Northern Border Regional Commission State and Region Chartbooks: A Health-Focused Landscape Analysis

June 21, 2022

- ✓ All attendees are muted
- ✓ Today's session will be recorded
- ✓ Submit questions using the chat function
- ✓ Q&A will follow the presentation

Rural Health Research Gateway

About Per Ostmo

Per Ostmo is the Program Director of the Rural Health Research Gateway (Gateway), housed at the Center for Rural Health at the University of North Dakota School of Medicine & Health Sciences. Gateway is funded by the Federal Office of Rural Health Policy (FORHP) to disseminate research conducted by the FORHP funded Rural Health Research Centers. Per earned his Master of Public Administration degree from the University of North Dakota with focus areas in grant writing and health care administration. He is originally from rural North Dakota.

Likes: equitable healthcare, bicycling, punk rock
Dislikes: Health Professional Shortage Areas

Per Ostmo, MPA

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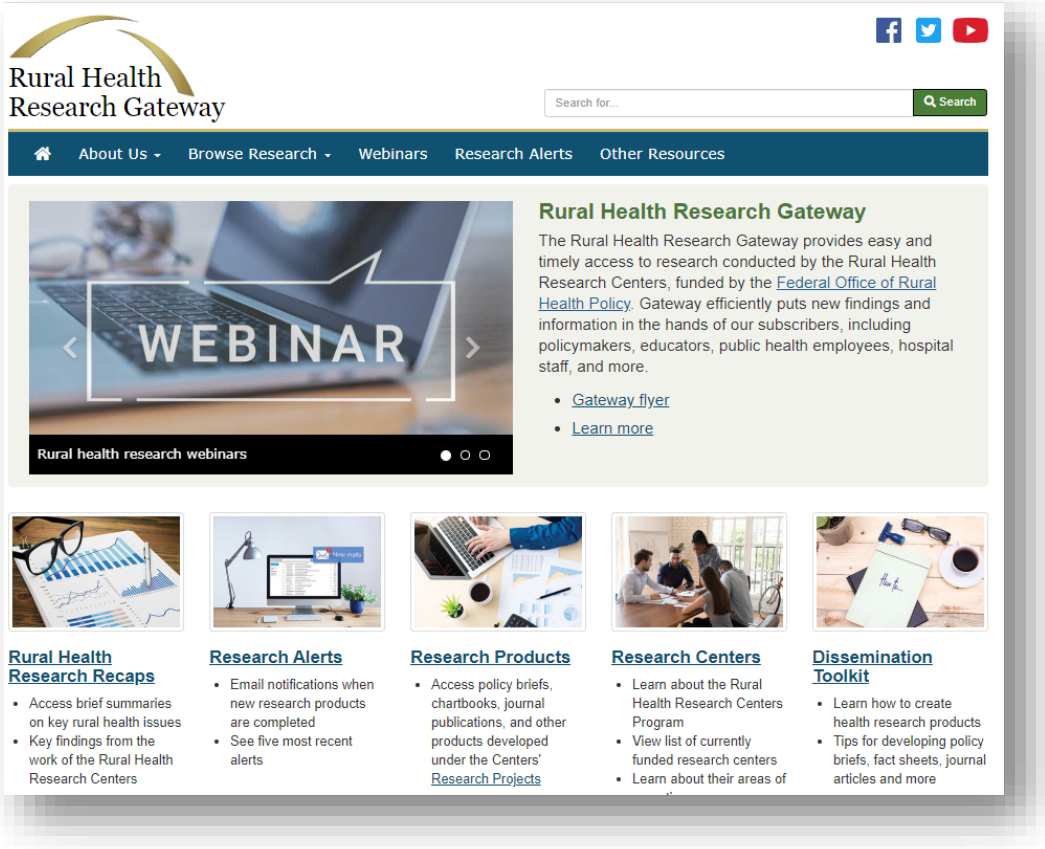
Rural Health Research Gateway

Provide access to publications and projects funded through the Federal Office of Rural Health Policy, Health Resources and Services Administration.

Gateway is a resource for:

- Policy makers
- Students
- Rural health researchers
- Health care providers
- Rural health organizations, professionals, associations, and more



ruralhealthresearch.org

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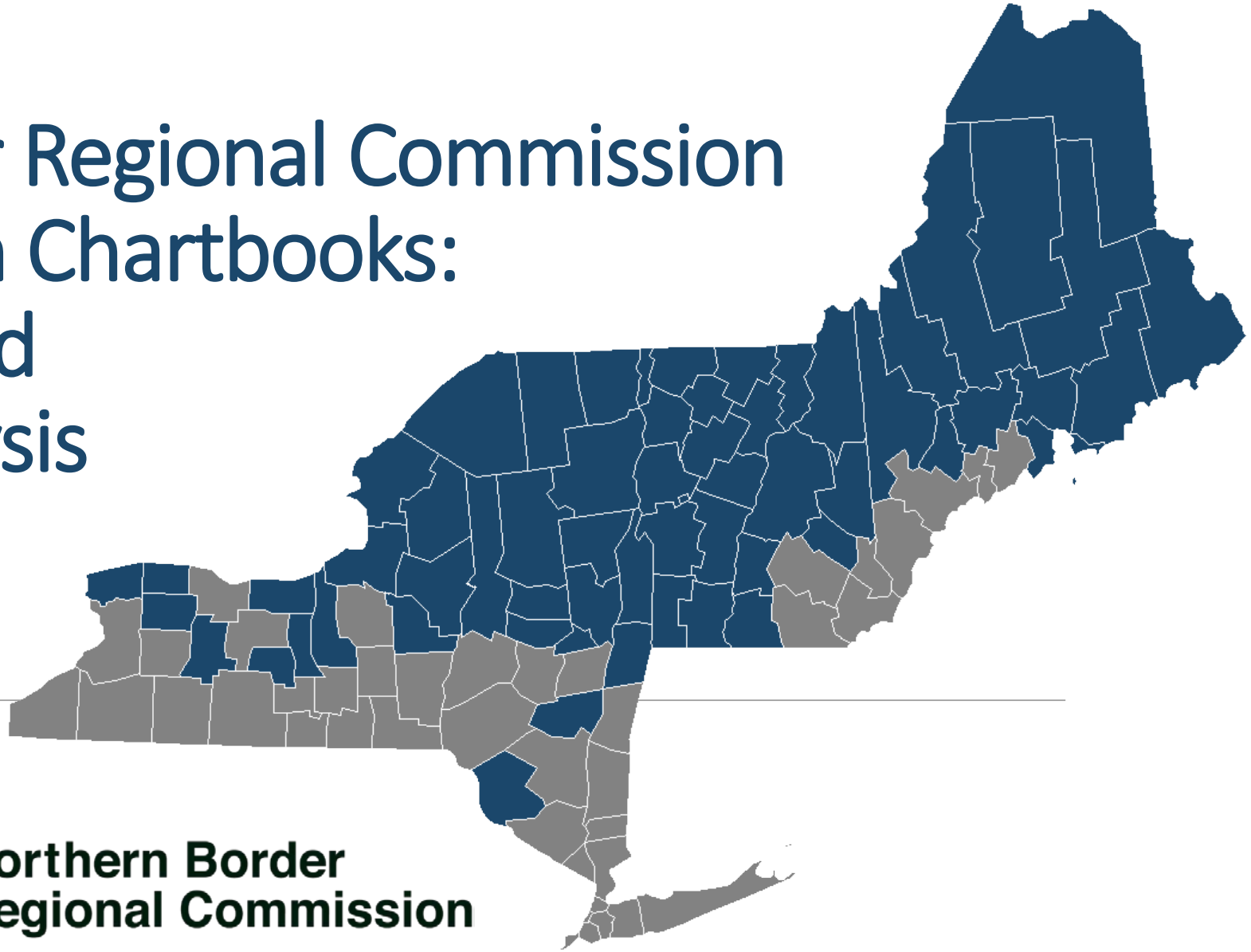
KATHERINE AHRENS, PHD

JUNE 21, 2022



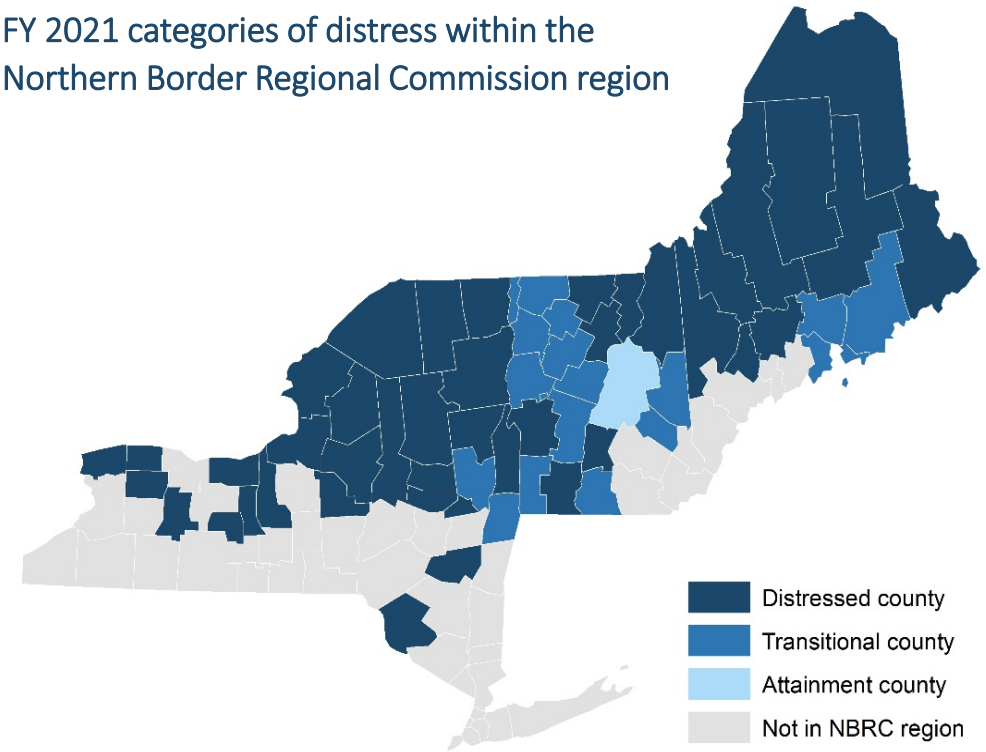
Maine Rural Health Research Center

Northern Border Regional Commission

Introduction

- The Northern Border Regional Commission (NBRC) was formed by Congress in 2008 in order to help fund promising economic and community development projects in (primarily) rural counties in Maine, New Hampshire, Vermont, and New York.
- Since 2010, the Northern Border Regional Commission has provided more than $90 million in funding for economic and infrastructure development projects in Maine, New Hampshire, New York, and Vermont.
- In addition, the Commission has leveraged matched funds from the federal government and state governments.

FY 2021 categories of distress within the Northern Border Regional Commission region



Data source: Northern Border Regional Commission. *NBRC Annual Economic & Demographic Research for Fiscal Year 2021: To Determine Categories of Distress within the Northern Boarder Regional Commission Service Area.* March 2021.

https://www.nbrc.gov/content/northern-border-region

Introduction

- To inform the distribution of Northern Border Regional Commission funds, the Maine Rural Health Research Center conducted a landscape analysis of population health and healthcare access for each state and for the region overall.
- We present measures that may assist in the *planning* and *selection* of high-impact health-focused projects for rural counties in greatest need.
- One Regional Chartbook and 4 State Chartbooks.
- Project team: Katherine Ahrens, PhD; Amanda Burgess, MPPM; Carly Milkowski, MPH; Louisa Munk; Yvonne Jonk, PhD; Erika Ziller, PhD

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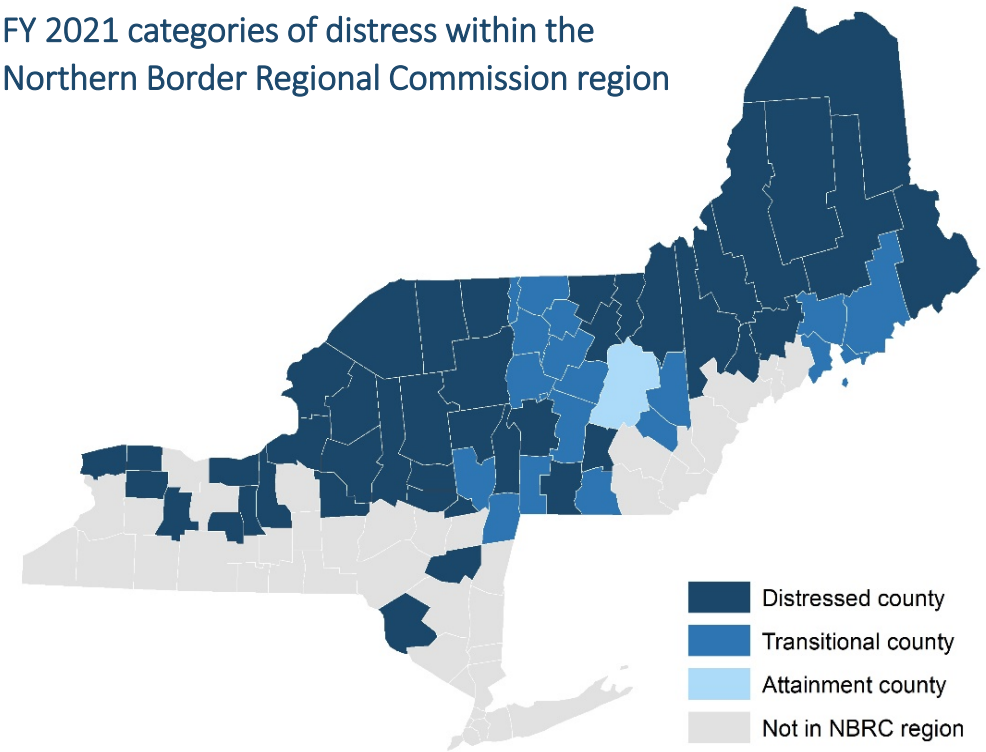

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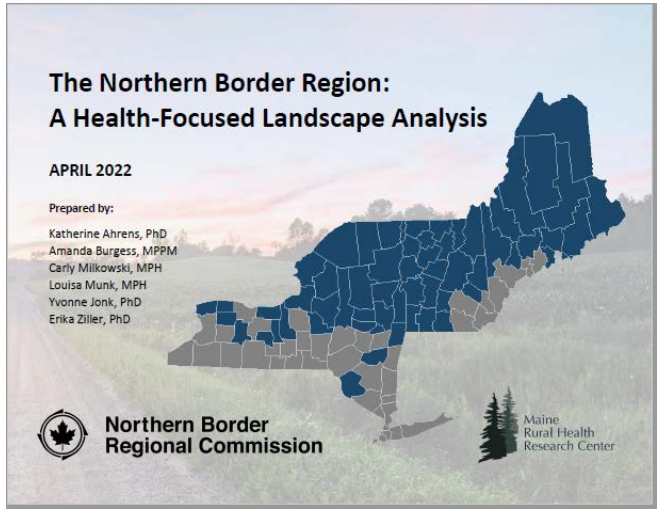

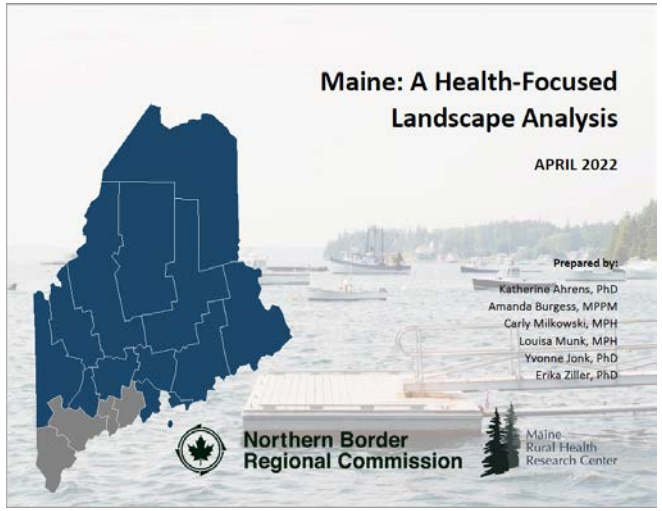

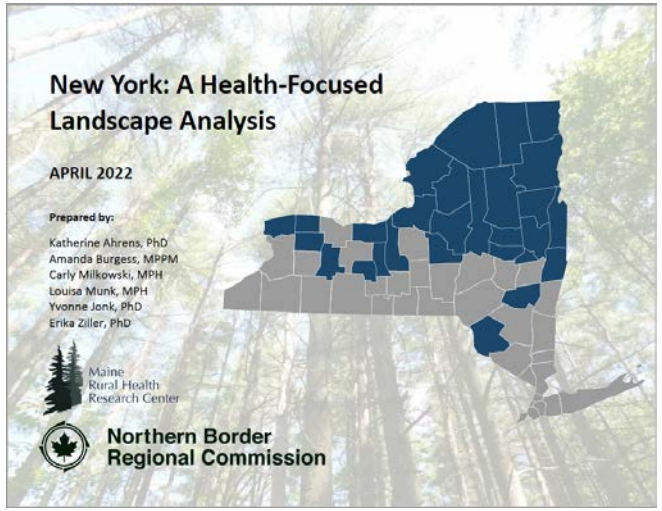

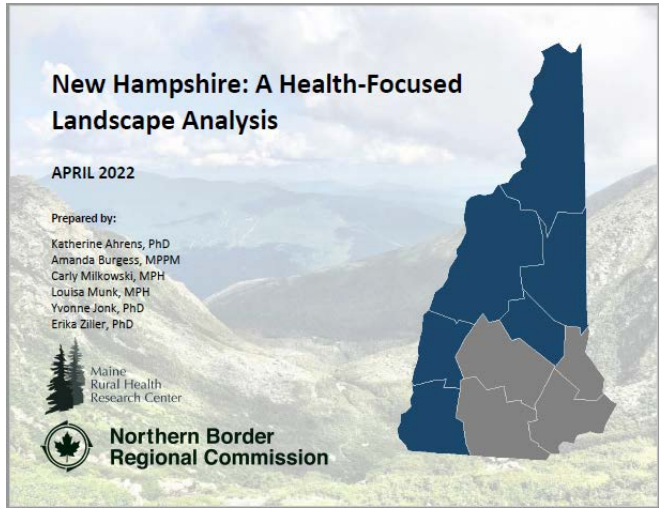

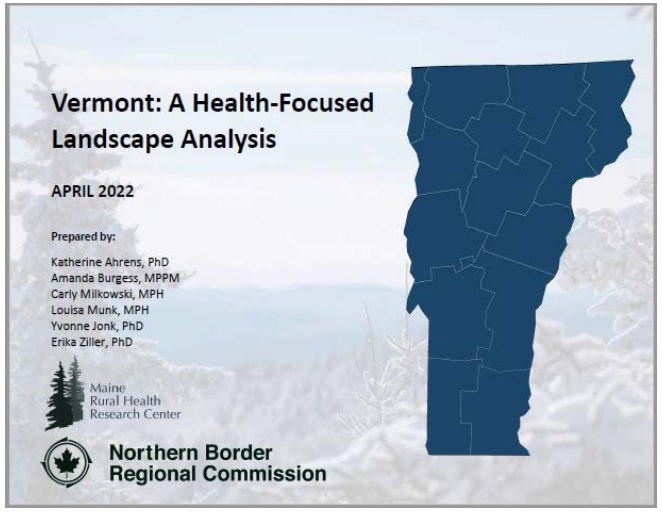

Rural Health Research Gateway

https://www.ruralhealthresearch.org/projects/100002578

Regional chartbook

Methods

- We used state-level health-related measures published in 2021, aggregated by the County Health Rankings (a program of the University of Wisconsin Population Health Institute, funded by Robert Wood Johnson Foundation), as well as other data sources.
- All data sources are publicly available and free of charge.
- State-level measures in the Regional Chartbook generally corresponded to county-level measures used for the State Chartbooks.
- We examined measures within the following 12 health-related domains: demographics, socioeconomic characteristics, access to care, health outcomes, health behaviors, community safety and physical environment, mortality, access to the internet, health insurance, telehealth policies, telehealth grants, and scope of practice policies.
- We also created maps of county-level health professional shortage areas, substance use disorder-related measures, and healthcare facilities using ArcGIS.
- I'll show results for each health-related domain and set of maps, and highlight some findings.

Demographic characteristics

Geography	Population	Rurality	Age		Sex	Race/ethnicity[1]						Language
	(N)	Living in a rural area (%)	Below 18 years of age (%)	Age 65 and older (%)	Female (%)	Non-Hispanic white (%)	Non-Hispanic Black (%)	Hispanic (%)	American Indian & Alaska Native (%)	Asian (%)	Native Hawaiian/ Other Pacific Islander (%)	Not proficient in English (%)
United States	328,239,523	19.3%	22.3%	16.5%	50.8%	60.1%	12.5%	18.5%	1.3%	5.9%	0.2%	4.3%
Maine	1,344,212	61.3%	18.5%	21.2%	51.0%	93.0%	1.6%	1.8%	0.7%	1.3%	<0.1%	0.5%
New Hampshire	1,359,711	39.7%	18.8%	18.7%	50.4%	89.8%	1.5%	4.0%	0.3%	3.0%	<0.1%	1.0%
New York	19,453,561	12.1%	20.7%	16.9%	51.4%	55.3%	14.5%	19.3%	1.0%	9.0%	0.1%	6.9%
Vermont	623,989	61.1%	18.3%	20.0%	50.6%	92.6%	1.3%	2.0%	0.4%	1.9%	<0.1%	0.6%

Data sources: Census Population Estimates, 2010 and 2019; American Community Survey, 2015-2019 5-year estimates.
[1]Race/ethnicity data may not sum to 100% due to missing data.

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Socioeconomic characteristics

Geography	Employment			Income				Social support	Education	
	Employed full time, ages 16 to 64 (%)	Unemployed, ages 16 and older seeking work (%)	Employed in healthcare and social assistance (%)	Median household income ($)	Population in poverty (%)	Children in poverty (%)	Children eligible for free or reduced-price lunch (%)	Children in single-parent households (%)	High school graduation rate (%)	Adults with some college completion (%)
United States	66.4%	3.7%	15.8%	65,712	12.3%	16.8%	52.2%	25.5%	85.0%	66.1%
Maine	63.1%	3.0%	21.7%	58,824	10.9%	13.8%	44.1%	20.6%	85.9%	68.3%
New Hampshire	65.4%	2.5%	15.4%	78,571	7.5%	8.1%	27.0%	19.1%	88.9%	70.8%
New York	66.4%	4.0%	19.9%	72,038	13.1%	18.2%	53.9%	27.0%	82.4%	68.7%
Vermont	62.2%	2.4%	19.0%	63,293	10.1%	10.8%	36.4%	21.2%	85.5%	68.7%

Data sources: American Community Survey, 2015-2019 5-year estimates; Bureau of Labor Statistics, 2019; US Census Bureau, Center for Economic Studies, Business Development Statistics, 2018; Small Area Income and Poverty Estimates, 2019; National Center for Education Statistics, 2018-2019; EDFacts, 2017-2018.

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Access to care

Geography	Access to care							Quality of care		
	Uninsured among ages 0-64 (%)	Uninsured among adults ages 18-64 (%)	Uninsured among children ages 0-18 (%)	Ratio of population to primary care physicians (N:1)	Ratio of population to primary care providers other than physicians (N:1)	Ratio of population to dentists (N:1)	Ratio of population to mental health providers (N:1)	Preventable hospital stays per 100,000 Medicare enrollees (N)	Mammography screening among female Medicare enrollees ages 65-74 (%)	Flu vaccinations among fee-for-service Medicare enrollees (%)
United States	10.4%	12.4%	5.2%	1,319	942	1,405	383	4,236	42.0%	48.0%
Maine	10.2%	11.7%	5.7%	899	655	1,484	202	3,447	46.0%	46.0%
New Hampshire	7.1%	8.6%	2.3%	1,100	682	1,302	311	3,844	49.0%	52.0%
New York	6.3%	7.7%	2.5%	1,194	787	1,174	329	4,043	42.0%	50.0%
Vermont	4.9%	5.9%	1.5%	892	818	1,365	208	3,256	45.0%	49.0%

Data sources: Small Area Health Insurance Estimates, 2018; Area Health Resource File, American Medical Association, 2018; Center for Medicare & Medicaid Services, National Provider Identification, 2020; Area Health Resource File, National Provider Identification, 2019; Mapping Medicare Disparities Tool, 2018.

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Health outcomes

Geography	Length of life			Quality of life		
	Life expectancy (years)	Premature age-adjusted mortality (deaths among residents under age 75 per 100,000 population)	Child mortality (number of deaths among children under age 18 per 100,000 population)	Frequent physical distress (% of adults)	Frequent mental distress (% of adults)	Diabetes prevalence (% of adults aged 20+)
United States	79.2	339.2	49.1	11.4%	12.7%	10.5%
Maine	78.7	338.4	43.0	13.0%	15.7%	10.4%
New Hampshire	79.7	304.9	32.0	10.4%	15.1%	9.6%
New York	81.4	276.3	38.5	10.6%	11.1%	10.1%
Vermont	79.8	302.2	37.4	11.0%	12.6%	8.8%

Data sources: National Center for Health Statistics – Mortality Files, 2016-2019; Behavioral Risk Factor Surveillance System, 2018; United States Diabetes Surveillance System, 2017.

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Health behaviors

Geography	Tobacco use	Food access, physical activity, and obesity				Alcohol use		Sexual health	
	Adult smoking	Adult obesity	Food environment index[1]	Physical inactivity[2]	Access to exercise opportunities[3]	Excessive drinking[4]	Alcohol-impaired driving deaths (as % of driving deaths)	Sexually transmitted infections (Chlamydia cases per 100,000 population)	Teen births (# per 1,000 female population 15-19)
	(%)	(%)		(%)	(%)	(%)			
United States	16.6%	29.7%	7.8	22.7%	84.2%	19.2%	27.0%	539.9	20.9
Maine	19.4%	29.8%	8.0	20.8%	70.0%	22.0%	35.4%	325.2	14.0
New Hampshire	16.6%	28.6%	8.8	20.8%	88.2%	20.2%	31.5%	278.1	9.6
New York	13.0%	26.4%	9.0	23.4%	93.2%	19.2%	20.6%	602.4	13.9
Vermont	14.7%	27.0%	8.7	18.4%	75.8%	20.5%	34.3%	274.5	11.1

Data sources: Behavioral Risk Factor Surveillance System, 2018; United States Diabetes Surveillance System, 2017; United States Department of Agriculture Food Environment Atlas, 2015; Map the Meal Gap from Feeding America, 2018; Business Analyst, Delorme map data, ESRI, & US Census Tigerline Files, 2010 and 2019; Fatality Analysis Reporting System, 2015-2019; National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, 2018; National Center for Health Statistics - Natality files, 2013-2019.

[1]The food environment index, a composite measure of food insecurity and access to a grocery store, ranges from 0 (worst) to 10 (best).

[2]Physical inactivity is a measure of the percentage of adults reporting no leisure-time physical activity in the past month.

[3]Access to exercise opportunities is a measure of the percentage of individuals in a county who live reasonably close to a location for physical activity (a census block within a half mile of a park, an urban census block within one mile of a recreational facility, or a rural census block within three miles of a recreational facility).

[4]Excessive drinking is a measure of the percentage of a county's adult population that reports binge or heavy drinking in the past 30 days.

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Community safety and physical environment

Geography	Community safety	Housing		Environmental quality
	Violent crime (# of offenses per 100,000 population)	Severe housing problems (% of households)	Homeownership (% of occupied units owned)	Air pollution - particulate (micrograms per cubic meter)
United States	386.5	17.5%	64.0%	7.2
Maine	125.8	14.3%	72.3%	6.6
New Hampshire	196.8	14.5%	71.1%	5.7
New York	379.0	23.5%	53.9%	6.6
Vermont	128.8	17.0%	70.8%	5.4

Data sources: Uniform Crime Reporting – Federal Bureau of Investigation, 2014 and 2016; Comprehensive Housing Affordability Strategy (CHAS) data, 2013-2017; American Community Survey, 2015-2019 5-year estimates; Environmental Public Health Tracking Network, 2016.

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Deaths rates per 100,000 population

Geography	Length of life	Injury-related deaths	Injury-related death subcategories			
	Premature death (years of potential life lost before age 75 per 100,000)	All injury deaths (# per 100,000)	Suicide deaths (# per 100,000)	Firearm deaths (# per 100,000)	Drug overdose deaths (# per 100,000)	Motor vehicle crash deaths (# per 100,000)
United States	6,906.6	72.3	13.8	11.9	21.2	11.4
Maine	7,020.8	93.0	17.7	11.4	28.4	11.5
New Hampshire	6,373.8	88.5	17.9	10.6	32.7	8.6
New York	5,406.3	50.5	8.1	4.2	19.1	5.7
Vermont	6,277.2	85.6	17.0	11.7	22.4	9.6

Data sources: National Center for Health Statistics – Mortality Files, 2013-2019.

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Vermont	6,277.2	85.6	17.0	11.7	22.4	9.6

Data sources: National Center for Health Statistics – Mortality Files, 2013-2019.

Top five causes of death

Geography	Top five causes of death (Age-adjusted rate of death per 100,000 population)				
	Heart disease	Cancer	Accidents (unintentional injuries)	Chronic lower respiratory diseases	Stroke (cerebrovascular diseases)
United States	164.8	152.3	47.5	40.2	37.3
Maine	147.8	168.6	63.3	48.6	33.9
New Hampshire	148.7	153.7	62.6	40.8	27.9
New York	173.7	141.5	33.7	28.6	24.9
Vermont	153.1	158.7	55.9	40.6	30.7

Data source: CDC WONDER, 2015-2019.

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Maine	147.8	168.6	63.3	48.6	33.9
New Hampshire	148.7	153.7	62.6	40.8	27.9
New York	173.7	141.5	33.7	28.6	24.9
Vermont	153.1	158.7	55.9	40.6	30.7

Data source: CDC WONDER, 2015-2019.

Access to the internet

Geography	Household access to the internet			Household access to broadband
	Access with an internet subscription (%)	Access without an internet subscription[1] (%)	No internet access (%)	Access with broadband of any type (%)
United States	86.6%	2.5%	10.9%	86.4%
Maine	82.9%	3.5%	13.7%	82.1%
New Hampshire	88.2%	2.5%	9.3%	87.7%
New York	83.2%	2.9%	13.9%	82.8%
Vermont	82.2%	4.7%	13.1%	81.5%

Data source: American Community Survey, 2015-2019 5-year estimates.
[1]Respondents reported accessing the internet without paying a cell phone company or internet service provider.

Access to the internet

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Maine	82.9%	3.5%	13.7%	82.1%
New Hampshire	88.2%	2.5%	9.3%	87.7%
New York	83.2%	2.9%	13.9%	82.8%
Vermont	82.2%	4.7%	13.1%	81.5%

Data source: American Community Survey, 2015-2019 5-year estimates.
[1]Respondents reported accessing the internet without paying a cell phone company or internet service provider.

Health insurance coverage

Geography	Health insurance coverage of the total population (all ages)						Total ages 0-64 with Medicaid	Total ages 0-64 with employer coverage
	Employer (%)	Non-Group (%)	Medicaid (%)	Medicare (%)	Military (%)	Uninsured (%)	(%)	(%)
United States	49.6%	5.9%	19.8%	14.2%	1.4%	9.2%	21.0%	58.1%
Maine	46.5%	5.7%	20.0%	18.3%	1.5%	8.1%	21.1%	57.5%
New Hampshire	56.2%	5.3%	13.2%	17.7%	1.2%	6.4%	14.7%	67.4%
New York	49.8%	5.8%	25.7%	13.0%	0.4%	5.3%	26.9%	58.3%
Vermont	48.4%	4.8%	23.9%	17.5%	1.0%	4.4%	27.2%	58.8%

Data source: Kaiser Family Foundation estimates based on the 2019 American Community Survey, 1-year estimates.
Note: This table presents health insurance coverage of the total population (all ages) for 2019. Health insurance coverage categories are mutually exclusive and were determined using the following hierarchy: Medicaid, Medicare, employer, military, non-group, uninsured. The estimate of the uninsured population differs from that in Table III, which uses a different data source and presents 2018 data on the uninsured population under age 65. As of January 2019, all states in the Northern Border region had implemented Medicaid expansion.

Health insurance coverage

Geography	Health insurance coverage of the total population (all ages)						Total ages 0-64 with Medicaid	Total ages 0-64 with employer coverage
	Employer (%)	Non-Group (%)	Medicaid (%)	Medicare (%)	Military (%)	Uninsured (%)	(%)	(%)
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Telehealth policies

Geography	Live video reimbursement in Medicaid	Telephone reimbursment in Medicaid	Store-and-forward reimbursement in Medicaid[1]	Remote patient monitoring reimbursement in Medicaid[3]	No restrictions on facility originating site in Medicaid[4]	Private payer laws[5]	Telehealth-specific patient consent requirement
Maine	✓	✓	✓	✓	✓	✓	✓
New Hampshire	✓				✓	✓	✓
New York	✓		✓	✓	✓	✓	✓
Vermont	✓		✓[2]	✓	✓	✓	✓

Data source: Center for Connected Health Policy, 2021.
Note: Data based on research conducted by the Center for Connected Health Policy between February 2021-July 2021.
[1]Store-and-forward is the electronic transmission of medical information to a clinician who uses the information to evaluate the case or render a service outside of a real-time interaction.
[2]Store-and-forward services only reimbursed through communication technology-based services.
[3]Remote patient monitoring is the collection of health data, such as vital signs and weight, that are then transmitted to clinicians in another location for monitoring and evaluation.
[4]These restrictions limit the types of facilities where patients can go to receive services via telehealth.
[5]Private payer laws require private payers to provide some type of reimbursement for telehealth delivered services.

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New York	✓		✓	✓	✓	✓	✓
Vermont	✓		✓[2]	✓	✓	✓	✓

Data source: Center for Connected Health Policy, 2021.
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Largest telehealth grants awarded by HRSA

Maine **Total funding: $13,432,212**	New York **Total funding: $13,796,698**
1. $1M, Eastern Maine Healthcare System, Rural Communities Opioid Response-Implementation, 2020 2. $1M, MaineHealth, Rural Communities Opioid Response-Implementation, 2020 3. $1M, Redington Fairview General Hospital, Rural Communities Opioid Response-Implementation, 2020 4. $1M, Wabanaki Health and Wellness, Rural Communities Opioid Response-Implementation, 2020 5. $1M, MaineGeneral Medical Center, Rural Communities Opioid Response-Implementation, 2019	1. $1.35M, Research Foundation of State University of New York, Opioid Workforce Expansion Program-Professional, 2019 2. $1.34M, Touro College, Opioid Workforce Expansion Program-Professional, 2019 3. $1M, Genesee Council on Alcoholism and Substance Abuse, Inc., Rural Communities Opioid Response-Implementation, 2020 4. $1M, The Reach Project, Inc., Rural Communities Opioid Response-Implementation, 2020 5. $1M, Rochester Institute of Technology, Rural Communities Opioid Response-Implementation, 2020
New Hampshire **Total funding: $2,800,000**	**Vermont** **Total funding: $4,188,244**
1. $1M, Communities for Alcohol and Drug Free Youth, Rural Communities Opioid Response-Implementation, 2020 2. $1M, North County Health Consortium, Rural Communities Opioid Response-Implementation, 2020 3. $200K, Communities for Alcohol and Drug Free Youth, Rural Communities Opioid Response-Planning, 2020 4. $200K, County of Cheshire, Rural Communities Opioid Response-Planning, 2019 1. $200K, Trustees of Dartmouth College, Rural Communities Opioid Response-Planning, 2019	1. $1M, Central Vermont Medical Center, Rural Communities Opioid Response-Implementation, 2020 2. $1M, Connecticut Valley Addition Recovery, Inc., Rural Communities Opioid Response-Implementation, 2020 3. $1M, Health Care & Rehabilitation Services of Southeastern Vermont, Rural Communities Opioid Response-Implementation, 2019 4. $299,137, University of Vermont, Telehealth Network Grant Program, 2020 2. $289,107, University of Vermont, Telehealth Network Grant Program, 2021

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Scope of practice - Nurse practitioners and physician assistants

Name	Nurse practitioners			Physician assistants					
	Authority to write prescriptions	Authority to practice independently	Primary care provider role	Requirements for supervision of PAs	Ratio requirements	Scope of practice determination	Authority to write prescriptions	Co-signature by physician on patient notes and charts	Authority to prescribe controlled substances[1]
Maine	Full independent prescriptive authority	Transition to independent practice period required	Recognized in policy	Determined at practice level	None	Determined at practice level	Determined at practice level	None, but regular (at least quarterly) review of selected charts	Schedule II-V
New Hampshire	Full independent prescriptive authority	Full independent practice authority	Recognized in policy	Determined at practice level	Physician may not supervise more than 4 PAs	Determined at practice level	Determined at practice level	Regular, ongoing evaluation of a representative sample of charts	Schedule II-V
New York	Physician relationship required for prescribing privileges	Physician relationship required	Recognized in policy	Determined at practice level	Physician may not supervise more than 4 PAs in a private practice or more than 6 PAs in a hospital	Determined at practice level	Determined at practice level	None	Schedule II-V
Vermont	Full independent prescriptive authority	Transition to independent practice period required	Recognized in policy	Determined at practice level	Physician may not supervise more PAs concurrently than have been approved by the Vermont Board of Medical Practice after review of the system of care delivery	Determined at practice level	Determined at practice level	Regular review of selected charts with documentation within 72-hours of provision of care	Schedule II-V

Data source: American Medical Association, 2018; National Conference of State Legislatures, 2021.

[1]Substances controlled under the Controlled Substances Act are divided into five schedules based on whether they have a currently accepted medical use in the United States, their relative abuse potential, and likelihood of causing dependence when abused. For example, schedules range from Schedule I controlled substances which have no accepted medical use in the United States (ex. LSD, heroin, ecstasy) and Schedule II controlled substances which have a high potential for abuse which may lead to severe psychological or physical dependence (ex. methadone, codeine, oxycodone), to Schedule V controlled substances which have a low potential for abuse and consist primarily of preparations containing limited quantities of certain narcotics (ex. cough preparations containing 200 milligrams of codeine or less per 100 milliliters). (Source: https://www.deadiversion.usdoj.gov/schedules/).

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Scope of practice - Other providers

Name	Oral health providers			Behavioral health providers	Pharmacists		
	Practice of teledentistry	Dental therapists[1]	Dental hygienists with direct access[2]	Education required for addiction counselor credentialing	Prescription of hormonal contraceptives	Prescription of tobacco cessation aids	Prescription adaptation[3]
Maine	Not outlined in statutes and/or regulations	Recognized	No supervision required	High school diploma or higher	May not prescribe	May prescribe	May modify prescriptions
New Hampshire	Not outlined in statutes and/or regulations	Not recognized	Collaborative agreement or supervision required	Associate's degree or higher	May prescribe	May not prescribe	May not modify prescriptions
New York	Outlined in statutes and/or regulations	Not recognized	Collaborative agreement or supervision required	High school diploma or higher	May not prescribe	May not prescribe	May not modify prescriptions
Vermont	Not outlined in statutes and/or regulations	Recognized	Collaborative agreement or supervision required	Bachelor's degree or higher	May not prescribe	May not prescribe	May not modify prescriptions

Data source: National Conference of State Legislatures, 2021

[1]Dental therapists are midlevel dental providers supervised by dentists. They typically work in rural and underserved areas to improve access to dental services.

[2]Direct access is the ability of a dental hygienist to initiate treatment based on their assessment of a patient's needs without the specific authorization of a dentist, treat the patient without the presence of a dentist, and maintain a provider-patient relationship.

[3]Prescription adaptation is pharmacists modifying medication regimens from the original prescriber to improve a patient's health outcome (i.e., changing a 30-day supply to a 60-day supply, therapeutic substitution).

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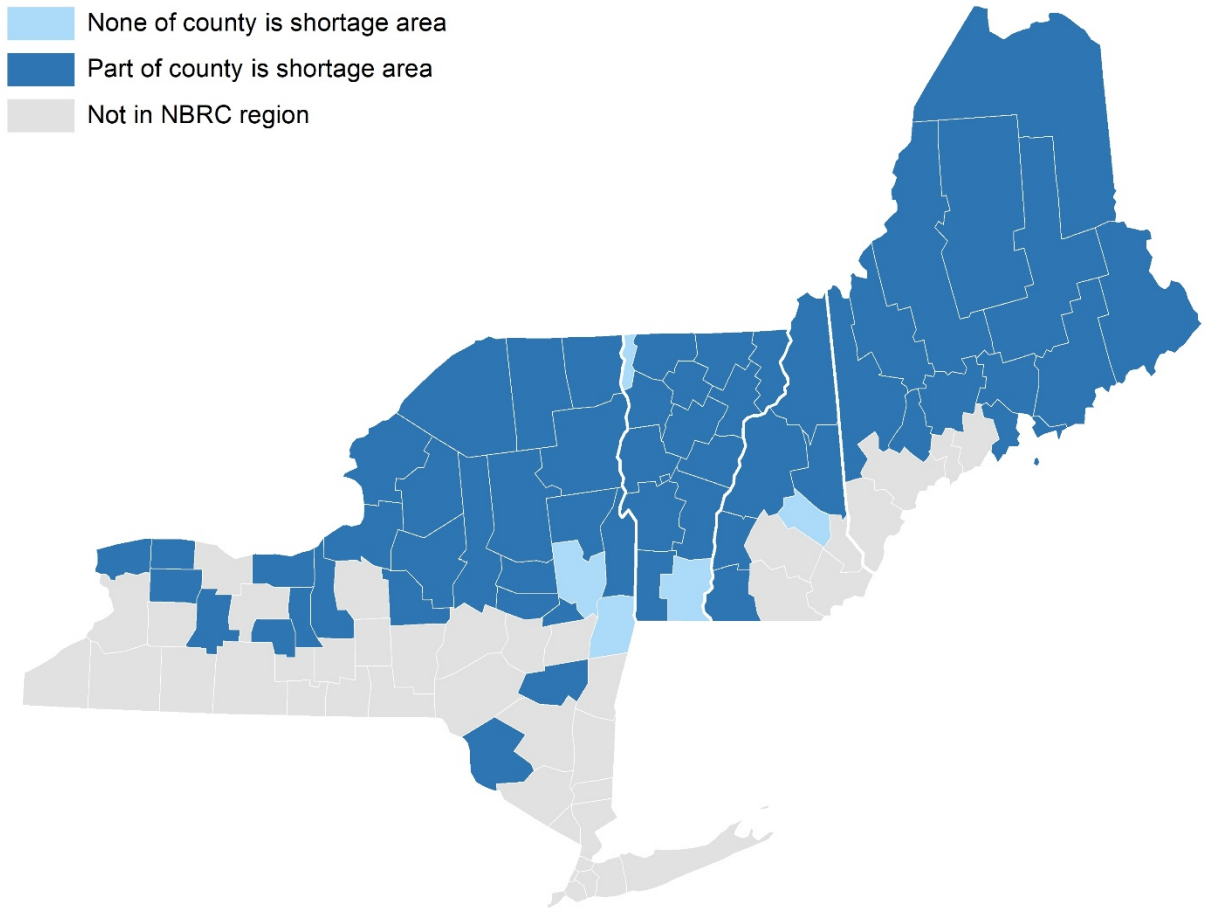
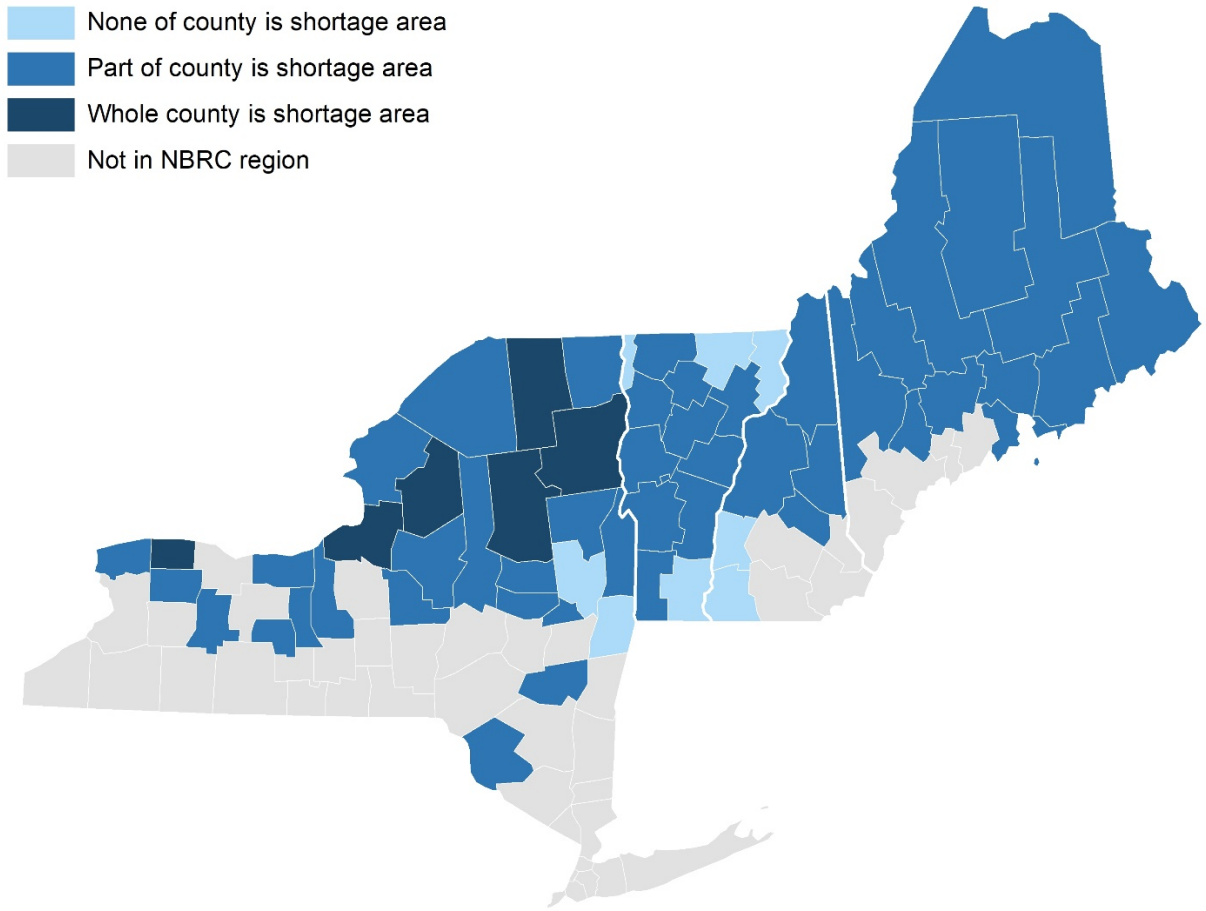
Health Professional Shortage Areas- Primary Care

- The majority of Northern Border region counties (55 of 60) are designated as *partial* primary care health professional shortage areas:
  - 12 in Maine
  - 5 in New Hampshire
  - 26 in New York
  - 12 in Vermont
- Five counties in the region have no primary care health professional shortage areas.
- There are no *whole* county primary care health professional shortage areas in the Northern Border region.



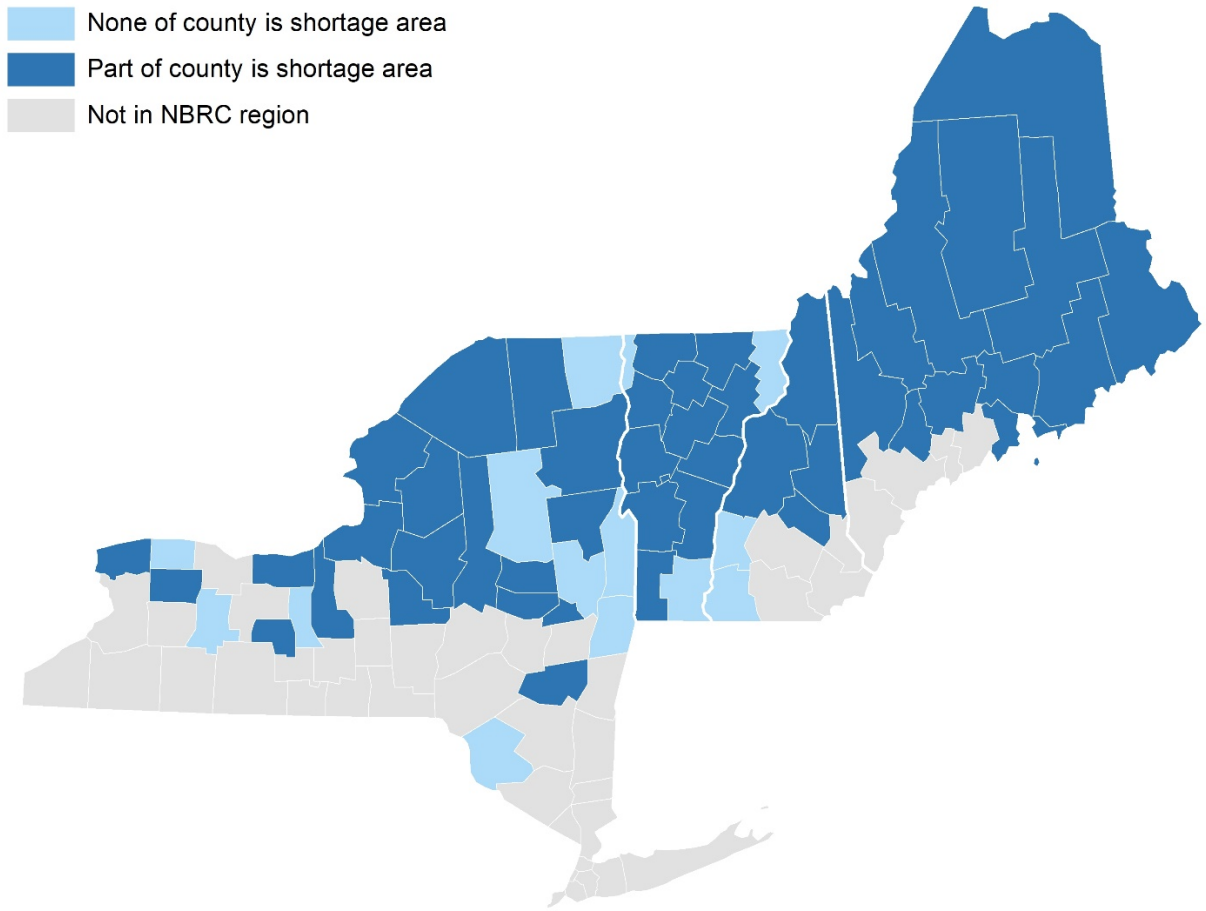
Health Professional Shortage Areas- Mental Health

- There are six *whole* county mental health professional shortage areas in the Northern Border region, all located in New York.
- Forty-six counties in the region are designated *partial* county mental health professional shortage areas:
  - 12 in Maine
  - 4 in New Hampshire
  - 20 in New York
  - 10 in Vermont
- Eight counties in the region have no mental health professional shortage areas.



Health Professional Shortage Areas- Dental Health

- Of the 46 Northern Border counties designated as *partial* dental health professional shortage areas, there are:
  - 12 in Maine
  - 4 in New Hampshire
  - 19 in New York
  - 11 in Vermont
- Fourteen counties in the region have no dental health professional shortage areas.
- No counties in the region are designated as *whole* dental health professional shortage areas.

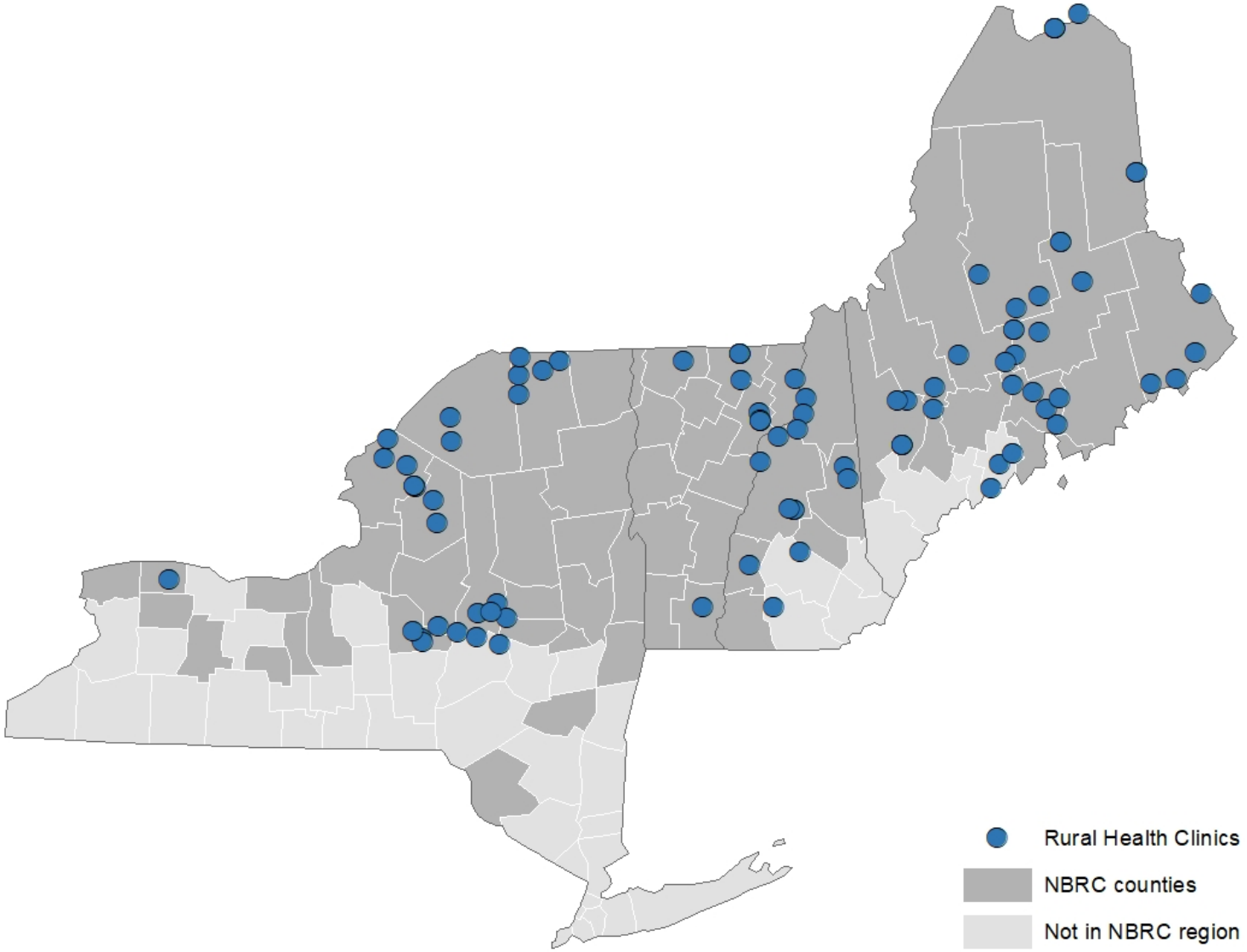


Rural Health Clinics

As of March 2021, there were 81 Rural Health Clinics in the Northern Border region:

- 34 in Maine
- 12 in New Hampshire
- 25 in New York
- 10 in Vermont

Data source: Centers for Medicare & Medicaid Services (CMS), Provider of Services file, March 2021.



Federally Qualified Health Centers

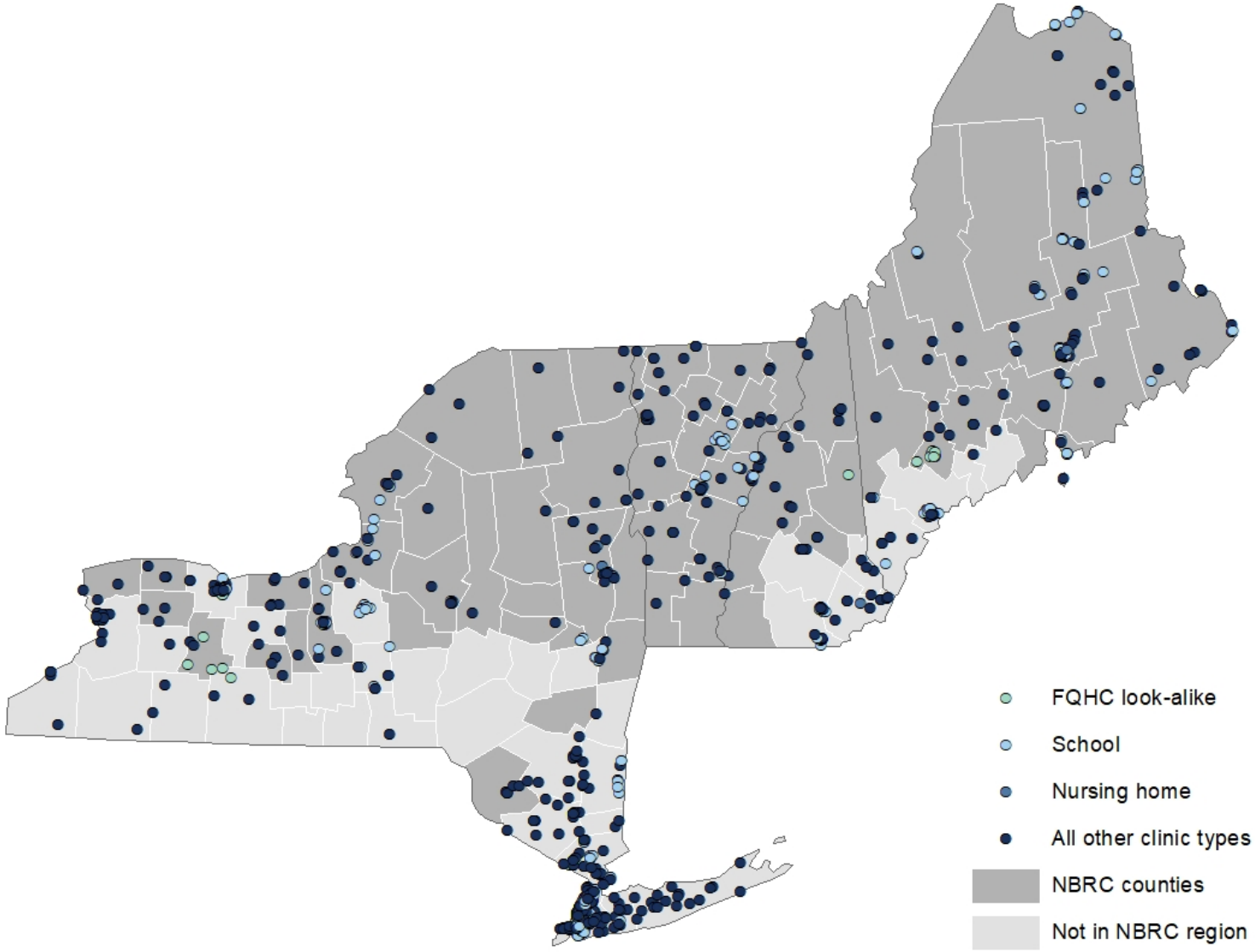
As of June 2021, there were 367 FQHCs and 19 look-alikes in the Northern Border region.

Of these health centers, there were:

- 161 in Maine
- 20 in New Hampshire
- 128 in New York
- 92 in Vermont

Another 812 centers were located outside of the Northern Border region.

Data source: Health Resources and Services Administration, *Data Explorer*, June 2021.



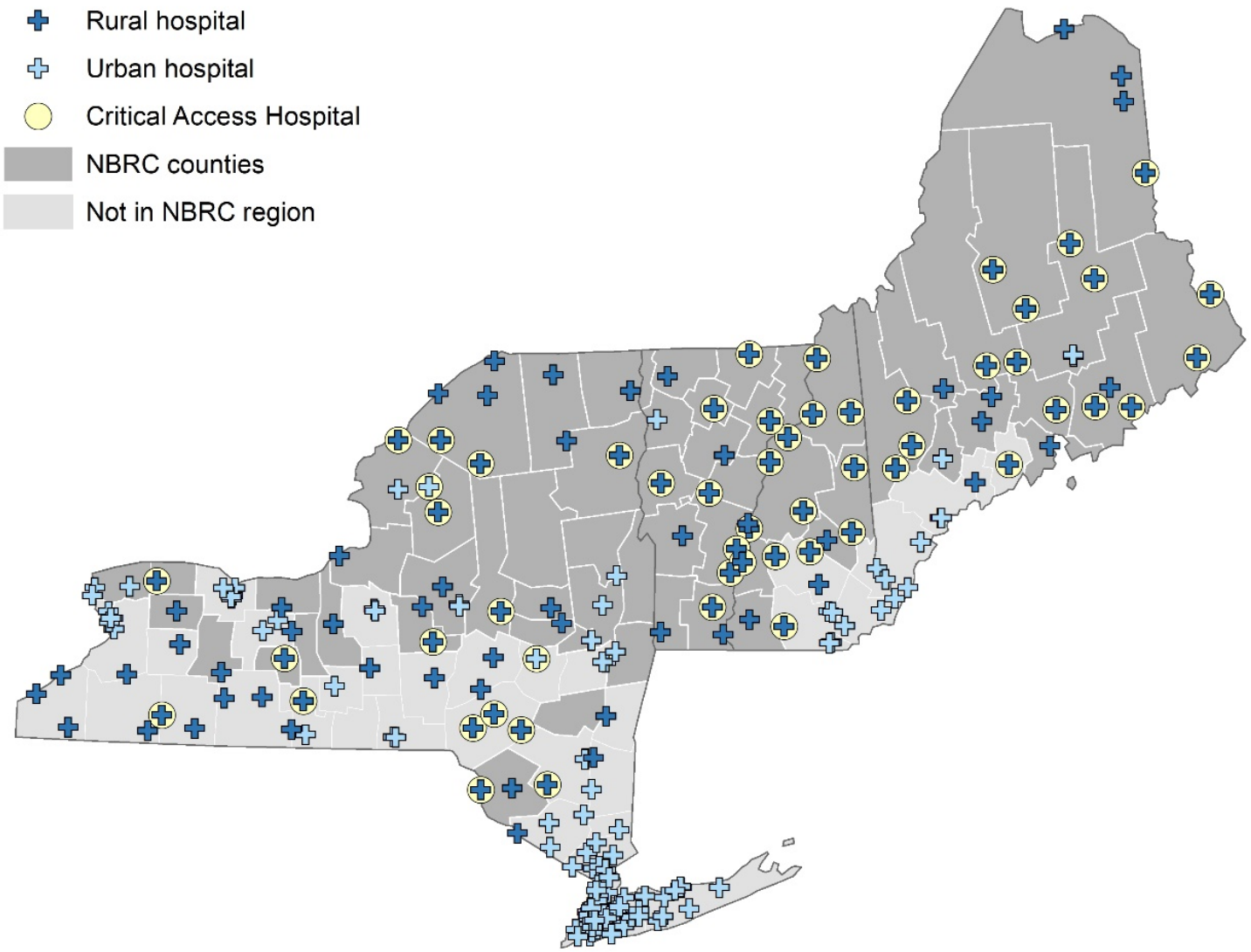
Hospitals

There are 91 general acute hospitals in the Northern Border region. Eighteen are in urban areas and 73 are in rural areas.

Of the rural hospitals in the region, 41 are Critical Access Hospitals, a designation given to eligible rural hospitals by the Centers for Medicare & Medicaid Services.

Critical Access Hospitals: Eligible hospitals must have 25 or fewer acute care inpatient beds, provide 24/7 emergency care, and generally must be located more than 35 miles from another hospital.

Data source: Health Resources & Services Administration, June 2021.



Drug poisoning mortality, 2018

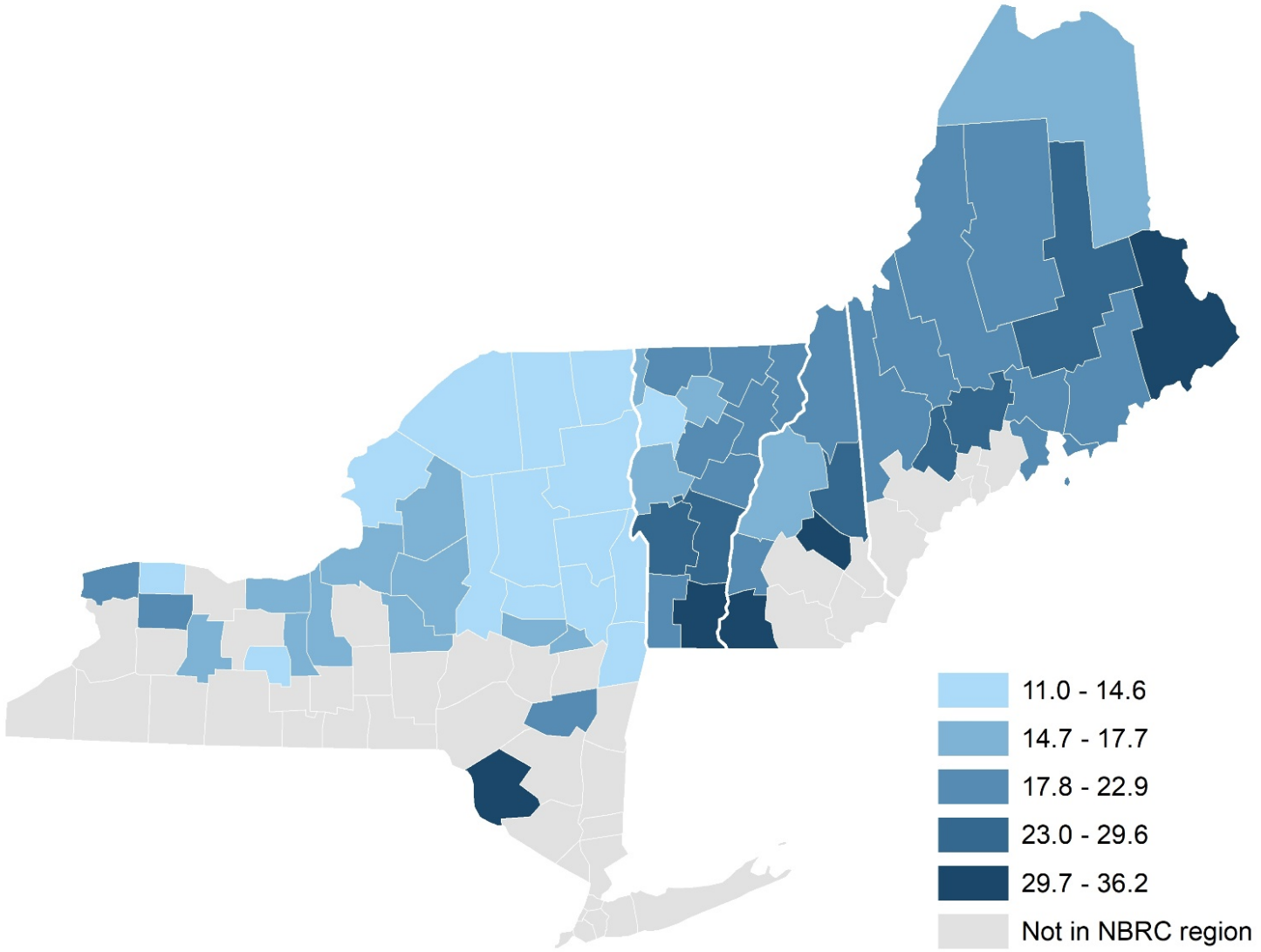
County-level model-based death rates from drug poisoning mortality.

Maine (25.8), New Hampshire (33.3), and Vermont (24.4) had state rates above the U.S. average of 20.6 per 100,000. New York rate was 18.9 per 100,000.

The NBRC counties with the highest model-based drug poisoning mortality rates (per 100,000) were:

- Belknap County, NH (35.3)
- Sullivan County, NY (33.4)
- Windham County, VT (32.2)
- Cheshire County, NH (30.7)
- Washington County, ME (30.0)

Data source: National Center for Health Statistics, *Drug Poisoning Mortality in the United States, 1999-2018*.

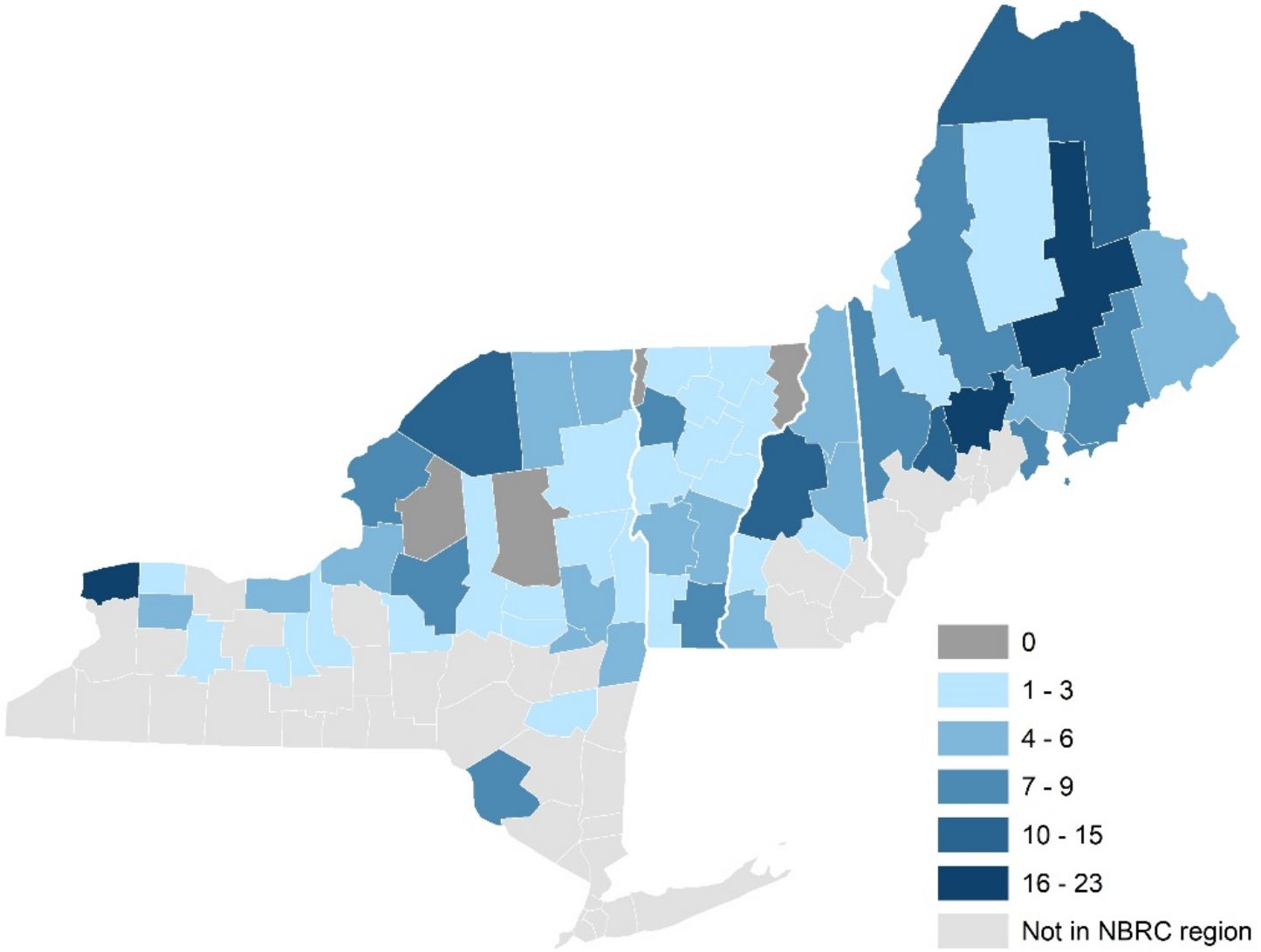


Substance use treatment facilities

There are 305 substance use treatment facilities in the Northern Border region.

Four counties in the region have no treatment facilities.

The remaining counties have between 1 and 23 facilities.



Data source: Substance Abuse and Mental Health Services Administration (SAMHSA). *Behavioral Health Treatment Services Locator.* 2021.

Buprenorphine practitioners

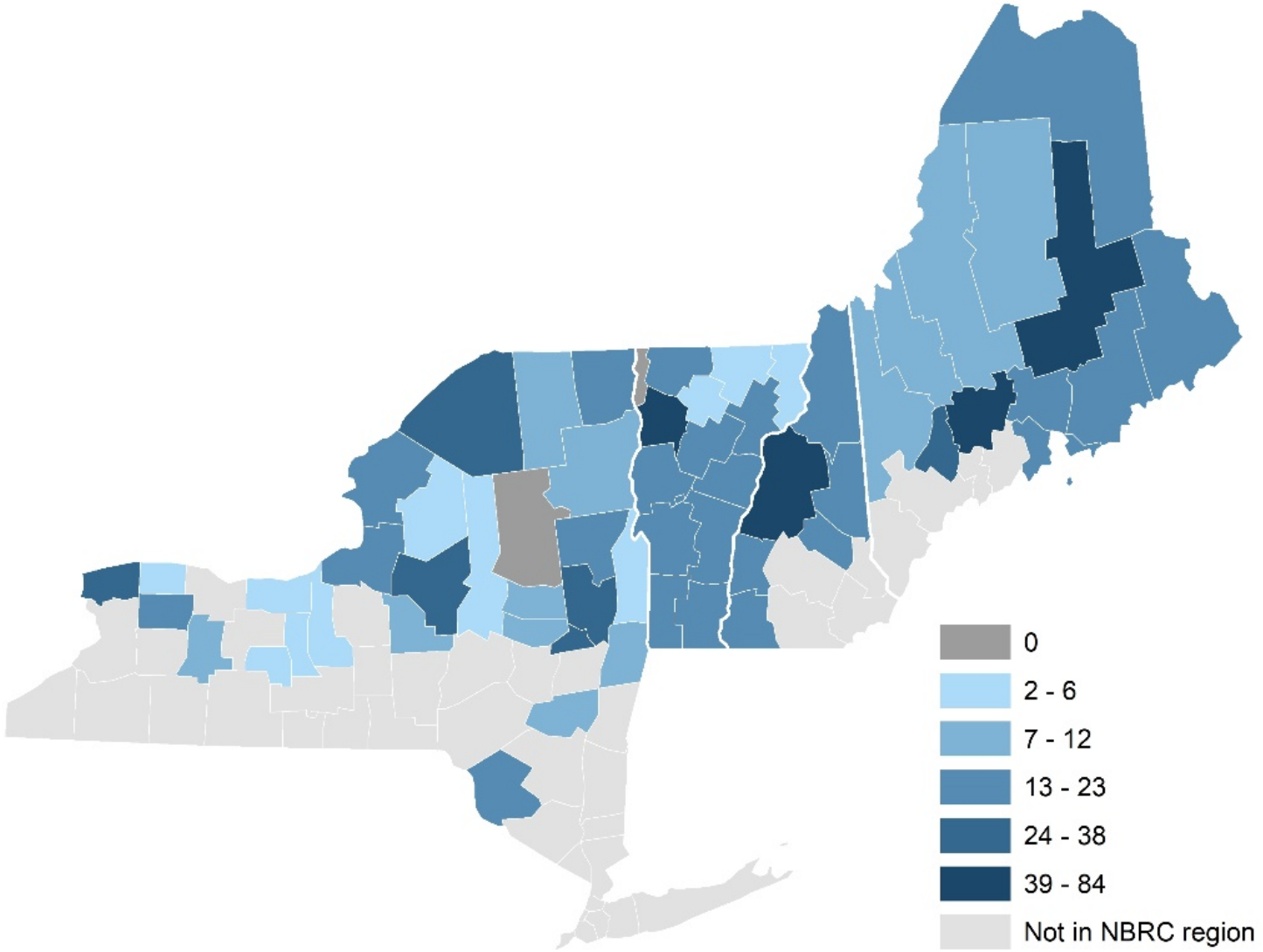
To administer, dispense, or prescribe buprenorphine to treat opioid use disorder a practitioner must receive a waiver.

As of August 2021, there were 1,034 waivered practitioners practicing in the Northern Border region.

Two counties in the region have no buprenorphine practitioners (Hamilton County, NY and Grand Isle County, VT).

The number of practitioners ranges from 2 to 84 among the other counties in the region.

Data source: Substance Abuse and Mental Health Services Administration (SAMHSA). *Behavioral Health Treatment Services Locator.* 2021.



Key takeaways: Northern Border Region

Most counties in the Northern Border region face shortages of primary care, mental health, and/or dental health professionals.

- Ninety-two percent of counties (55 of 60) are designated as partial primary care health professional shortage areas.
- Eighty-seven percent of counties (52 of 60) are designated whole or partial county mental health professional shortage areas.
- Seventy-six percent of counties (46 of 60) are partial dental health professional shortage areas.

Population health status and cause-specific rates of death are variable across the Northern Border region.

- The highest cause-specific rates of death are for cancer in Maine, New Hampshire, and Vermont. The highest cause-specific rates of death are for heart disease in New York and the US overall.
- Compared with the US overall, Maine, New Hampshire, and Vermont have higher rates of death from chronic lower respiratory disease and unintentional injuries, including higher rates of suicide and drug overdose deaths.
- All Northern Border region states have rates of excessive drinking that are equal to or greater than the national average.
- Maine and New Hampshire have a greater percentage of adults reporting frequent mental distress than the other NBRC states and the US as a whole.

Key takeaways: Northern Border Region

NBRC states generally perform well on measures of community safety and physical environment.

- All NBRC states have lower rates of violent crime and less air pollution compared with the US overall.
- Maine, New Hampshire, and Vermont have relatively low rates of severe housing problems and high rates of homeownership; New York performs worse than the national average on these measures.

NBRC states have relatively high rates of health insurance coverage.

- All NBRC states have lower rates of uninsured individuals among the total population as compared with the US overall.

State chartbooks

Methods

- We used 2021 published county- and state-level health-related measures, aggregated by the County Health Rankings as well as other data sources. All data sources are publicly available and free of charge.

- We labeled counties according to the current Northern Border Regional Commission categories: distressed, transitional, attainment counties with an isolated area(s) of distress, attainment counties without an isolated area of distress.

- We identified counties that ranked near the top and near the bottom for each health-related characteristic examined, among all 102 counties in ME, NH, NY, and VT for comparison.
  - Then we counted the number of times each county fell into the worst performing 10th percentile ranking for each health-related domain (the number of times they were “worst” performing for a given measure)

Summary of health-related domains: ME

County	Access to healthcare	Health outcomes	Health behaviors and access	Community safety and physical environment	Death rates per 100,000 population	Top five causes of death	Internet access
Androscoggin County*	☑	⚠	☑	☑	☑	⚠	☑
Aroostook County*	🚫	🚫	⚠	☑	☑	☑	⚠
Cumberland County	☑	☑	☑	☑	☑	☑	☑
Franklin County*	☑	☑	⚠	☑	⚠	☑	☑
Hancock County†	⚠	☑	☑	☑	☑	☑	☑
Kennebec County*	☑	☑	☑	☑	☑	☑	☑
Knox County	⚠	☑	☑	☑	☑	☑	☑
Lincoln County	🚫	☑	☑	☑	⚠	☑	☑
Oxford County*	⚠	🚫	⚠	☑	⚠	☑	☑
Penobscot County*	⚠	⚠	☑	☑	☑	☑	☑
Piscataquis County*	🚫	🚫	⚠	☑	🚫	⚠	⚠
Sagadahoc County	⚠	☑	☑	☑	⚠	☑	☑
Somerset County*	🚫	🚫	⚠	☑	🚫	⚠	☑
Waldo County†	⚠	☑	☑	☑	⚠	☑	☑
Washington County*	🚫	🚫	🚫	☑	🚫	⚠	⚠
York County	☑	☑	☑	☑	☑	☑	☑

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Performance indicator key: ☑ = county is in bottom 10% of all counties for fewer than 2 measures; ⚠ = county is in bottom 10% of all counties for 2-3 measures; 🚫 = county is in bottom 10% of all counties for 4 or more measures.

Key takeaways: Maine

- Most counties in Maine face shortages of primary care, mental health, and/or dental health professionals.
- Some rural Maine counties have limited access to health care and poor population health status.
- Rates of injury-related death are highest in Piscataquis, Somerset, and Washington Counties.
- Maine performs well on measures of community safety and physical environment.

Summary of health-related domains: NH

County	Access to healthcare	Health outcomes	Health behaviors and access	Community safety and physical environment	Death rates per 100,000 population	Top five causes of death	Internet access
Belknap County†	☑	☑	☑	☑	⚠	☑	☑
Carroll County†	☑	☑	☑	☑	⚠	☑	☑
Cheshire County†	☑	☑	☑	☑	☑	☑	☑
Coos County*	☑	🚫	⚠	☑	🚫	🚫	☑
Grafton County‡	☑	☑	☑	☑	☑	☑	☑
Hillsborough County	☑	☑	☑	☑	☑	☑	☑
Merrimack County	☑	☑	☑	☑	☑	☑	☑
Rockingham County	☑	☑	☑	☑	☑	☑	☑
Strafford County	☑	☑	☑	☑	☑	☑	☑
Sullivan County*	☑	☑	☑	☑	☑	☑	☑

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Key takeaways: New Hampshire

- Most counties in New Hampshire face shortages of primary care, mental health, and/or dental health professionals.
- Most New Hampshire counties perform well on measures of population health status and health care access.
- Some New Hampshire counties perform poorly on cause-specific death rates.
- New Hampshire performs well on measures of community safety and physical environment.

Summary of health-related domains: NY

County	Access to healthcare	Health outcomes	Health behaviors and access	Community safety and physical environment	Death rates per 100,000 population	Top five causes of death	Internet access
Albany County	☑	☑	☑	⚠	☑	☑	☑
Allegany County	☑	☑	☑	☑	☑	☑	☑
Bronx County	⚠	☑	🚫	🚫	☑	☑	☑
Broome County	☑	☑	☑	☑	☑	☑	☑
Cattaraugus County	☑	🚫	⚠	☑	☑	⚠	⚠
Cayuga County*	⚠	☑	☑	☑	☑	☑	☑
Chautauqua County	☑	☑	☑	☑	☑	☑	☑
Chemung County	☑	⚠	⚠	☑	☑	⚠	☑
Chenango County	☑	⚠	☑	☑	☑	⚠	☑
Clinton County*	☑	☑	☑	☑	☑	☑	☑
Columbia County	☑	☑	☑	☑	☑	☑	☑
Cortland County	☑	☑	☑	☑	☑	☑	☑
Delaware County	☑	☑	☑	☑	☑	☑	☑
Dutchess County	☑	☑	☑	☑	☑	☑	☑
Erie County	☑	☑	☑	☑	☑	☑	☑
Essex County*	☑	☑	☑	☑	☑	☑	☑
Franklin County*	☑	☑	⚠	☑	☑	☑	⚠
Fulton County*	☑	☑	⚠	☑	☑	☑	☑
Genesee County*	☑	☑	☑	☑	☑	☑	☑
Greene County*	⚠	☑	☑	☑	☑	☑	⚠
Hamilton County*	⚠	☑	⚠	☑	☑	☑	☑
Herkimer County*	⚠	☑	⚠	☑	☑	☑	☑
Jefferson County*	☑	☑	⚠	☑	☑	☑	☑
Kings County	⚠	☑	☑	🚫	☑	☑	☑
Lewis County*	☑	☑	☑	☑	☑	☑	☑
Livingston County*	☑	☑	☑	☑	☑	☑	☑
Madison County*	☑	☑	☑	☑	☑	☑	☑
Monroe County	☑	☑	☑	☑	☑	☑	☑
Montgomery County*	⚠	☑	⚠	☑	☑	☑	☑
Nassau County	☑	☑	☑	⚠	☑	☑	☑

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Summary of health-related domains: NY (continued)

County	Access to healthcare	Health outcomes	Health behaviors and access	Community safety and physical environment	Death rates per 100,000 population	Top five causes of death	Internet access
New York County	☑	☑	⚠	🚫	☑	☑	☑
Niagara County*	☑	☑	☑	⚠	☑	☑	☑
Oneida County*	☑	☑	☑	☑	☑	☑	☑
Onondaga County	☑	☑	☑	☑	☑	☑	☑
Ontario County	☑	☑	☑	☑	☑	☑	☑
Orange County	☑	☑	☑	☑	☑	☑	☑
Orleans County*	🚫	🚫	🚫	☑	☑	☑	☑
Oswego County*	☑	☑	☑	☑	☑	☑	☑
Otsego County	☑	☑	☑	☑	☑	☑	☑
Putnam County	☑	☑	☑	☑	☑	☑	☑
Queens County	☑	☑	☑	⚠	☑	☑	☑
Rensselaer County†	☑	☑	☑	☑	☑	☑	☑
Richmond County	☑	☑	☑	⚠	☑	☑	☑
Rockland County	☑	☑	☑	⚠	☑	☑	☑
St. Lawrence County*	☑	☑	☑	☑	☑	☑	☑
Saratoga County†	☑	☑	☑	☑	☑	☑	☑
Schenectady County	☑	☑	☑	☑	☑	☑	☑
Schoharie County	⚠	☑	☑	☑	☑	☑	⚠
Schuyler County	☑	☑	☑	☑	☑	⚠	☑
Seneca County*	⚠	☑	⚠	☑	☑	☑	☑
Steuben County	☑	☑	☑	☑	☑	☑	☑
Suffolk County	☑	☑	☑	☑	☑	☑	☑
Sullivan County*	⚠	☑	⚠	☑	☑	☑	☑
Tioga County	⚠	☑	☑	☑	☑	☑	☑
Tompkins County	☑	☑	☑	☑	☑	☑	☑
Ulster County	☑	☑	☑	☑	☑	☑	☑
Warren County*	☑	☑	☑	☑	☑	☑	☑
Washington County*	⚠	☑	☑	☑	☑	☑	☑
Wayne County*	🚫	☑	⚠	☑	☑	☑	☑
Westchester County	☑	☑	☑	⚠	☑	☑	☑
Wyoming County	⚠	☑	☑	☑	☑	☑	☑
Yates County*	☑	⚠	⚠	☑	☑	☑	☑

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Key takeaways: New York

- Most counties in New York face shortages of primary care, mental health, and/or dental health professionals.
- New York counties perform well on measures of access to health insurance.
- Some of New York's Northern Border counties perform poorly on health outcomes measures.
- Injury-related death rates were lower in New York than in other Northern Border states and the US overall.

Summary of health-related domains: VT

County	Access to healthcare	Health outcomes	Health behaviors and access	Community safety and physical environment	Death rates per 100,000 population	Top five causes of death	Internet access
Addison County†	☑	☑	☑	☑	☑	☑	☑
Bennington County†	☑	☑	☑	☑	☑	☑	☑
Caledonia County*	☑	☑	☑	☑	⚠	☑	☑
Chittenden County†	☑	☑	☑	☑	☑	☑	☑
Essex County*	⚠	⚠	⚠	☑	⚠	⚠	⚠
Franklin County†	☑	☑	⚠	☑	☑	☑	☑
Grand Isle County†	⚠	☑	☑	☑	☑	☑	☑
Lamoille County†	☑	☑	☑	☑	☑	☑	☑
Orange County†	☑	☑	☑	☑	☑	☑	☑
Orleans County*	⚠	☑	⚠	☑	☑	☑	☑
Rutland County*	☑	☑	☑	☑	☑	☑	☑
Washington County†	☑	☑	☑	☑	☑	☑	☑
Windham County*	☑	☑	☑	☑	🚫	☑	☑
Windsor County†	☑	☑	☑	☑	☑	☑	☑

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Key takeaways: Vermont

- Most counties in Vermont face shortages of primary care, mental health, and/or dental health professionals.
- Most Vermont counties perform well on access to health care and population health measures.
- Rates of injury-related death are highest in Caledonia, Essex, Grand Isle, and Windham Counties.
- Vermont performs well on measures of community safety and physical environment.

Questions?

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