

National Study of Treatment and Addiction Recovery Residences Report ILLINOIS

The National Study of Treatment and Addiction Recovery Residences (NSTARR) constitutes the largest and most diverse study of recovery housing in the U.S. 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 156 recovery residences (1.22 houses per 100,000 population) in Illinois (see Table 1). Compared to other states (which include DC), Illinois ranked 44 in terms of recovery housing availability per capita. Ninety-two percent of residences in Illinois could be geocoded for these analyses. Coles County, a non-adjacent rural county, had the most recovery residences per 100,000 population, and 82 counties had no identified recovery residences, representing a mix of rural-urban classifications; 95 had fewer than 5 recovery residences (see Figure 1).

We used geographic information systems to identify hot and cold spots in Illinois. 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 14.00 in Illinois for the years 2009–2019. Illinois ranked 40 on alcohol- and drug-involved mortality out of the 50 states and DC. Among the counties ranked, Franklin County had the highest alcohol- and drug-involved mortality rate and Moultrie County had the lowest alcohol- and drug-involved mortality rate. Of the three counties that had the highest mortality rates in Illinois (i.e., Franklin, Winnebago, and Vermilion), two 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. Only one county was classified as having very high vulnerability, and this county was located in an area ranked in the top half of recovery housing availability per capita, suggesting recovery housing is located in communities with greater need (see Table 1 and Figure 4).

156
RESIDENCES
TOTAL

44
NATIONAL
AVAILABILITY
RANKING

82
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
ILLINOIS	12,770,631		156	1.22	44	14.00	40	
Adams	66,085	Non-adjacent rural	0	0.00	102	29.00	43	Low
Alexander	6,260	Urban	0	0.00	102	Suppressed	-	High
Bond	16,589	Urban	0	0.00	102	26.20	59	Low
Boone	53,537	Urban	0	0.00	102	25.40	64	High
Brown	6,628	Non-adjacent rural	0	0.00	102	Suppressed	-	Low
Bureau	33,122	Non-adjacent rural	0	0.00	102	26.90	53	Low
Calhoun	4,830	Urban	0	0.00	102	Suppressed	-	Very low vulnerability
Carroll	14,466	Non-adjacent rural	0	0.00	102	23.50	74	Very low vulnerability
Cass	12,493	Adjacent rural	0	0.00	102	21.80	79	Moderate
Champaign	209,922	Urban	1	0.48	17	35.80	16	Moderate
Christian	32,931	Adjacent rural	0	0.00	102	25.20	65	Low
Clark	15,716	Adjacent rural	0	0.00	102	38.40	13	Low
Clay	13,287	Non-adjacent rural	0	0.00	102	33.30	23	Moderate
Clinton	37,634	Urban	0	0.00	102	17.80	89	Low
Coles	51,353	Non-adjacent rural	5	9.74	1	30.50	34	Moderate
Cook	5,198,275	Urban	68	1.31	11	28.80	44	Very high vulnerability
Crawford	18,972	Non-adjacent rural	0	0.00	102	23.90	71	Low
Cumberland	10,836	Non-adjacent rural	0	0.00	102	20.10	83	Very low vulnerability
De Witt	15,932	Urban	0	0.00	102	35.50	18	Low
DeKalb	104,366	Urban	1	0.96	14	21.70	80	Moderate
Douglas	19,623	Adjacent rural	0	0.00	102	19.80	84	High
DuPage	929,060	Urban	1	0.11	20	22.20	77	Moderate
Edgar	17,407	Adjacent rural	0	0.00	102	32.10	28	Moderate
Edwards	6,455	Non-adjacent rural	0	0.00	102	27.60	50	Very low vulnerability
Effingham	34,137	Non-adjacent rural	0	0.00	102	29.20	40	Low
Fayette	21,565	Adjacent rural	0	0.00	102	25.20	65	Low
Ford	13,270	Urban	0	0.00	102	29.60	38	Low
Franklin	38,923	Adjacent rural	0	0.00	102	60.80	1	Moderate
Fulton	35,092	Adjacent rural	0	0.00	102	26.80	54	Low
Gallatin	5,064	Adjacent rural	0	0.00	102	38.60	12	Low
Greene	13,132	Adjacent rural	0	0.00	102	30.40	35	Very low vulnerability
Grundy	50,666	Urban	0	0.00	102	35.80	16	Low
Hamilton	8,176	Non-adjacent rural	0	0.00	102	Suppressed	-	Very low vulnerability
Hancock	17,983	Non-adjacent rural	0	0.00	102	15.30	90	Very low vulnerability

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Hardin	3,939	Non-adjacent rural	0	0.00	102	Suppressed	-	Low
Henderson	6,809	Non-adjacent rural	0	0.00	102	31.10	31	Very low vulnerability
Henry	49,267	Urban	0	0.00	102	21.30	81	Low
Iroquois	27,812	Adjacent rural	0	0.00	102	41.30	7	Low
Jackson	57,977	Urban	1	1.72	9	37.70	14	Moderate
Jasper	9,594	Non-adjacent rural	0	0.00	102	19.80	84	Very low vulnerability
Jefferson	37,985	Non-adjacent rural	0	0.00	102	33.60	21	Moderate
Jersey	21,937	Urban	0	0.00	102	37.10	15	Very low vulnerability
Jo Daviess	21,588	Adjacent rural	0	0.00	102	24.70	68	Very low vulnerability
Johnson	12,494	Adjacent rural	0	0.00	102	26.30	58	Low
Kane	531,376	Urban	2	0.38	19	22.20	77	High
Kankakee	110,637	Urban	0	0.00	102	32.90	25	High
Kendall	126,054	Urban	0	0.00	102	19.70	86	Low
Knox	50,508	Adjacent rural	0	0.00	102	30.90	32	Moderate
LaSalle	109,737	Adjacent rural	0	0.00	102	44.90	4	Moderate
Lake	701,473	Urban	22	3.14	4	23.70	73	High
Lawrence	16,033	Non-adjacent rural	0	0.00	102	33.60	21	Moderate
Lee	34,389	Adjacent rural	1	2.91	7	27.90	49	Low
Livingston	36,040	Adjacent rural	0	0.00	102	31.30	30	Moderate
Logan	29,003	Adjacent rural	0	0.00	102	26.20	59	Low
Macon	105,528	Urban	1	0.95	15	25.80	62	High
Macoupin	45,463	Urban	0	0.00	102	26.00	61	Low
Madison	264,776	Urban	8	3.02	5	43.10	5	Low
Marion	37,743	Adjacent rural	0	0.00	102	42.50	6	Moderate
Marshall	11,679	Urban	0	0.00	102	26.60	55	Very low vulnerability
Mason	13,621	Adjacent rural	0	0.00	102	34.70	19	Low
Massac	14,219	Non-adjacent rural	0	0.00	102	39.10	11	Moderate
McDonough	30,479	Non-adjacent rural	0	0.00	102	20.40	82	Low
McHenry	307,714	Urban	5	1.62	10	28.20	46	Low
McLean	172,578	Urban	2	1.16	13	28.30	45	Low
Menard	12,306	Urban	0	0.00	102	23.90	71	Very low vulnerability
Mercer	15,589	Urban	0	0.00	102	27.20	51	Very low vulnerability
Monroe	34,168	Urban	0	0.00	102	24.10	70	Very low vulnerability
Montgomery	28,828	Adjacent rural	1	3.47	3	29.10	41	Low
Morgan	34,247	Adjacent rural	1	2.92	6	28.20	46	Low

Moultrie	14,641	Adjacent rural	0	0.00	102	13.80	92	Moderate
Ogle	51,025	Adjacent rural	0	0.00	102	24.30	69	Moderate
Peoria	182,770	Urban	0	0.00	102	39.50	10	Moderate
Perry	21,251	Adjacent rural	0	0.00	102	26.50	56	Moderate
Piatt	16,401	Urban	0	0.00	102	27.00	52	Very low vulnerability
Pike	15,672	Non-adjacent rural	0	0.00	102	22.90	75	Low
Pope	4,203	Adjacent rural	0	0.00	102	Suppressed	-	Low
Pulaski	5,510	Adjacent rural	0	0.00	102	Suppressed	-	Moderate
Putnam	5,721	Adjacent rural	0	0.00	102	39.70	9	Very low vulnerability
Randolph	32,295	Adjacent rural	0	0.00	102	32.00	29	Moderate
Richland	15,766	Non-adjacent rural	0	0.00	102	22.50	76	Low
Rock Island	143,873	Urban	4	2.78	8	26.40	57	High
Saline	23,994	Adjacent rural	0	0.00	102	41.10	8	High
Sangamon	196,861	Urban	7	3.56	2	33.10	24	Low
Schuyler	6,953	Non-adjacent rural	0	0.00	102	Suppressed	-	Low
Scott	5,005	Non-adjacent rural	0	0.00	102	Suppressed	-	Very low vulnerability
Shelby	21,737	Adjacent rural	0	0.00	102	17.90	88	Very low vulnerability
St. Clair	262,338	Urban	1	0.38	18	32.70	26	High
Stark	5,447	Urban	0	0.00	102	Suppressed	-	Very low vulnerability
Stephenson	45,093	Adjacent rural	0	0.00	102	32.30	27	Moderate
Tazewell	133,195	Urban	0	0.00	102	30.60	33	Low
Union	16,968	Adjacent rural	0	0.00	102	30.20	36	High
Vermilion	77,563	Urban	0	0.00	102	47.10	3	High
Wabash	11,546	Non-adjacent rural	0	0.00	102	29.10	41	Low
Warren	17,146	Adjacent rural	0	0.00	102	15.30	90	Low
Washington	14,058	Adjacent rural	0	0.00	102	24.80	67	Very low vulnerability
Wayne	16,402	Non-adjacent rural	0	0.00	102	29.90	37	Very low vulnerability
White	13,868	Adjacent rural	0	0.00	102	33.70	20	Moderate
Whiteside	56,016	Adjacent rural	0	0.00	102	28.10	48	Moderate
Will	689,315	Urban	9	1.31	12	25.50	63	Moderate
Williamson	67,102	Urban	0	0.00	102	29.50	39	Moderate
Winnebago	284,819	Urban	2	0.70	16	50.90	2	High
Woodford	38,700	Urban	0	0.00	102	19.20	87	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. Thirteen (13) recovery residences in the state were not successfully geocoded due to lack of adequate address information, and thus were not assigned to a county.

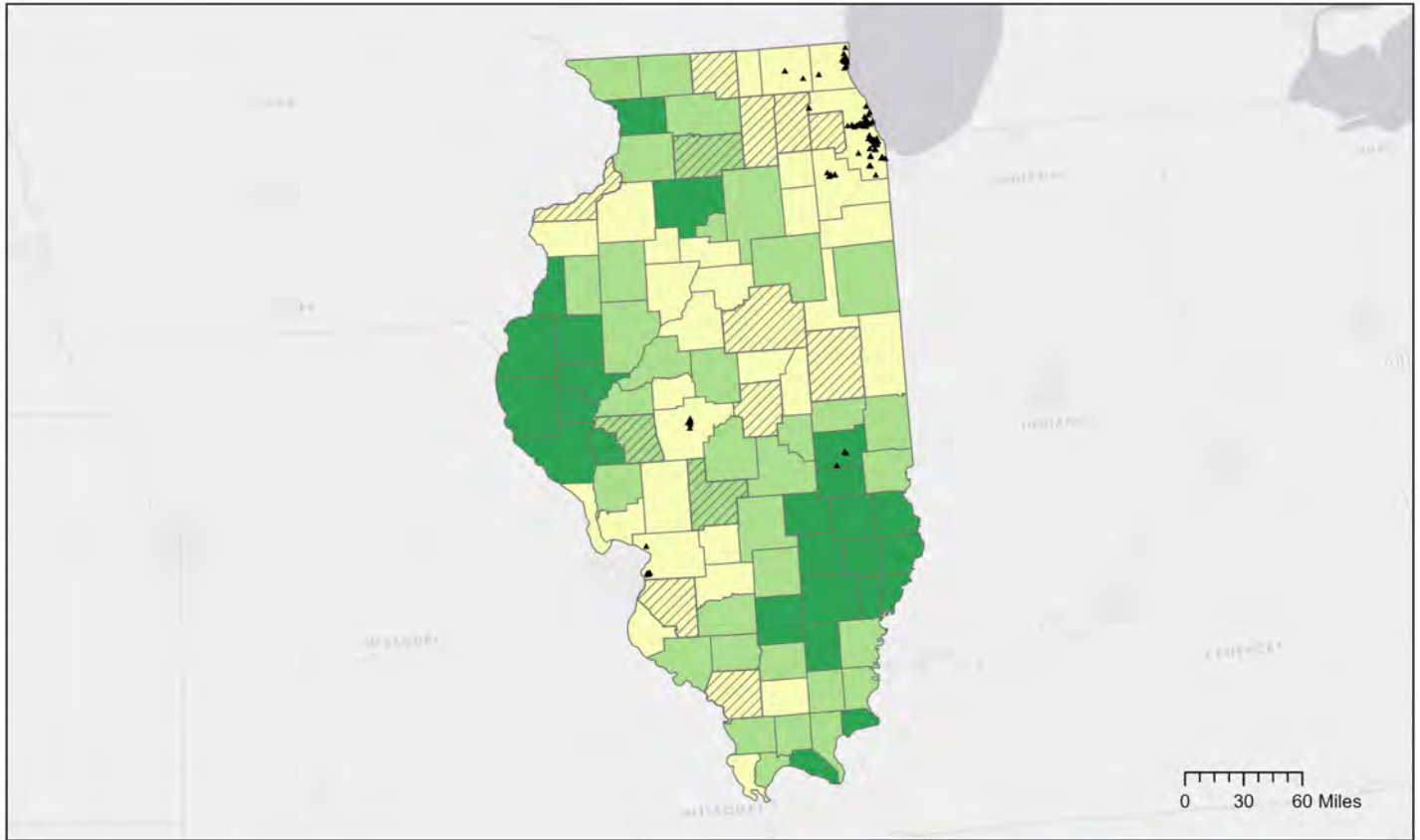
⁴Recovery residences availability per capita is ranked in order of decreasing recovery residence density per 100,000 population per county, with 1 (highest number of residences per 100,000) to 102 (lowest number of residences per 100,000 population). Counties without recovery residences were all assigned a tied rank of 102.

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 92 (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)

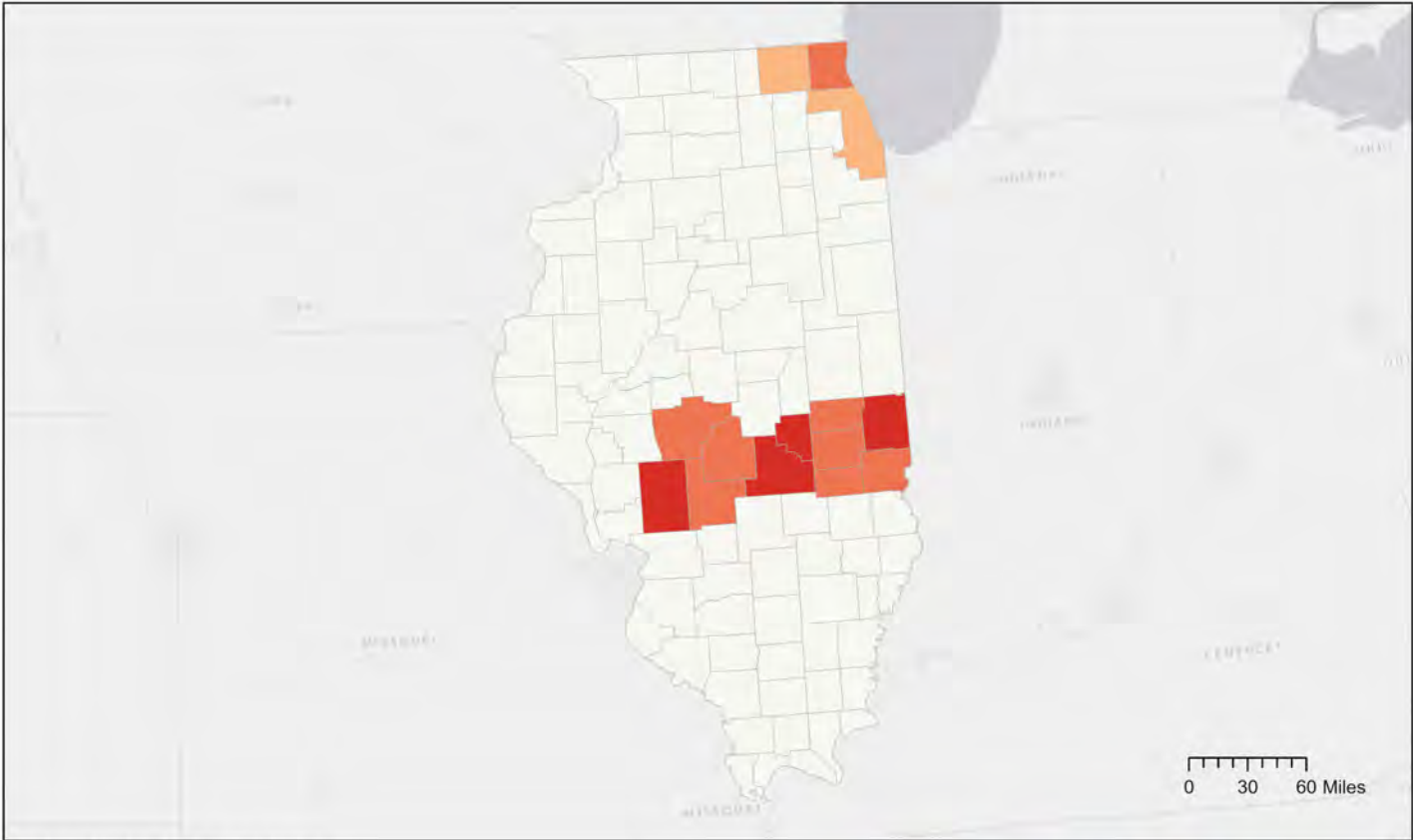
- Urban
- Adjacent rural
- Non-adjacent rural
- Counties with residence locations suppressed (1-4 residences) to protect privacy



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

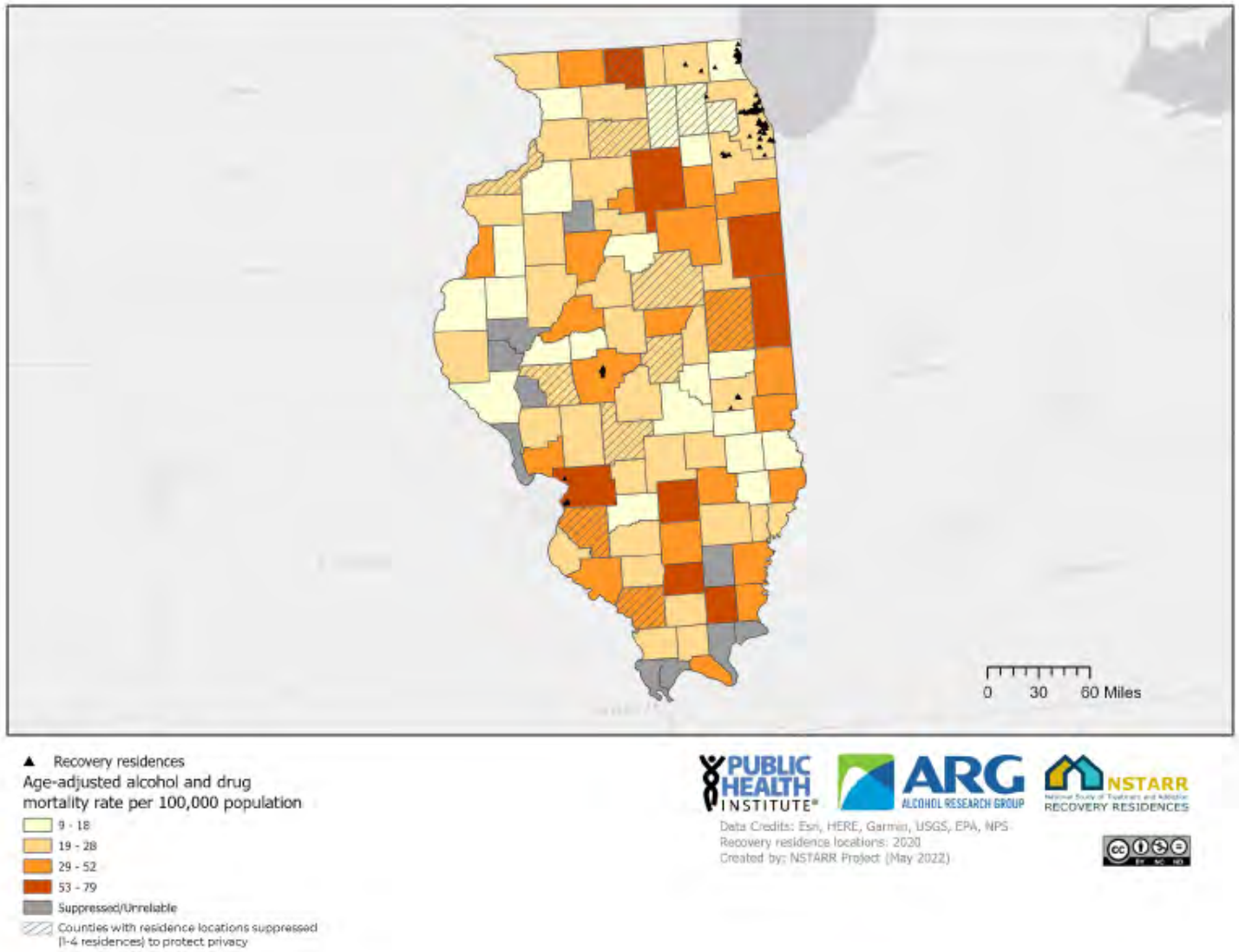
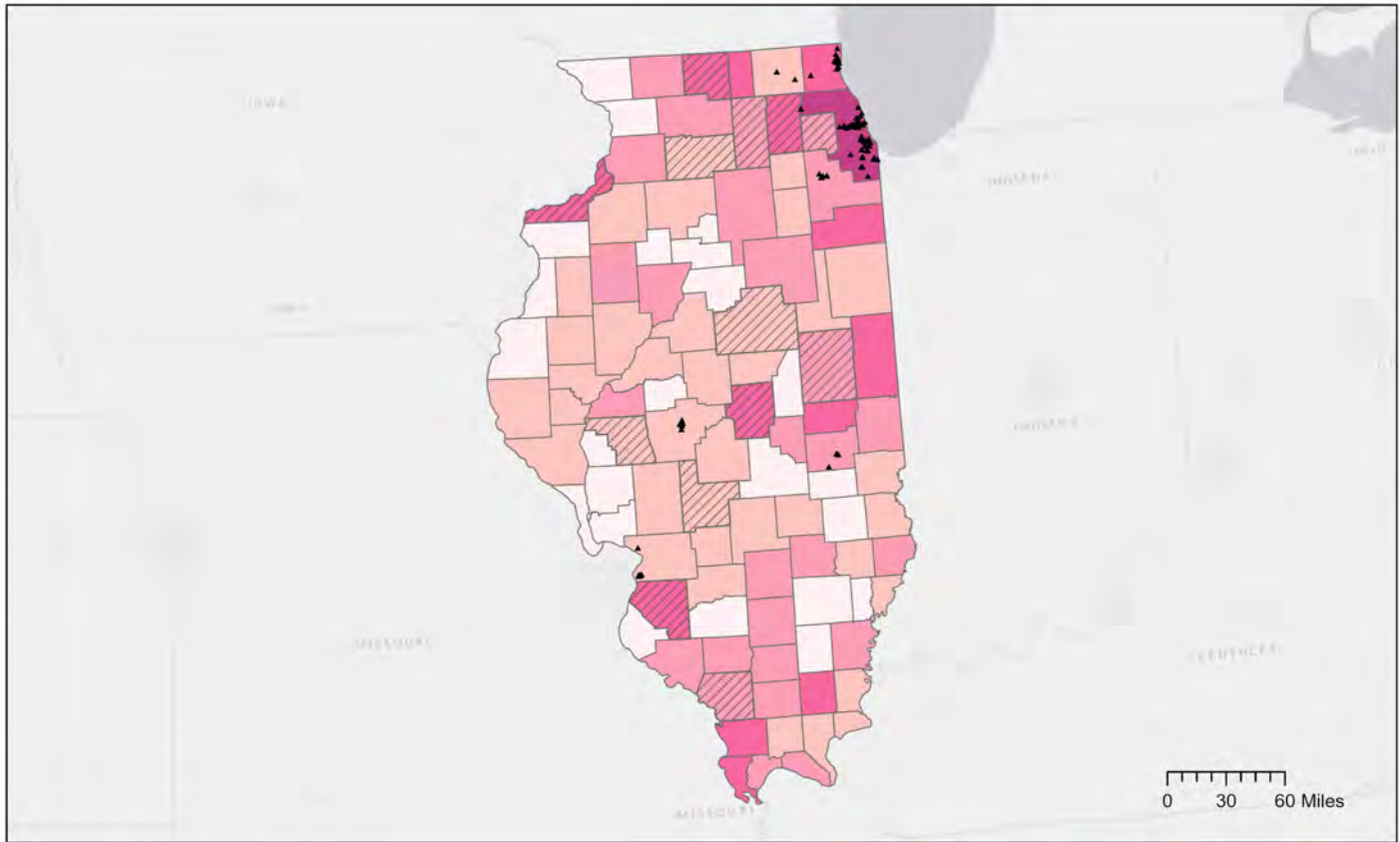


Figure 4. Distribution of Residences by COVID-19 Community Vulnerability Index



- ▲ Recovery Residences
- COVID-19 Community Vulnerability Index (CCVI)
- Very low vulnerability
- Low
- Moderate
- High
- Very high vulnerability
- 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)





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