

National Study of Treatment and Addiction Recovery Residences Report Nebraska

The National Study of Treatment and Addiction Recovery Residences (NSTARR) constitutes the largest and most diverse study of recovery housing in the US to date. NSTARR compiled data from publicly available sources (e.g., Oxford House, National Alliance for Recovery Residences, and Substance Abuse and Mental Health Services Administration websites) and lists maintained by entities tracking recovery housing. Residences for which locating information was available were geocoded and linked with U.S. Census data on urbanicity, alcohol- and drug-involved mortality, and COVID vulnerability. Data collection began in January 2020 and is ongoing until June 2023. The NSTARR database currently contains information on 10,358 residences operated by 3,628 providers in all 50 states. For a detailed description of methods and national findings, please see Mericle et al., 2022.

KEY FINDINGS

The NSTARR team identified 77 recovery residences (4.02 houses per 100,000 population) in Nebraska (see Table 1). Compared to other states (which include DC), Nebraska ranked 18 in terms of recovery housing availability per capita. Ninety-two percent of residences in Nebraska could be geocoded for these analyses. Thurston County, an adjacent rural county, had the most recovery residences per 100,000 population, and 84 counties had no identified recovery residences, representing a mix of rural-urban classifications; 90 had fewer than 5 recovery residences (see Figure 1).

We used geographic information systems to identify hot and cold spots in Nebraska. A hot spot is a cluster of high values (county with a high number of residences surrounded by other counties with high numbers of residences) and a cold spot is a cluster of low values (county with low counts surrounded by counties also with low counts). Our analyses found hot spots but no cold spots within the state (see Figure 2).

The age-adjusted alcohol- and drug-involved mortality rate (per 100,000 population) was 17.00 in Nebraska for the years 2009-2019. Nebraska ranked 31 on alcohol- and drug-involved mortality out of the 50 states and DC. Among the counties ranked, Thurston County had the highest alcohol- and drug-involved mortality rate and Adams County had the lowest alcohol- and drug-involved mortality rate. Of the four counties that had the highest mortality rates in Nebraska (i.e., Thurston, Dawes, Scotts Bluff, and Sheridan), three of them also ranked in the bottom half recovery housing availability per capita, suggesting more recovery resources may be needed (see Table 1 and Figure 3).

COVID vulnerability was summarized using the county-level data from the Centers for Disease Control and Prevention's COVID Vulnerability Index (CCVI). The CCVI is a composite measure of seven social determinants of health, encompassing modified themes from the Centers for Disease Control and Prevention's Social Vulnerability Index in combination with COVID risk factors to identify communities in need of additional support during the COVID pandemic. No counties were classified as having very high vulnerability (see Table 1 and Figure 4).

77
RESIDENCES
TOTAL

18
NATIONAL
AVAILABILITY
RANKING

84
COUNTIES
WITHOUT
RESIDENCES

Table 1. County-level Descriptive Statistics on Recovery Residences

County Name	Population ¹	RUCC Classification ²	Number of Recovery Residences ³	Recovery Residences Per 100,000 Population	Recovery Residences Availability per Capita (Rank) ⁴	Age-Adjusted Alcohol/Drug Mortality ⁵ Rate per 100,000 Population	Mortality Rate (Rank) ⁶	CCVI Quintile ⁷
NEBRASKA	1,914,571		77	4.02	18	17.00	31	
Adams	31,587	Adjacent rural	0	0.00	93	17.30	36	Low
Antelope	6,341	Non-adjacent rural	0	0.00	93	Suppressed	-	Very low vulnerability
Arthur	427	Non-adjacent rural	0	0.00	93	Suppressed	-	Very low vulnerability
Banner	722	Non-adjacent rural	0	0.00	93	Suppressed	-	Very low vulnerability
Blaine	477	Non-adjacent rural	0	0.00	93	Suppressed	-	Very low vulnerability
Boone	5,279	Non-adjacent rural	0	0.00	93	Suppressed	-	Very low vulnerability
Box Butte	10,970	Non-adjacent rural	1	9.12	3	33.80	7	Very low vulnerability
Boyd	1,937	Non-adjacent rural	0	0.00	93	Suppressed	-	Very low vulnerability
Brown	3,015	Non-adjacent rural	0	0.00	93	Suppressed	-	Very low vulnerability
Buffalo	49,209	Adjacent rural	1	2.03	9	19.20	30	Low
Burt	6,510	Adjacent rural	0	0.00	93	30.30	10	Very low vulnerability
Butler	8,029	Adjacent rural	0	0.00	93	24.90	19	Very low vulnerability
Cass	25,888	Urban	0	0.00	93	24.10	21	Very low vulnerability
Cedar	8,498	Non-adjacent rural	0	0.00	93	21.30	24	Very low vulnerability
Chase	3,783	Non-adjacent rural	0	0.00	93	Suppressed	-	Very low vulnerability
Cherry	5,779	Non-adjacent rural	0	0.00	93	37.00	5	Very low vulnerability
Cheyenne	9,604	Non-adjacent rural	0	0.00	93	30.10	12	Very low vulnerability
Clay	6,203	Adjacent rural	0	0.00	93	Suppressed	-	Very low vulnerability
Colfax	10,714	Non-adjacent rural	0	0.00	93	Suppressed	-	Very low vulnerability
Cuming	8,952	Non-adjacent rural	0	0.00	93	Suppressed	-	Very low vulnerability
Custer	10,826	Non-adjacent rural	0	0.00	93	Suppressed	-	Very low vulnerability
Dakota	20,173	Urban	0	0.00	93	18.40	33	High
Dawes	8,810	Non-adjacent rural	0	0.00	93	42.80	2	Very low vulnerability
Dawson	23,733	Non-adjacent rural	0	0.00	93	22.50	23	Moderate
Deuel	1,831	Non-adjacent rural	0	0.00	93	Suppressed	-	Very low vulnerability
Dixon	5,719	Urban	0	0.00	93	Suppressed	-	Very low vulnerability
Dodge	36,665	Adjacent rural	2	5.45	7	25.50	17	Moderate
Douglas	560,617	Urban	42	7.49	6	30.20	11	Moderate
Dundy	1,913	Non-adjacent rural	0	0.00	93	Suppressed	-	Very low vulnerability
Fillmore	5,547	Adjacent rural	0	0.00	93	Suppressed	-	Very low vulnerability

Franklin	2,987	Non-adjacent rural	0	0.00	93	Suppressed	-	Very low vulnerability
Frontier	2,640	Non-adjacent rural	0	0.00	93	Suppressed	-	Very low vulnerability
Furnas	4,747	Non-adjacent rural	0	0.00	93	Suppressed	-	Very low vulnerability
Gage	21,594	Adjacent rural	0	0.00	93	28.70	13	Very low vulnerability
Garden	1,864	Non-adjacent rural	0	0.00	93	Suppressed	-	Very low vulnerability
Garfield	2,001	Non-adjacent rural	0	0.00	93	Suppressed	-	Very low vulnerability
Gosper	2,013	Non-adjacent rural	0	0.00	93	Suppressed	-	Very low vulnerability
Grant	722	Non-adjacent rural	0	0.00	93	Suppressed	-	Very low vulnerability
Greeley	2,382	Adjacent rural	0	0.00	93	Suppressed	-	Very low vulnerability
Hall	61,265	Urban	5	8.16	5	23.90	22	High
Hamilton	9,215	Urban	0	0.00	93	Suppressed	-	Very low vulnerability
Harlan	3,415	Non-adjacent rural	0	0.00	93	Suppressed	-	Very low vulnerability
Hayes	893	Non-adjacent rural	0	0.00	93	Suppressed	-	Very low vulnerability
Hitchcock	2,815	Non-adjacent rural	0	0.00	93	Suppressed	-	Very low vulnerability
Holt	10,177	Non-adjacent rural	0	0.00	93	Suppressed	-	Very low vulnerability
Hooker	693	Non-adjacent rural	0	0.00	93	Suppressed	-	Very low vulnerability
Howard	6,417	Urban	0	0.00	93	Suppressed	-	Very low vulnerability
Jefferson	7,144	Non-adjacent rural	0	0.00	93	32.80	8	Very low vulnerability
Johnson	5,161	Adjacent rural	0	0.00	93	Suppressed	-	Very low vulnerability
Kearney	6,529	Non-adjacent rural	0	0.00	93	Suppressed	-	Very low vulnerability
Keith	8,068	Non-adjacent rural	0	0.00	93	25.10	18	Very low vulnerability
Keya Paha	760	Non-adjacent rural	0	0.00	93	Suppressed	-	Very low vulnerability
Kimball	3,633	Adjacent rural	0	0.00	93	Suppressed	-	Low
Knox	8,426	Non-adjacent rural	0	0.00	93	21.10	25	Very low vulnerability
Lancaster	313,158	Urban	11	3.51	8	28.20	14	Low
Lincoln	35,263	Non-adjacent rural	3	8.51	4	27.60	15	Very low vulnerability
Logan	927	Non-adjacent rural	0	0.00	93	Suppressed	-	Very low vulnerability
Loup	605	Non-adjacent rural	0	0.00	93	Suppressed	-	Very low vulnerability
Madison	35,080	Non-adjacent rural	4	11.40	2	21.00	26	Moderate
McPherson	395	Non-adjacent rural	0	0.00	93	Suppressed	-	Very low vulnerability
Merrick	7,798	Urban	0	0.00	93	Suppressed	-	Very low vulnerability
Morrill	4,781	Non-adjacent rural	0	0.00	93	Suppressed	-	Low
Nance	3,544	Adjacent rural	0	0.00	93	Suppressed	-	Very low vulnerability

Nemaha	6,973	Non-adjacent rural	0	0.00	93	34.90	6	Very low vulnerability
Nuckolls	4,244	Non-adjacent rural	0	0.00	93	Suppressed	-	Very low vulnerability
Otoe	15,949	Adjacent rural	0	0.00	93	25.80	16	Very low vulnerability
Pawnee	2,649	Non-adjacent rural	0	0.00	93	Suppressed	-	Very low vulnerability
Perkins	2,901	Non-adjacent rural	0	0.00	93	Suppressed	-	Very low vulnerability
Phelps	9,100	Non-adjacent rural	0	0.00	93	20.20	28	Very low vulnerability
Pierce	7,144	Non-adjacent rural	0	0.00	93	Suppressed	-	Very low vulnerability
Platte	33,174	Non-adjacent rural	0	0.00	93	18.80	31	Low
Polk	5,225	Non-adjacent rural	0	0.00	93	Suppressed	-	Very low vulnerability
Red Willow	10,768	Non-adjacent rural	0	0.00	93	32.30	9	Very low vulnerability
Richardson	7,961	Non-adjacent rural	0	0.00	93	Suppressed	-	Very low vulnerability
Rock	1,414	Non-adjacent rural	0	0.00	93	Suppressed	-	Very low vulnerability
Saline	14,270	Adjacent rural	0	0.00	93	19.30	29	Moderate
Sarpy	181,232	Urban	0	0.00	93	18.80	31	Very low vulnerability
Saunders	21,165	Urban	0	0.00	93	17.50	35	Very low vulnerability
Scotts Bluff	36,074	Non-adjacent rural	0	0.00	93	39.30	3	Moderate
Seward	17,171	Urban	0	0.00	93	17.60	34	Very low vulnerability
Sheridan	5,231	Non-adjacent rural	0	0.00	93	39.30	3	Moderate
Sherman	3,033	Adjacent rural	0	0.00	93	Suppressed	-	Very low vulnerability
Sioux	1,219	Non-adjacent rural	0	0.00	93	Suppressed	-	Very low vulnerability
Stanton	5,957	Non-adjacent rural	0	0.00	93	Suppressed	-	Very low vulnerability
Thayer	5,057	Non-adjacent rural	0	0.00	93	Suppressed	-	Very low vulnerability
Thomas	645	Non-adjacent rural	0	0.00	93	Suppressed	-	Very low vulnerability
Thurston	7,181	Adjacent rural	2	27.85	1	95.50	1	Moderate
Valley	4,206	Non-adjacent rural	0	0.00	93	Suppressed	-	Very low vulnerability
Washington	20,361	Urban	0	0.00	93	20.30	27	Very low vulnerability
Wayne	9,332	Adjacent rural	0	0.00	93	Suppressed	-	Very low vulnerability
Webster	3,537	Non-adjacent rural	0	0.00	93	Suppressed	-	Very low vulnerability
Wheeler	783	Non-adjacent rural	0	0.00	93	Suppressed	-	Very low vulnerability
York	13,745	Adjacent rural	0	0.00	93	24.30	20	Very low vulnerability

¹Population data were downloaded from tables in Social Explorer's ACS five-year estimate (2015-2019). American Community Survey 5-year Estimates, 2015-2019. Social Explorer tables, ACS 2015-2019. Social Explorer.

²The Rural-Urban Continuum Code (RUCC) was used to classify each county as urban, adjacent rural, or non-adjacent rural. Urban counties are counties with codes 1 (Counties in metro areas of 1 million population or more), 2 (Counties in metro areas of 250,000 to 1 million population), and 3 (Counties in metro areas of fewer than 250,000 population). Adjacent rural counties are counties with codes 4 (Urban population of 20,000 or more, adjacent to a metro area), 6 (Urban population of 2,500 to 19,999, adjacent to a metro area), and 8 (Completely rural or less than 2,500 urban population, adjacent to a metro area). Non-adjacent rural counties are the remaining three codes - 5 (Urban population of 20,000 or more, not adjacent to a metro area), 7 (Urban population of 2,500 to 19,999, not adjacent to a metro area), and 9 (Completely rural or less than 2,500 urban population, not adjacent to a metro area). Rural-Urban Continuum Code (RUCC). <https://www.ers.usda.gov/data-products/rural-urban-continuum-codes.aspx>

³Recovery residences are from the NSTARR project and are current as of 2020. Six (6) recovery residences in the state were not successfully geocoded due to lack of adequate address information, and thus were not assigned to a county.

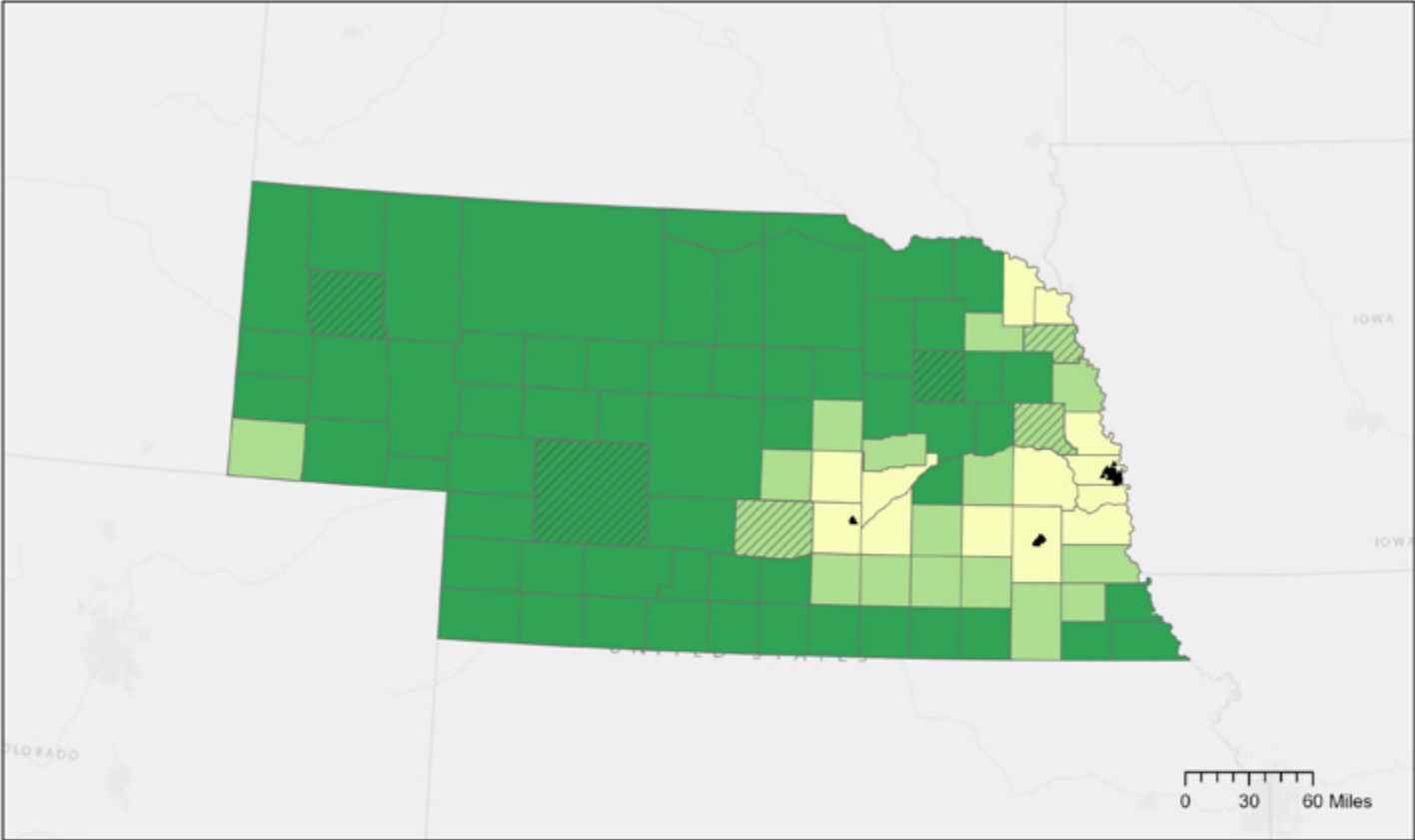
⁴Recovery residences availability per capita is ranked in order of decreasing recovery residence density per 100,000 population per county, with 1 (highest number of residences per 100,000) to 93 (lowest number of residences per 100,000 population). Counties without recovery residences were all assigned a tied rank of 93.

⁵Alcohol- and drug-involved mortality included all deaths as underlying causes of death and selected ICD-10 codes mentioning or attributed to alcohol or drugs as contributing cause of death. Data from the Centers for Disease Control and Prevention, 2020. CDC Wonder (Wide-ranging Online Data for Epidemiologic Research). U.S. Department of Health and Human Services, Atlanta, GA. Available at: <https://wonder.cdc.gov/>. For more information on coding multiple causes of death, see: Centers for Disease Control and Prevention, About Multiple Cause of Death, 1999-2019. <https://wonder.cdc.gov/mcd-icd10.html> accessed on August 9 2021.

⁶Mortality rate is ranked in order of decreasing alcohol- and drug-involved mortality from 1 (highest mortality per 100,000 population) to 36 (lowest mortality per 100,000 population).

⁷COVID-19 Community Vulnerability Index (CCVI) scores range in value from 0 – 1, with 0 being least vulnerable and 1 being the most vulnerable. Each county is ranked relative to all counties across the country, based on seven themes/domains. Each county was grouped into quintiles: very high (score of 0.8-1), high (0.6-0.8), moderate (0.4-0.6), low (0.2-0.4), and very low (0-0.2). For more information on how the CCVI is calculated, see: COVID-19 Community Vulnerability Index (CCVI) methodology. Retrieved from [https://covid-static-assets.s3.amazonaws.com/US-CCVI/COVID-19+Community+Vulnerability+Index+\(CCVI\)+Methodology.pdf](https://covid-static-assets.s3.amazonaws.com/US-CCVI/COVID-19+Community+Vulnerability+Index+(CCVI)+Methodology.pdf)

Figure 1. Distribution of Residences by Rural-Urban Classification



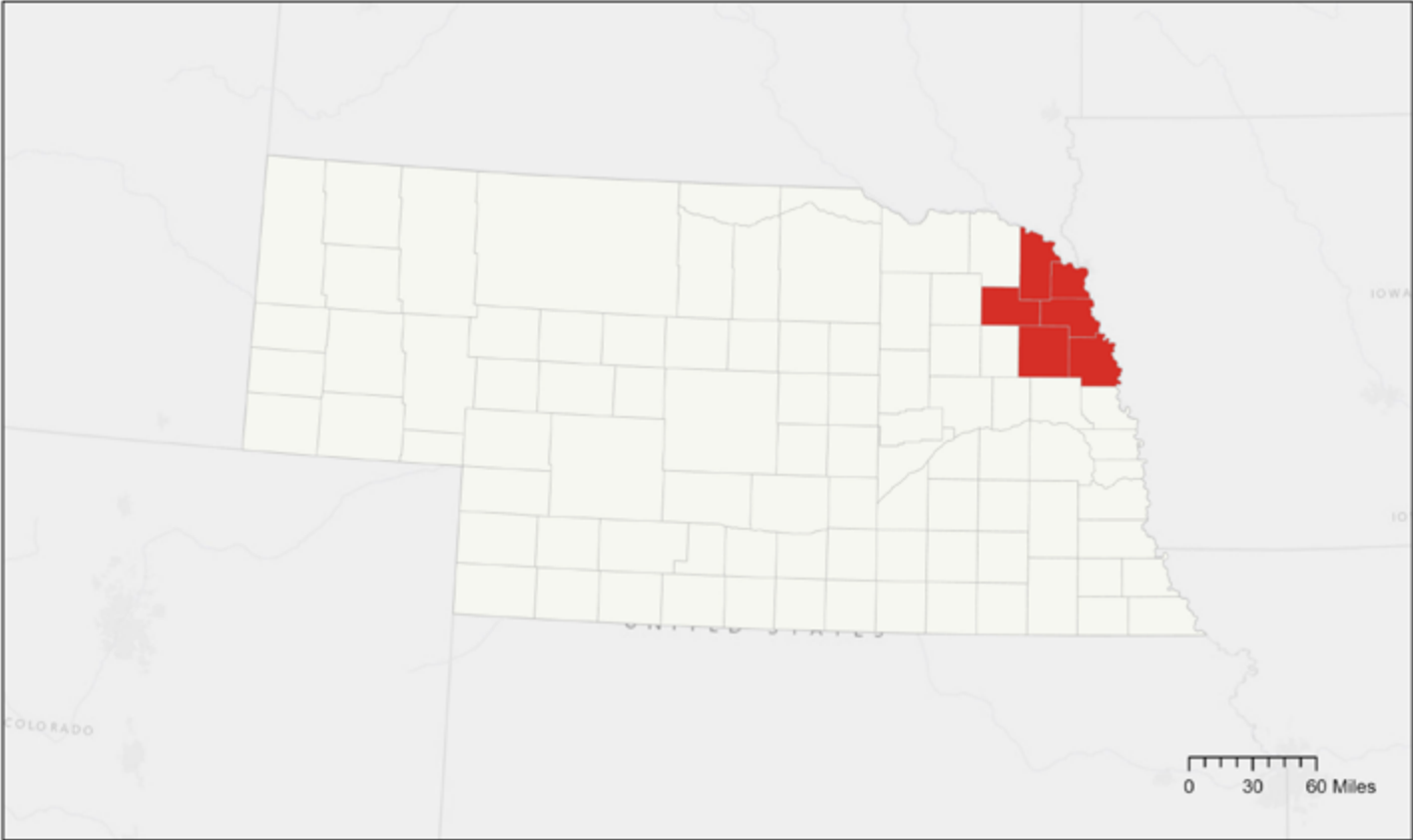
- ▲ Recovery residences
- Rural-Urban Classification Code (RUCC)
- Urban
- Adjacent rural
- Non-adjacent rural
- Counties with residence locations suppressed (1-4 residences) to protect privacy



Data Credits: Esri, HERE, Garmin, USGS, EPA, NPS
 Recovery residence locations: 2020
 Created by: NSTARR Project (May 2022)



Figure 2. Hot/Cold Spot Analysis of Recovery Residence Locations



Hot Spot Analysis (Getis-Ord GI*)

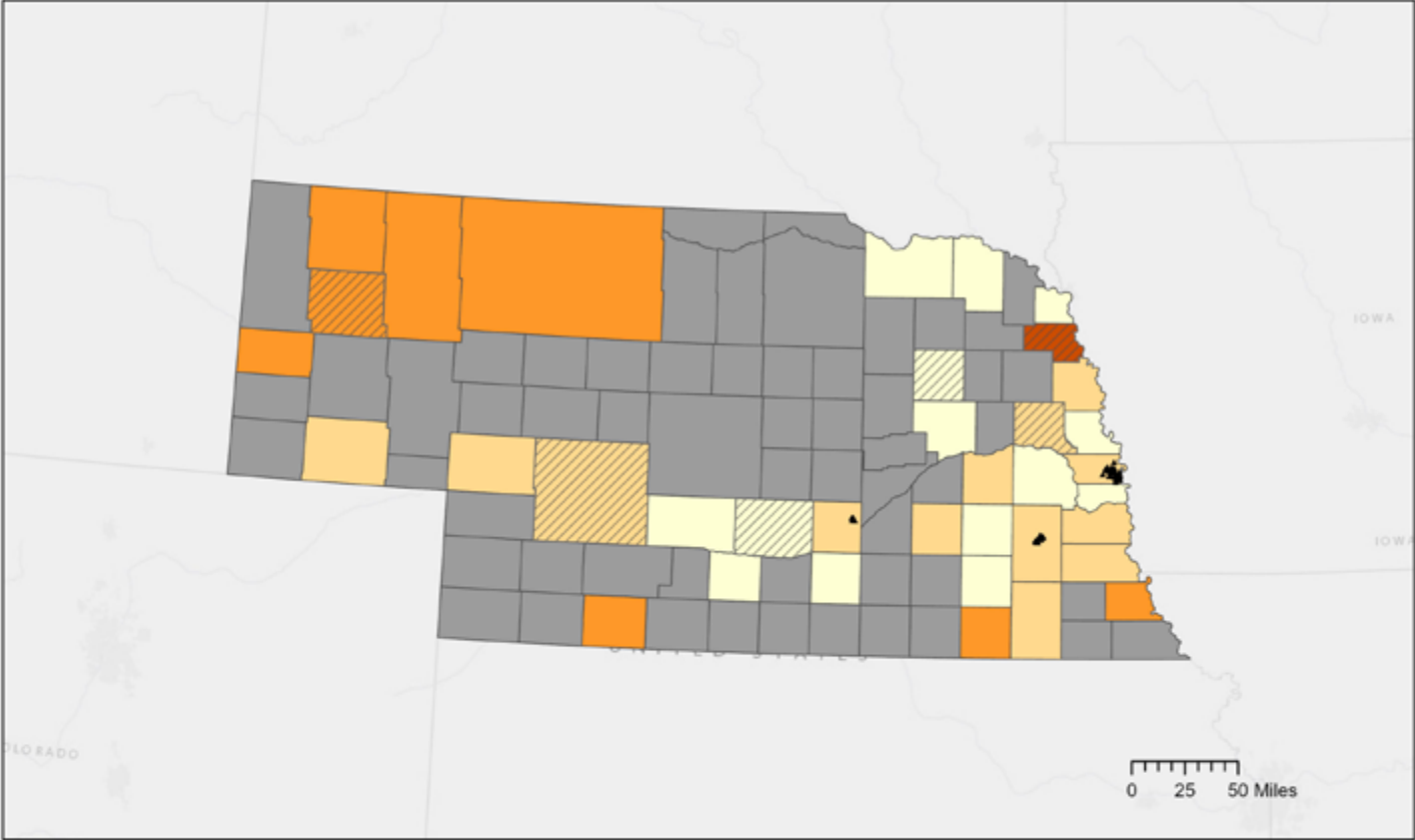
- Cold Spot with 99% Confidence
- Cold Spot with 95% Confidence
- Cold Spot with 90% Confidence
- Not Significant
- Hot Spot with 90% Confidence
- Hot Spot with 95% Confidence
- Hot Spot with 99% Confidence



Data Credits: Esri, HERE, Garmin, USGS, EPA, NPS
Recovery residence locations: 2020
Created by: NSTARR Project (May 2022)



Figure 3. Distribution of Residences by Age-adjusted Alcohol- and/or Drug-involved Mortality



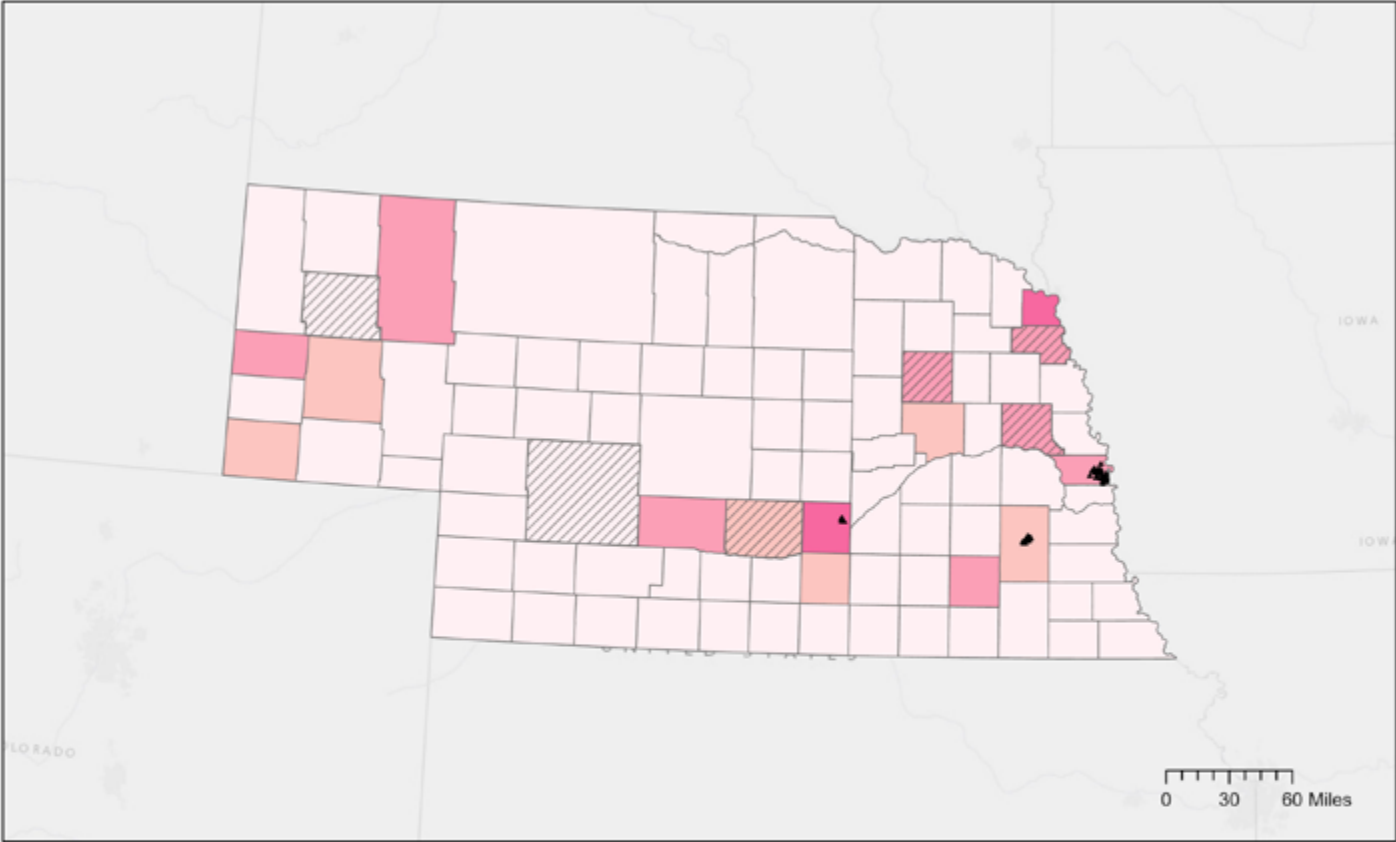
- ▲ Recovery residences
- Age-adjusted alcohol and drug mortality rate per 100,000 population
- 17 - 22
- 23 - 30
- 31 - 42
- 43 - 95
- Suppressed/Unreliable
- Counties with residence locations suppressed (1-4 residences) to protect privacy



Data Credits: Esri, HERE, Garmin, USGS, EPA, NPS
 Recovery residence locations: 2020
 Created by: NSTARR Project (May 2022)



Figure 4. Distribution of Residences by COVID-19 Community Vulnerability Index



- ▲ Recovery Residences
- COVID-19 Community Vulnerability Index (CCVI)
- Very low vulnerability
- Low
- Moderate
- High
- Very high vulnerability
- Countries with residence locations suppressed (1-4 residences) to protect privacy



Data Credits: Esri, HERE, Garmin, USGS, EPA, NPS
 Recovery residence locations: 2020
 Created by: NSTARR Project (May 2022)





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