National Study of Treatment and Addiction Recovery Residences Report
NEW YORK

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 244 recovery residences (1.25 houses per 100,000 population) in New York (see Table 1). Compared to other states (which include DC), New York ranked 43 in terms of recovery housing availability per capita. Ninety-seven percent of residences in New York could be geocoded for these analyses. Niagara County, an urban county, had the most recovery residences per 100,000 population, and 16 counties had no identified recovery residences, representing a mix of rural-urban classifications; 46 (76% of counties in the state) had fewer than 5 recovery residences (see Figure 1).

We used geographic information systems to identify hot and cold spots in New York. 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 and cold spots within the state (see Figure 2).

The age-adjusted alcohol- and drug-involved mortality rate (per 100,000 population) was 13.40 in New York for the years 2009-2019. New York ranked 43 on alcohol- and drug-involved mortality out of the 50 states and DC. Sullivan County had the highest alcohol- and drug-involved mortality rate and Saratoga County had the lowest alcohol- and drug-involved mortality rate. Of the three counties that had the highest mortality rates in New York (i.e., Sullivan, Bronx, and Broome), two of them also ranked in the top half recovery housing availability per capita, suggesting recovery housing is located in communities with greater need (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. Four counties were classified as having very high vulnerability, and two of those counties were located in areas ranked in the top half of recovery housing availability per capita, again suggesting that recovery housing is located in communities with greater need (see Table 1 and Figure 4).

244
RESIDENCES TOTAL

43
NATIONAL AVAILABILITY RANKING

16
COUNTIES WITHOUT RESIDENCES

Literature Cited: Mericle, A. A., Patterson, D., Howell, J., Subbaraman, M. S., Faxio, A., & Karriker-Jaffe, K. J. (2022). Identifying the availability of recovery housing in the U.S.: The NSTARR project. Drug and Alcohol Dependence, 230, 109188.

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]
NEW YORK	19,572,320		244	1.25	43	13.40	43	
Albany	306,968	Urban	10	3.26	10	22.40	50	Moderate
Allegany	46,688	Non-adjacent rural	2	4.28	5	22.50	49	Moderate
Bronx	1,435,068	Urban	14	0.98	38	44.00	2	Very high vulnerability
Broome	193,188	Urban	3	1.55	30	40.00	3	High
Cattaraugus	77,121	Adjacent rural	3	3.89	7	33.00	12	High
Cayuga	77,425	Adjacent rural	2	2.58	18	30.10	23	High
Chautauqua	128,496	Adjacent rural	2	1.56	28	38.30	5	High
Chemung	84,895	Urban	1	1.18	33	36.50	6	Moderate
Chenango	47,909	Adjacent rural	0	0.00	62	21.40	51	High
Clinton	80,583	Non-adjacent rural	3	3.72	8	22.80	48	Moderate
Columbia	60,371	Adjacent rural	1	1.66	26	27.30	32	Moderate
Cortland	47,865	Adjacent rural	2	4.18	6	30.60	20	Low
Delaware	44,995	Adjacent rural	0	0.00	62	39.30	4	High
Dutchess	293,754	Urban	6	2.04	20	33.20	11	Moderate
Erie	919,355	Urban	24	2.61	17	35.30	7	High
Essex	37,459	Adjacent rural	0	0.00	62	30.80	19	Moderate
Franklin	50,477	Non-adjacent rural	1	1.98	22	25.20	39	Moderate
Fulton	53,646	Adjacent rural	1	1.86	23	24.70	41	High
Genesee	57,808	Adjacent rural	3	5.19	3	27.60	31	Moderate
Greene	47,424	Adjacent rural	1	2.11	19	33.30	9	High
Hamilton	4,515	Adjacent rural	0	0.00	62	30.00	24	Low
Herkimer	62,057	Urban	1	1.61	27	23.90	45	Moderate
Jefferson	112,842	Urban	4	3.54	9	30.40	21	Moderate
Kings	2,589,974	Urban	12	0.46	43	25.10	40	Very high vulnerability
Lewis	26,572	Adjacent rural	0	0.00	62	28.60	30	Low
Livingston	63,591	Urban	0	0.00	62	20.70	55	Moderate
Madison	71,205	Urban	2	2.81	14	25.50	38	Low
Monroe	743,341	Urban	22	2.96	13	29.20	28	High
Montgomery	49,302	Adjacent rural	1	2.03	21	24.10	43	Very high vulnerability
Nassau	1,356,509	Urban	3	0.22	46	21.20	54	Low
New York	1,631,993	Urban	22	1.35	31	27.20	34	High
Niagara	210,820	Urban	12	5.69	1	33.30	9	Moderate
Oneida	229,959	Urban	4	1.74	24	29.90	26	High
Onondaga	462,872	Urban	5	1.08	35	32.80	14	High
Ontario	109,511	Urban	5	4.57	4	27.30	32	Moderate
Orange	380,085	Urban	2	0.53	41	31.70	18	High
Orleans	40,904	Urban	0	0.00	62	20.60	56	High
Oswego	118,339	Urban	2	1.69	25	30.00	24	High
Otsego	59,972	Non-adjacent rural	0	0.00	62	29.80	27	Low

Putnam	98,787	Urban	1	1.01	37	26.40	35	Low
Queens	2,287,388	Urban	10	0.44	44	19.90	59	High
Rensselaer	159,185	Urban	5	3.14	12	21.30	53	Moderate
Richmond	474,893	Urban	2	0.42	45	33.00	12	Moderate
Rockland	324,422	Urban	3	0.92	39	23.90	45	High
Saratoga	228,502	Urban	3	1.31	32	17.30	62	Very low vulnerability
Schenectady	154,859	Urban	5	3.23	11	23.50	47	High
Schoharie	31,222	Urban	0	0.00	62	19.60	60	Low
Schuyler	17,920	Adjacent rural	0	0.00	62	21.40	51	Moderate
Seneca	34,390	Adjacent rural	0	0.00	62	32.40	15	Moderate
St. Lawrence	108,913	Adjacent rural	3	2.75	16	26.00	36	Moderate
Steuben	96,422	Adjacent rural	1	1.04	36	25.60	37	Moderate
Suffolk	1,483,832	Urban	11	0.74	40	32.30	16	Moderate
Sullivan	75,116	Adjacent rural	4	5.33	2	46.10	1	Very high vulnerability
Tioga	48,686	Urban	0	0.00	62	30.40	21	Low
Tompkins	102,642	Urban	0	0.00	62	29.10	29	Low
Ulster	178,665	Urban	5	2.80	15	32.10	17	Moderate
Warren	64,276	Urban	1	1.56	29	24.20	42	Low
Washington	61,616	Urban	0	0.00	62	20.20	58	Moderate
Wayne	90,519	Urban	1	1.10	34	24.00	44	Moderate
Westchester	968,890	Urban	5	0.52	42	18.00	61	High
Wyoming	40,305	Adjacent rural	0	0.00	62	20.60	56	Moderate
Yates	25,011	Urban	0	0.00	62	33.80	8	High

[1]Population 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.

[2]The 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

[3]Recovery residences are from the NSTARR project and are current as of 2020. Eight (8) recovery residences in the state were not successfully geocoded due to lack of adequate address information, and thus were not assigned to a county.

[4]Recovery 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 62 (lowest number of residences per 100,000 population). Counties without recovery residences were all assigned a tied rank of 62.

[5]Alcohol- 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.

[6]Mortality rate is ranked in order of decreasing alcohol- and drug-involved mortality from 1 (highest mortality per 100,000 population) to 62 (lowest mortality per 100,000 population).

[7]COVID-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 I 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

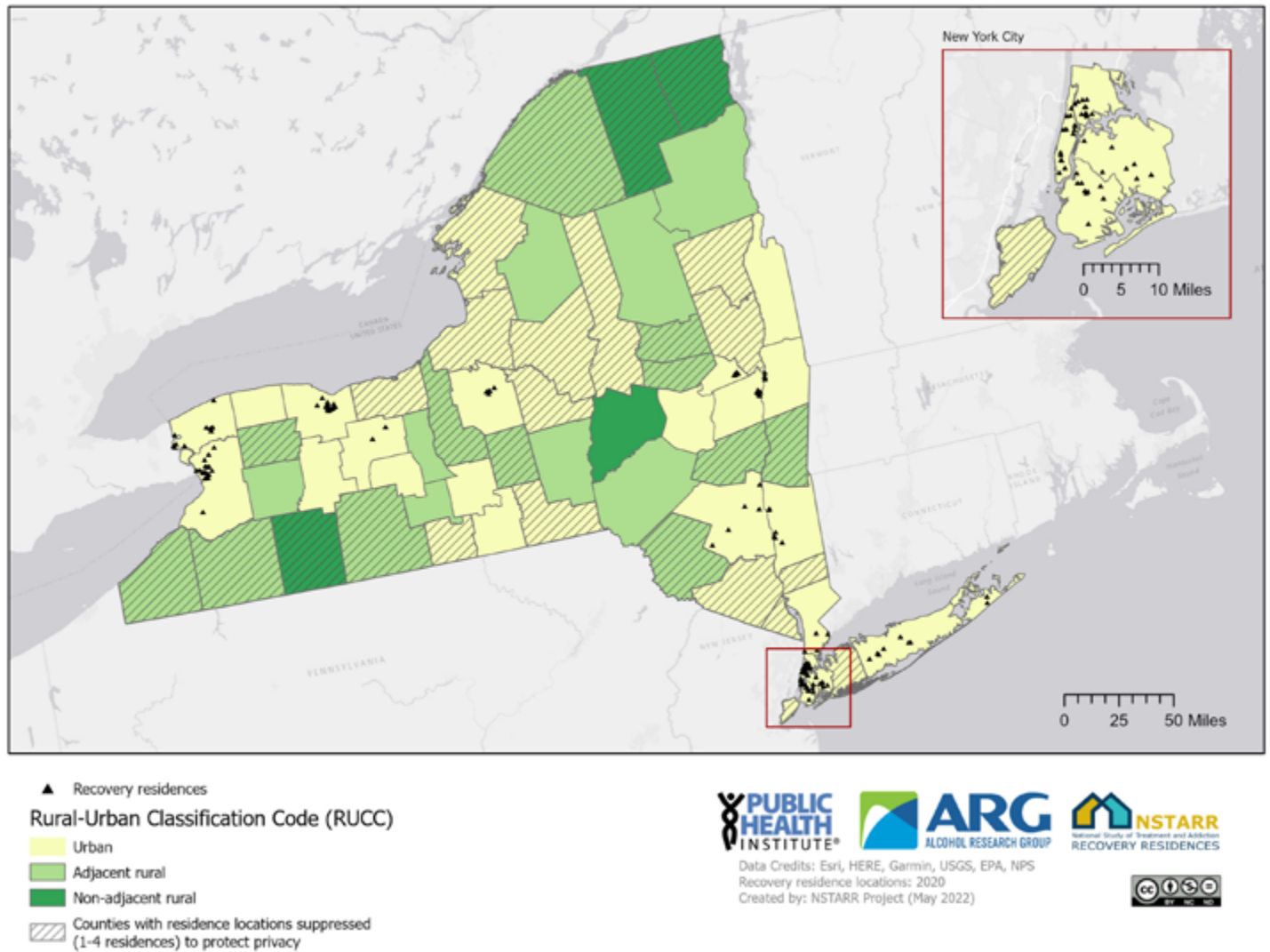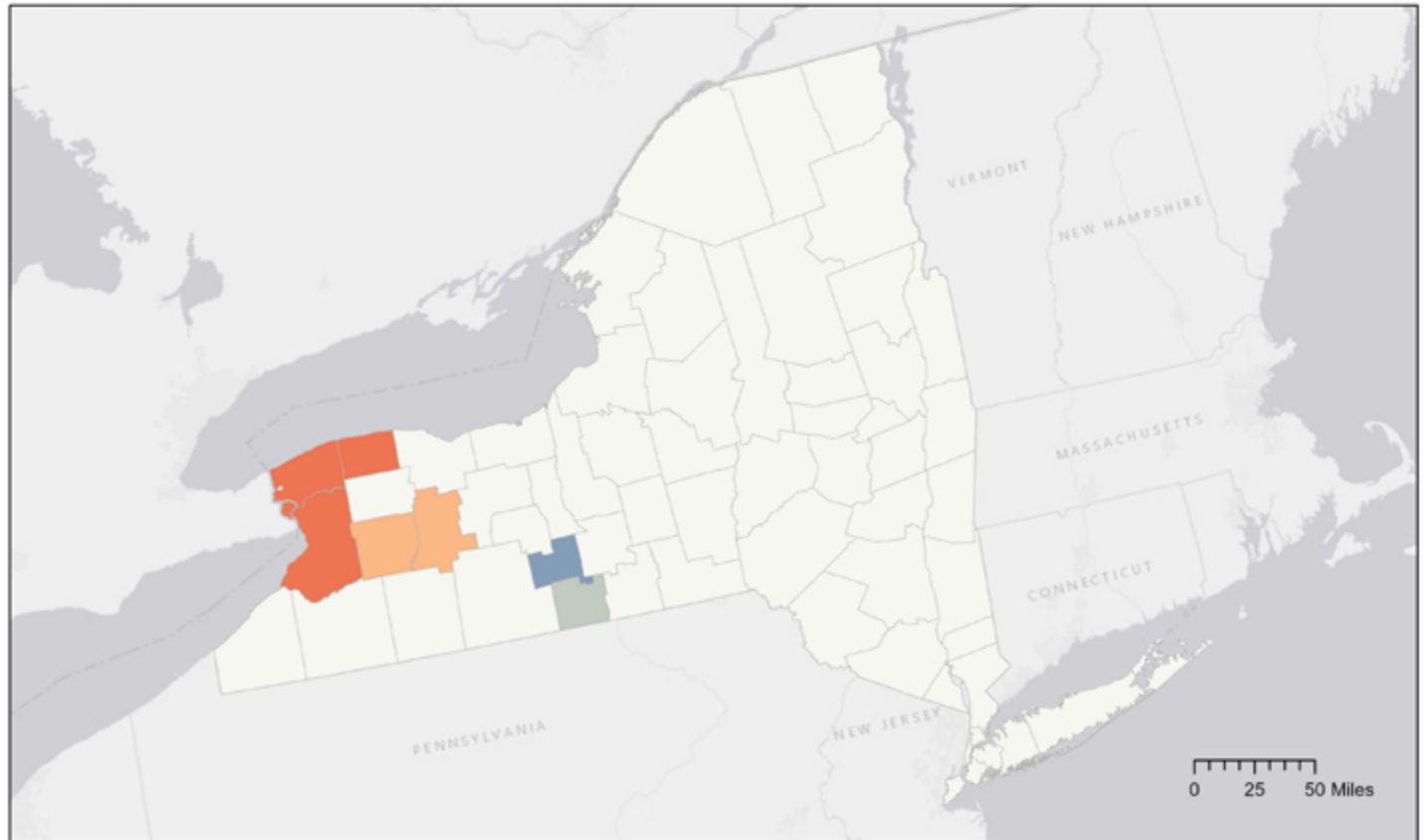Figure 1. Distribution of Residences by Rural-Urban Classification

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
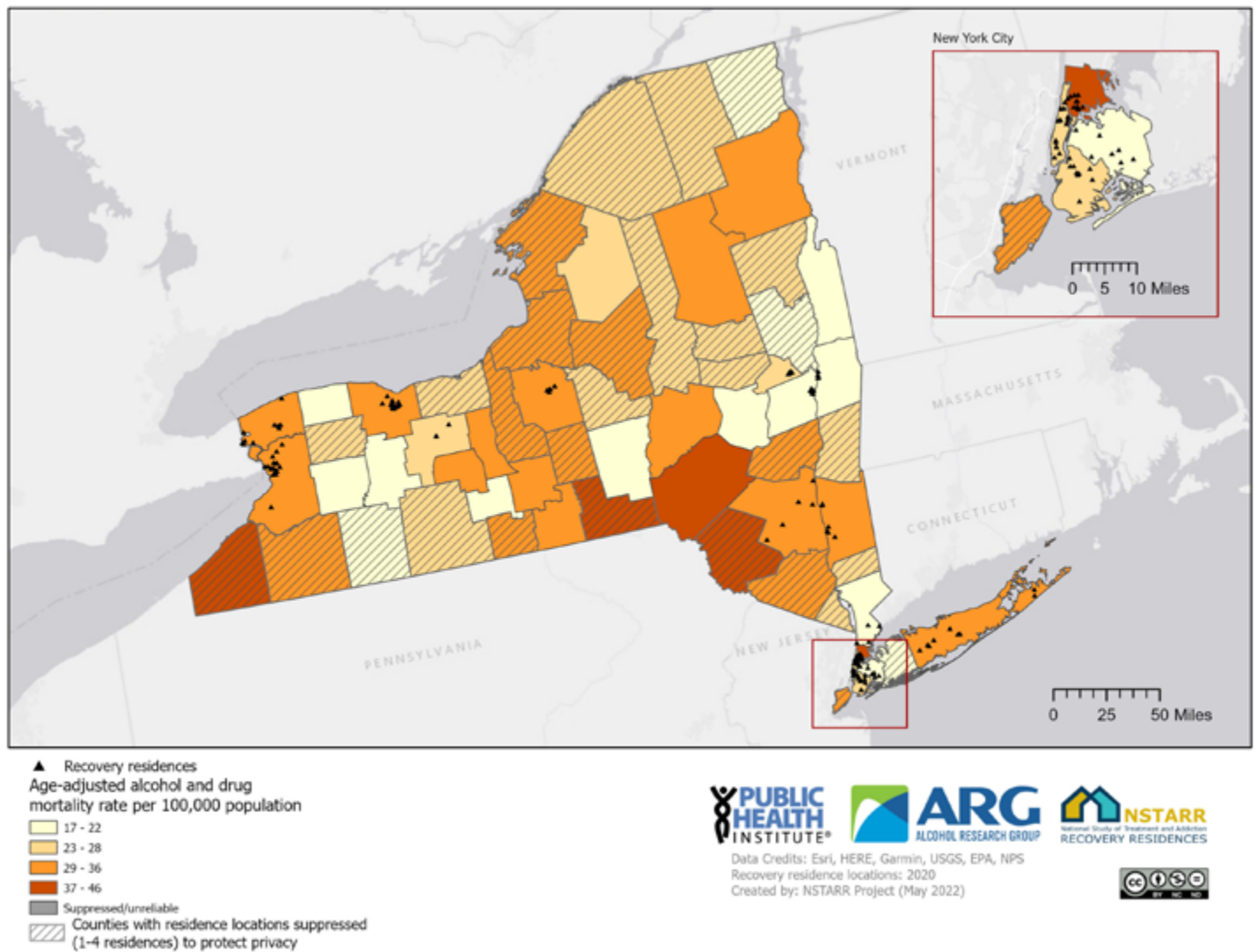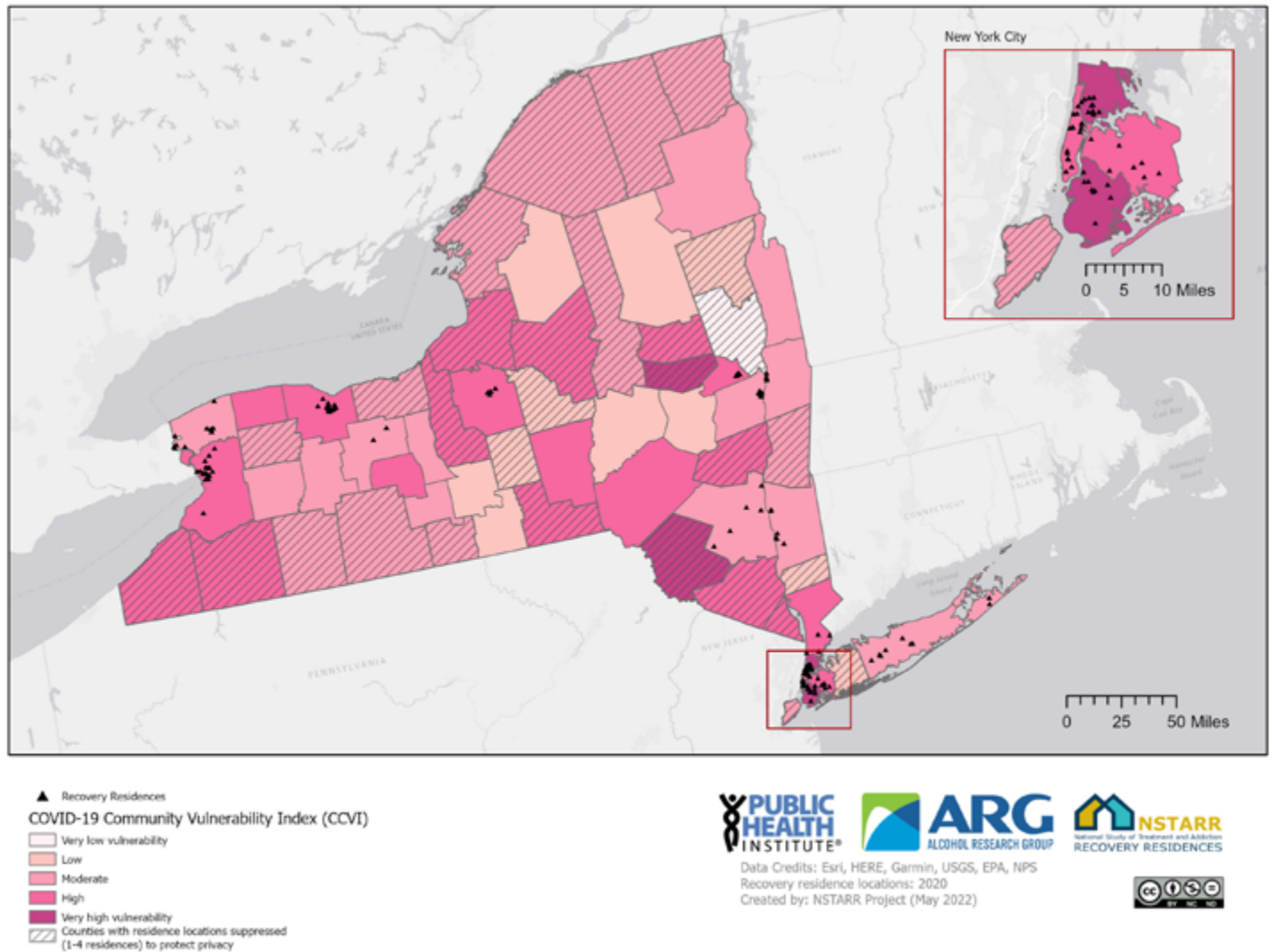

▲ Recovery residences
Age-adjusted alcohol and drug
mortality rate per 100,000 population

□ 17 - 22
□ 23 - 28
■ 29 - 36
■ 37 - 46
■ 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
- 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)

NSTARR

National Study of Treatment and Addiction

RECOVERY RESIDENCES

National Study of Treatment and Addiction Recovery Residences
6001 Shellmound Street, Suite 450
Emeryville, CA 94608

🌐 nstarr.arg.org   ✉ nstarr@arg.org   **f** @NSTARRStudy   🐦 @arg_nstarr

ARG ALCOHOL RESEARCH GROUP   **PUBLIC HEALTH INSTITUTE**