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New Hampshire: A Health-Focused Landscape Analysis

Katherine Ahrens PhD

University of Southern Maine, Muskie School of Public Service, Maine Rural Health Research Center

Amanda Burgess MPPM, MPH

University of Southern Maine, Muskie School of Public Service, Maine Rural Health Research Center

Carly Milkowski MPH

University of Southern Maine, Muskie School of Public Service, Maine Rural Health Research Center

Louisa Munk MPH

University of Southern Maine, Muskie School of Public Service, Maine Rural Health Research Center

Yvonne Jonk PhD

*University of Southern Maine, Muskie School of Public Service, Maine Rural Health Research Center**See next page for additional authors*Follow this and additional works at: https://digitalcommons.usm.maine.edu/population_healthPart of the [Health Policy Commons](#), [Health Services Research Commons](#), [Public Policy Commons](#),
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Authors

Katherine Ahrens PhD; Amanda Burgess MPPM, MPH; Carly Milkowski MPH; Louisa Munk MPH; Yvonne Jonk PhD; and Erika C. Ziller PhD

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Prepared by:

Katherine Ahrens, PhD
Amanda Burgess, MPPM
Carly Milkowski, MPH
Louisa Munk, MPH
Yvonne Jonk, PhD
Erika Ziller, PhD



Maine
Rural Health
Research Center



**Northern Border
Regional Commission**

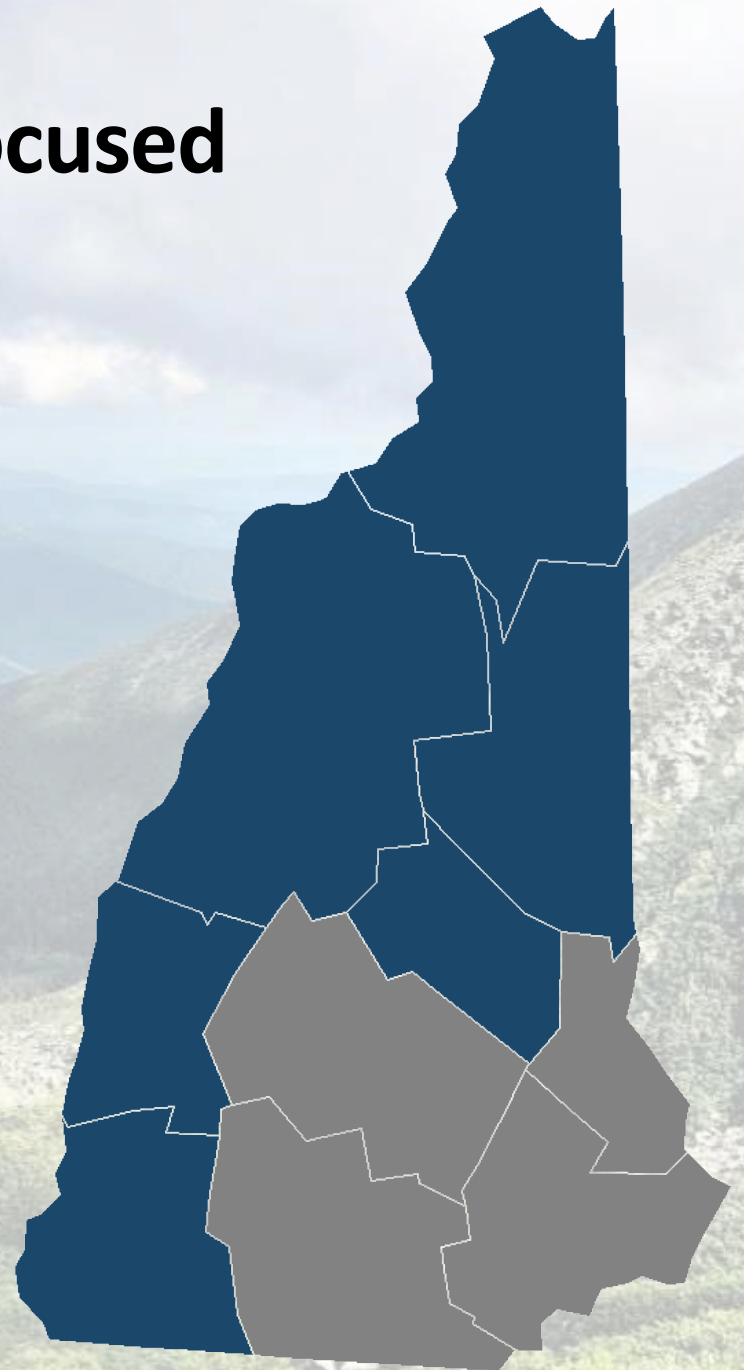


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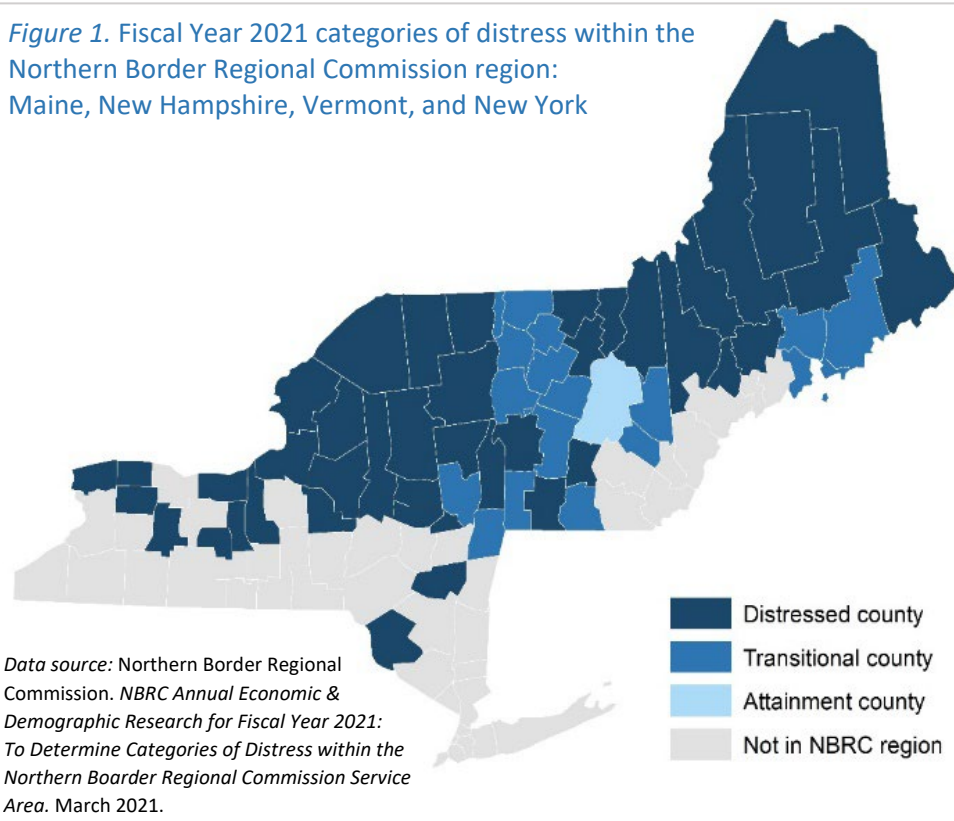
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INTRODUCTION

The Northern Border Regional Commission (<https://www.nbrc.gov/>) is a Federal-State partnership formed by Congress in 2008. Its purpose is to fund economic and community development projects in economically distressed and (primarily) rural counties located in four northeastern border states: Maine, New Hampshire, New York, and Vermont.

Counties within the Northern Border Regional Commission Region (NBRC) are categorized annually as “distressed” (have high rates of poverty, unemployment, and outmigration, with severe and persistent economic distress and underdevelopment), “transitional” (have recently experienced high rates of poverty, unemployment, and outmigration, with economic distress and underdevelopment), or “attainment counties” (neither distressed nor transitional) (Figure 1).

Figure 1. Fiscal Year 2021 categories of distress within the Northern Border Regional Commission region: Maine, New Hampshire, Vermont, and New York



Counties designated as distressed and transitional are eligible for Northern Border Regional Commission awards, with a 20% match required for distressed counties and a 50% match required for transitional counties. Counties designated as attainment counties are not eligible for awards, but projects might be eligible if they are located within sub-county areas designated as isolated areas of distress, are part of a multi-county or multi-state project, or if the project is of significant benefit to distressed or transitional counties outside that county. Annual appropriation is divided equally among Maine, New Hampshire, New York, and Vermont.

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.

The 2021 Federal Appropriations package included an increase in funding for the Northern Border Regional Commission (from \$25 million to \$30 million) and a temporary waiver of the matching funds requirement for grantees. To be eligible for grant consideration, projects must fall within specific categories. One category is “basic health care and other public services to assist economically distressed areas.”

In order 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.

The measures presented in this chartbook may assist in the planning and selection of high impact projects for rural counties in greatest need of economic and infrastructure development investments to improve population health and healthcare access in New Hampshire.

KEY TAKEAWAYS

The analyses in this chartbook identify strengths and assets of the state of New Hampshire, as well as opportunities for improvement, across a comprehensive set of population health and health care access measures. These data are intended to inform strategic initiatives to support health and health care in the state, particularly in rural counties and counties in the Northern Border region. Key findings include:

Most counties in New Hampshire face shortages of primary care, mental health, and/or dental health professionals.

- Nine New Hampshire counties are designated partial health professional shortage areas for primary care (*see page 13*).
- Eight counties are partial mental health and dental health professional shortage areas (*see page 13*).

Most counties perform well on measures of population health status and health care access.

- Ranked alongside the 102 counties in the Northern Border region, New Hampshire counties perform well on measures of access to care (*see page 5*).
- Compared with other counties in the state, Coos County has the shortest life expectancy, highest rate of premature mortality, and the largest proportion of residents reporting frequent mental distress and diabetes (*see page 6*).

Some counties perform poorly on cause-specific death rates.

- Coos County has the highest rates of death from cancer, chronic lower respiratory diseases, and stroke in the state (*see page 10*).
- Belknap County, Carroll County, Coos County, and Stafford County have the highest rates of accidental death in the state (*see page 10*).
- Rates of suicide deaths and firearm deaths are highest in Carroll County and Coos County, drug overdose deaths are highest in Hillsborough County and Strafford County, and motor vehicle crash deaths are highest in Coos County (*see page 9*).

New Hampshire performs well on measures of community safety and physical environment.

- New Hampshire counties generally have lower rates of violent crime and severe housing problems, higher rates of homeownership, and lower levels of air pollution than other counties in the Northern Border region (*see page 8*).

SECTION I. Demographic Characteristics

Geography	Population	Rurality	Age		Sex	Race/ethnicity ¹						Language
		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
	(N)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
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%
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%
Belknap County†	61,303	66.3%	18.3%	22.8%	50.6%	94.8%	0.6%	1.8%	0.3%	1.2%	<0.1%	0.2%
Carroll County†	48,910	90.2%	15.3%	29.0%	50.6%	95.6%	0.6%	1.6%	0.4%	0.8%	<0.1%	<0.1%
Cheshire County†	76,085	65.0%	17.8%	20.7%	51.0%	93.8%	0.8%	2.0%	0.3%	1.7%	<0.1%	0.3%
Coos County*	31,563	66.2%	16.1%	24.2%	47.4%	94.8%	0.8%	1.9%	0.5%	0.6%	<0.1%	0.5%
Grafton County‡	89,886	68.7%	16.0%	21.3%	50.6%	90.4%	1.2%	2.5%	0.4%	3.9%	<0.1%	1.0%
Hillsborough County	417,025	21.2%	20.2%	16.2%	50.3%	83.8%	2.5%	7.3%	0.3%	4.5%	0.1%	2.0%
Merrimack County	151,391	54.6%	18.9%	18.7%	50.6%	92.1%	1.6%	2.3%	0.3%	2.2%	<0.1%	0.9%
Rockingham County	309,769	24.9%	19.1%	18.6%	50.5%	92.2%	0.8%	3.3%	0.2%	2.2%	<0.1%	0.4%
Strafford County	130,633	32.4%	18.2%	15.4%	50.9%	90.2%	1.2%	2.8%	0.3%	3.7%	0.1%	0.6%
Sullivan County*	43,146	64.2%	18.6%	22.1%	50.5%	94.6%	0.8%	1.7%	0.4%	1.0%	<0.1%	0.3%

Data sources: Census Population Estimates, 2010 and 2019; American Community Survey, 2015-2019 5-year estimates.

Note: Rural counties are in bold font. * = NBRC distressed county; † = NBRC transitional county, ‡ = NBRC attainment county.

¹Race/ethnicity data may not sum to 100% due to missing data.

SECTION II. 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%
New Hampshire	65.4%	2.5%	15.4%	78,571	7.5%	8.1%	27.0%	19.1%	88.9%	70.8%
Belknap County†	63.2%	2.5%	18.2%	68,752	8.6%	11.0%	33.8%	25.6%	89.3%	66.1%
Carroll County†	62.4%	2.5%	13.1%	64,495	9.0%	13.4%	36.5%	29.3%	93.9%	66.2%
Cheshire County†	60.5%	2.6%	12.9%	65,326	9.7%	10.9%	35.6%	17.5%	87.2%	65.5%
Coos County*	59.8%	3.2%	24.3%	49,156	13.9%	18.1%	47.2%	14.6%	84.2%	53.1%
Grafton County‡	59.4%	2.2%	24.0%	62,468	9.2%	9.9%	28.8%	20.2%	93.0%	71.4%
Hillsborough County	67.6%	2.6%	14.7%	82,862	7.5%	7.9%	29.7%	19.3%	87.3%	71.3%
Merrimack County	65.8%	2.3%	20.2%	75,800	6.4%	7.1%	27.4%	18.7%	86.9%	70.5%
Rockingham County	67.5%	2.7%	11.2%	91,416	5.1%	4.8%	14.0%	16.0%	91.7%	75.8%
Strafford County	60.8%	2.3%	19.3%	71,486	8.8%	8.3%	30.4%	21.5%	86.7%	72.6%
Sullivan County*	70.8%	2.3%	9.5%	63,518	10.1%	12.7%	40.9%	19.5%	82.0%	56.4%

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

Note: Rural counties are in bold font. * = NBRC distressed county; † = NBRC transitional county, ‡ = NBRC attainment county.

SECTION III. Access to Healthcare

Geography	Access to care							Quality of care			County performance indicator
	Uninsured among ages 0-64	Uninsured among adults ages 18-64	Uninsured among children ages 0-18	Ratio of population to primary care physicians	Ratio of population to primary care providers other than physicians	Ratio of population to dentists	Ratio of population to mental health providers	Preventable hospital stays per 100,000 Medicare enrollees	Mammography screening among female Medicare enrollees ages 65-74	Flu vaccinations among fee-for-service Medicare enrollees	
	(%)	(%)	(%)	(N:1)	(N:1)	(N:1)	(N:1)	(N)	(%)	(%)	
United States	10.4%	12.4%	5.2%	1,319	942	1,405	383	4,236	42.0%	48.0%	
New Hampshire	7.1%	8.6%	2.3%	1,100	682	1,302	311	3,844	49.0%	52.0%	
Belknap County†	8.3%	10.0%	3.0%	1,606	1,057	1,460	179	3,226	49.0%	52.0%	✓
Carroll County†	9.7%	11.5%	3.3%	1,109	815	1,397	411	3,262	47.0%	49.0%	✓
Cheshire County†	7.6%	9.2%	2.4%	1,471	988	1,312	298	2,940	45.0%	51.0%	✓
Coos County*	8.8%	10.5%	2.9%	854	789	1,578	501	3,605	42.0%	41.0%	✓
Grafton County‡	7.6%	9.0%	2.8%	483	291	1,167	216	3,338	46.0%	42.0%	✓
Hillsborough County	7.3%	8.9%	2.5%	1,157	685	1,209	313	4,364	51.0%	55.0%	✓
Merrimack County	6.9%	8.4%	2.3%	916	594	1,294	235	3,714	54.0%	55.0%	✓
Rockingham County	5.6%	6.8%	1.8%	1,305	846	1,313	400	3,843	52.0%	54.0%	✓
Strafford County	7.2%	8.8%	2.1%	1,586	695	1,347	374	4,642	42.0%	53.0%	✓
Sullivan County*	7.5%	9.1%	2.5%	1,307	1,392	2,538	560	3,448	51.0%	42.0%	✓

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.

Note: Rural counties are in bold font. * = NBRC distressed county; † = NBRC transitional county; ‡ = NBRC attainment county. If a cell is highlighted in light blue, the county in that row is in the bottom 10% of all counties in NBRC states (ME, NH, NY, VT) for that measure.

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.

SECTION IV. Health Outcomes

Geography	Length of life			Quality of life			County performance indicator
	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%	
New Hampshire	79.7	304.9	32.0	10.4%	15.1%	9.6%	
Belknap County†	77.6	360.0	37.6	11.0%	14.1%	10.4%	✓
Carroll County†	79.6	310.8	55.4	11.1%	13.9%	11.4%	✓
Cheshire County†	79.0	321.2	49.5	11.2%	13.6%	9.6%	✓
Coos County*	77.3	390.0	NA	13.2%	15.7%	14.5%	⊘
Grafton County‡	80.7	293.1	27.4	10.7%	13.4%	7.7%	✓
Hillsborough County	79.6	309.3	33.3	10.1%	13.2%	9.7%	✓
Merrimack County	79.7	304.3	31.2	10.2%	13.1%	8.9%	✓
Rockingham County	80.9	263.4	22.1	10.2%	12.4%	8.9%	✓
Strafford County	78.0	350.3	38.4	11.1%	13.9%	10.7%	✓
Sullivan County*	79.8	317.8	NA	12.4%	14.7%	10.0%	✓

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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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.

SECTION V. Health Behaviors and Access

Geography	Tobacco use	Food access, physical activity, and obesity				Alcohol use		Sexual health		County performance indicator
	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	
New Hampshire	16.6%	28.6%	8.8	20.8%	88.2%	20.2%	31.5%	278.1	9.6	
Belknap County†	16.7%	28.0%	8.6	21.4%	87.2%	20.9%	33.3%	223.7	11.3	✓
Carroll County†	17.3%	28.2%	8.9	22.8%	80.6%	21.8%	25.0%	158.1	13.9	✓
Cheshire County†	17.1%	31.8%	8.7	20.5%	75.3%	21.9%	38.2%	231.7	10.3	✓
Coos County*	19.8%	36.7%	7.9	26.2%	73.5%	20.1%	41.7%	319.3	22.4	⚠
Grafton County‡	15.6%	24.7%	8.5	18.7%	89.6%	21.8%	26.5%	298.7	6.5	✓
Hillsborough County	16.0%	28.5%	8.6	21.7%	91.7%	19.1%	34.4%	332.9	12.1	✓
Merrimack County	17.2%	27.7%	8.7	19.7%	92.6%	21.2%	20.7%	231.9	9.0	✓
Rockingham County	14.2%	27.2%	8.9	18.2%	88.4%	22.7%	41.0%	228.2	5.4	✓
Strafford County	17.5%	31.6%	8.6	23.4%	89.3%	20.6%	22.6%	378.7	8.0	✓
Sullivan County*	17.9%	32.8%	8.5	25.8%	77.9%	19.5%	14.3%	190.4	17.3	✓

Data sources: Behavioral Risk Factor Surveillance System, 2018; United States Diabetes Surveillance System, 2017; United States Department of Agriculture Food Environment Atlas, 2015 and 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.

Note: Rural counties are in bold font. * = NBRC distressed county; † = NBRC transitional county; ‡ = NBRC attainment county. If a cell is highlighted in light blue, the county in that row is in the bottom 10% of all counties in NBRC states (ME, NH, NY, VT) for that measure.

¹The food environment index is a measure of food security and access to healthy food and ranges from 0 (worst) to 10 (best). ²Physical inactivity is a measure of the percentage of adults reporting no leisure-time physical activity in the past month. ³Access 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). ⁴Excessive drinking is a measure of the percentage of a county's adult population that reports binge or heavy drinking in the past 30 days.

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.

SECTION VI. Community Safety and Physical Environment

Geography	Community safety	Housing		Environmental quality	County performance indicator
	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	
New Hampshire	196.8	14.5%	71.1%	5.7	
Belknap County†	238.7	14.9%	75.5%	4.4	✓
Carroll County†	181.5	14.8%	79.3%	5.7	✓
Cheshire County†	187.3	15.8%	69.4%	5.9	✓
Coos County*	158.7	14.2%	70.7%	5.6	✓
Grafton County‡	166.8	13.8%	69.3%	5.1	✓
Hillsborough County	273.1	15.0%	66.0%	4.3	✓
Merrimack County	157.6	14.5%	71.8%	5.8	✓
Rockingham County	117.2	12.9%	77.7%	5.7	✓
Strafford County	235.8	16.4%	66.0%	6.0	✓
Sullivan County*	175.2	13.6%	73.3%	5.7	✓

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.

Note: Rural counties are in bold font. * = NBRC distressed county; † = NBRC transitional county; ‡ = NBRC attainment county. If a cell is highlighted in light blue, the county in that row is in the bottom 10% of all counties in NBRC states (ME, NH, NY, VT) for that measure.

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.

SECTION VII. Death Rates per 100,000 Population, Cause Specific

Geography	Length of life	Injury-related deaths	Injury-related death subcategories				County performance indicator
	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	
New Hampshire	6,373.8	88.5	17.9	10.6	32.7	8.6	
Belknap County†	7,980.2	107.4	18.8	13.5	42.1	11.5	⚠
Carroll County†	7,675.6	115.7	25.9	15.4	28.1	13.7	⚠
Cheshire County†	7,063.1	86.0	20.2	13.9	32.8	11.8	✓
Coos County*	7,594.5	120.9	22.6	17.7	24.3	16.2	⊘
Grafton County‡	5,624.3	80.7	16.0	12.3	19.7	10.1	✓
Hillsborough County	6,609.2	89.8	18.1	10.3	39.1	7.1	✓
Merrimack County	6,318.6	88.7	20.3	10.0	29.0	9.2	✓
Rockingham County	5,398.2	77.0	15.2	7.9	28.6	6.7	✓
Strafford County	7,096.0	94.2	16.0	8.9	40.1	8.5	✓
Sullivan County*	6,080.2	81.3	21.0	14.9	14.7	9.3	✓

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

Note: Rural counties are in bold font. * = NBRC distressed county; † = NBRC transitional county; ‡ = NBRC attainment county. If a cell is highlighted in light blue, the county in that row is in the bottom 10% of all counties in NBRC states (ME, NH, NY, VT) for that measure.

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.

SECTION VIII. Top Five Causes of Death

Geography	Top five causes of death (Age-adjusted rate of death per 100,000 population)					County performance indicator
	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	
New Hampshire	148.7	153.7	62.6	40.8	27.9	
Belknap County†	178.1	166.8	76.5	43.1	30.2	✓
Carroll County†	131.2	150.0	73.4	36.8	33.3	✓
Cheshire County†	152.7	149.8	57.1	44.9	27.9	✓
Coos County*	188.9	184.8	74.5	59.8	37.9	✗
Grafton County‡	137.8	146.0	49.5	36.6	26.8	✓
Hillsborough County	147.6	146.9	65.6	40.1	25.9	✓
Merrimack County	146.6	155.7	57.6	43.2	29.7	✓
Rockingham County	145.1	148.0	57.5	36.6	25.6	✓
Strafford County	154.3	179.4	75.2	48.0	31.8	✓
Sullivan County*	145.8	173.5	47.7	41.8	26.1	✓

Data source: National Center for Health Statistics – Mortality Files, 2015-2019.

Note: Rural counties are in bold font. * = NBRC distressed county; † = NBRC transitional county; ‡ = NBRC attainment county. If a cell is highlighted in light blue, the county in that row is in the bottom 10% of all counties in NBRC states (ME, NH, NY, VT) for that measure.

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.

SECTION IX. Internet Access

Geography	Household access to the internet			Household access to broadband	County performance indicator
	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%	
New Hampshire	88.2%	2.5%	9.3%	87.7%	
Belknap County†	87.1%	2.8%	10.1%	86.5%	✓
Carroll County†	87.2%	2.4%	10.4%	86.9%	✓
Cheshire County†	84.5%	2.7%	12.9%	83.8%	✓
Coos County*	78.8%	3.6%	17.6%	78.2%	✓
Grafton County‡	83.4%	4.8%	11.9%	82.7%	✓
Hillsborough County	90.0%	2.1%	7.9%	89.6%	✓
Merrimack County	87.0%	2.6%	10.4%	86.5%	✓
Rockingham County	91.5%	1.8%	6.6%	91.3%	✓
Strafford County	86.4%	3.1%	10.5%	86.1%	✓
Sullivan County*	82.1%	4.5%	13.4%	81.6%	✓

Data source: American Community Survey, 2015-2019 5-year estimates.

Note: Rural counties are in bold font. * = NBRC distressed county; † = NBRC transitional county; ‡ = NBRC attainment county. If a cell is highlighted in light blue, the county in that row is in the bottom 10% of all counties in NBRC states (ME, NH, NY, VT) for that measure. For this table, only two measures (“No internet access” and “Access with broadband of any type”) were used to assess the bottom 10% of all counties in NBRC states. The “Household access to the internet” measures sum to 100%.

¹Respondents reported accessing the internet without paying a cell phone company or internet service provider.

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.

SECTION X. Summary of Health Measures

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*	✓	✓	✓	✓	✓	✓	✓

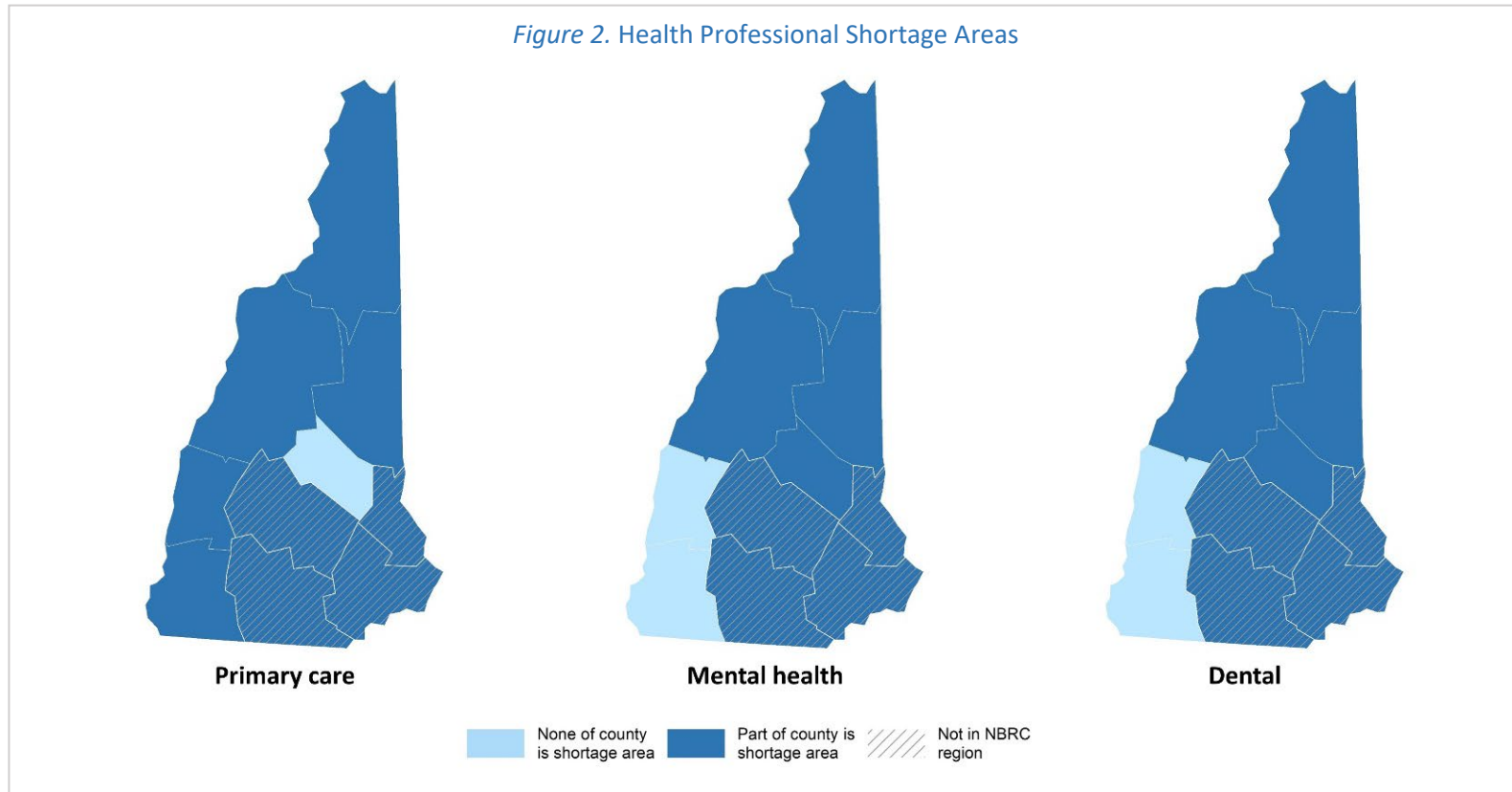
Note: Rural counties are in bold font; * = NBRC distressed county; † = NBRC transitional county; ‡ = NBRC attainment county.

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.

SECTION XI. Health Professional Shortage Areas

Health Professional Shortage Areas reflect areas and populations that experience a shortage of health professionals in three domains: primary care, mental health, and dental health. At the county level, Health Professional Shortage Areas indicate whether all, part (“partial”), or none of the county is a shortage area. The Health Resources & Services Administration designates these areas on an annual basis.

- Nine New Hampshire counties are designated *partial* primary care professional shortage areas and one county (Belknap County) has no primary care professional shortage areas (Figure 2, left).
- Eight counties in New Hampshire are designated *partial* mental health professional shortage areas, while in two counties (Cheshire and Sullivan) there are no designated mental health professional shortage areas (Figure 2, middle).
- Eight New Hampshire counties are designated *partial* dental health professional shortage areas and two counties (Cheshire and Sullivan) have no dental health professional shortage areas (Figure 2, right).



Data source: Health Resources & Services Administration, Area Health Resources Files, 2020-2021. Note: For a map of the state with county names, see Appendix I.

SECTION XII. Rural Health Clinics

Rural Health Clinics provide primary care services and preventative services in underserved rural communities. Centers for Medicare & Medicaid Services (CMS) certified Rural Health Clinics must be located in a rural underserved area, have a team of physician and non-physician clinicians, and provide outpatient primary care services and basic laboratory services. Rural Health Clinics receive enhanced reimbursement for Medicare and Medicaid services.

As of March 2021, New Hampshire had 14 Rural Health Clinic locations:

- 12 Rural Health Clinics are located in Northern Border Region counties
- 12 Rural Health Clinics are hospital based
- Clinician full-time equivalents (FTE):
 - 1 FTE is equal to a single person working 40 hours a week
 - Clinicians: physicians, physician assistants, and nurse practitioners
 - New Hampshire Rural Health Clinics range from 1.5 to 13.7 clinician FTEs

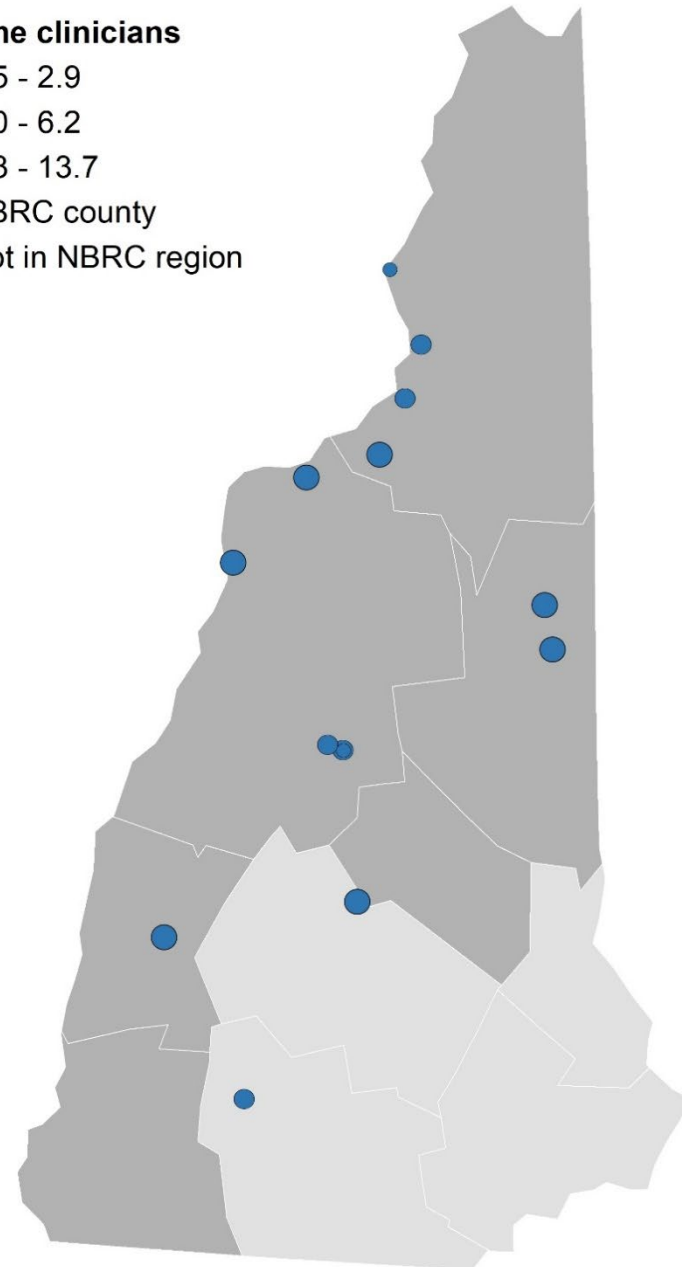
Data source: Centers for Medicare & Medicaid Services (CMS), Provider of Services file, March 2021.

Note: For a map of the state with county names, see Appendix I.

Figure 3. Rural Health Clinic locations and clinician staffing levels

Full-time clinicians

- 1.5 - 2.9
- 3.0 - 6.2
- 6.3 - 13.7
- NBRC county
- Not in NBRC region



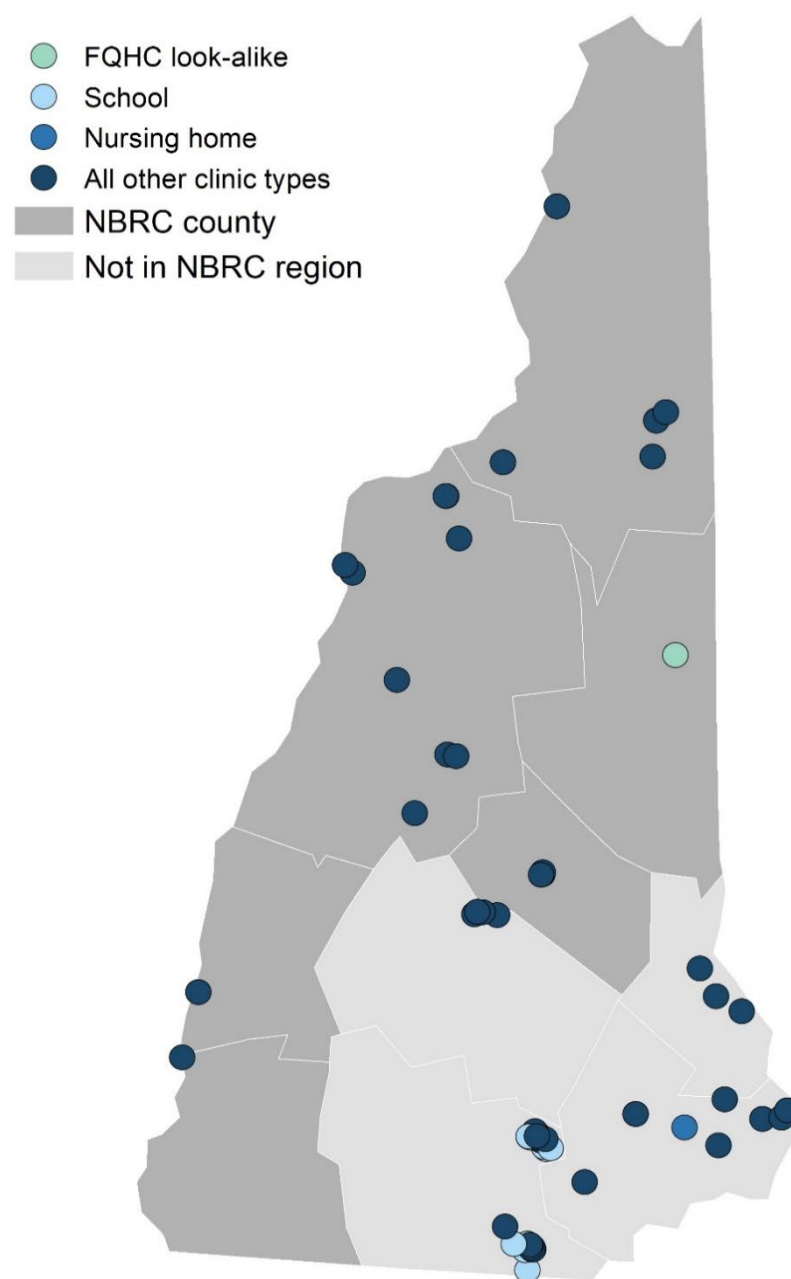
SECTION XIII. Federally Qualified Health Centers

Federally Qualified Health Centers (FQHCs) are community health centers that provide primary care to underserved populations. Health centers can receive federal grant funding through Section 330 of the Public Health Service Act. Health centers that are look-alikes meet the Health Resources & Services Administration's health center requirements, serve similar populations, but do not receive federal grant funding. The Centers for Medicare & Medicaid Services certify participants in the Health Center program as FQHCs for payment purposes.

As of June 2021, there were 21 FQHCs or look-alikes in New Hampshire's Northern Border counties, and 68 total in the state including:

- 1 FQHC look-alike in Carroll County
- 13 FQHC school clinics
- 1 FQHC nursing home clinic
- 53 other FQHC service delivery clinics

Figure 4. Federally Qualified Health Centers and look-alikes








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

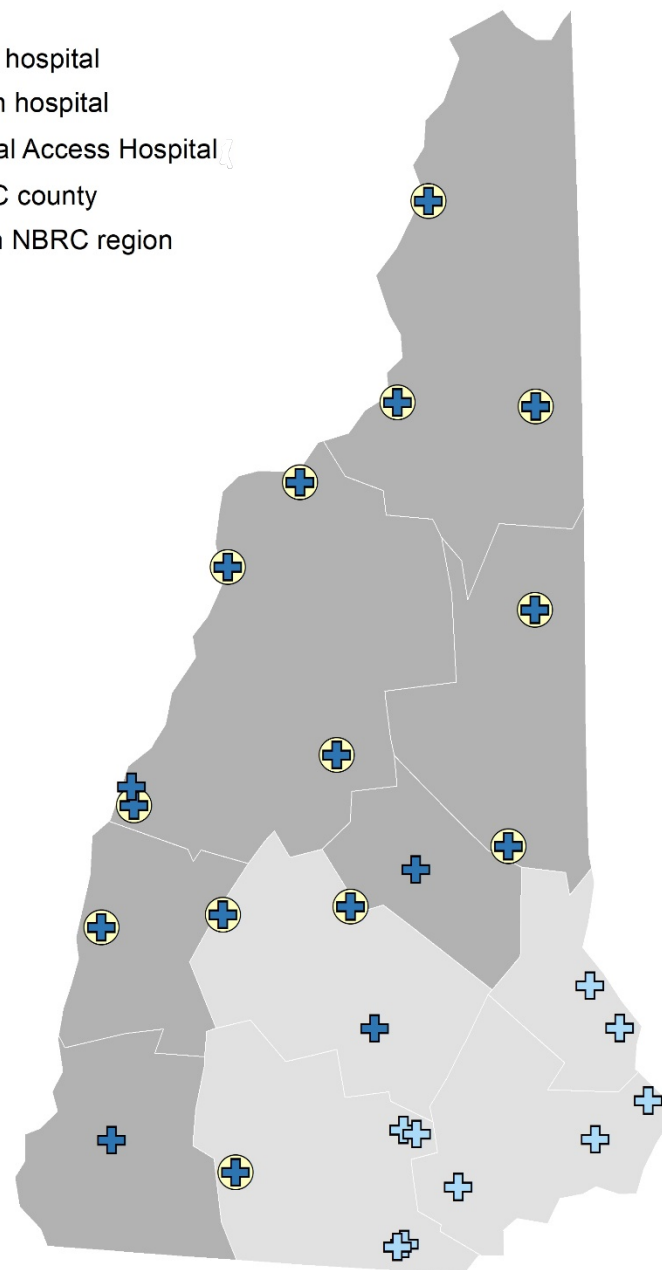
Note: For a map of the state with county names, see Appendix I.

SECTION XIV. Hospitals

There are 26 general acute hospitals in New Hampshire.¹ Nine are in urban areas and 17 are in rural areas.² Of the rural hospitals, 13 are Critical Access Hospitals, which is a designation given to eligible rural hospitals by the Centers for Medicare & Medicaid Services. 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.

Figure 5. Hospital locations

-  Rural hospital
-  Urban hospital
-  Critical Access Hospital
-  NBRC county
-  Not in NBRC region



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

Note: For a map of the state with county names, see Appendix I.

¹ Includes short-term and Critical Access Hospitals; specialty hospitals (e.g., children's, psychiatric, rehabilitation, transplant, Veterans Affairs) are not captured.

² As defined by the Federal Office of Rural Health Policy, 2020.

SECTION XV. Drug Poisoning Mortality

New Hampshire's 2018 drug poisoning mortality rate was 33.3 per 100,000, higher than the US rate of 20.6 per 100,000 and higher than any other state in the Northern Border region.³

County-level model-based estimates of drug poisoning mortality:⁴

- Lowest in Grafton County (17.4 per 100,000)
- Highest in Belknap County (35.3 per 100,000) and Hillsborough County (36.2 per 100,000)

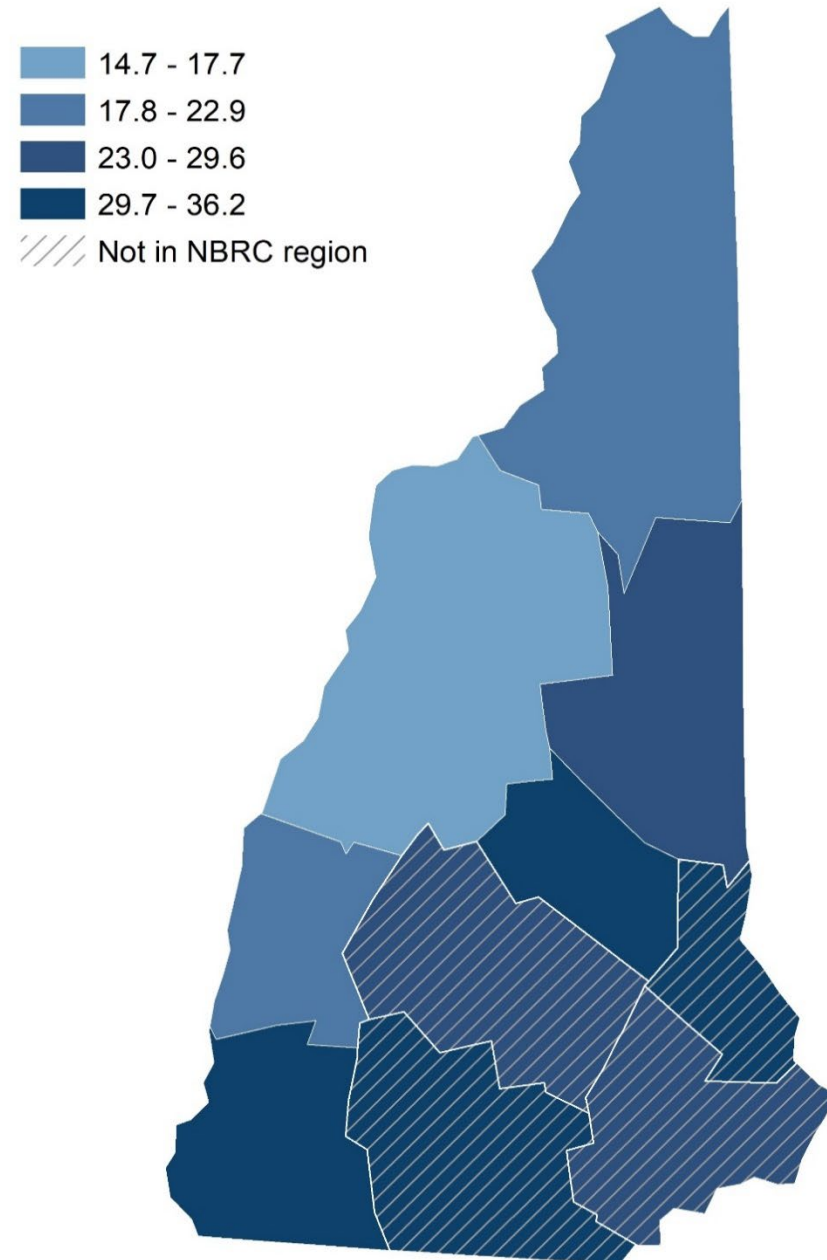
Data source: National Center for Health Statistics (NCHS), Drug Poisoning Mortality in the United States, 1999-2018. September 2020.

Note: For a map of the state with county names, see Appendix I.

³ Drug poisoning deaths are classified using the International Classification of Diseases, Tenth Revision (ICD-10). Drug-poisoning deaths with the following underlying causes of death are included in the rate: unintentional, suicide, homicide, or undetermined intent. Drug-poisoning deaths include overdose deaths from all types of medications and drugs.

⁴ Model-based death rates are smoothed, county-level crude death rates. These estimates borrow strength across counties to provide stable estimates where data are sparse due to small population sizes. For more information, see the NCHS documentation: <https://www.cdc.gov/nchs/data-visualization/drug-poisoning-mortality/>.

Figure 6. Model-based drug poisoning mortality per 100,000 population, 2018



SECTION XVI. Substance Use Treatment

As of August 2021, there were 81 substance use treatment facilities in New Hampshire and 397 licensed buprenorphine practitioners. Counties in the NBRC region had 33 treatment facilities and 143 buprenorphine practitioners. Of counties in the region, Sullivan County had the fewest substance use treatment facilities (n=2) and buprenorphine practitioners (n=13). Grafton County had the most treatment facilities (n=12) and buprenorphine practitioners (n=58) among New Hampshire's Northern Border counties.

Figure 7. Substance use treatment facilities

- ▲ Substance use treatment facility
- NBRC county
- Not in NBRC region

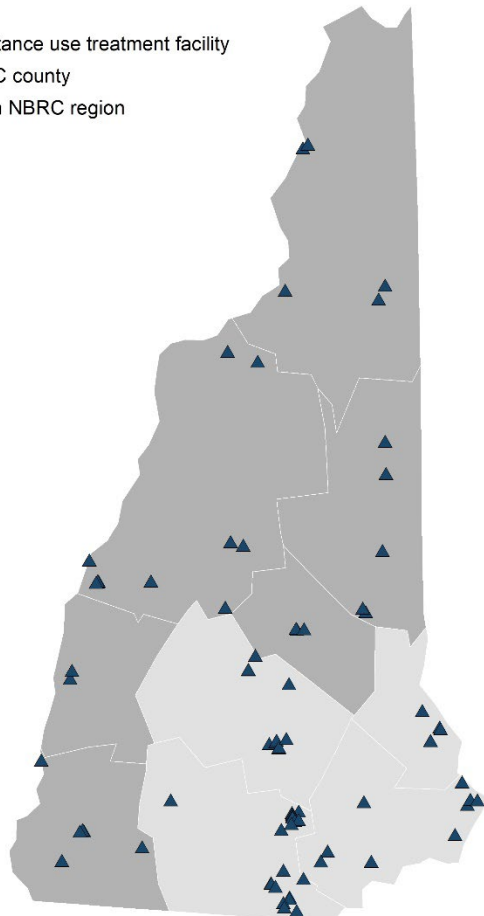
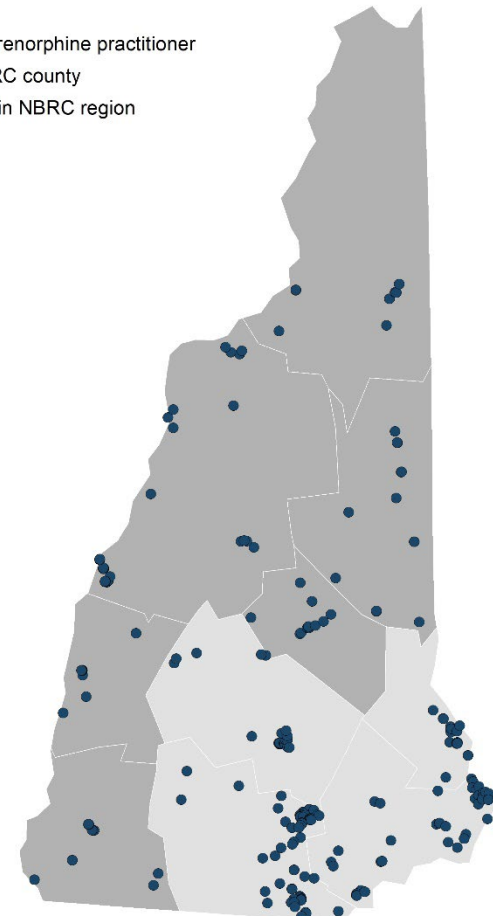


Figure 8. Buprenorphine practitioners per county

- Buprenorphine practitioner
- NBRC county
- Not in NBRC region



Data source: Substance Abuse and Mental Health Services Administration, Behavioral Health Treatment Services Locator, 2021.

Note: For a map of the state with county names, see Appendix I.

METHODS NOTE

This chartbook compiled the most recent publicly available data at the county-level and state-level for New Hampshire.

We used 2021 published county- and state-level health-related measures, aggregated by the County Health Rankings (Robert Wood Johnson Foundation), along with the additional data sources (see Appendix II. Data Sources for specific data sources). All data sources are publicly available and free of charge.

Rural status of hospitals was based on the definition used by the Federal Office of Rural Health Policy (FORHP). FORHP defines an area as rural if it is not part of a Metropolitan Statistical Area. FORHP considers census tracts (which can be inside Metropolitan counties) with a Rural-Urban Commuting Area code of 4 or greater as rural as well as tracts with RUCA codes 2 or 3 that are at least 400 square miles in area with a population density of no more than 35 people per square mile.⁵

We used the 2013 Rural-Urban Continuum Codes to label counties as metropolitan “urban” (codes 1-3) or nonmetropolitan “rural” (codes 4-9) in this chartbook’s data tables.⁶

To label 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 used the March 2021 report, “NBRC Annual Economic & Demographic Research for Fiscal Year 2021: To Determine Categories of Distress within the Northern Boarder Regional Commission Service Areas.”

We identified counties that ranked near the bottom (worst performing) for each health-related measure examined using all 102 counties in Maine, New Hampshire, New York, and Vermont for comparison. We assigned the following county performance indicators based on the number of times each county fell into the bottom 10th percentile ranking for each health-related topic:

✅ = 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

We used ArcGIS to map locations of facilities within each state. NBRC state and county shapefiles were sourced from the US Census Bureau.⁷

⁵ Health Resources & Services Administration (2021, January). "Defining Rural Population." Retrieved July 9, 2021, from <https://www.hrsa.gov/rural-health/about-us/definition/index.html>.

⁶ USDA United States Department of Agriculture Economic Research Service (2003). Rural Urban Continuum Codes (RUCC. Retrieved September 16, 2021, from <https://www.ers.usda.gov/data-products/rural-urban-continuum-codes/>.

⁷ US Census Bureau (2018). Cartographic Boundary Files – Shapefile. Retrieved June 7, 2021, from <https://www.census.gov/geographies/mapping-files/time-series/geo/carto-boundary-file.html>.

APPENDIX I. New Hampshire County Map



APPENDIX II. Data Sources

American Community Survey, US Census Bureau

- Adults with some college completion: Percentage of adults ages 25-44 with some post-secondary education, 2015-2019 5-year estimates
- Children in single-parent households: Percentage of children that live in a household headed by single parent, 2015-2019 5-year estimates
- Employed full time: Population 16 to 64 years old who worked full-time, year-round, 2015-2019 5-year estimates
- Homeownership: Percentage of occupied housing units that are owned, 2015-2019 5-year estimates
- Households with an internet subscription: Percentage of households with an internet subscription, 2015-2019 5-year estimates
- Households with broadband of any type: Percentage of households with broadband of any type, 2015-2019 5-year estimates
- Internet access without a subscription: Percentage of households with internet access without a subscription, 2015-2019 5-year estimates
- No internet access: Percentage of households with no internet access, 2015-2019 5-year estimates
- % Not proficient in English: 2015-2019 5-year estimates

Area Health Resource File, American Medical Association

- Ratio of population to primary care physicians: Ratio of population to primary care physicians, 2018

Area Health Resources Files, County Level Data

- Health Professional Shortage Areas, 2020-2021

Area Health Resource File, National Provider Identification file

- Ratio of population to dentists: Ratio of population to dentists, 2019

Behavioral Risk Factor Surveillance System

- Adult smoking: Percentage of adults who are current smokers, 2018
- Excessive drinking: Percentage of adults reporting binge or heavy drinking, 2018
- Frequent mental distress: Percentage of adults reporting 14 or more days of poor mental health per month, 2018
- Frequent physical distress: Percentage of adults reporting 14 or more days of poor physical health per month, 2018

Bureau of Labor Statistics

- Unemployed: Percentage of population ages 16 and older unemployed but seeking work, 2019

Business Analyst, Delorme map data, ESRI, & US Census Tigerline Files

- Access to exercise opportunities: Percentage of population with adequate access to locations for physical activity, 2010 and 2019

Business Dynamics Statistics, Center for Economic Studies, US Census Bureau

- Employment in health care and social assistance: Percentage of workforce employed in the healthcare and social assistance sector, 2018

Census Population Estimates

- Age: Percentage of population age 65 and older, 2019
- Age: Percentage of population below 18 years of age, 2019
- Living in a rural area: Percentage of population living in a rural area, 2010
- Population: Total population, 2019
- Race/ethnicity: Percentage of population that is American Indian and Alaska Native, 2019
- Race/ethnicity: Percentage of population that is Asian, 2019
- Race/ethnicity: Percentage of population that is Hispanic, 2019
- Race/ethnicity: Percentage of population that is Native Hawaiian/Other Pacific Islander, 2019
- Race/ethnicity: Percentage of population that is non-Hispanic Black, 2019
- Race/ethnicity: Percentage of population that is non-Hispanic white, 2019
- Sex: Percentage of population that is female, 2019

Centers for Medicare & Medicaid Services, National Provider Identification

- Ratio of population to mental health providers: Ratio of population to mental health providers, 2020
- Ratio of population to primary care providers other than physicians: Ratio of population to primary care providers other than physicians, 2020

Centers for Medicare & Medicaid Services (CMS), Provider of Services file

- Rural Health Clinic clinician staffing, March 2021
- Rural Health Clinic locations, March 2021
- Rural Health Clinic physician staffing, March 2021

Comprehensive Housing Affordability Strategy (CHAS) data

- Severe Housing problems: Percentage of households with at least 1 of 4 housing problems: overcrowding, high housing costs, lack of kitchen facilities, or lack of plumbing facilities, 2013-2017

ED Facts

- High school graduation rate: Percentage of ninth-grade cohort that graduates in four years, 2017-2018

Environmental Public Health Tracking Network

- Air pollution-particulate: Average daily density of fine particulate matter in micrograms per cubic meter (PM2.5), 2016

Fatality Analysis Reporting System

- Alcohol-impaired driving deaths: Percentage of driving deaths with alcohol involvement, 2015-2019

Health Resources & Services Administration

- Federally Qualified Health Center locations and designations, June 2021
- Hospital locations, June 2021

Mapping Medicare Disparities Tool

- Flu vaccinations among fee-for-service Medicare enrollees: Percentage of fee-for-service Medicare enrollees that had an annual flu vaccination, 2018
- Mammography screening among female Medicare enrollee ages 65-74: Percentage of female Medicare enrollees ages 65-74 that received an annual mammography screening, 2018
- Preventable hospital stays per 100,000 Medicare enrollees: Rate of hospital stays for ambulatory-care sensitive conditions per 100,000 Medicare enrollees, 2018

National Center for Education Statistics

- Children eligible for free or reduced-price lunch: Percentage of children enrolled in public schools that are eligible for free or reduced-price lunch, 2018-2019

National Center for Health Statistics – Drug Poisoning Mortality in the United States, 1999-2018

- Age-adjusted drug poisoning mortality per 100,000 population, 2018
- County-level model-based drug poisoning mortality per 100,000 population, 2018

National Center for Health Statistics – Mortality Files

- Accidents (unintentional injury): Age-adjusted rate of death per 100,000 population, 2015-2019
- Cancer: Age-adjusted rate of death per 100,000 population, 2015-2019
- Child mortality: Number of deaths among children under age 18 per 100,000 population, 2016-2019
- Chronic lower respiratory diseases: Age-adjusted rate of death per 100,000 population, 2015-2019
- Drug overdose deaths: Number of drug poisoning deaths per 100,000 population, 2017-2019
- Firearm deaths: Number of deaths due to firearms per 100,000 population, 2015-2019
- Heart disease: Age-adjusted rate of death per 100,000 population, 2015-2019
- Injury deaths: Number of deaths due to injury per 100,000 population, 2015-2019
- Life expectancy: Average number of years a person can expect to live, 2017-2019
- Motor vehicle crash deaths: Number of motor vehicle crash deaths per 100,000 population, 2013-2019
- Premature death: Years of potential life lost before age 75 per 100,000 population (age-adjusted), 2017-2019
- Stroke (cerebrovascular diseases): Age-adjusted rate of death per 100,000 population, 2015-2019
- Suicide deaths: Number of deaths due to suicide per 100,000 population, 2015-2019

National Center for Health Statistics - Natality files

- Teen births: Number of births per 1,000 female population ages 15-19, 2013-2019

National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention

- Sexually transmitted infections: Number of newly diagnosed chlamydia cases per 100,000 population, 2018

Substance Abuse and Mental Health Services Administration, Behavioral Health Treatment Services Locator

- Substance use treatment facilities, 2021
- Buprenorphine practitioners per county, 2021

Small Area Income and Poverty Estimates

- Children in poverty: Percentage of people under age 18 in poverty, 2019
- Median household income: The income where half of households in a county earn more and half of households earn less, 2019

Small Area Health Insurance Estimates

- Uninsured, ages 0-64: Percentage of population under age 65 without health insurance, 2018
- Uninsured adults, age <65: Percentage of adults under age 65 without health insurance, 2018
- Uninsured children: Percentage of children under age 19 without health insurance, 2018

Uniform Crime Reporting – Federal Bureau of Investigation

- Violent crime: Number of reported violent crime offenses per 100,000 population, 2014 and 2016

United States Department of Agriculture Food Environment Atlas and Map the Meal Gap from Feeding America

- Food environment index: Index of factors that contribute to a healthy food environment, from 0 (worst) to 10 (best), 2015 and 2018

United States Diabetes Surveillance System

- Adult obesity: Percentage of the population aged 20 and older that reports a body mass index (BMI) of greater than or equal to 30kg/m², 2017
- Diabetes prevalence: Percentage of adults aged 20 and above with diagnosed diabetes, 2017
- Physical inactivity: Percentage of adults aged 20 and older reporting no leisure-time physical activity, 2017

APPENDIX III. Additional Resources

- [Charting a Course to Improve the Health of New Hampshire](#), New Hampshire State Health Improvement Plan, 2013-2020 – The New Hampshire State Health Improvement Plan is a product of the New Hampshire Department of Health and Human Services, Division of Public Health Services and outlines priority areas, objectives, and goals to improve population health in the state.
- [New Hampshire State Health Profile](#), 2011 – This report presents state and regional data on a variety of health indicators, including health outcomes and the social determinants of health and is intended to guide public health decision making at the state and local levels.
- [New Hampshire Statewide Primary Care Needs Assessment to Analyze Unmet Need, Disparities, and Health Workforce Issues](#), 2016 – This needs assessment was conducted by the New Hampshire Department of Health and Human Services, Division of Public Health Services in accordance with the Primary Care Services Resource Coordination and Development Program. The assessment identifies geographic areas and populations that lack access to or experience a shortage of health care services, including preventive and primary care, dental care, and mental health services.
- [Snapshot of New Hampshire's Public Health Regions, Counties, and the Cities of Manchester and Nashua](#), 2011 – This report is a companion to the 2011 New Hampshire State Health Profile, and presents more detailed regional health profiles. Selected indicators measuring health outcomes and social determinants of health are presented by public health region, county, and major city.



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