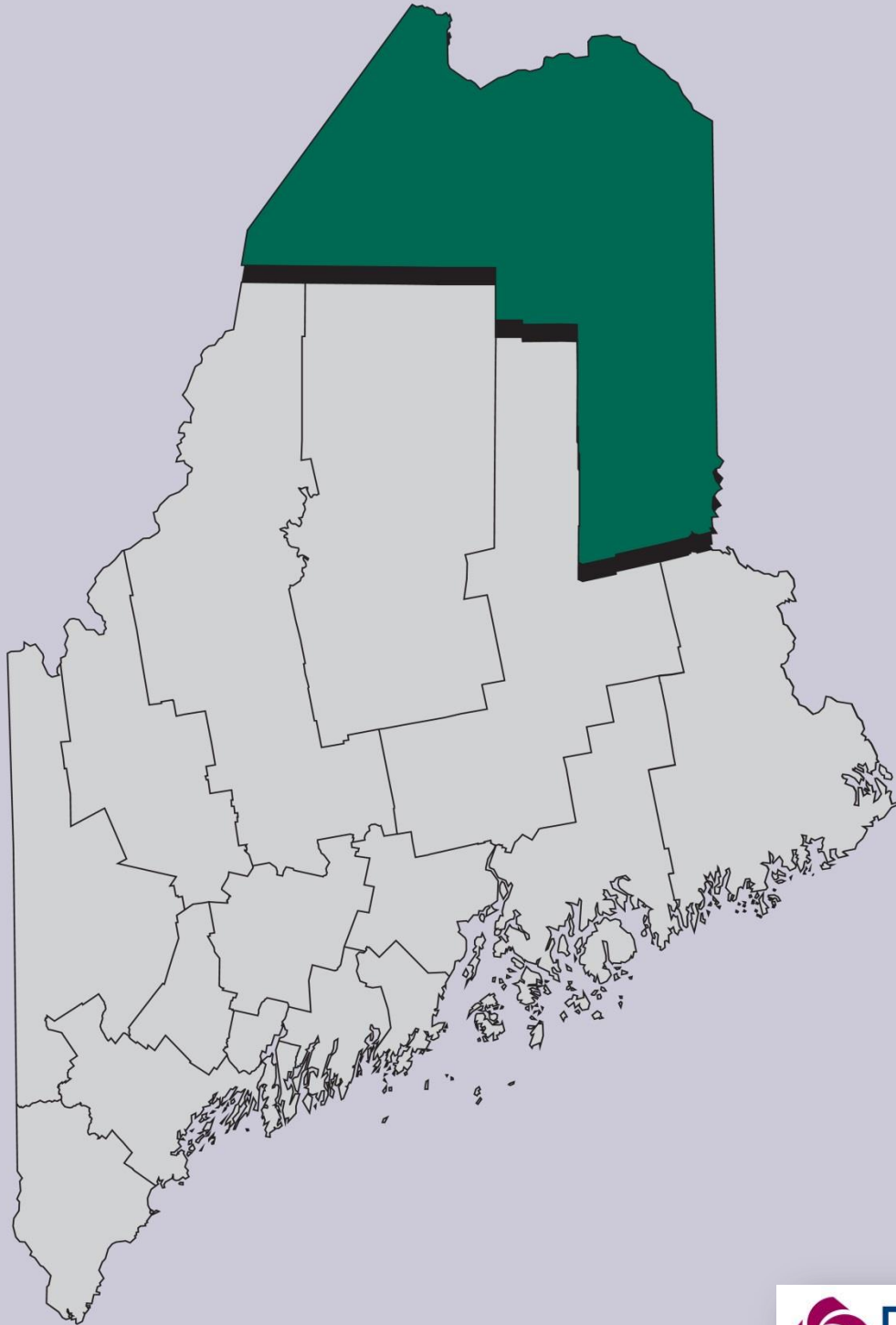




Aroostook County
Community Health Needs Assessment
August 2014



Acknowledgements

Thank you for your interest in the **2014 Community Health Needs Assessment (CHNA)**. EMHS has enjoyed a long history of working with healthcare, public health, and community stakeholders to identify issues and opportunities for collaborative community health improvement.

This report presents the findings of *The EMHS Qualitative Stakeholder Survey* disseminated across eight Maine counties¹ in June 2014, OneMaine CHNA data published in 2011, and *County Health Rankings* data published in 2014.

Together, the data provide a unique perspective on the health of Maine communities, with a focus on the social, environmental, and clinical factors which influence the ability of populations to lead healthy lives. We hope this report will be helpful to community leaders in their ongoing efforts to clarify priorities and implement strategic actions leading to improved community health.

We wish to thank the following EMHS Member Organizations, hospitals, local public health coordinating councils, and Healthy Maine Partnerships for their contributions to this 2014 Community Health Needs Assessment:

EMHS Member Organizations

Acadia Hospital
Affiliated
Beacon Health
Blue Hill Memorial Hospital
Charles A. Dean Memorial Hospital
Eastern Maine HomeCare
Eastern Maine Medical Center
EMHS Foundation
Inland Hospital
Mercy Hospital
Rosscare
Sebasticook Valley Health
TAMC
VNA Home Health Hospice

Partnering Hospitals

Cary Medical Center
Down East Community Hospital
Houlton Regional Hospital
Maine Coast Memorial Hospital



¹ Aroostook, Cumberland, Hancock, Kennebec, Penobscot, Piscataquis, Somerset, and Washington

Mayo Regional Hospital
Millinocket Regional Hospital
Mount Desert Island Hospital
Northern Maine Medical Center
Redington-Fairview General Hospital

Local Public Health Coordinating Councils

Aroostook District Coordinating Council
Central District Coordinating Council
Cumberland District Public Health Council
Downeast Public Health Council
Penquis District Coordinating Council
Wabanaki Public Health

Healthy Maine Partnerships

Bangor Region Public Health & Wellness
Healthy Acadia
Healthy Aroostook
Healthy Casco Bay
Healthy Communities of the Capital Area
Healthy Lakes
Healthy Northern Kennebec
Healthy Portland
Healthy Rivers
Healthy Sebasticook Valley
Healthy Wabanaki
Healthy Waldo County
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Piscataquis Public Health Council
Power of Prevention
Somerset Public Health
Washington County: One Community

We would also like to thank the Maine Center for Disease Control & Prevention, District Public Health Liaisons, Federally Qualified Health Centers, Bangor Public Health and Community Services, Portland Public Health, and others who provided their generous support and insights. This report's findings were prepared by Patricia Hart of Hart Consulting, Inc.



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Executive Summary

Background

Aroostook County is home to 70,055 people, living in a region encompassing 6,671 square miles, with a population density of 10.8 people per square mile.

Assets

The county's healthcare delivery assets include Cary Medical Center, Houlton Regional Hospital, Northern Maine Medical Center, and TAMC; three Federally Qualified Health Centers²; two tribal health centers; 31 dentists; and 61 primary care providers. The public health infrastructure includes the Aroostook District Coordinating Council, Maine CDC Public Health Unit, Local Health Officers, Wabanaki Public Health, Aroostook County Emergency Management Agency, and two Healthy Maine Partnerships - Healthy Aroostook and Power of Prevention. Community strengths and assets identified by respondents include a clean environment with ample opportunities for physical activity in all seasons, safe and supportive communities with an active faith based community, university and colleges, and caring residents who frequently volunteer their time and skill.

Findings

Of Maine's 16 counties, Aroostook County ranks thirteenth in health outcomes and twelfth for quality of life.³ Top social concerns include unemployment/economic opportunity, substance abuse, domestic violence, isolation (physical and social) and affordable housing. Aroostook County has the highest rates of adult asthma and overweight youth. It has the second highest rate of heart disease in Maine. Those most likely to experience barriers to good health are low income households, uninsured, older adults, individuals who are socially isolated, and the mentally ill.

The greatest identified gaps in healthcare include behavioral/mental health services, dental care and substance abuse treatment. Identified barriers to access include out-of-pocket costs associated with insurance plans, lack of insurance and unable to pay for the care, transportation, negative prior experiences, and not understanding or value the importance of seeking care. Gaps in access are reflected in the county's highest rate of hospital admission for ambulatory care and 2nd highest usage of the ED in the state.

Recommendations

Key strategies for improving community health in Aroostook County include cultivating economic development (jobs paying livable wages), increasing transportation, improving access to health care services and aging in place/home care, and investing in public health activities.

² Maine Primary Care Association

³ County Health Rankings.



Aroostook County Findings

This 2014 CHNA provides an in-depth look at the factors impacting the health of our communities. It uses findings from three studies, with different perspectives, to put together a rich picture of health status in Maine:

- Insights about community needs, assets, and barriers from the *EMHS Qualitative Stakeholder Survey* (2014)
- Relative rankings on a set of county indicators from the *County Health Rankings* (2014)
- Absolute measures of health status from the surveillance and epidemiological data shared in the *OneMaine Community Health Needs Assessment* (2011)

Analyzing the three sources of data together provides greater clarity about community needs and potential strategies for improvement.



Factors Affecting Health: Aroostook County

Key: A=Asset; C=Concern; (--)= No assessment. ARO=Aroostook County; ME=Maine

Issue/Concern	Qualitative Feedback (Stakeholder Opinion)	County Health Ranking (Relative Ranking)*	OneMaine (Absolute Measure)
Social and Economic			
Safe place to live	A	3	--
Unemployment/economic opportunity	C	12	Labor force unemployed: ARO=9.3%, ME=7.8%
Substance abuse	C	1	High mortality rates for alcohol and substance abuse
Domestic violence	C	--	Ever physically hurt by Intimate Partner: ARO=10%, ME=12%

Key: A=Asset; C=Concern; (--)= No assessment. ARO=Aroostook County; ME=Maine

Issue/Concern	Qualitative Feedback (Stakeholder Opinion)	County Health Ranking (Relative Ranking)*	OneMaine (Absolute Measure)
Access to Care			
Primary care/medical practice	C	11	Without usual source of primary care: ARO=Males 20%, Females 9.1%, ME=Males 18%, Females 8.3%
Emergency room	C	--	High ED visit rate
Screening immunization	A	13	Adult flu immunizations: ARO=37%, ME=42% Female pneumonia vaccination: ARO=64%, ME=74%
Barriers to Care/Gaps			
Dental care	C	11	No dental visit in past 2 years: ARO=30%, ME=24%
Behavioral/mental health services (adults)	C	11	Highest unmet need for mental health treatment in last year: ARO=6.6%, ME=4.8%
Mental Health Issues			
Affordable options for people who are uninsured or under-insured	C	--	--
Pain management alternatives to prescription drugs/opioids	C	--	--
Violence Issues			
Alcohol and/or drug abuse related violence	C	1	--
Domestic violence	C	--	Ever physically hurt by Intimate Partner: ARO=10%, ME=12%
Bullying	C	--	--
Substance Abuse Issues			
Alcohol abuse	C	1	High mortality rates for alcohol and substance abuse Chronic heavy drinking: ARO=5.5%, ME=6.4%
Prescription drug misuse and abuse	C	1	Adult misuse of prescription drugs: ARO=0.8%, ME=1.8%
Barriers to Healthy Eating and Physical Activity			
Personal barriers (e.g. lack of time, motivation, values and beliefs)	C	--	Adult no physical activity: ARO=25%, ME=21%
Weather conditions	C	--	--

*Ranking is ordered in relation to the 16 counties in Maine, with #1 being the "healthiest."

Methodology

This CHNA was developed by EMHS to support our member organizations and community partners in their work to develop strategies that will improve the health of the people we all serve. The report's findings were analyzed and compiled by Patricia Hart and Kristin Marks of Hart Consulting, Inc.

This report relates findings from three data sources to provide a more rounded look at the assets, issues, and opportunities in the eight-county region. This update includes data from three sources:

1. The *Qualitative Stakeholder Survey* conducted by EMHS with its stakeholders (June 2014)
2. The University of Wisconsin Population Health Institute's *County Health Rankings* (2014)
3. OneMaine Health's *Community Health Needs Assessment* (2011)

EMHS Qualitative Stakeholder Survey

In June 2014, EMHS conducted an online survey with stakeholders and partners living or working in the eight-county region to understand key issues, including facilitators and barriers that impact healthcare and population health in these communities. The web-based survey was distributed via email to 17 partnering hospitals, six local Public Health Districts, and 17 Healthy Maine Partnerships. Representatives from these organizations distributed the survey link to their employees, volunteers, board members, donors, and other stakeholders. Recipients were encouraged to forward the survey to additional community stakeholders. This snowball sample yielded 2,400 respondents, with 1,477 completed surveys.

County Health Rankings

The annual *County Health Rankings*, published in 2014 by the University of Wisconsin in partnership with the Robert Wood Johnson Foundation, measures underlying health factors, including high school graduation rates, obesity, smoking, unemployment, access to healthy foods, the quality of air and water, income, and teen births in nearly every county in America. The rankings show how health is influenced by our local environment and community supports. For more information: www.countyhealthrankings.org

OneMaine Health Community Health Needs Assessment (CHNA)

In 2010, One Maine Health, a collaborative of EMHS, MaineHealth, and MaineGeneral, commissioned the University of New England's Center for Health Planning and Policy Research and the Muskie School at the University of Southern Maine to conduct a state-wide community health needs assessment. The study identified the most important health issues in the state and by county, using accepted statistical methods to validate health indicators and to compare results. The CHNA presents health status, barriers to care, demographic, and social indicators affecting people and organizations throughout Maine. The study reports on healthcare data, health surveillance data, vital statistics, and other demographic data. For more information: www.chna.emh.org

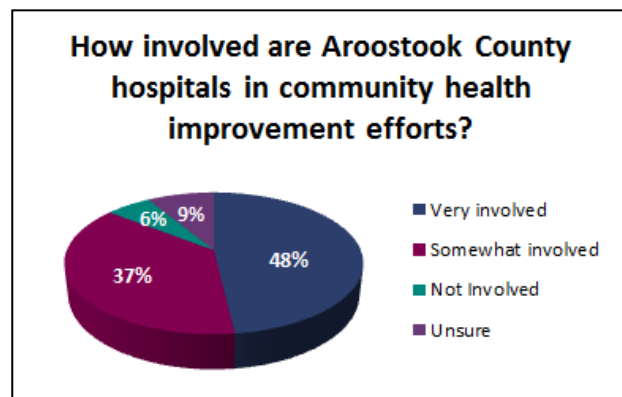
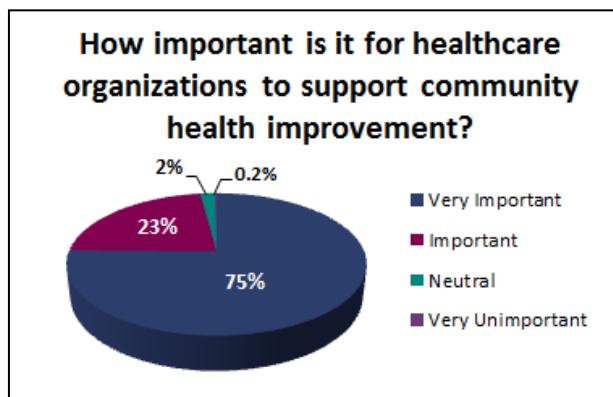
EMHS Qualitative Stakeholder Survey

Background

The *EMHS Qualitative Stakeholder Survey* was an online survey conducted in June 2014, with stakeholders and partners living or working in the eight-county EMHS service region. The purpose was to understand key issues, including facilitators and barriers that influence healthcare and population health, in these communities. The survey was widely distributed and ultimately yielded 1,477 completed surveys. There were 215 respondents representing Aroostook County. The respondents represent the following sectors:

- 68% Healthcare
- 13% Other
- 7% Private sector/business
- 7% Education
- 5% Public health

Responses to the Survey



What are the assets and strengths that make it possible for people to lead healthier lives in Aroostook County?

- Clean and beautiful environment and ample opportunities for physical activity in all seasons
- Quality local hospitals that are involved in community health and prevention
- Supportive and safe communities with a small town atmosphere and an active faith-based community
- Universities/colleges and their resources
- Residents with a good work ethic who often volunteer their time and skill

Strengths	Top Social Concerns
<ul style="list-style-type: none"> • Our community is a safe place to live • People living in our community know and trust one another • Neighbors care and look out for each other 	<ul style="list-style-type: none"> • Unemployment/economic opportunity • Substance abuse • Domestic violence • Physical and social isolation • Affordable housing

Which vulnerable populations are most likely to encounter barriers to good health?

- Low income residents
- Uninsured
- Older adults/elderly
- Individuals who are socially isolated
- Mentally ill

What strategies could measurably improve the health of your community?

- Jobs/economic development/livable wages
- Improved access to healthcare services
- Improved access to transportation
- Services to help aging in place/home
- Investment in public health activities

Detailed Findings from Qualitative Stakeholder Survey, June 2014		
Survey Question and Top Responses	Aroostook County (n=215) %	Maine ⁴ (n=1477) %
Demographic		
Which community sector do you primarily represent? (10 choices, picked 1)		
Healthcare	68.4%	74.7%
Other	7.4%	8.0%
Private sector/business	7.4%	3.9%
Education	6.5%	3.5%
Public Health	4.7%	4.6%
Government	2.8%	2.6%
Social services	2.8%	2.7%
Social Factors		
Please rate your level of agreement with the following statements (5-point scale) (Strongly agree, Agree)		
Our community is a safe place to live	95.4%	87.6%
People living in our community know and trust one another	89.3%	71.9%
Neighbors care and look out for each other	87.0%	74.2%

⁴ Stakeholder respondents live and/or work in eight counties in the EMHS service area: Aroostook, Cumberland, Hancock, Kennebec, Penobscot, Piscataquis, Somerset, and Washington.

Detailed Findings from Qualitative Stakeholder Survey, June 2014

Survey Question and Top Responses	Aroostook County (n=215) %	Maine ⁴ (n=1477) %
What do you consider to be the top social concerns in the community you serve? (14 choices, picked 3)		
Unemployment/economic opportunity	73.0%	59.2%
Substance abuse	60.5%	60.9%
Domestic violence	20.9%	16.8%
Physical and social isolation	20.5%	13.2%
Affordable housing	15.8%	24.5%
In the community you serve, which vulnerable populations are most likely to encounter barriers to good health? (16 choices, picked 3)		
Low income residents	44.2%	44.1%
Uninsured	41.9%	37.8%
Older adults/elderly	38.1%	33.1%
Individuals who are socially isolated	28.8%	23.9%
Mentally ill	28.4%	39.7%
Access to Care		
In the community you serve, where do people go for their routine health care? (10 choices, picked 3)		
Primary care/Medical practice	84.2%	75.4%
Emergency room	68.8%	68.0%
Federally Qualified Health Center/Rural Health Center	41.9%	24.9%
In the community you serve, what are the greatest gaps in healthcare services? (18 choices, picked 3)		
Dental care	27.4%	25.1%
Behavioral/mental health services (adults)	25.6%	40.8%
Substance abuse treatment/counseling	24.7%	29.6%
Substance detoxification	22.8%	18.2%
Behavioral/mental health services (children)	21.9%	24.2%
What issues prevent the people in your community from accessing care? (15 choices, picked 3)		
Out of pocket costs associated with insurance plans	72.6%	71.1%
Lack of insurance and unable to pay for the care	64.7%	67.1%
Transportation	33.0%	33.4%
Don't understand or value the importance of seeking healthcare	32.6%	33.5%
Negative prior experiences	13.5%	9.2%
What strategies could measurably improve the health of your community? (14 choices, picked 3)		
Jobs/economic development/livable wages	55.8%	55.0%
Improved access to healthcare services	33.5%	36.6%
Improved access to transportation	32.6%	31.9%
Services to help aging in place/home	31.2%	23.0%
Investment in public health activities	21.4%	16.5%
Preventive Screenings and Immunizations		
To what extent are the following preventive clinical services accessible in the community you serve? (5-point scale) (Very accessible, Accessible)		
Childhood immunizations	88.4%	82.3%
Flu vaccinations	88.0%	86.5%

Detailed Findings from Qualitative Stakeholder Survey, June 2014

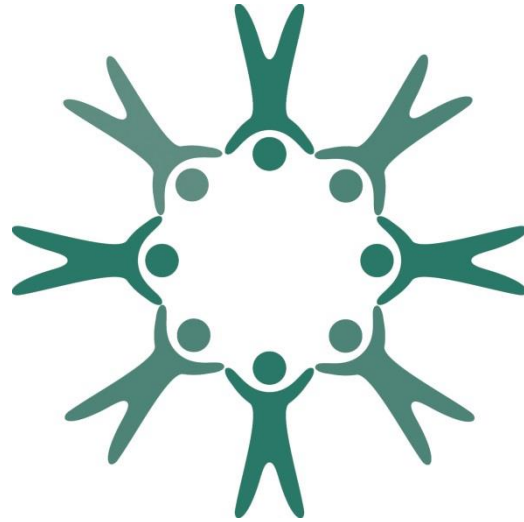
Survey Question and Top Responses	Aroostook County (n=215) %	Maine ⁴ (n=1477) %
Mammography screening	81.9%	74.1%
Colorectal screenings	79.1%	65.3%
Diabetes screenings	78.1%	68.7%
Cervical and vaginal cancer screening	71.2%	65.0%
Preventive care visits	67.0%	58.1%
Cardiovascular disease screening	63.2%	62.4%
Tobacco use screening	60.9%	52.2%
Aging related screening	55.3%	47.2%
Obesity screening	53.5%	48.2%
Depression screenings	48.8%	40.7%
Oral health	41.4%	38.6%
Drug misuse screening	39.6%	33.0%
Alcohol misuse screening	36.3%	30.3%
Environmental Conditions for Health		
To what extent do the following environmental conditions affect the health and well-being of people in the community you serve? (5-point scale) (Very large affect, Large affect)		
Access to safe areas for physical activity	62.8%	56.0%
Climate change	52.6%	35.8%
Tobacco free areas	44.7%	44.1%
Toxics and soil contamination	39.5%	25.6%
Homes containing mold, mildew, lead, radon, etc.	30.2%	33.2%
Early Care and Education		
What increased opportunities in your community would contribute to healthy childhood development? (11 choices, picked 3)		
Family financial stability	61.4%	56.0%
Opportunities for healthy eating	45.1%	35.1%
Access to early care and education	44.7%	47.3%
Mental Health and Substance Abuse		
What are the top unmet mental health/behavioral healthcare needs facing your community? (16 choices, picked 3)		
Affordable options for people who are uninsured or under-insured	45.1%	48.5%
Pain management alternatives to prescription drugs/opioids	29.8%	22.9%
Substance abuse treatment providers	27.0%	23.6%
What are the top violence issues facing the community you serve? (9 choices, picked 3)		
Alcohol and/or drug abuse related violence	81.9%	83.5%
Domestic violence	70.7%	67.7%
Bullying	50.7%	32.2%
What are the top substance abuse issues facing the community you serve? (10 choices, picked 3)		
Alcohol abuse	73.0%	62.2%
Prescription drug misuse and abuse	50.7%	57.2%
Other drug abuse (cocaine, heroin, bath salts)	37.7%	41.0%

Detailed Findings from Qualitative Stakeholder Survey, June 2014

Survey Question and Top Responses	Aroostook County (n=215) %	Maine ⁴ (n=1477) %
Healthy Food and Nutrition		
What are the top barriers in your community that prevent healthy eating? (14 choices, picked 3)		
Affordability of healthy food options	64.2%	63.2%
Knowledge, attitudes, and beliefs regarding nutrition	36.3%	43.6%
Adequate training in healthy cooking	28.8%	28.8%
Cardiovascular Health		
What are the top barriers in your community that prevent people from being physically active? (11 choices, picked 3)		
Personal barriers (i.e. lack of time, motivation, values and beliefs)	69.8%	75.1%
Weather conditions	49.8%	40.0%
Insufficient facilities or lack of access to facilities for exercising	32.6%	20.4%
Other		
In the communities you serve, where do people generally look for health information? (12 choices, picked 3)		
Doctor/healthcare provider	73.0%	70.3%
Internet	63.3%	60.3%
Family or friends	41.9%	48.7%
How important is it for healthcare organizations to support community health improvement, making it possible for all community members to live healthier lives? (5-point scale)		
“Very important” or “Important”	97.7%	95.8%

Unless otherwise indicated, the percentages listed in the table for each question reflect the percentage of respondents who identified the choice as one of their top three among a list of options.

County Health Rankings

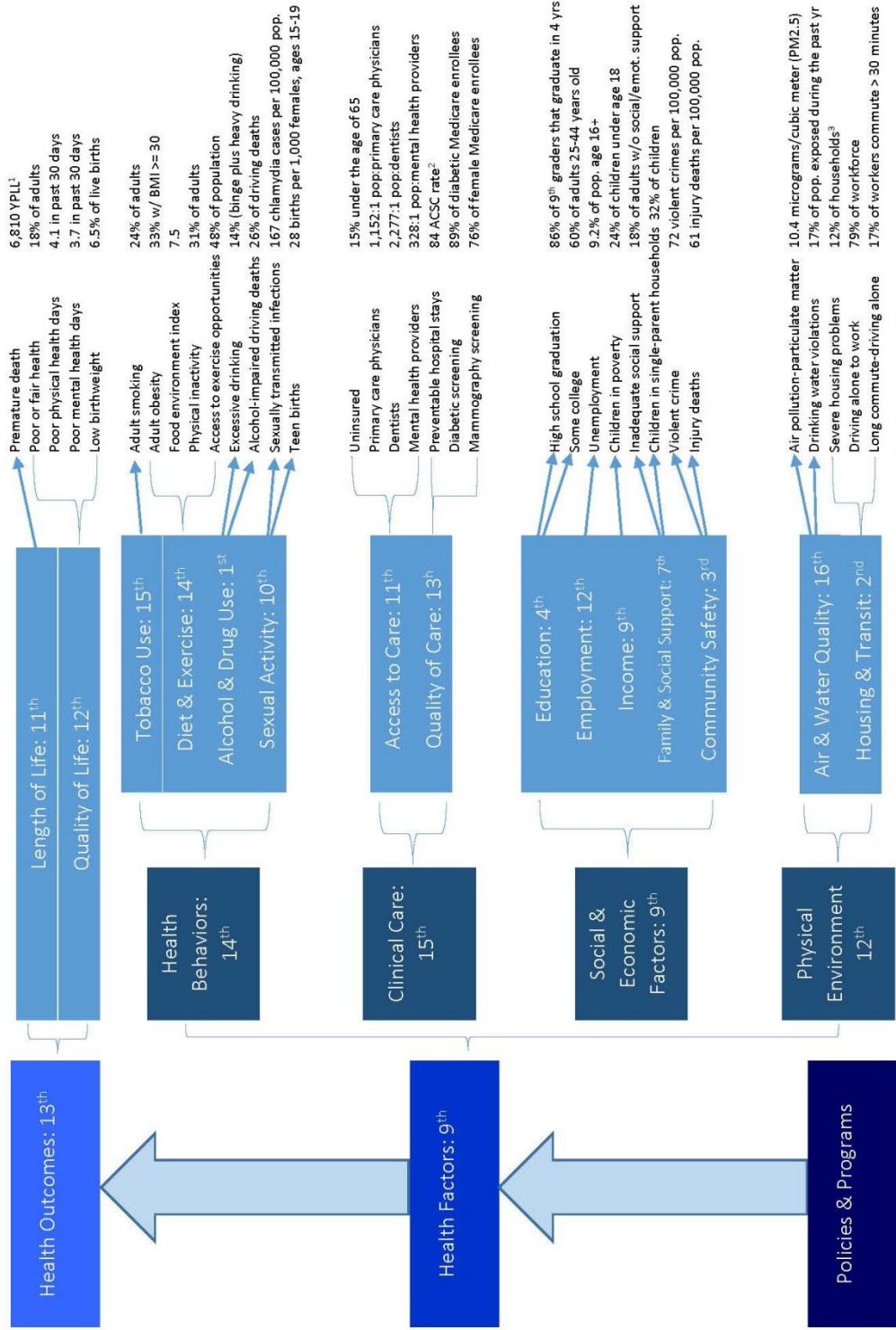


Background

The annual *County Health Rankings* measures the social, economic, environmental, and behavioral factors that influence health. These factors are quantified using indicators such as high school graduation rates, obesity, smoking, unemployment, access to healthy foods, the quality of air and water, income, and teen births, to name a few. The rankings weigh and score the sets of indicators to provide county comparisons within each state. The data are compiled from secondary sources and published by the University of Wisconsin in partnership with the Robert Wood Johnson Foundation. For more information: www.countyhealthrankings.org

For this analysis, the *County Health Rankings* data for each of Maine's 16 counties is displayed in the signature paradigm used by the University of Wisconsin to show how all of the factors ultimately impact the health of our communities. While the comparison across counties provides insight into county health status, it is also important to keep in mind the underlying health measures. Because of the forced ranking, one county is always the "healthiest" and one is always the "least healthy." It is important to look past the assignment of rank to understand the underlying issues and opportunities.

AROOSTOOK COUNTY



¹YPLL=Years of potential life lost before 75 per 100,000 populations (age-adjusted)
²ACSC rate=hospitalization rate for ambulatory-care sensitive conditions per 1,000 Medicare enrollees
³Severe housing problems=overcrowding, high housing costs, or lack of kitchen or plumbing facilities

2014 County Health Rankings & Roadmaps. The University of Wisconsin Population Health Institute in collaboration with the Robert Wood Johnson Foundation. <http://www.countyhealthrankings.org/>

OneMaine Health Community Health Needs Assessment

Background

OneMaine Health is a collaborative of Eastern Maine Healthcare Systems, MaineHealth, and MaineGeneral Health. Its purpose is to share information among the three systems and to facilitate understanding community health needs. In 2010, the group commissioned a statewide *Community Health Needs Assessment* (CHNA) designed to identify important health issues in the state, both overall and by county, using scientifically valid health indicators and comparative information. The assessment also identifies priority health issues where better integration of public health and healthcare could improve access, quality, and cost effectiveness of services to residents of Maine. The CHNA provides a comprehensive set of data for each county as well as for the state. The indicators shared in the assessment are computed from an extensive set of health-related data and a community household telephone survey.

Health Issues Where Aroostook County Stands Out From Other Counties in Maine

Healthcare Access

- High hospital admission rates for ambulatory care sensitive conditions
- High ED visit rate
- Low uptake of flu immunizations (ARO=37%, ME=42%)
- Low receipt of female pneumonia vaccination (ARO=64%, ME=74%)
- Highest percentage with no dental visit (ARO=30%, ME=24%)

Chronic Disease and Risk Factors

- Highest incidence of adult asthma (ARO=13%, ME=10%)
- High prevalence of heart disease (ARO=7.3%, ME=6.3%)
- High lung cancer and colorectal cancer
- High adult smoker prevalence (ARO=27%, ME=22%)
- High adult no physical activity (ARO=25%, ME=21%)
- High mortality rates for alcohol and substance abuse
- Highest unmet need for mental health treatment in last year (ARO=6.6%, ME=4.8%)

Youth-Related

- Highest percent youth overweight (ARO=17%, ME=14%)



AROOSTOOK COUNTY KEY FINDINGS

- 2008 Population Estimate = 71,827
- 18% of residents are age 65+
- 2008 Median Household Income 2008 = \$35,999
- 32% of residents enrolled in Medicaid

Health Risks and Challenges	Health Assets and Opportunities
------------------------------------	--

Risk Factors

- **Smoking:** High percentage of adult current smokers [ARO=27%, ME = 22%]
- **Overweight/Obesity:** High percentage of adults with no physical activity [ARO=25%, ME=21%]
- **Youth:** Highest percentage of high school students overweight of any county [ARO=17%, ME=14%]
- **Immunizations:**
 - Low receipt of flu vaccination [ARO=37%, ME=42%]
 - Low receipt of pneumonia vaccination among females 65+ [ARO=64%, ME=74%]
- **Oral Health:** High percentage with no dental visit in past two years [ARO= 30%, ME=24%]

- **Alcohol and Substance Use:**
 - Low rate of chronic heavy drinking [ARO=5.5%, ME=6.4%]
 - Low adult use of street and prescriptions drugs [ARO= 1.8%, 0.8%, ME= 5.2%, 1.8%]
- **Youth :** Low high school student use of marijuana, inhalants and prescription drugs [ARO=17%, 7.1%, 7.0%, ME=24%, 9.3%, 11%]
- **Reproductive Health:** Low rates of low birth weight and premature newborns [ARO=5.6%, 7.1%, ME=6.4%, 8.7%]

Disease Incidence & Prevalence

- **Heart Disease:** 2nd highest prevalence of heart disease among counties [ARO=7.3%, ME=6.3%]
- **Asthma:** Highest prevalence of adult asthma among counties [ARO=13%, ME=10%]
- **COPD:** High COPD prevalence [ARO=5.8%, ME=4.2%]
- **Cancer:** High incidence of lung/bronchus cancer and colorectal cancer
- **Mental Health:** Highest percentage of any county reporting unmet need for mental health treatment in past year [ARO=6.6%, ME=4.8%]

- **Cancer:** Low incidence of cervical, melanoma and prostate cancers

Hospital Utilization & Mortality Rates

- **Hospital Admissions:**
 - Highest hospital admission rates for ambulatory care sensitive conditions of any county
 - High hospital admission rates for cardiovascular diseases, respiratory diseases and diabetes
- **Emergency Department Visits:** 2nd highest county rate in Emergency Department (ED) visits
- **Mortality:**
 - High mortality rates for alcohol and substance abuse related conditions and suicide
 - High mortality rates for cardiovascular, respiratory disease, and cancer

- Low hospital admission and ED rates for mental health and substance abuse diagnoses
- Low mortality rates for bladder, melanoma and prostate cancers

Produced by the UNE Center for Community and Public Health

