

# National Study of Treatment and Addiction Recovery Residences Report Oregon

**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 399 recovery residences (8.21 houses per 100,000 population) in Oregon (see Table 1). Compared to other states (which include DC), Oregon ranked 4 in terms of recovery housing availability per capita. Nearly all (99%) residences in Oregon could be geocoded for these analyses. Multnomah County, an urban county, had the most recovery residences per 100,000 population, and 14 counties had no identified recovery residences, representing a mix of rural and non-adjacent rural counties; 26 had fewer than 5 recovery residences (see Figure 1).

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

The age-adjusted alcohol- and drug-involved mortality rate (per 100,000 population) was 29.80 in Oregon for the years 2009-2019. Oregon ranked 5 on alcohol- and drug-involved mortality out of the 50 states and DC. Among the counties ranked, Lake County had the highest alcohol- and drug-involved mortality rate and Washington County had the lowest alcohol- and drug-involved mortality rate. Of the three counties that had the highest mortality rates in Oregon (i.e., Lake, Coos, and Klamath), 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. No counties were classified as having very high vulnerability (see Table 1 and Figure 4).

399  
RESIDENCES  
TOTAL

4  
NATIONAL  
AVAILABILITY  
RANKING

14  
COUNTIES  
WITHOUT  
RESIDENCES

Table 1. County-level Descriptive Statistics on Recovery Residences

County Name	Population <sup>1</sup>	RUCC Classification <sup>2</sup>	Number of Recovery Residences <sup>3</sup>	Recovery Residences Per 100,000 Population	Recovery Residences Availability per Capita (Rank) <sup>4</sup>	Age-Adjusted Alcohol/Drug Mortality <sup>5</sup> Rate per 100,000 Population	Mortality Rate (Rank) <sup>6</sup>	CCVI Quintile <sup>7</sup>
<b>OREGON</b>	4,129,803		339	8.21	4	29.80	5	
<b>Baker</b>	16,019	Non-adjacent rural	0	0.00	36	59.00	9	Low
<b>Benton</b>	91,107	Urban	6	6.59	11	28.30	31	Low
<b>Clackamas</b>	410,463	Urban	49	11.94	2	34.30	27	Low
<b>Clatsop</b>	39,102	Adjacent rural	1	2.56	20	52.20	15	Low
<b>Columbia</b>	51,375	Urban	2	3.89	18	43.50	21	Low
<b>Coos</b>	63,686	Non-adjacent rural	3	4.71	15	68.10	2	Moderate
<b>Crook</b>	23,011	Adjacent rural	0	0.00	36	52.40	14	Low
<b>Curry</b>	22,650	Non-adjacent rural	0	0.00	36	61.90	5	Low
<b>Deschutes</b>	186,251	Urban	12	6.44	13	39.90	24	Very low vulnerability
<b>Douglas</b>	109,114	Adjacent rural	8	7.33	6	57.20	12	Low
<b>Gilliam</b>	1,878	Non-adjacent rural	0	0.00	36	Suppressed	-	Low
<b>Grant</b>	7,189	Non-adjacent rural	0	0.00	36	43.30	22	Very low vulnerability
<b>Harney</b>	7,267	Non-adjacent rural	0	0.00	36	57.90	11	Low
<b>Hood River</b>	23,209	Adjacent rural	0	0.00	36	30.30	30	Moderate
<b>Jackson</b>	216,574	Urban	15	6.93	9	51.00	17	Low
<b>Jefferson</b>	23,607	Adjacent rural	1	4.24	16	65.50	4	High
<b>Josephine</b>	86,251	Urban	1	1.16	22	61.70	6	Moderate
<b>Klamath</b>	66,921	Non-adjacent rural	0	0.00	36	66.10	3	Low
<b>Lake</b>	7,837	Non-adjacent rural	0	0.00	36	70.20	1	Low
<b>Lane</b>	373,340	Urban	29	7.77	3	58.70	10	Low
<b>Lincoln</b>	48,547	Non-adjacent rural	2	4.12	17	61.40	8	Moderate
<b>Linn</b>	125,048	Urban	9	7.20	7	53.00	13	Moderate
<b>Malheur</b>	30,412	Adjacent rural	2	6.58	12	37.10	25	High
<b>Marion</b>	339,641	Urban	23	6.77	10	40.90	23	High
<b>Morrow</b>	11,303	Adjacent rural	0	0.00	36	31.80	29	Low
<b>Multnomah</b>	804,606	Urban	119	14.79	1	50.60	18	Moderate
<b>Polk</b>	83,037	Urban	2	2.41	21	32.30	28	Low
<b>Sherman</b>	1,642	Non-adjacent rural	0	0.00	36	Suppressed	-	Very low vulnerability
<b>Tillamook</b>	26,389	Adjacent rural	0	0.00	36	51.10	16	Moderate
<b>Umatilla</b>	77,129	Adjacent rural	4	5.19	14	43.70	20	High
<b>Union</b>	26,337	Non-adjacent rural	2	7.59	5	45.10	19	Low
<b>Wallowa</b>	7,004	Non-adjacent rural	0	0.00	36	27.30	32	Very low vulnerability
<b>Wasco</b>	26,130	Adjacent rural	2	7.65	4	61.70	6	Moderate
<b>Washington</b>	589,481	Urban	41	6.96	8	26.60	33	Moderate
<b>Wheeler</b>	1,415	Non-adjacent rural	0	0.00	36	Suppressed	-	Very low vulnerability
<b>Yamhill</b>	104,831	Urban	3	2.86	19	36.40	26	High

<sup>1</sup>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.

<sup>2</sup>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>

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

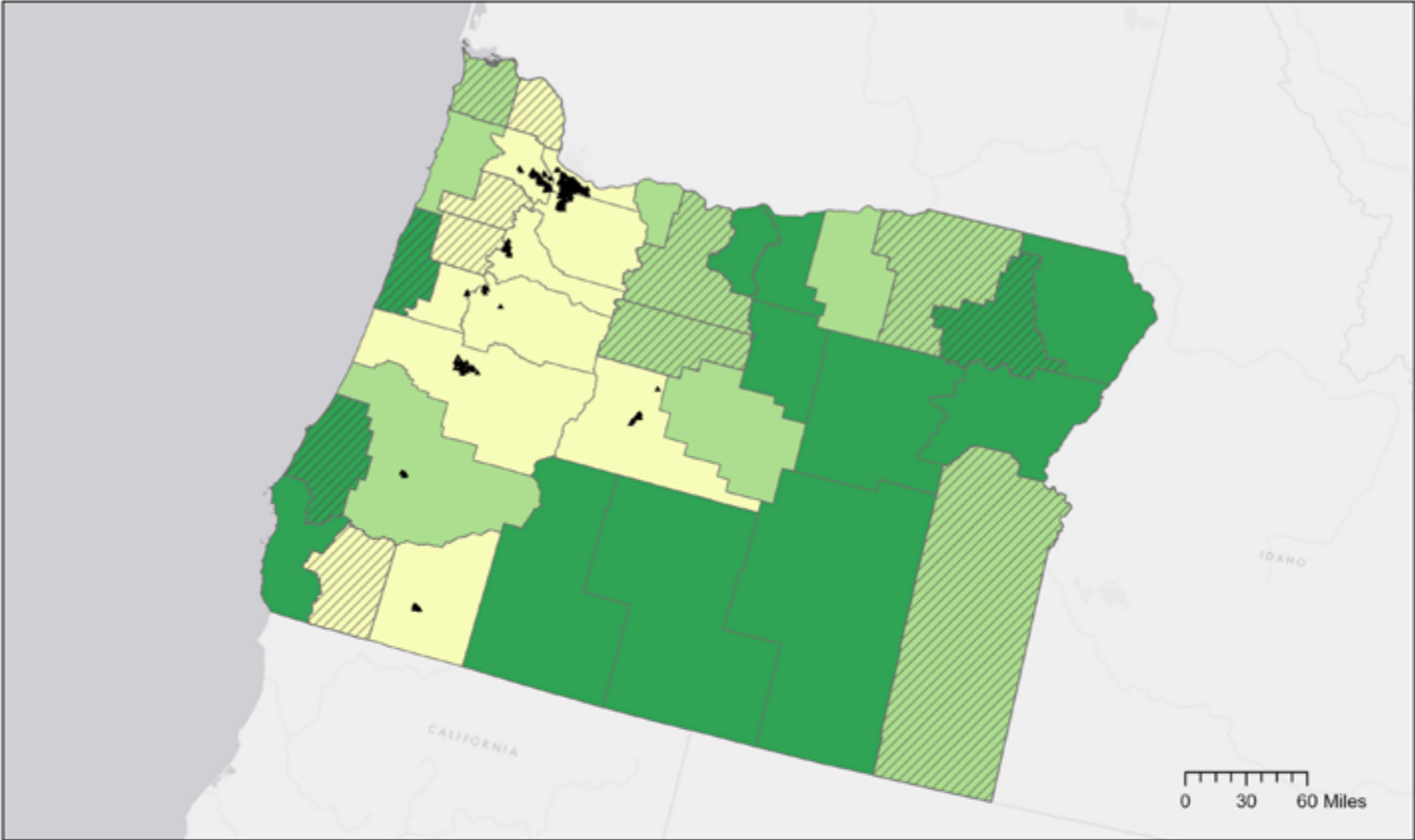
<sup>4</sup>Recovery residences availability per capita is ranked in order of decreasing recovery residence density per 100,000 population per county, with 1 (highest number of residences per 100,000) to 36 (lowest number of residences per 100,000 population). Counties without recovery residences were all assigned a tied rank of 36.

<sup>5</sup>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.

<sup>6</sup>Mortality rate is ranked in order of decreasing alcohol- and drug-involved mortality from 1 (highest mortality per 100,000 population) to 33 (lowest mortality per 100,000 population).

<sup>7</sup>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](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



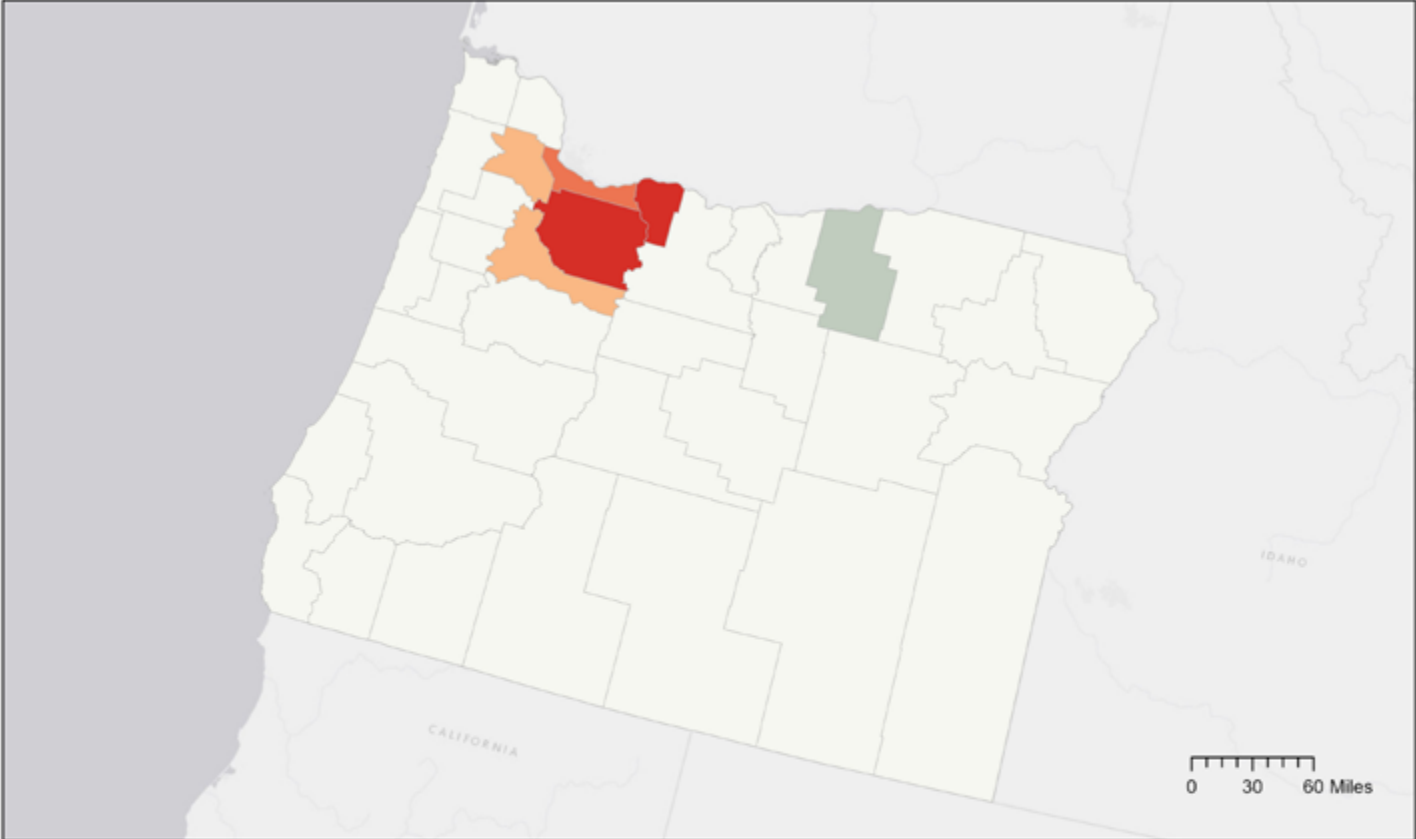
- ▲ Recovery residences
- Rural-Urban Classification Code (RUCC)**
- Urban
- Adjacent rural
- Non-adjacent rural
- Counties with residence locations suppressed (1-4 residences) to protect privacy



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



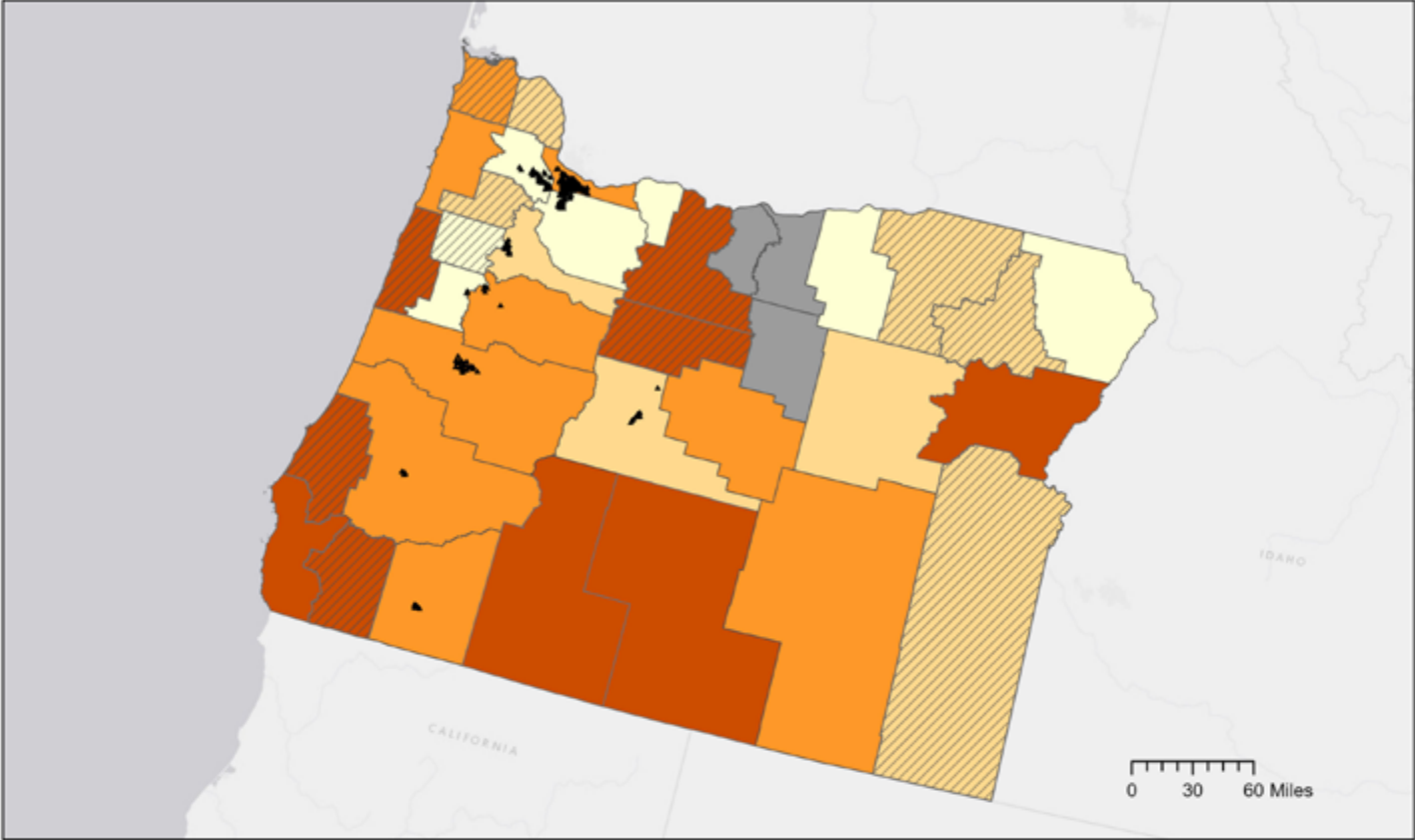
- Hot Spot Analysis (Getis-Ord GI\*)**
- Cold Spot with 99% Confidence
  - Cold Spot with 95% Confidence
  - Cold Spot with 90% Confidence
  - Not Significant
  - Hot Spot with 90% Confidence
  - Hot Spot with 95% Confidence
  - Hot Spot with 99% Confidence



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



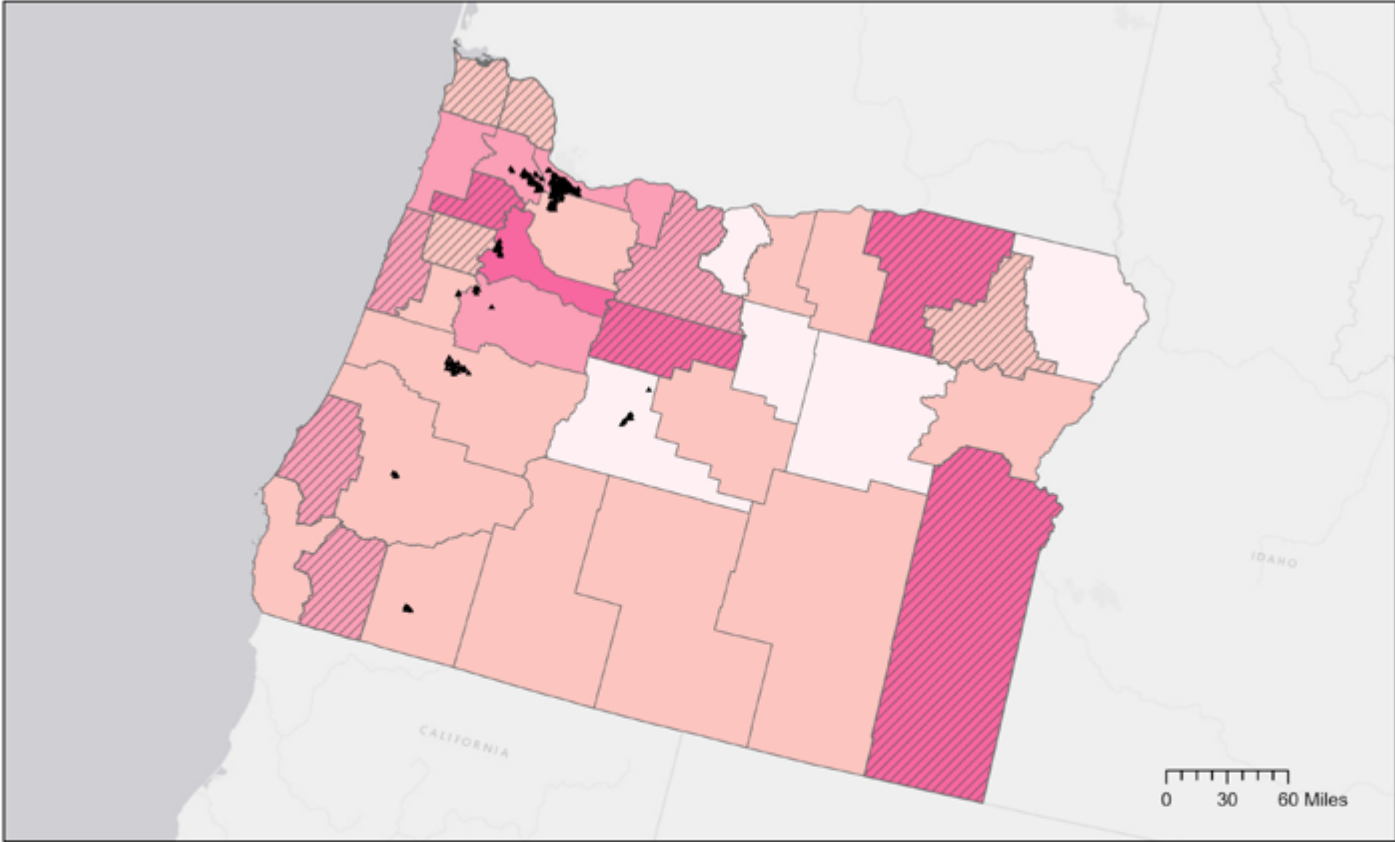
- ▲ Recovery residences
- Age-adjusted alcohol and drug mortality rate per 100,000 population
- 26 - 34
- 35 - 45
- 46 - 58
- 59 - 70
- Suppressed/Unreliable
- Counties with residence locations suppressed (1-4 residences) to protect privacy



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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