (9) Public transportation State insurance for those who qualify/MaineCare (6) Nutrition programs **Education** Media Engagement - local papers, social media identification and access to local providers	**Providers** Not enough providers (12) Lack of ability to identify whether providers are available (3) High provider turnover (3) Too many doctors going into specialty care vs. primary care (2) Provider and staff burnout (5) Lack of consistency for primary care providers **Costs** High cost of care, especially for uninsured (11) Lack of affordable specialty medical care (6) Lack of access to dermatology for uninsured or underinsured (3) High cost of medications Lack of insurance for cancer treatment Lack of affordable dental care **Barriers to care** Long waitlists (8) Navigating the healthcare system is difficult even for those who have insurance (2) Regulations like telehealth reimbursement and crossing state lines, among others broadband challenges, lack of access to broadband (6) Hard to develop new services (2) **Transportation** Transportation barriers (14) Lack of services and resources in rural areas (10) **Other Services** Lack of childcare availability (2)

PRIORITY: SOCIAL DETERMINANTS OF HEALTH

KEY TAKEAWAYS FOR PENOBSCOT COUNTY

Social determinants of health were selected as a top priority in Penobscot County. It was also identified as one of the top health concerns in 14 other counties and among underserved communities across the state.

Social determinants of health are the conditions in which people live, learn, work, play, worship, and age. Domains include education, economic stability, health care access and quality, the environment, and social connectedness. Examples include access to healthy food, housing, water, air, and relationships. Differences in social determinants can create disparities that impact vulnerable populations and rural areas like in Penobscot County.

Poverty was the most frequently mentioned health indicator in Penobscot County. During the 2015-2017 time period, 14.8% of individuals in Penobscot County lived in poverty. This rate of significantly decreased from 17.0% during the 2009-2011 time period. However, this is still significantly higher than the state (11.8%). The rates have also decreased for children from 17.1% in 2018 to 13.9% in 2019. This is similar to the state in 2019 (13.8%).

“Telehealth has increased in access in some ways, but not all have tech ability of resources.”

Adverse childhood experiences (ACEs) are a list of potentially traumatic events that occur during childhood and increase the likelihood of negative health and behavioral outcomes later in life ACEs. In 2019, 22.7% (1 in 5) high school students in Penobscot County reported experiencing four or more adverse childhood experiences. This is similar to the state rate of 21.3%.

Broadband access was the third most frequently identified concern related to social determinants of health. The percentage of residents with access to broadband internet was 79.2% in 2017. This means that one in 5 Penobscot County residents does not have reliable broadband access. This is a concern given the increasing use of telehealth and access to the global economy.

“Many SDOHs underlie poor health outcomes - lack of access to broadband, poverty, housing issues, transportation issues, food access.”

Housing Insecurity was mentioned by 35% (or 40 of the 113) forum participants. Recent data shows 2.8% of Penobscot County high school students report regularly sleeping somewhere else other than their parents or guardian’s homes, while 12.0% of residents spent more than **half of their income on housing** in 2019. Both of these statistics are similar across Maine.

Community members facing systemic disadvantages can be especially impacted by social determinants of health. Individuals with disabilities are impacted by a lack of transportation and face issues of discrimination. Black or African Americans noted poverty, unemployment, and food insecurity issues. Older adults often live on limited incomes on must rely on the support of others as well as face barriers related to transportation and food insecurity.

Participants mentioned resources to address issues related to social determinants of health such as the emergency homeless shelter system, Penobscot Community Health Care (PCHC) care managers, and increased focus on housing and infrastructure for navigators and others.

For more information about how those who may experience systemic disadvantages are impacted by this priority health topic area, please see the State CHNA Report.

MAJOR HEALTH CONCERNS FOR PENOBSCOT COUNTY

	PENOBSCOT COUNTY			BENCHMARKS			
INDICATOR	**POINT 1**	**POINT 2**	**CHANGE**	**MAINE**	**+/-**	**U.S.**	**+/-**
SOCIAL DETERMINANTS OF HEALTH							
Individuals living in poverty	2009-2011 **17.0%**	2015-2019 **14.8%**	★	2015-2019 **11.8%**	!	2019 **12.3%**	N/A
Children living in poverty	2018 **17.1%**	2019 **13.9%**	○	2019 **13.8%**	○	2019 **16.8%**	○
Children eligible for free or reduced lunch	2020 **45.4%**	2021 **39.5%**	N/A	2021 **38.2%**	N/A	2017 **15.6%**	N/A
Median household income	2007-2011 **$43,601**	2015-2019 **$50,808**	★	2015-2019 **$57,918**	!	2019 **$65,712**	N/A
Unemployment	2018 **3.8%**	2020 **5.4%**	N/A	2020 **5.4%**	N/A	2020 **8.1%**	N/A
High school student graduation	2019 **87.2%**	2020 **86.2%**	N/A	2020 **87.4%**	N/A	2019 **87.1%**	N/A
People living in rural areas	—	2019 **43.0%**	N/A	2019 **66.2%**	N/A	—	N/A
Access to broadband	2015 **77.6%**	2017 **79.2%**	N/A	2017 **88.6%**	N/A	2017 **90.4%**	N/A
No vehicle for the household	2007-2011 **2.0%**	2015-2019 **2.3%**	○	2015-2019 **2.1%**	○	2019 **4.3%**	N/A
Persons 65 years and older living alone	2011-2015 **28.3%**	2015-2019 **29.4%**	N/A	2015-2019 **29.0%**	N/A	2019 **26.6%**	N/A
Households that spend more than 50% of income toward housing	—	2015-2019 **12.0%**	N/A	2015-2019 **12.0%**	○	—	N/A
Housing insecure (high school students)	2017 **4.1%**	2019 **2.8%**	○	2019 **3.3%**	○	—	N/A
Adverse childhood experiences (high school students)	—	2019 **22.7%**	N/A	2019 **21.3%**	○	—	N/A
Associate's degree or higher among those age 25 and older	2007-2011 **33.4%**	2015-2019 **38.3%**	N/A	2015-2019 **41.9%**	N/A	2019 **41.7%**	N/A
Commute of greater than 30 minutes driving alone	—	2015-2019 **26.4%**	N/A	2015-2019 **32.9%**	N/A	2019 **37.9%**	N/A

CHANGE columns shows statistically significant changes in the indicator over time.	
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COMMUNITY RESOURCES TO ADDRESS SOCIAL DETERMINANTS OF HEALTH

Penobscot County community members point to several resources available that improve social determinants of health. These include many resources available to assist residents with accessing healthy foods, community cohesion, health screenings, and new revenue streams becoming available. However, community members also identified several challenges related to social determinants of health, including high levels of poverty, lack of resources for housing and transportation, high levels of food insecurity, isolation and rurality, and a lack of childcare resources.

The following information was gathered from participants during a group activity. Participants were asked to share their knowledge of the gaps and needs or resources and assets in their communities regarding the identified health priorities. The numbers in parentheses indicate the number of times community members mentioned or concurred with what was listed.

Table 9. Gaps/Needs and Available Resources (Social Determinants of Health)

AVAILABLE RESOURCES	GAPS/NEEDS
Community Cohesion Community Health Leadership Board (4) Community service centers Access to recourses in the community like through 211 Maine (4) Vested partners (2) Faith-based communities as partners in providing support and connection (3) Media Engagement - local papers, social media Social groups like Young Men's Christian Association (YMCA) Collaboration among unrelated organizations This Community Health Needs Assessment (CHNA) process (3) Many online resources **Food** Free school lunches and meal programs (5) Food banks and community pantries available like Good Shepherd Food Bank (5) Embedded screening for access to food in hospitals (5) Meals on Wheels (4) Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) program including farmer's market **Health Services** Local school-based health centers (3) Penobscot Community Health Care (PCHC) care managers (2) The combined strength of local health care organizations post-COVID (2) **Housing** The emergency homeless shelter system Increased focus on housing and infrastructure for navigators and others (2)	**Barriers to Care** The benefits system is too complicated and not effective (6) Limited wrap-around services (2) Lack of community education of resources available (3) **Poverty** Addressing poverty as a root cause (3) Low median income (2) Unemployment rates **Equity** Inequitable access for minorities and immigrants (3) **Youth/Families** Not enough affordable childcare or similar services (9) Need for early childhood education and health needed No family leave pay (2) **Physical Activity** High cost for outdoor recreation equipment (3) **Funding** Irregular funding streams (3) **Housing** Insufficient affordable and safe housing (20) No 24/7 place for people experiencing homelessness to access services (2) **Transportation** Transportation barriers like lack of access to public transportation or bike lanes (17)

Table 9. Gaps/Needs and Available Resources (Social Determinants of Health) (Continued)

AVAILABLE RESOURCES	GAPS/NEEDS
Screening PREPARE tool for screening for Community Health and Counseling Services (CHCS) (2) Care management more focused on social determinants of health	**Isolation** Isolation caused by COVID Lack of affordable/reliable internet access Older adults are less familiar with technology, didn't grow up with it
Jobs Partnerships focused on education and businesses to create job training (2) More jobs available (2)	**Trauma/stress** High rates of trauma Time consumption of modern life
Physical Activity Lots of access to parks and outdoor access (3)	**Workforce Development** Lack of workforce development (2)
Child Development/Schools Bangor area offers great educational opportunities	**Coordination** Limited integration between community resources with medical system (4)
Family Supports Referral systems for Public Health Nursing and Maine families	**Data** Lack of data collection
Funding: Community-focused grants American Rescue Plan Act funds	

OTHER IDENTIFIED NEEDS

The following is a list of all health priorities identified in the Penobscot County forum. Each participant was allowed to vote for up to 4 priorities from a list of twenty-four priorities. The first column is the name of the priority, the second column is the total number of votes that priority received, and the final column is the percentage of participants who voted for that priority.

Table 10. All Priority Health Topic Areas for Penobscot County

PRIORITIES	# OF VOTES	% OF PARTICIPANTS
Mental Health	67	59%
Substance and Alcohol Use	52	46%
Access to Care	47	42%
Social Determinants of Health	45	40%
Cancer	20	18%
Older Adult Health	19	17%
Physical Activity, Nutrition, and Weight	12	11%
Intentional Injury	9	8%
Pregnancy and Birth Outcomes	9	8%
Environmental Health	6	5%
Tobacco	6	5%
Infectious Disease	4	4%
Children with Special Needs	3	3%
Respiratory Disease	3	3%
Health Care Quality	2	2%
Immunizations	2	2%
Other-Substance Addicted Babies	2	2%
Cardiovascular Disease	1	1%
Diabetes	1	1%
Oral Health	1	1%
Unintentional Injury	1	1%

APPENDIX: METHODOLOGY

The Maine Shared CHNA is a public-private collaboration governed by a Steering Committee, which is made up of representatives of each member organization (CMHC, MGH, MH, NLH, and Maine CDC). The Steering Committee sets fiscal and operational goals that are then implemented by the Maine Shared CHNA Program Manager. Input is provided by key stakeholder groups including the Metrics Committee and the Health Equity/Community Engagement Committee.

The **Metrics Committee** is charged with creating and reviewing a common set of population/community health indicators and measures every three years. Before the 2018-2019 Maine Shared CHNA, the Metrics Committee conducted an extensive review of the data using the following criteria as a guide: 1.] describes an emerging health issue; 2.] describes one or more social determinants of health; 3.] measures an actionable issue; 4.] the issue is known to have high health and social costs; 5.] rounds out our description of population health; 6.] aligns with national health assessments (e.g.: County Health Rankings, American Health Rankings, Healthy People); 7.] data is less than 2 years old; 8.] data was included in the previous data set, or 9.] the Maine CDC analyzes the indicator in a current program. This review process was carried into the 2021-2022 Maine Shared CHNA, where the Metrics Committee also reviewed the previous data set to check for changes in data sources, potential new sources of data to round out certain topics, and to deepen Social Determinants of Health data which many of our partners have included in their work.

The **Health Equity/Community Engagement Committee** is charged with updating outreach methodology to ensure a collection of broad, diverse, and representative qualitative data from groups that are more likely to experience health disparities. To ensure these methods reflect the needs and cultural expectations this committee included representatives from a variety of Maine's ethnic-based and community-based organizations, along with representatives from public health and healthcare, and a variety of additional partners.

The 2021-2022 Maine Shared CHNA process involved three phases.

Data Analysis

The first phase of the project involved the analysis of more than 220 health indicators for the state, counties, public health districts, selected cities, and by specific demographics when available.

Data analysis was conducted by the Maine CDC and its epidemiology contractor, the University of Southern Maine with additional support from the contracted vendor, Market Decisions Research.

Community Outreach and Engagement

Community outreach and engagement for the Maine Shared CHNA included the following efforts:

- 17 County Forums (Maine)
- 9 Community Sponsored Events
- 1,000 Oral Surveys

County Forums were held in each of Maine's 16 counties, with one county, Penobscot, hosting one event in western Penobscot and one in eastern Penobscot in recognition of the differences between Greater Portland (Maine's most densely populated area) and the Lakes Region, (a more rural area). Local planning teams led by local healthcare and public health district liaisons organized and promoted these events. Participants were shown a PowerPoint presentation with relevant county data and were led through guided discussions to identify indicators of concern. Participants then voted to identify their top four health priorities. They were then asked to share their knowledge on gaps and

assets available in their communities to address each of the top priorities identified.

New this cycle was an expanded effort to reach those who experience systemic disadvantages and therefore experience a greater rate of health disparities. Two types of outreach were piloted. One effort included nine community-sponsored events. The hosts were chosen for their statewide reach.

The communities included:

- Black or African American
- Homeless or formerly homeless
- LGBTQ+ community
- Older adults
- People who are deaf or hard of hearing
- People who live with a disability
- People with low income
- People with a mental health diagnosis
- Youth

These events followed the same methodology as county forums with hosts providing input on the data presentation and leading the effort to recruit participants

Oral surveys were conducted in collaboration with eight ethnic-based community organizations' (ECBO's) community health workers to better reach Maine's immigrant population. There were 1,000 surveys were conducted in either English (32%), Somali, (24%), Arabic (23%), French (8%), Spanish (5%), Lingala (3%), and other languages including Swahili, Maay Maay, Portuguese, Oromo, Eretria, Kirundi, and Amara. When asked for their countries of origin, respondents most commonly cited the United States (212), Iraq (205), Somalia (157), The Democratic Republic of Congo (81), Djibouti (70), Kenya (30), and Mexico (29).

Other countries of origin mentioned included Rwanda, Ethiopia, Angola, Syria, Guatemala, South Africa, Palestine, Puerto Rico, Morocco, Afghanistan, El Salvador, Nigeria, Canada, Burundi, Eritrea, France, Honduras, Uganda, Jamaica, Mali, Gabon, Sudan, Nicaragua, Peru, and Brazil

The survey was an adaptation of the City of Portland's Minority Health Program Survey conducted in 2009, 2011, 2014, and 2018. In 2021, a small group of stakeholders convened to adapt this survey to meet the needs of the Maine Shared CHNA. This group included those who deployed the survey as well as other interested parties.

Groups that piloted these new outreach methods were offered stipends for their time.

Due to concerns related to COVID-19, community engagements efforts were conducted virtually except the event for the deaf or hard of hearing, which was held in a gymnasium at the Governor Baxter School for the Deaf on Mackworth Island. Oral surveys were conducted telephonically or by following current U.S. CDC COVID-19 protocols.

Community engagement was supported by John Snow, Inc. (JSI), who also conducted the initial qualitative analysis. All support materials including Data Profiles and PowerPoints were produced by Market Decisions Research.

Reporting

Initial analysis for each event and the oral surveys were reviewed by local hosts for accuracy and to ensure the information the community may find sensitive was flagged. Final CHNA reports for the state, each county, and districts were developed in the spring of 2022. Final Reports were written and produced by Market Decisions Research.

In addition to Urban, County, and Health District reports, the County, District, and State level data are also available on an Interactive Data Portal. The data in the portal is arranged by health topic and provides demographic comparisons, trends over time, definitions, and information on the data sources. Visit www.mainechna.org and click on **Interactive Data** in the menu to the left. The Maine Shared CHNA website is hosted by the Maine DHHS. (www.mainechna.org).

One virtual community forum was held in Penobscot County on September 23, 2021, with 113 attendees. Persons from the following organizations representing broad interests of the community who were consulted during the engagement process:

Bangor Public Health and Community Services
Center for Community Inclusion & Disability Studies, University of Maine
City of Bangor
Community Health Leadership Board
Community members
Downeast Public Health District
Eastern Maine Community College
Eastern Maine Development Corporation
Elliotsville Foundation, Inc.
Health Access Network
Maine Department of Health and Human Services
Midcoast Public Health District
Millinocket Regional Hospital
Mobilize Katahdin, Millinocket Memorial Library
Northeastern Workforce Development Board
Northern Light Health
Northern Light Acadia Hospital
Northern Light Beacon Health
Northern Light Eastern Maine Medical Center
Northern Light Eastern Maine Medical Center Board of Trustees
Northern Light Health
Northern Light Home Care & Hospice
Office of Child and Family Services, Maine Department of Health and Human Services
Partners for Peace
Penobscot Community Health Care
Penobscot Valley Hospital
Penquis Public Health District
Penquis Rape Response Services
Public Health Nursing, Maine Center for Disease Control and Prevention
St. Joseph Healthcare
St. Joseph Hospital
Town of Dexter
United Way of Eastern Maine

For a complete listing of organizations consulted for each of the 10 health equity outreach efforts, please see the Acknowledgements, page 24. The State Report, found on the Maine Shared CHNA website, www.mainechna.org, provides a full description of findings by each community-sponsored event.

ACKNOWLEDGMENTS

Funding for the Maine Shared CHNA is provided by the partnering healthcare systems with generous support from the Maine CDC and countless community partners and stakeholder groups. Additional funding was provided by the Maine Health Access Foundation and the Maine CDC to conduct additional outreach to engage those whose voices would not otherwise be distinctly heard. The Maine Shared CHNA is also supported in part by the U.S. Centers for Disease Control and Prevention (U.S. CDC) of the U.S. Department of Health and Human Services (U.S. DHHS) as part of the Preventive Health and Health Services Block Grant (awards NB01OT009343-01 & NB01OT009413-01). The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement, by the U.S. CDC/HHS, or the U.S. Government.

The infrastructure for community-led efforts is gaining strength. We are grateful to those who put their trust in the Maine Shared Community Health Needs Assessment process. Together, the MSCHNA and each of our community hosts have strived to ensure their voices are reflected herein.

Oral Survey Sponsors

Capital Area New Mainers Project
City of Portland's Minority Health Program
Gateway Community Services
Maine Access Immigrant Network
Maine Community Integration
Maine Department of Health and Human Services*
Maine Immigrant and Refugee Services
Mano en Mano
New England Arab American Organization
New Mainers Public Health Initiative

Community Event Sponsors

Consumer Council System of Maine
Disability Rights Maine
Green A.M.E. Zion Church
Health Equity Alliance
Maine Continuum of Care
Maine Council on Aging
Maine Primary Care Association
Maine Youth Action Network

*Includes the Manager of Diversity, Equity, and Inclusion and the Maine CDC.

Months of planning were conducted by stakeholder groups including the Metrics Committee, Data Analysis Team, Community Engagement Committee, Health Equity Committee, and Local Planning teams. For a complete listing please visit the Maine Shared CHNA website About Us page. Significant analysis was conducted by epidemiologists at the Maine CDC and the University of Southern Maine's Muskie School of Public Service. Market Decisions Research provided quantitative and qualitative analysis and design and production support. John Snow, Inc. (JSI) provided methodology, community engagement, and qualitative analysis expertise and support. The oral survey was adapted from the City of Portland's Minority Health Program's survey. Special thanks to the Partnership for Children's Oral Health for their data contribution.