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## Political lean: A crucial variable for monitoring COVID-19 in the United States

N. Krieger, PhD[1], J. T. Chen, ScD[1], C. Testa, BS[1], P. D. Waterman, MPH[1], and W. P. Hanage[2]

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**Affiliations**

1. Department of Social and Behavioral Sciences, Harvard T.H. Chan School of Public Health, Boston, MA
2. Center for Communicable Disease Dynamics, Department of Epidemiology, Harvard T.H. Chan School of Public Health, Boston, MA


**Corresponding Author**

Nancy Krieger, PhD
Professor of Social Epidemiology
American Cancer Society Clinical Research Professor
Department of Social and Behavioral Sciences
Harvard T.H. Chan School of Public Health
677 Huntington Avenue
Boston, MA 02115
Email: nkrieger@hsph.harvard.edu
Phone: 617-432-1571

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**Abstract**

Descriptions and monitoring of the social and spatial population distribution of COVID-19 cases and deaths in the US have largely relied on individual- and county-level sociodemographic data and vulnerability indices that draw primarily or exclusively from data available in US health records and US census data. In this brief report, using US data from September 1, 2020 to September 15, 2021, we provide empirical evidence demonstrating that county-level data on political lean (Republican vs. Democrat for the 2020 US presidential election) adds critical information to understanding population distributions of COVID cases and deaths – and also document the importance of socioeconomic variables in addition to data on racialized groups. In particular, during the period from July 1, 2021-September 15 (corresponding to the delta surge, occurring when COVID-19 vaccines were authorized for all US adults for at least 3 months or more), the two county level variables that most sharply differentiated risk comparing the highest to lowest quintiles for COVID-19 rates (per 100,000 person-years) were: (a) political lean: highest Republican lean vs. highest Democratic lean, for cases: rate ratio (RR) = 2.39 (95% confidence interval [CI] 2.25, 2.55) and for deaths: RR = 3.34 (95% CI 2.99, 3.73), and (b) percent below poverty line, for cases: RR 1.93 (95% CI 1.15, 2.4) and for deaths: RR = 5.08 (95% CI 3.14, 8.97). By contrast, the least differentiation was provided by % people of color (highest vs. lowest quintile): for cases, RR = 0.95 (95% CI 0.89, 1.02), and for deaths: 0.83 (95% CI 0.74, 0.93). However, combining these single variables with political lean magnified the risk contrast between county quintiles. Thus, people residing in the counties jointly with the highest poverty and highest political lean toward Republicans were nearly 6 times more likely to die (rate ratio: 5.90; 95% CI 4.95, 7.07) from COVID-19 compared to those residing in the counties jointly with the lowest poverty and highest political lean toward Democrats. Additionally, people residing in counties jointly with the highest % people of color and highest political lean toward Republicans were almost 5 times more likely to die (rate ratio: 4.77, 95% CI 3.70, 6.20) from COVID-19 compared to people residing in counties jointly with the lowest % people of color and highest political lean toward Democrats. We accordingly posit that county-level political lean is a crucial variable that should be used routinely to monitor county-level trends in COVID-19 cases and mortality, alongside and in conjunction with sociodemographic and socioeconomic data.

Descriptions and monitoring of the social and spatial population distribution of COVID-19 cases and deaths in the US have largely relied on individual- and county-level sociodemographic data and vulnerability indices that draw primarily or exclusively from data available in US health records and US census data [1-7]. However, spurred by the dramatically politicized and partisan nature of the framing and responses to the US COVID-19 pandemic [8-13], recently some data journalists have been looking at COVID-19 data in relation to another relevant variable: political lean – that is, the extent to which an area's vote in the 2020 Presidential election was for the Republican versus the Democratic ticket [14-17]. To our knowledge, however, data on county or community political lean have been included in very few scientific publications on COVID-19 outcomes [18-22] and in no COVID-19 data dashboards.

Instead, empirical investigations focused on political views and COVID risks have chiefly considered the political affiliation of individuals, not the communities in which they reside [11-13, 23-29]. But for communicable diseases, exposures are the result of infections among other people in the population. By implication, an individual's risk of infection with a virus like SARS-CoV-2 varies with the numbers of cases of COVID-19 among their contacts. For this reason it is important to consider how communities vary at the population level, i.e., employ contextual and not solely individual-level data. Illustrating this point is the familiar example of vaccination coverage, whereby increasing immunization in a community – a contextual variable – has a non-linear benefit for the prevention and control of outbreaks [30-32]. This dependence on contextual community characteristics is one of the reasons for the use of cluster-randomized trial designs [33] when assessing the benefit of vaccination [34], and also of mask use in preventing cases of COVID-19 [35-36].

In this brief paper, we accordingly explore the associations of political lean of a community, rather than individuals, on the amounts of SARS-CoV-2 transmission within it, as reflected by their COVID-19 case and mortality rates. Specifically, we present descriptive results that compare the differentiation of risk obtained for county-level data when using: (a) solely sociodemographic variables and vulnerability indices; (b) political lean data; and (c) political lean stratified by the sociodemographic and vulnerability indices. We employ data on the weekly COVID-19 case and mortality rates, both per 100,000 person-years, for the US, both nationally and by region, for the period September 1, 2020 through September 15, 2021, a time period that encompasses both the winter 2020 surge and also the most recent delta surge (July-September 2021), but which excludes the initial shock of the introduction of and response to the pandemic from March through August 2020 [1,9,10].

**METHODS**

Study population. *COVID-19 case and death data*. We obtained publicly available data on COVID-19 cases and deaths at the county level from USAFacts [37], which we chose because it reports separate entries for the five counties corresponding to the boroughs of New York City. USAFacts directly collects the daily county-level cumulative totals of positive cases and deaths from a table, dashboard, or PDF on the state public health website. These data are compiled either through scraping or manual entry. Details of their methodology, including unique data issues affecting particular states, are available at their website [38]. Presumptive positive cases are counted with confirmed cases. Notably, counts reported by state and local health departments can fluctuate, with some days seeing lower reported numbers than the previous days; USAFacts revises older reported numbers to ensure the data do not show decreasing cases.

To generate our dataset, we decumulated the cumulative case and death counts on a weekly basis from January 22, 2020 to September 1, 2021, but for these analyses focus on September 1, 2020 onward. During this time period, Nebraska ceased reporting of county-level data on COVID-19 cases and death on May 26, 2021, hence to ensure comparability across the time period, we have excluded Nebraska (91 counties) from these analyses. To obtain denominators needed to compute rates, we matched county case and death data to population count data published on the USAFacts website [37], which are derived from US Census county population estimates.

*County-level metrics.* We constructed three county-level sociodemographic and socioeconomic variables, for which we used American Community Survey (ACS) 2014-2018 five-year estimates [39] and employed the variables and approaches described at our *Public Health Disparities Geocoding Project* website [7]. These variables pertain to:

    (a) percent of population below the poverty line;

    (b) percent of population categorized as people of color (i.e., everyone exclusive of persons who are categorized as white non-Hispanic); and

    (c) racialized economic segregation (Index of Concentration at the Extremes, setting the extremes as low-income households of color vs. high-income white non-Hispanic households).

We obtained two county-level social vulnerability variables developed and used by US government agencies:

    (d) the Social Vulnerability Index (SVI)**,** whose different data elements are drawn from years between 2014 and 2018 [5,40]; and

    (e) the Minority Social Vulnerability Index (MSVI), whose different data elements are drawn from years between 2011 and 2018 [6].

We computed data on political lean using data from the 2020 US presidential election [41], with political lean computed as [18]:

(f) lean = (N of Republican votes – N of Democratic votes)/total votes

Finally, to produce our joint variables, which combine the political lean data with the other social metric data, we created cross-classified categories. For these composite variables, we grouped: (1) the top two quintiles of the social metric variable with the top two and bottom two quintiles of the political lean variable as "high social metric and high Republican lean" vs. "high social metric and high Democratic lean" respectively; (2) the bottom two quintiles of the social metric variable with the top two and bottom two quintiles of the political lean variable as "low social metric and high Republican lean" and "low social metric and high Democratic lean" respectively; and (3) all other counties in the "middle" category.

We computed COVID-19 incidence and mortality rates for each week over the full time period (September 1, 2020-September 15, 2021). To visualize these trends, we applied a loess (locally estimated scatterplot smooth) with a span of 0.15 to reduce stochastic variability from week to week [42]. We also calculated the COVID-19 incidence and mortality rates for the period of the delta surge (July 1, 2021 – September 15, 2021) and generated model-based estimates of both the incidence and mortality rate ratios (RR) and 95% confidence intervals (CI) for each county-level metric for this time period based on an overdispersed Poisson model [43].

**RESULTS**

**Figure 1** shows the national data for the COVID-19 case and mortality rates (September 1, 2020 – September 15, 2021) stratified, separately, by the following single variables: % below poverty (**Figure 1a**); % of population categorized as being people of color (**Figure 1b**); racialized economic segregation (**Figure 1c**); the social vulnerability index (**Figure 1d**); the minority social vulnerability index (**Figure 1e**); and political lean (**Figure 1f**). **Table 1** presents the overall incidence and mortality rates and rate ratios data for these variables for the period July 1, 2021 through September 15, 2021.

Focusing on the most recent surge, starting in July 2021, predominantly involving the delta variant and occurring at a point when vaccines had been available to the US adult population for over 3 months, the sharpest differentiation of risk for COVID-19 cases, by county, was provided by the political lean variable, followed by the poverty variable, and the least differentiation was provided by the variable pertaining to percent people of color (**Figure 1, Table 1**). Thus, for these COVID-19 case rates (per 100,000 person-years), the rate ratios for the time period July 1, 2021 – September 15, 2021, comparing the highest vs. lowest county risk quintiles, equaled (in order of magnitude of risk): (a) 2.39 (95% CI

2.24, 2.55) for political lean (comparing highest quintile for lean Republican to highest quintile for lean Democratic); (b) 1.93 (95% CI 1.56, 2.43) for % below poverty; (c) 1.72 (95% CI 1.60, 1.84) for racialized economic segregation; (d) 1.69 (95% CI 1.58, 1.81) for the SVI; (e) 1.45 (95 % CI 1.36, 1.55) for the minority SVI; and (f) 0.95 (95%  CI 0.89, 1.02) for % populations of color.

Considering, next, the COVID-19 mortality rates during this same time period, the two variables detecting the greatest risk contrasts switched places, with the county poverty variable most sharply differentiating risk, followed by political lean, and with the least differentiation again provided by the % population of color (**Figure 1, Table 1**). Thus, for these COVID-19 mortality rates (per 100,000 person-years), the rate ratios for the time period July 1, 2021 – September 15, 2021, comparing the highest vs. lowest county risk quintiles, equaled (in order of magnitude of risk): (a) 5.08 (95% CI 3.14, 8.97) for % below poverty; (b) 3.34 (95% CI 2.99, 3.73) for political lean (comparing highest quintile for lean Republican to highest quintile for lean Democratic); (c) 2.65 (95% CI 2.34, 3.02) for racialized economic segregation; (d) 2.49 (95% CI 2.21, 2.81) for the SVI; (e) 2.07 (95% CI 1.84, 2.34) for the minority SVI; and (f) 0.83 (95% CI 0.74, 0.93) for % populations of color.

**Figure 2** shows analogous national graphs for September 1, 2020 through September 15, 2021, however this time with the single sociodemographic and vulnerability index data combined with the political lean data (**Figures 2a-2e**). The corresponding tabular data for July 1, 2021-September 15, 2021 are included in **Table 1.** Far greater contrasts in risk were yielded by the composite metrics, linking political lean and the additional social metrics, as compared to the social metrics alone.

Considering, again the COVID-19 case rates (per 100,000 person-years), for the time period July 1, 2021 – September 15, 2021 the rate ratios for each composite variable, comparing the highest vs. lowest county risk quintiles, were on the order of 2.5 or higher. The greatest contrast was for the composite variable of political lean × racialized economic segregation (RR: 3.04, 95% CI 2.82, 3.27) and the smallest was for the composite variable of political lean × % population of color (RR: 2.62, 95% CI 2.27, 3.04).

For the COVID-19 mortality rates (per 100,000 person-years), these rate ratios for the same time period were close to or in excess of 5 or higher. The greatest contrast was for the composite variable of political lean × % below poverty (RR: 5.90, 95% CI 4.95, 7.07), and the smallest was for the composite variable of political lean × % population of color (RR: 4.77, 95% CI 3.70, 6.20).

What these data translate to is that, during the period of the delta surge (July 1, 2021-September 15, 2021), people residing in the highest vs. lowest county poverty quintiles were 5 times more likely to die (RR: 5.08, 95% CI 3.14, 8.97) from COVID-19, and this risk was further magnified when taking into account political lean, whereby people residing in the counties jointly with the highest poverty and highest political lean toward Republicans were nearly 6 times more likely to die (RR: 5.90; 95% CI 4.95, 7.07) from COVID-19 compared to those residing in the counties jointly with the lowest poverty and highest political lean toward Democrats. Moreover, for the county variable least differentiating COVID-19 county mortality rates, the % population of color, combining this variable with political lean markedly increased risk differentiation: from a rate ratio of 0.83 (95% CI 0.74, 0.93), comparing the highest vs. lowest county quintiles for % of population of color, to a rate ratio of 4.77 (95% CI 3.70, 6.20) comparing people residing in counties jointly with the highest % people of color and highest political lean toward Republicans versus people residing in counties jointly with the lowest % people of color and highest political lean toward Democrats.

Corresponding figures and tabular data by US region are provided in the supplemental data (**Figures S1, S2, Table S1**). Also included are data showing the regional composition of US counties, in relation to both population fraction and proportion of counties, for the social metrics and political lean variables (**Figure S3-S4**). These latter figures usefully reveal the patterning and extent of social spatial segregation and polarization in the US. For example, in the Northeast, approximately 15% of the population was in the highest quintile for percent of population categorized as being people of color, versus only 2% of the counties, whereas in the South, the contrast was 15% for population vs. 7 % for counties. Similarly, in the Midwest, approximately 20% of the population but 70% of the counties were in the highest quintile for political lean toward Republicans, whereas in the West, the contrast was 7% for population vs. 50% for counties.

Of note, despite marked differences in the regional composition, by population and counties, for each of the social metrics and political lean variables, the rank order of risk for COVID-19 case and mortality rates for each variable analyzed was largely consistent across US regions, even as the absolute values differed (**Figures S1, S2, Table S1**), suggesting the national data are not uniquely reflective of patterns within a particular region.

**CONCLUSION**

In the context of a highly politicized pandemic [8-29], accurate description and monitoring of US populations and regions most at risk cannot rely solely on sociodemographic and social vulnerability

indices: political lean matters too. Inclusion of political lean at the community level may not be common practice in US public health monitoring and analyses, but it is necessary for COVID-19 and likely is warranted for other health outcomes and policies, present and future, that are prone to partisan politicization [8-29,44,45].

It is not the intent of this descriptive paper to analyze or speculate about the causal processes that underlie why political lean has become a crucial variable to understand the dynamics of the COVID-19 pandemic in the US [8-29], one that differentiates risk more sharply than solely the sociodemographic and socioeconomic variables. Rather, our intent is to clarify that accurate description of the pandemic in the US requires inclusion of variables that are informative – and that a failure to include political variables at the county or community level in US COVID-19 monitoring and analyses constitutes a critical kind of information bias that can obscure who is most burdened by this pandemic.

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**FIGURES AND TABLES**

Figure 1. US national weekly COVID-19 case and mortality rates, per 100,000 person years, for September 1, 2021-September 15, 2021, stratified by county-level metrics for: (a) percent of population below the poverty line; (b) percent of population categorized as people of color; (c) racialized economic segregation (d) Social Vulnerability Index (SVI); (e) the Minority Social Vulnerability Index (MSVI); and; (f) 2020 political lean.

Figure 2. US national weekly COVID-19 case and mortality rates, per 100,000 person years, for September 1, 2021-September 15, 2021, stratified by county-level metrics for combinations of political lean AND: (a) percent of population below the poverty line; (b) percent of population categorized as people of color; (c) racialized economic segregation (d) Social Vulnerability Index (SVI); and (e) the Minority Social Vulnerability Index (MSVI).

Table 1. US national cumulative COVID-19 case and mortality rates per 100,000 person years, and incidence and mortality rate ratios and 95% confidence intervals, for July 1, 2021-September 15, 2021 (delta surge), stratified by county-level metrics for: (a) percent of population below the poverty line; (b) percent of population categorized as people of color; (c) racialized economic segregation (Index of Concentration at the Extremes (ICE)); (d) Social Vulnerability Index (SVI); (e) the Minority Social Vulnerability Index (MSVI); (f) 2020 political lean, and also political lean combined with each of the listed variables.

**SUPPLEMENTAL DATA:**

Figure S1. US national and regional weekly COVID-19 case and mortality rates, per 100,000 person years, for September 1, 2021-September 15, 2021, stratified by county-level metrics for: (a) percent of population below the poverty line; (b) percent of population categorized as people of color; (c) racialized economic segregation (d) Social Vulnerability Index (SVI); (e) the Minority Social Vulnerability Index (MSVI); and; (f) 2020 political lean.

Figure S2. US national and regional weekly COVID-19 case and mortality rates, per 100,000 person years, for September 1, 2021-September 15, 2021, stratified by county-level metrics for combinations of political lean AND: (a) percent of population below the poverty line; (b) percent of population categorized as people of color; (c) racialized economic segregation (d) Social Vulnerability Index (SVI); and (e) the Minority Social Vulnerability Index (MSVI).

Figure S3. US national population and county distribution by: (a) percent of population below the poverty line (2014-2018); (b) percent of population categorized as people of color (2014-2018); (c) racialized economic segregation (2014-2018); (d) Social Vulnerability Index (SVI)(2014-2018); (e) the Minority Social Vulnerability Index (MSVI) (2011-2018); and; (f) 2020 political lean.

Figure S4. US national population and county distribution by county-level metrics for combinations of political lean AND: a) percent of population below the poverty line (2014-2018); (b) percent of population categorized as people of color (2014-2018); (c) racialized economic segregation (2014-2018); (d) Social Vulnerability Index (SVI)(2014-2018); and (e) the Minority Social Vulnerability Index (MSVI) (2011-2018).

Table S1. US regional cumulative COVID-19 case and mortality rates per 100,000 person years, and incidence and mortality rate ratios and 95% confidence intervals, for July 1, 2021-September 15, 2021 (delta surge), stratified by county-level metrics for: (a) percent of population below the poverty line; (b)

percent of population categorized as people of color; (c) racialized economic segregation (Index of Concentration at the Extremes (ICE)); (d) Social Vulnerability Index (SVI); (e) the Minority Social Vulnerability Index (MSVI); (f) 2020 political lean, and also political lean combined with each of the listed variables.

Figure 1a: Weekly COVID-19 case and death rate per 100,000 person-years by county % below poverty, United States, September 1, 2020 - September 15, 2021
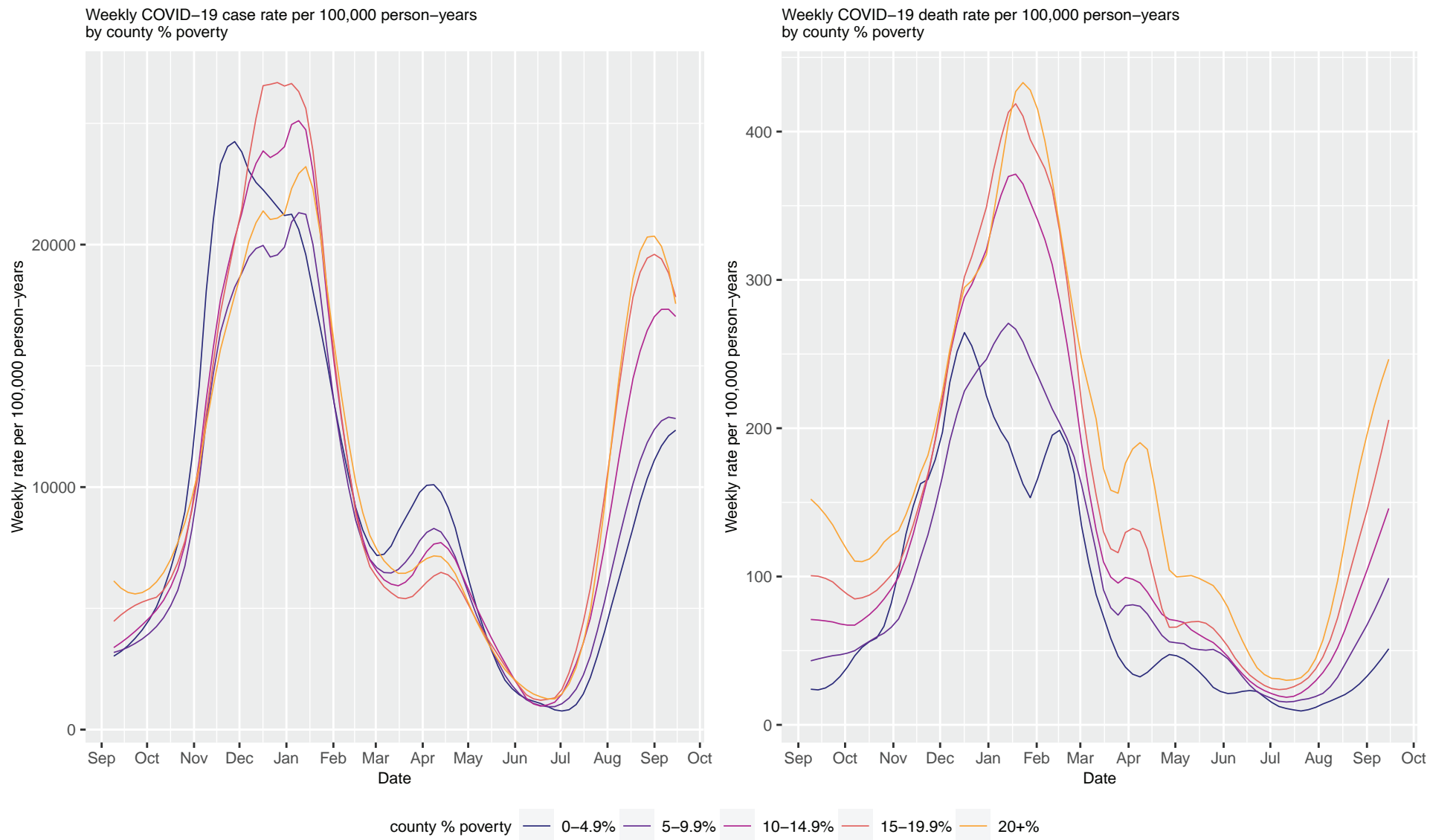
Figure 1b: Weekly COVID-19 case and death rate per 100,000 person-years by county % population of color, United States, September 1, 2020 - September 15, 2021
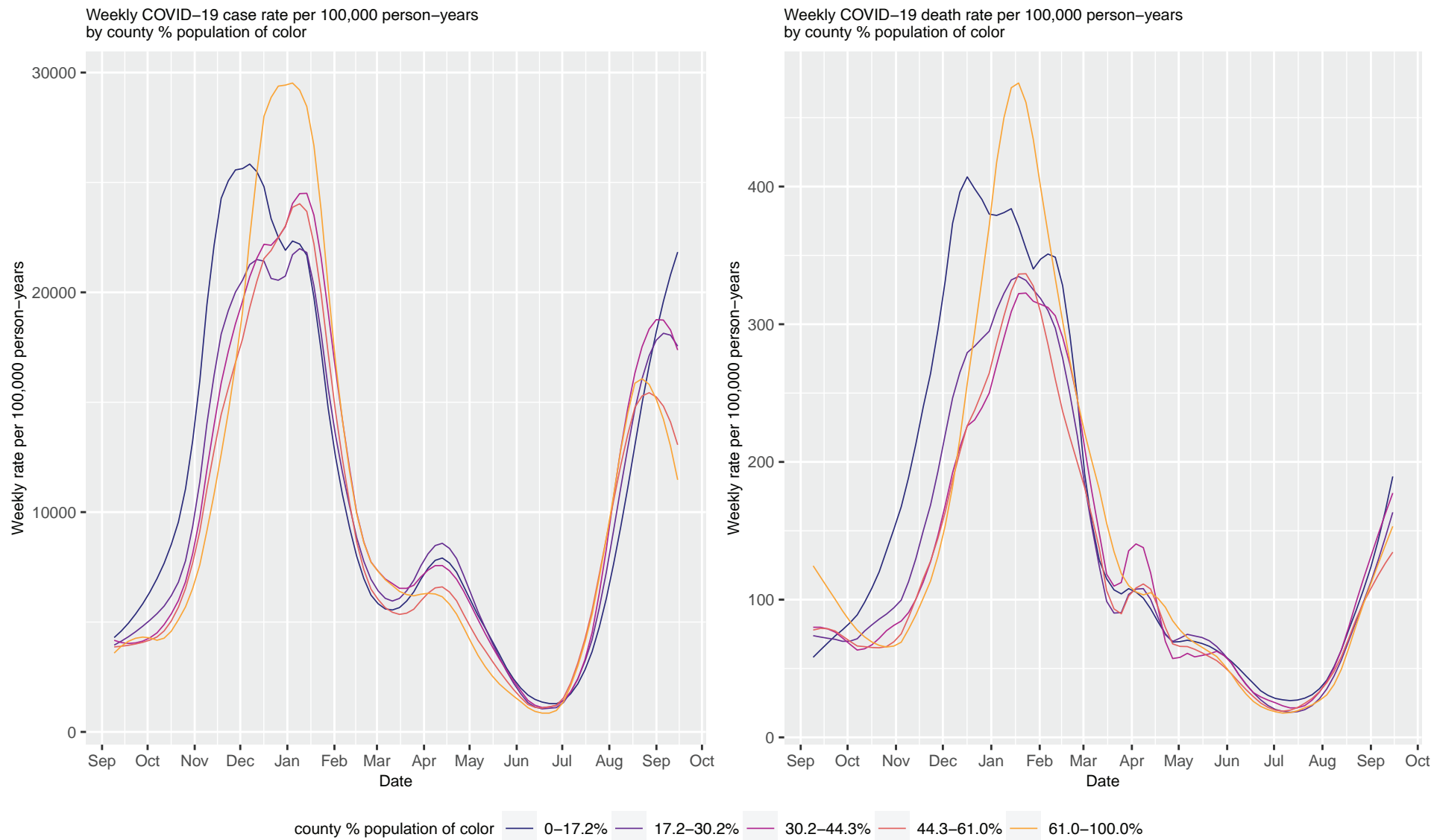
Figure 1c: Weekly COVID-19 case and death rate per 100,000 person-years by county racialized economic segregation, United States, September 1, 2020 - September 15, 2021
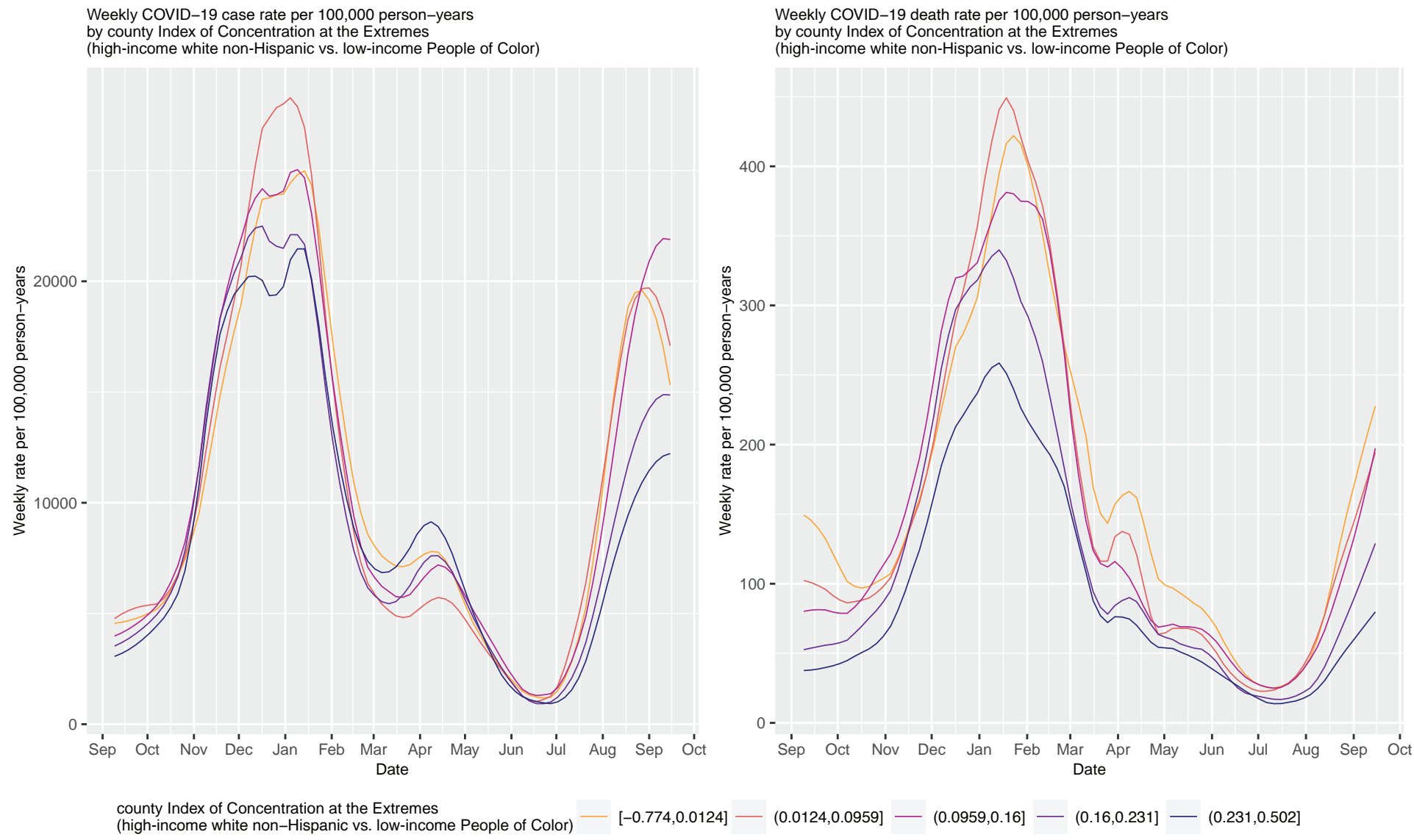


Weekly COVID-19 case rate per 100,000 person-years
by county Index of Concentration at the Extremes
(high-income white non-Hispanic vs. low-income People of Color)

Weekly COVID-19 death rate per 100,000 person-years
by county Index of Concentration at the Extremes
(high-income white non-Hispanic vs. low-income People of Color)

county Index of Concentration at the Extremes
(high-income white non-Hispanic vs. low-income People of Color)

[−0.774,0.0124]   (0.0124,0.0959]   (0.0959,0.16]   (0.16,0.231]   (0.231,0.502]

Figure 1d: Weekly COVID-19 case and death rate per 100,000 person-years by county Social Vulnerability Index (SVI), United States, September 1, 2020 - September 15, 2021
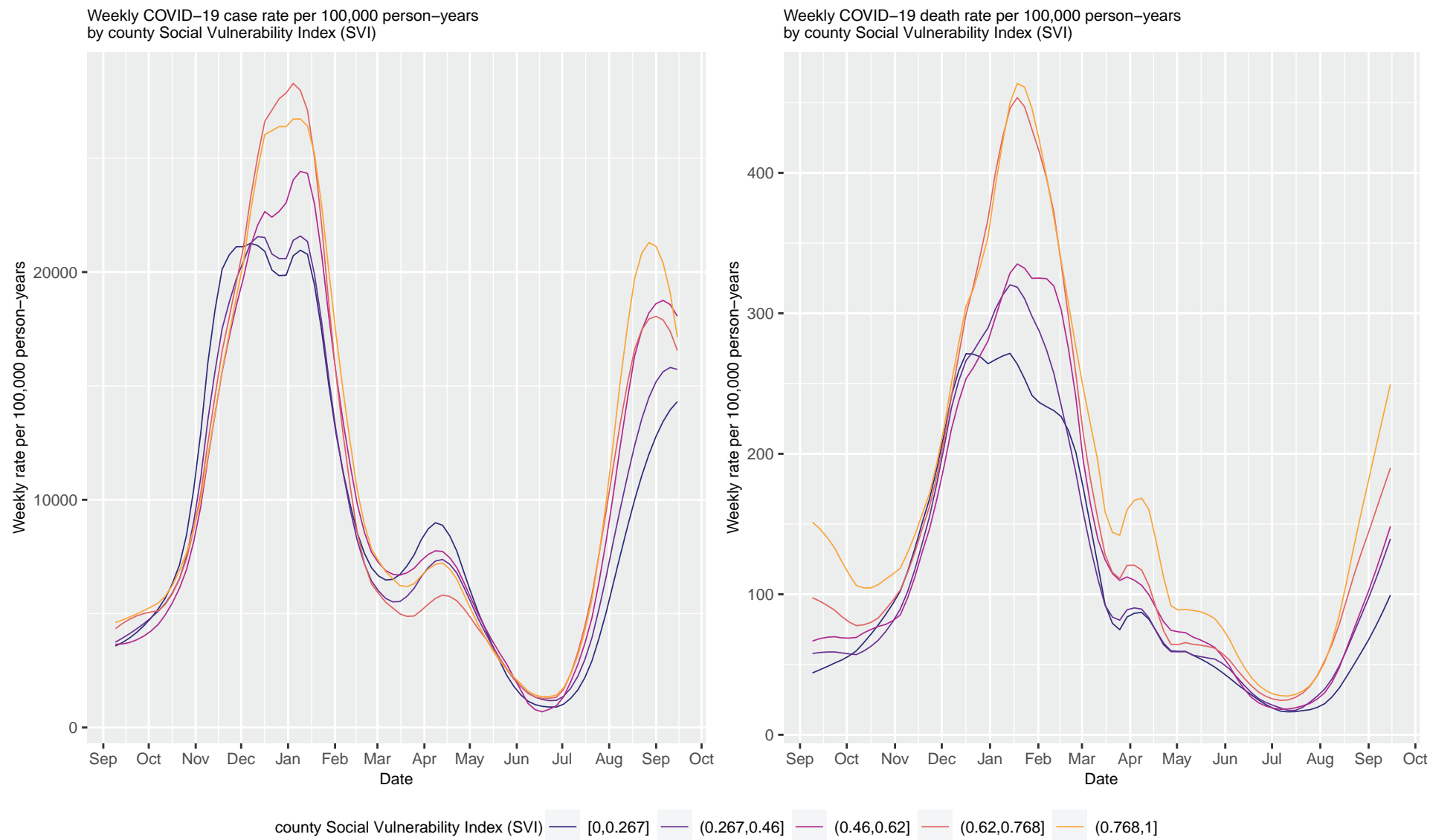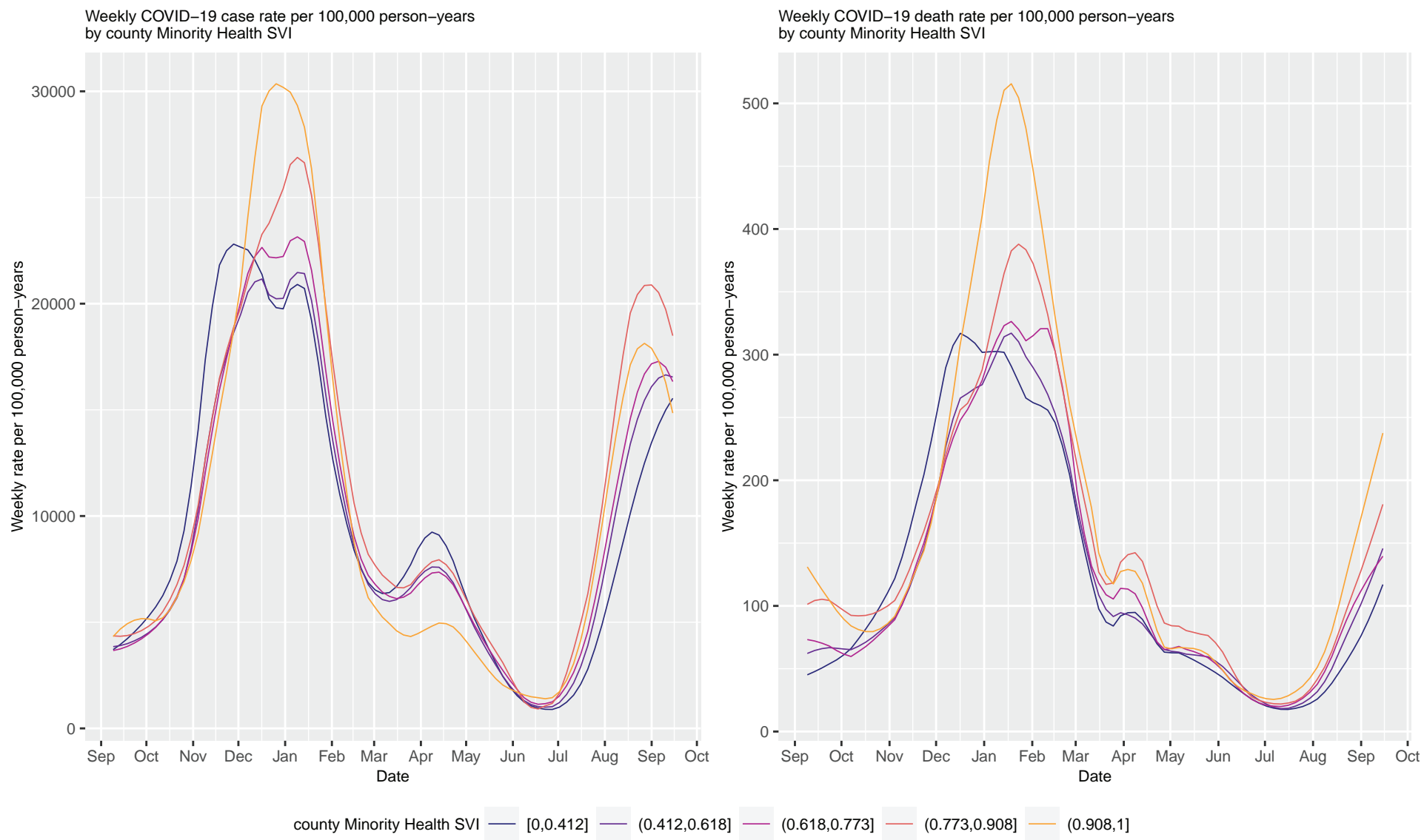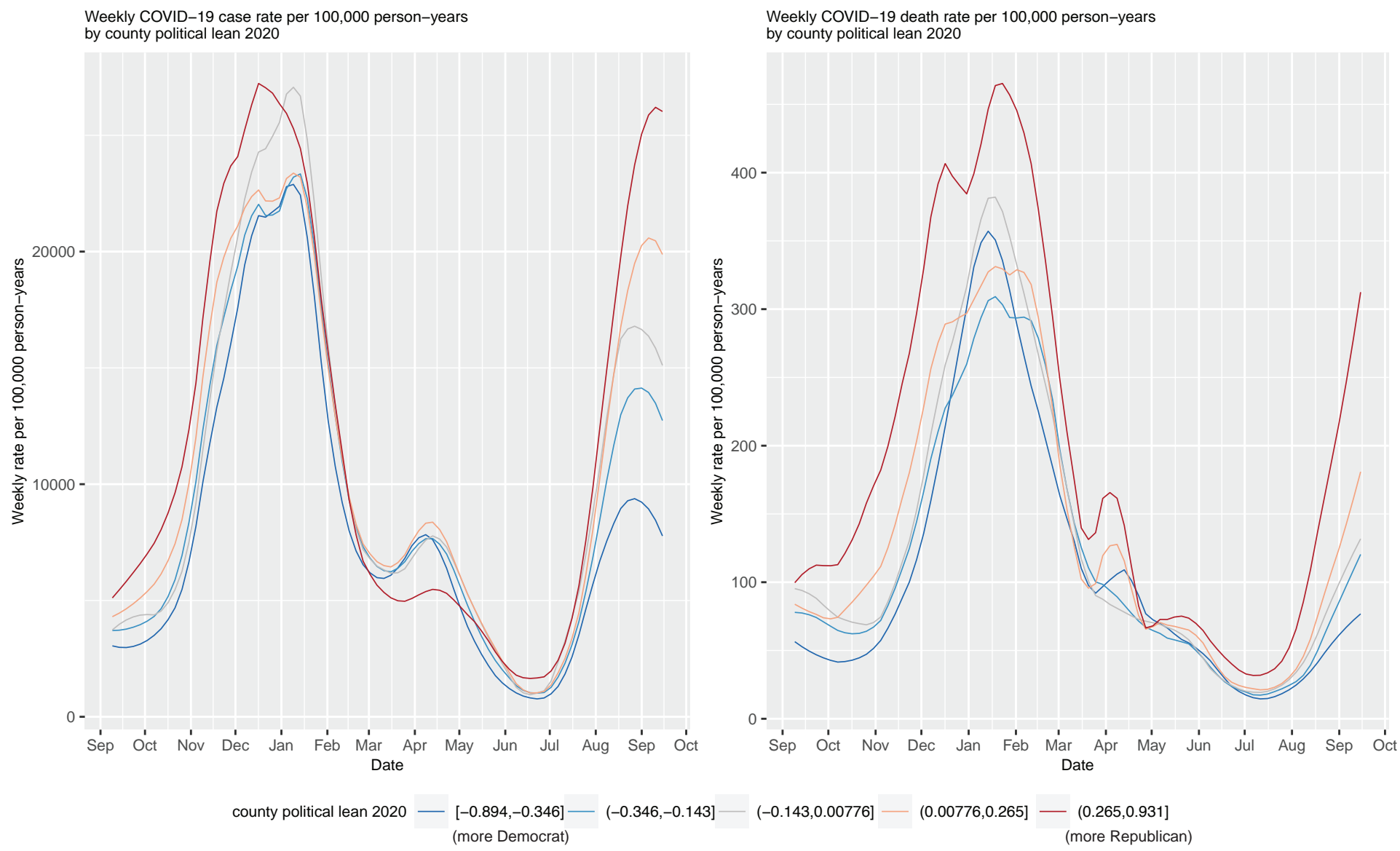


Weekly COVID–19 case rate per 100,000 person–years by county Social Vulnerability Index (SVI)

Weekly COVID–19 death rate per 100,000 person–years by county Social Vulnerability Index (SVI)

county Social Vulnerability Index (SVI) — [0,0.267] — (0.267,0.46] — (0.46,0.62] — (0.62,0.768] — (0.768,1]

Figure 1e: Weekly COVID-19 case and death rate per 100,000 person-years by county Minority Health SVI,
United States, September 1, 2020 - September 15, 2021



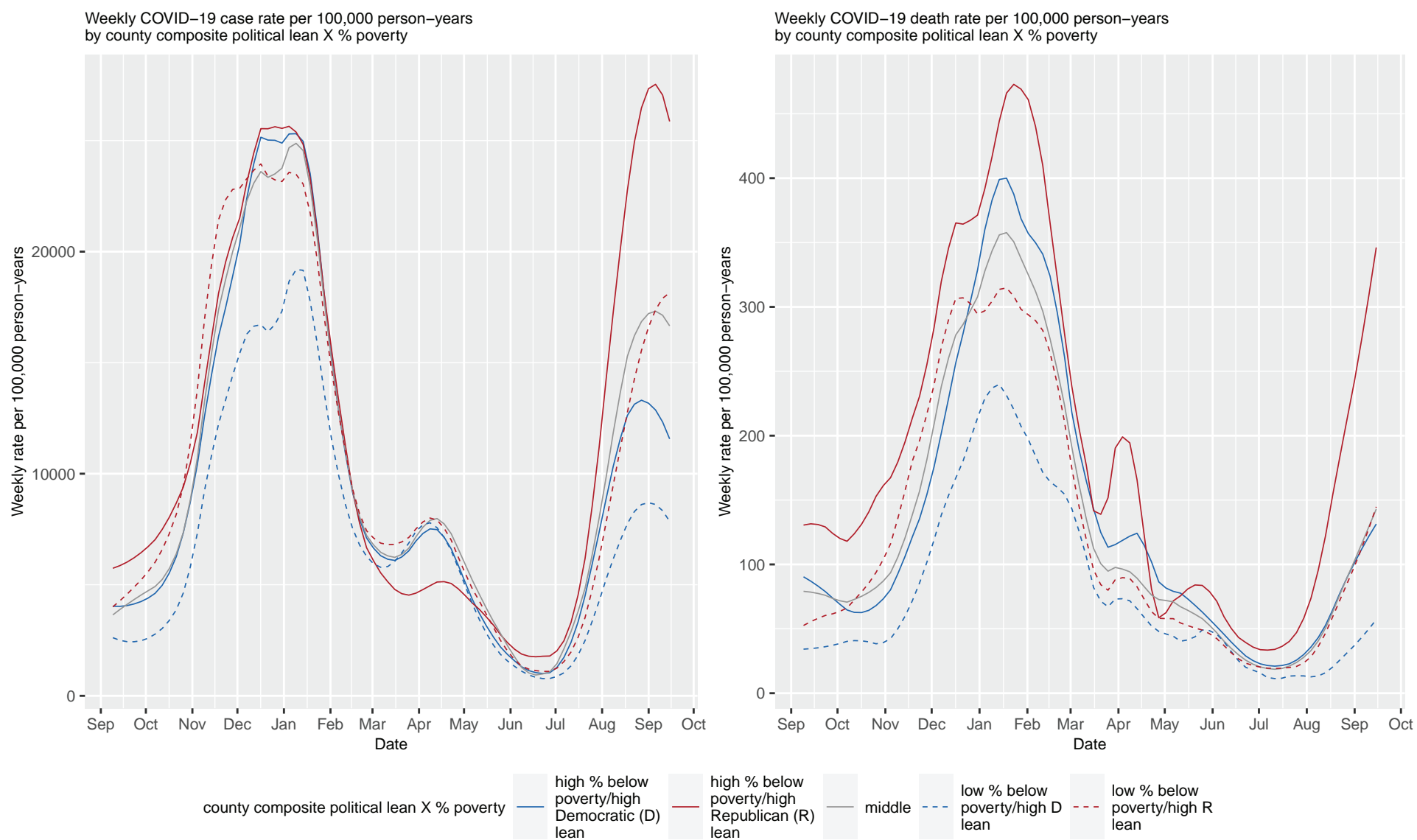Weekly COVID−19 case rate per 100,000 person−years
by county Minority Health SVI

Weekly COVID−19 death rate per 100,000 person−years
by county Minority Health SVI

county Minority Health SVI  — [0,0.412]  — (0.412,0.618]  — (0.618,0.773]  — (0.773,0.908]  — (0.908,1]

Figure 1f: Weekly COVID-19 case and death rate per 100,000 person-years by county political lean (2020),
United States, September 1, 2020 - September 15, 2021 ,



Weekly COVID−19 case rate per 100,000 person−years
by county political lean 2020

Weekly COVID−19 death rate per 100,000 person−years
by county political lean 2020

county political lean 2020 — [−0.894,−0.346] — (−0.346,−0.143] — (−0.143,0.00776] — (0.00776,0.265] — (0.265,0.931]

(more Democrat)

(more Republican)

Figure 2a: Weekly COVID-19 case and death rate per 100,000 person-years by county composite political lean X % below poverty, United States, September 1, 2020 - September 15, 2021

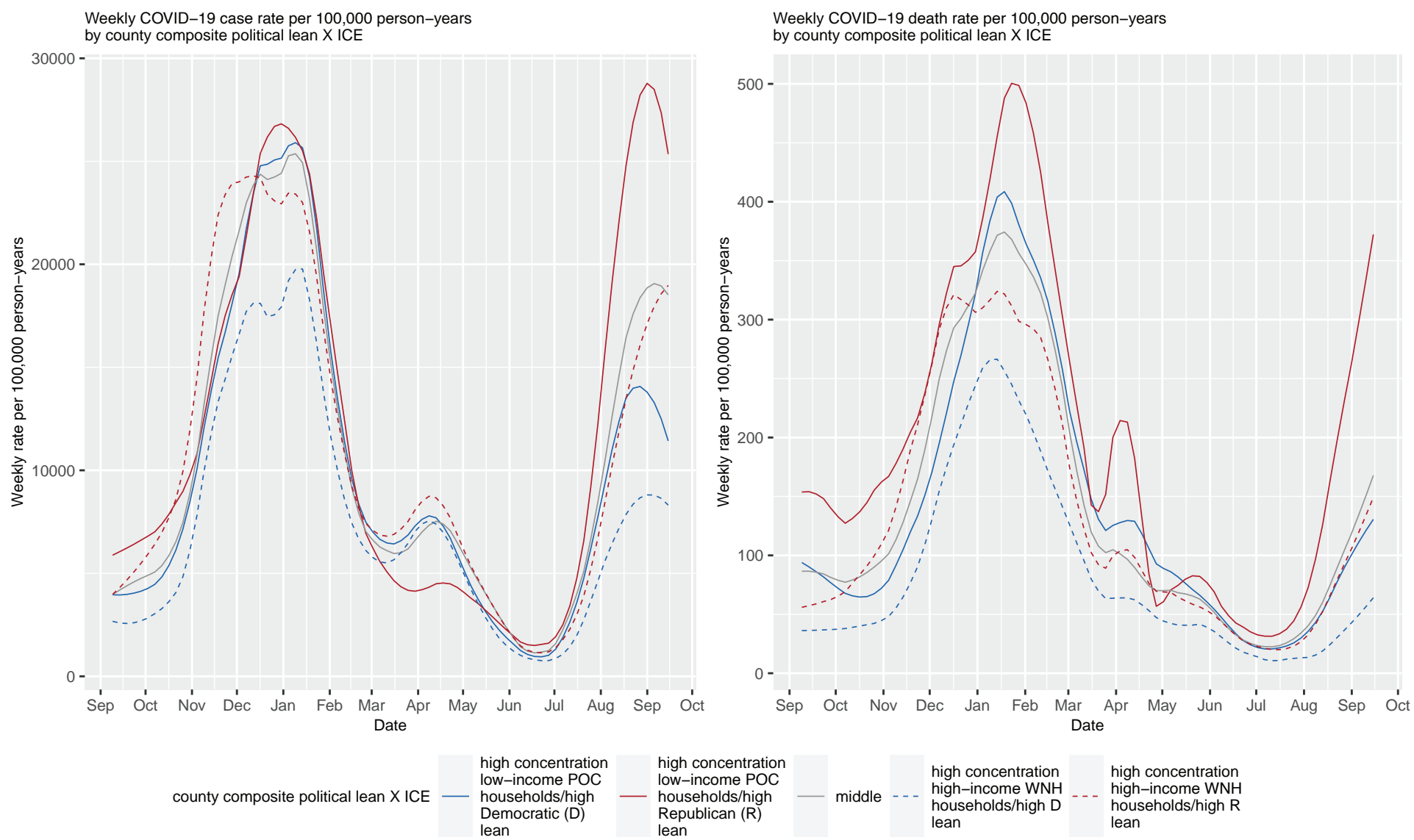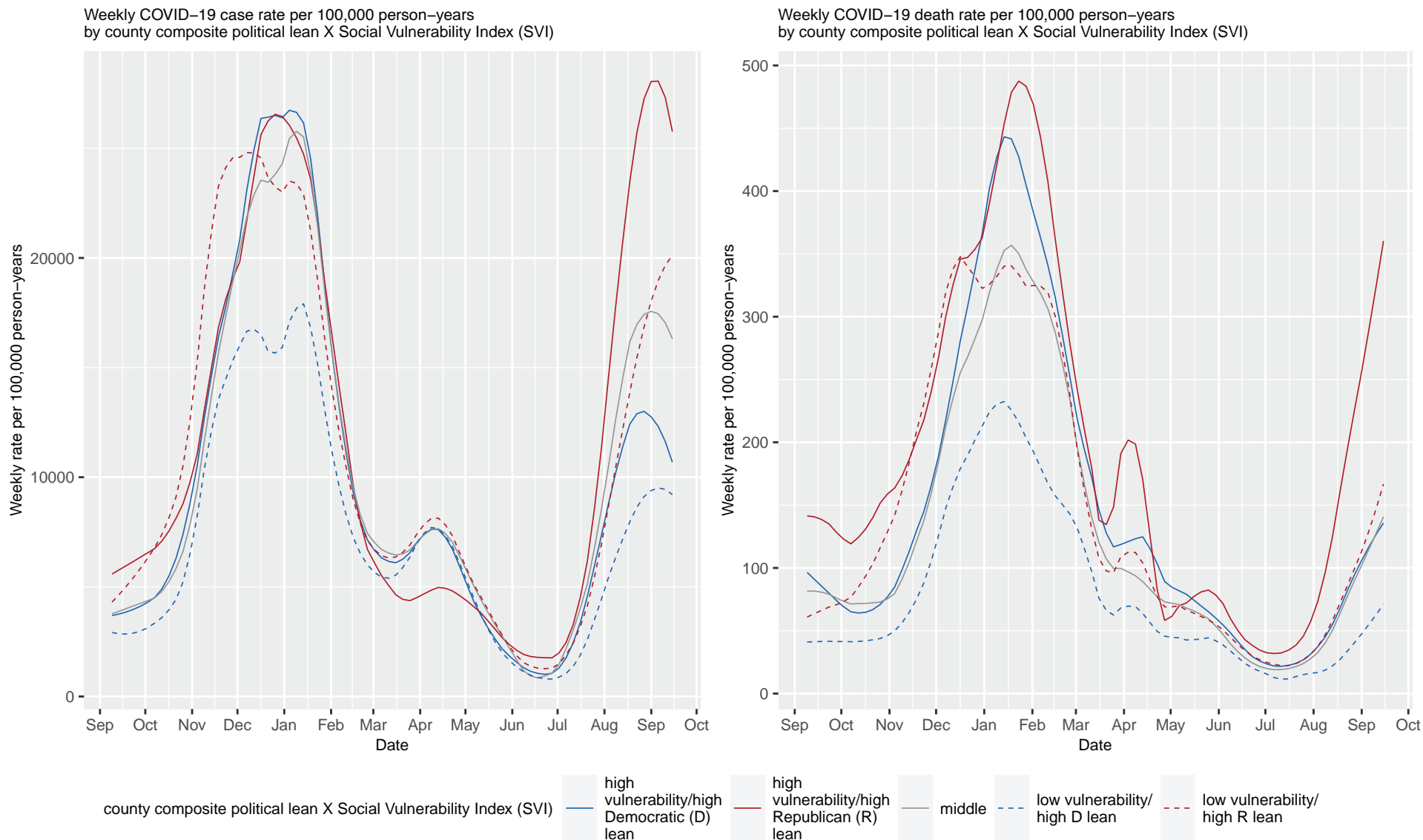Figure 2b: Weekly COVID-19 case and death rate per 100,000 person-years by county composite political lean X % population of color, United States, September 1, 2020 - September 15, 2021
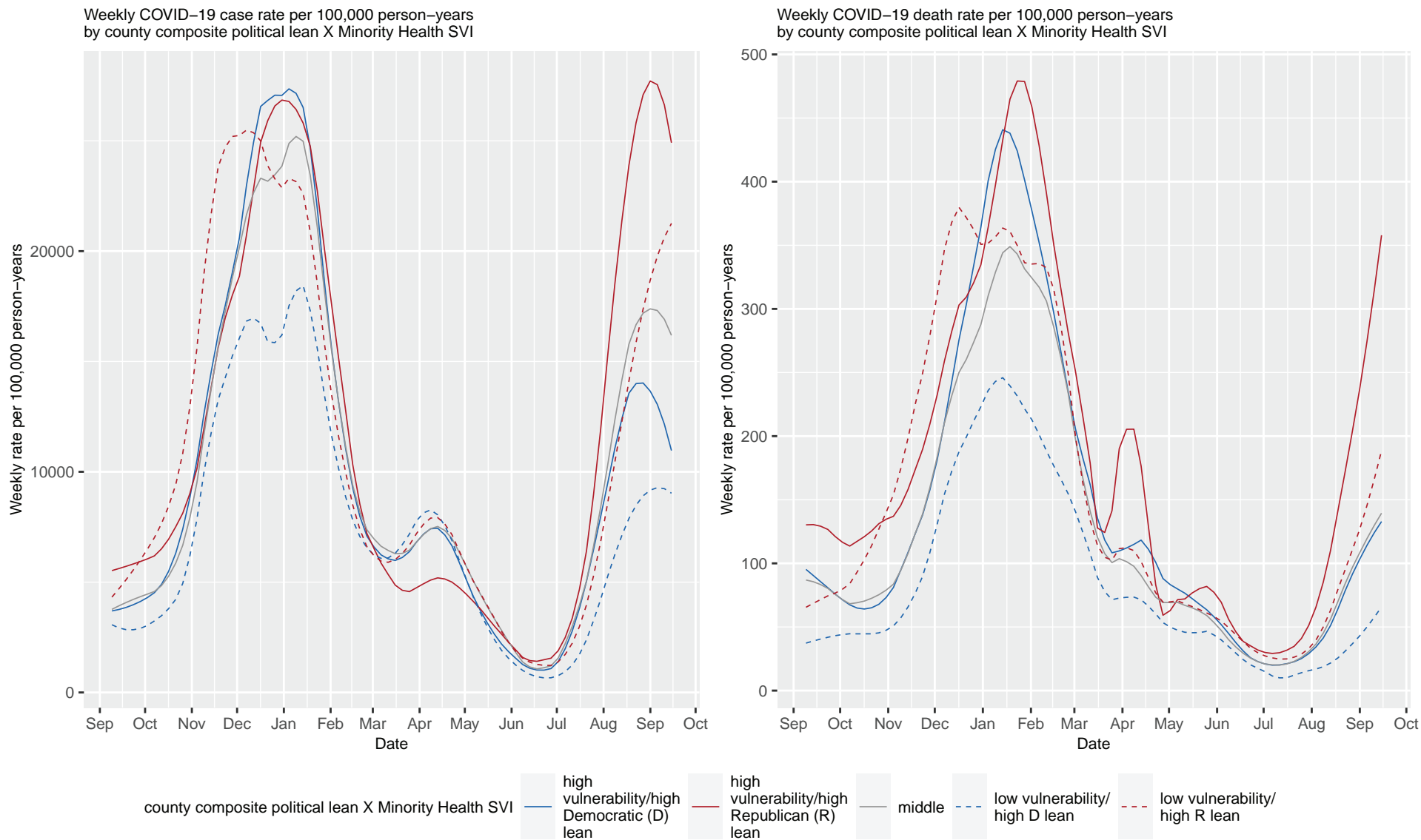
Figure 2c: Weekly COVID-19 case and death rate per 100,000 person-years by county composite political lean X racialized economic segregation, United States, September 1, 2020 - September 15, 2021 ,

Figure 2d: Weekly COVID-19 case and death rate per 100,000 person-years by county composite political lean X Social Vulnerability Index (SVI), United States, September 1, 2020 - September 15, 2021

# Figure 2e: Weekly COVID-19 case and death rate per 100,000 person-years by county composite political lean X Minority Health SVI, United States, September 1, 2020 - September 15, 2021



Weekly COVID−19 case rate per 100,000 person−years
by county composite political lean X Minority Health SVI

Weekly COVID−19 death rate per 100,000 person−years
by county composite political lean X Minority Health SVI

county composite political lean X Minority Health SVI
— high vulnerability/high Democratic (D) lean
— high vulnerability/high Republican (R) lean
— middle
-- low vulnerability/high D lean
-- low vulnerability/high R lean

Figure S1a: Weekly COVID-19 case and death rate per 100,000 person-years by county % below poverty and federal region, United States, September 1, 2020 - September 15, 2021
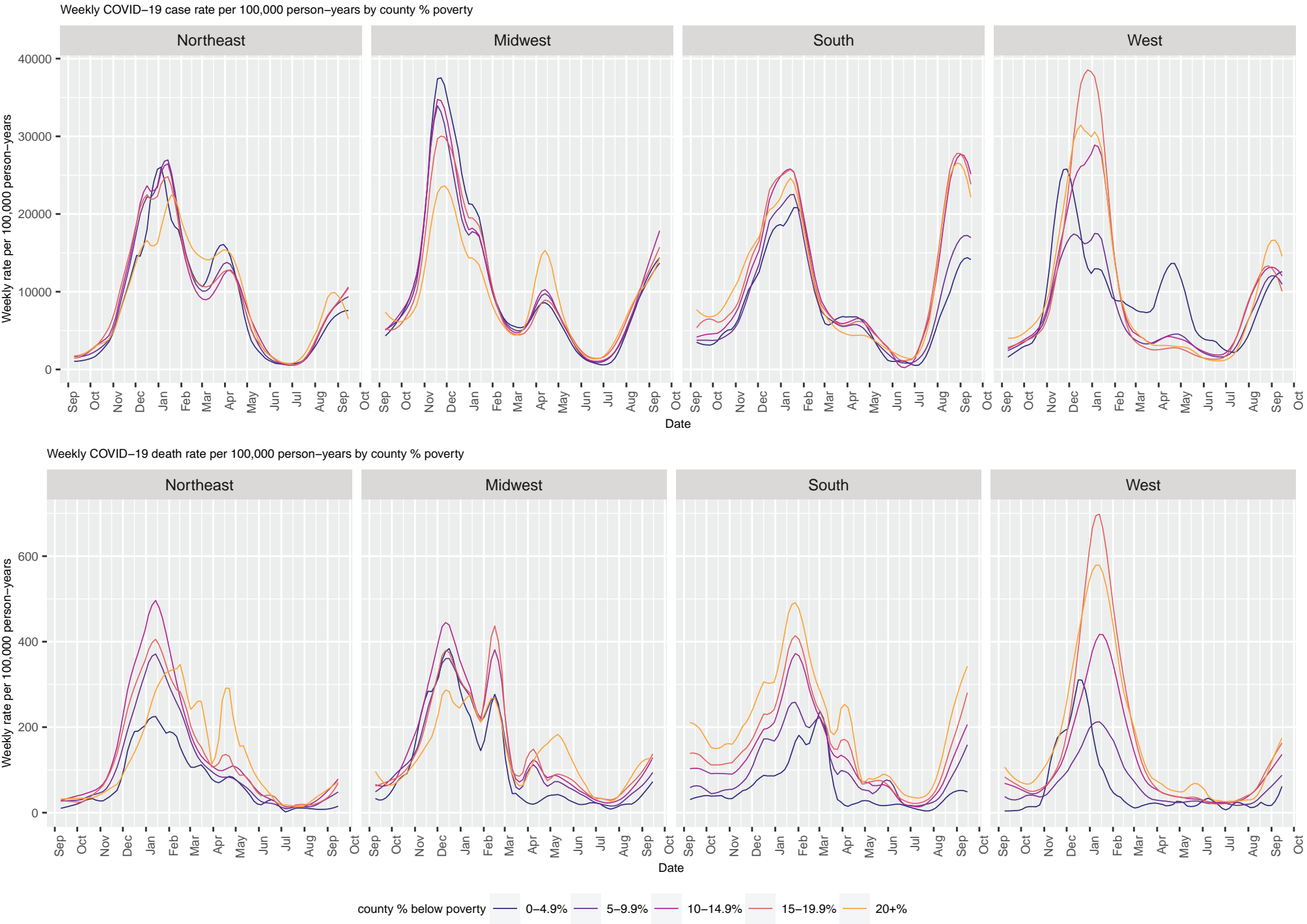
Figure S1b: Weekly COVID-19 case and death rate per 100,000 person-years by county % population of color and federal region, United States, September 1, 2020 - September 15, 2021
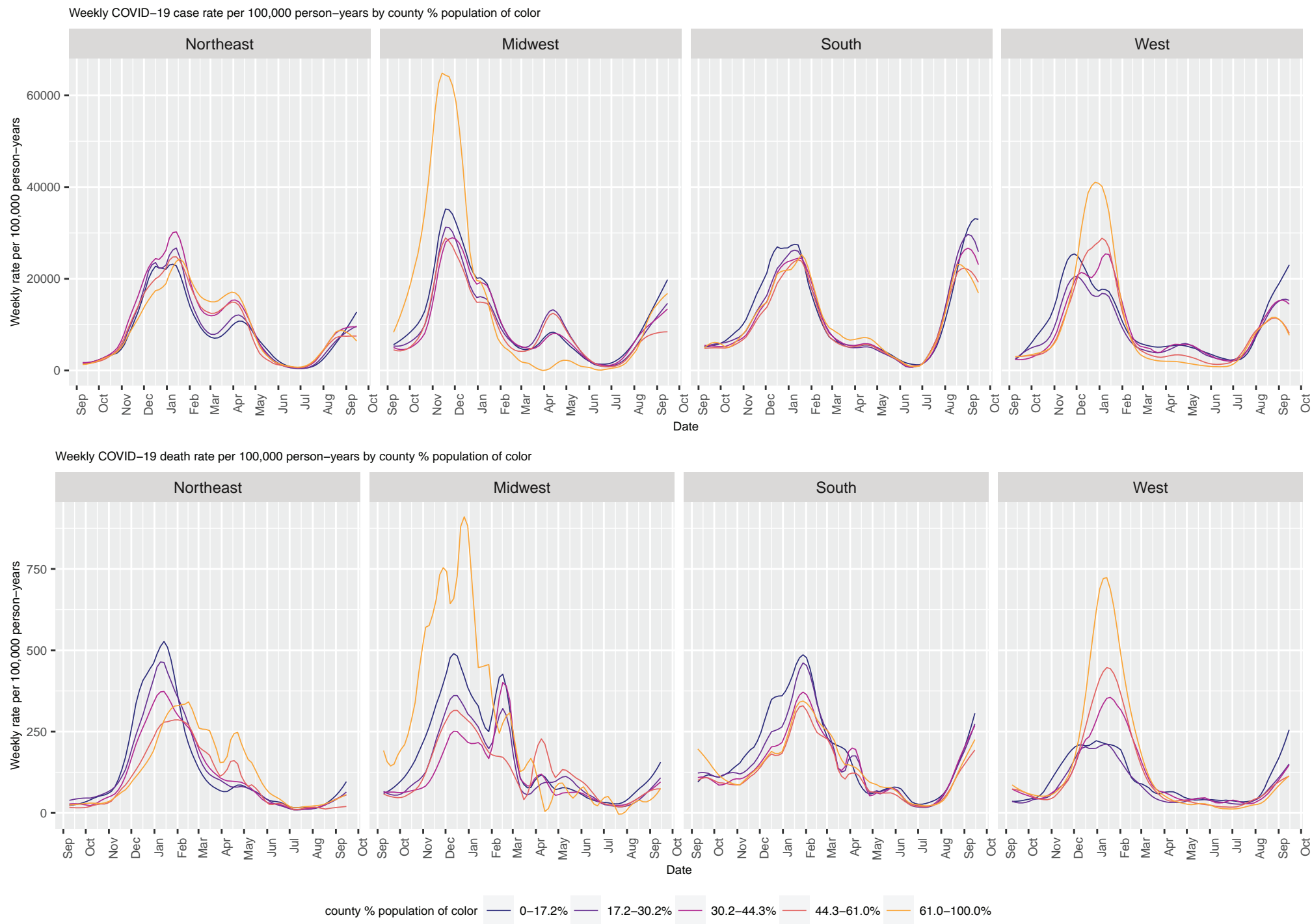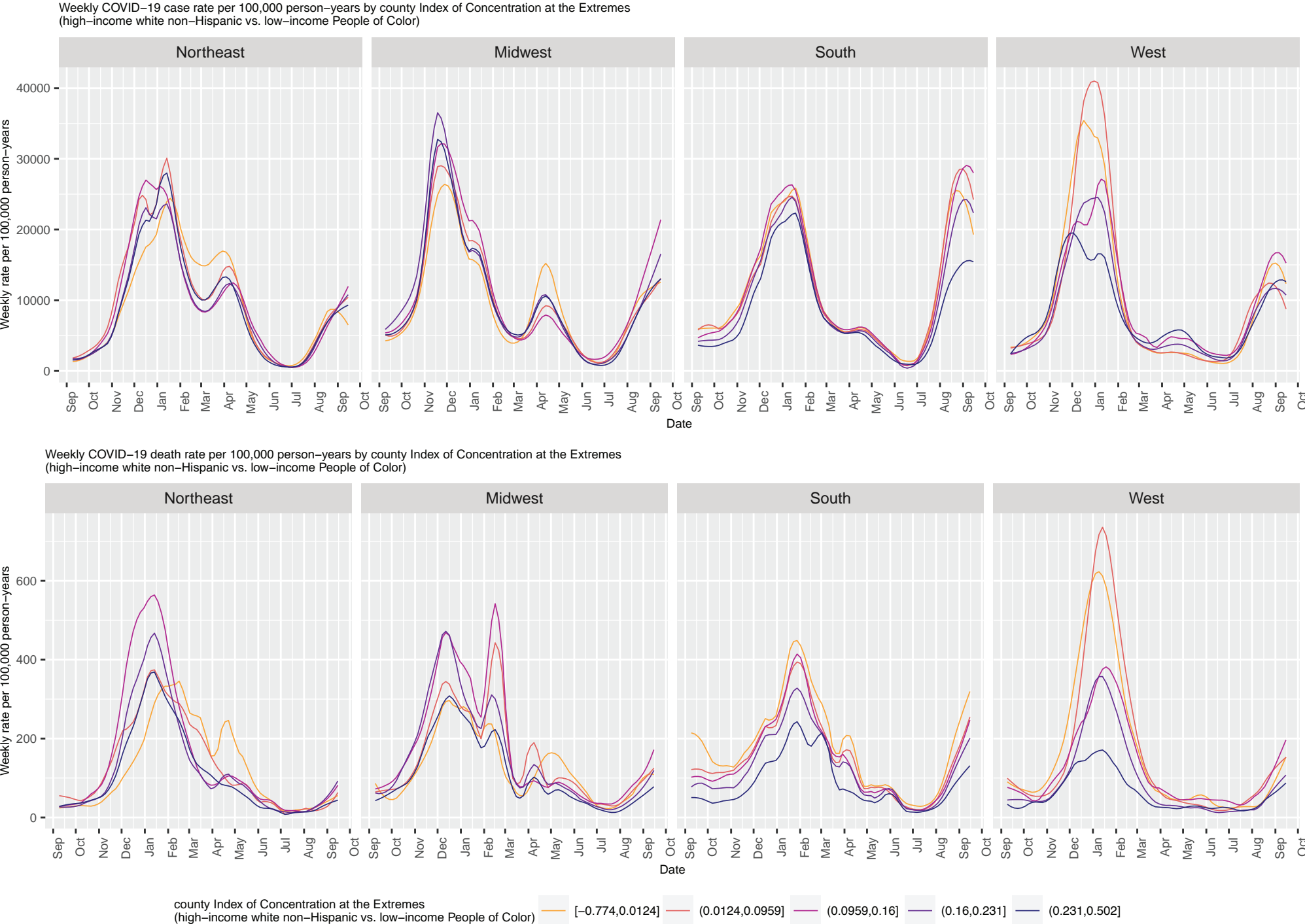
Figure S1c: Weekly COVID-19 case and death rate per 100,000 person-years by county racialized economic segregation and federal region, United States, September 1, 2020 - September 15, 2021

Figure S1d: Weekly COVID-19 case and death rate per 100,000 person-years by county Social Vulnerability Index (SVI) and federal region, United States, September 1, 2020 - September 15, 2021
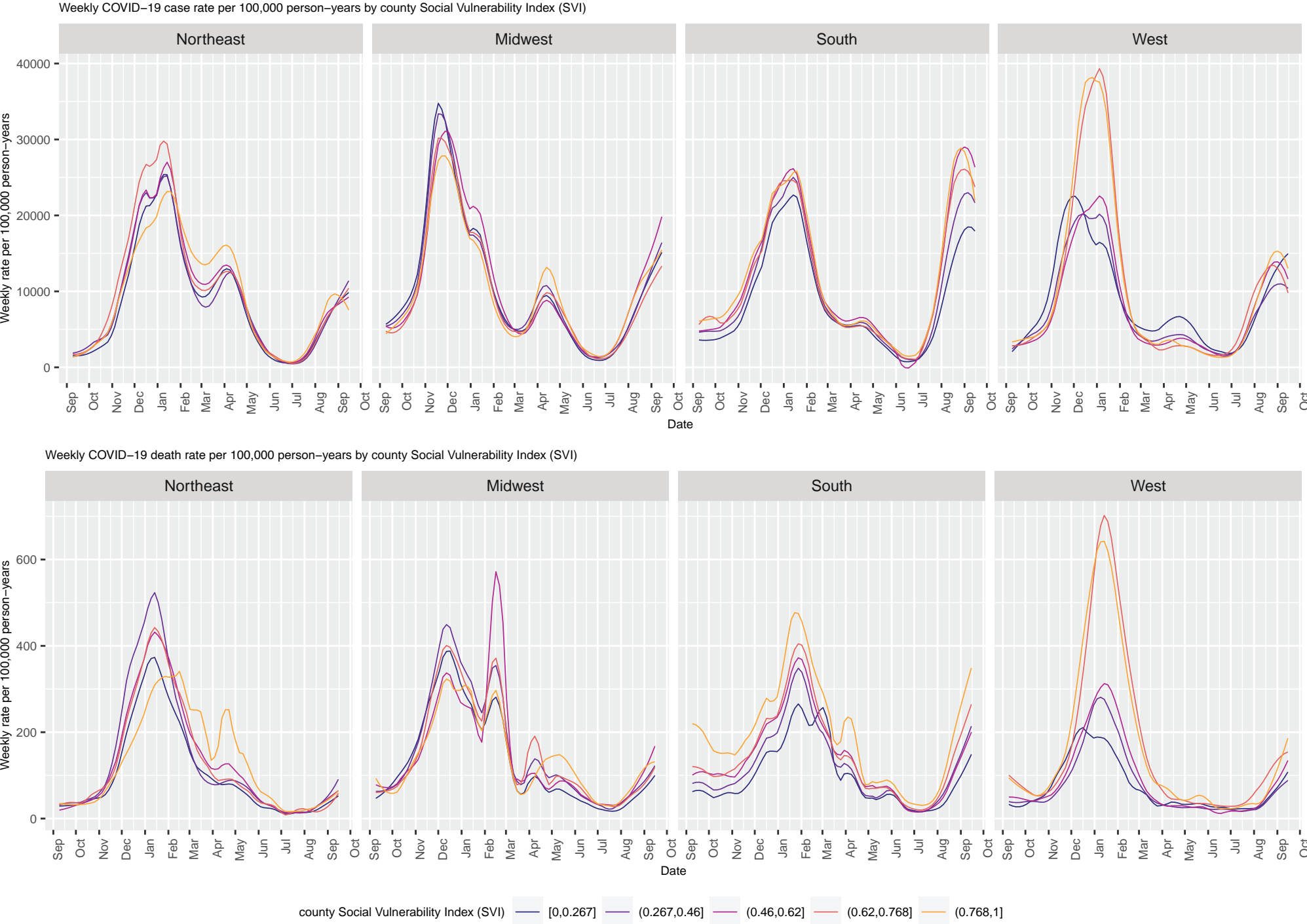
Figure S1e: Weekly COVID-19 case and death rate per 100,000 person-years by county Minority Health SVI and federal region, United States, September 1, 2020 - September 15, 2021
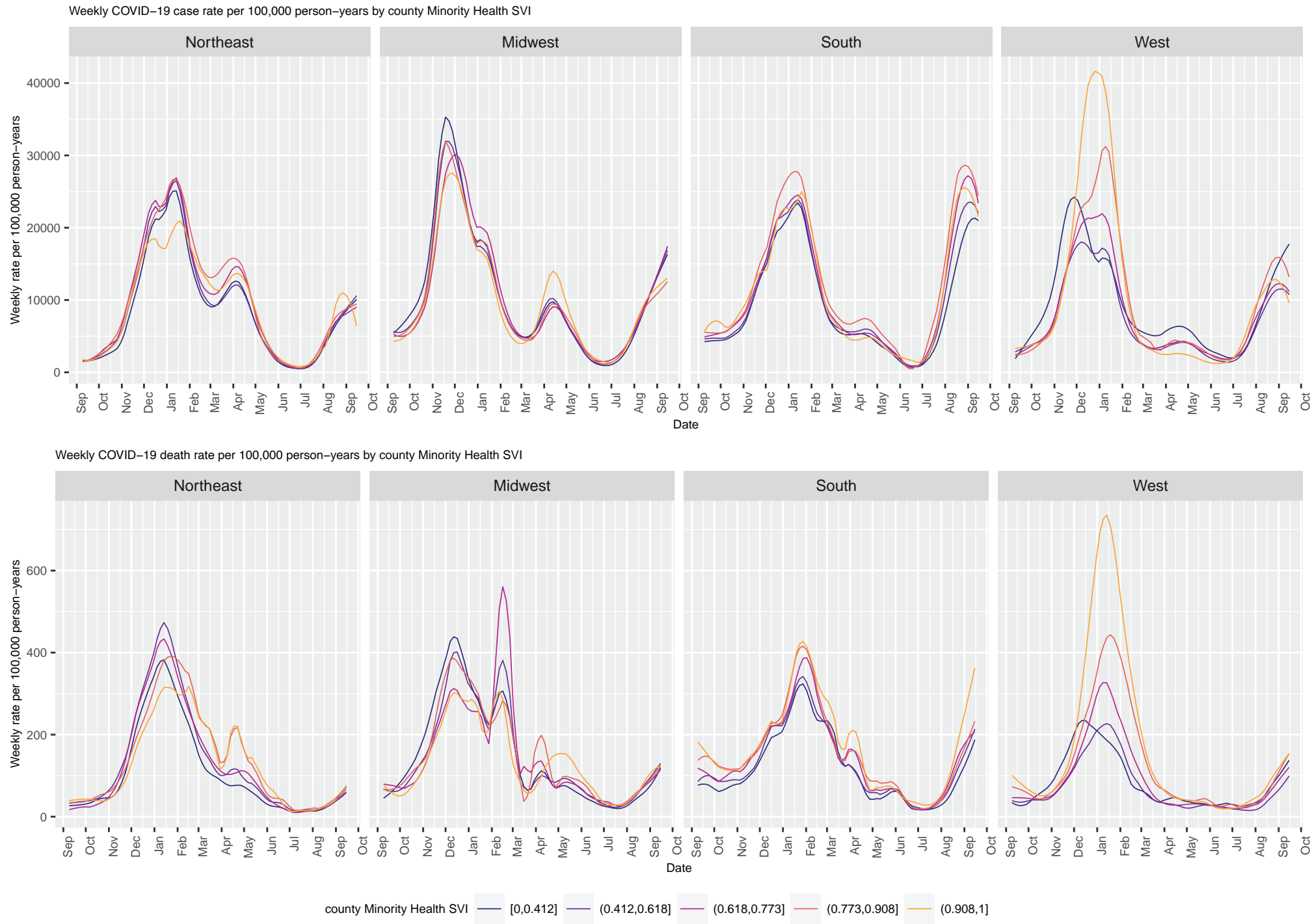


Weekly COVID−19 case rate per 100,000 person−years by county Minority Health SVI

Weekly COVID−19 death rate per 100,000 person−years by county Minority Health SVI

county Minority Health SVI   [0,0.412]   (0.412,0.618]   (0.618,0.773]   (0.773,0.908]   (0.908,1]

Figure S1f: Weekly COVID-19 case and death rate per 100,000 person-years by county political lean (2020) and federal region, United States, September 1, 2020 - September 15, 2021
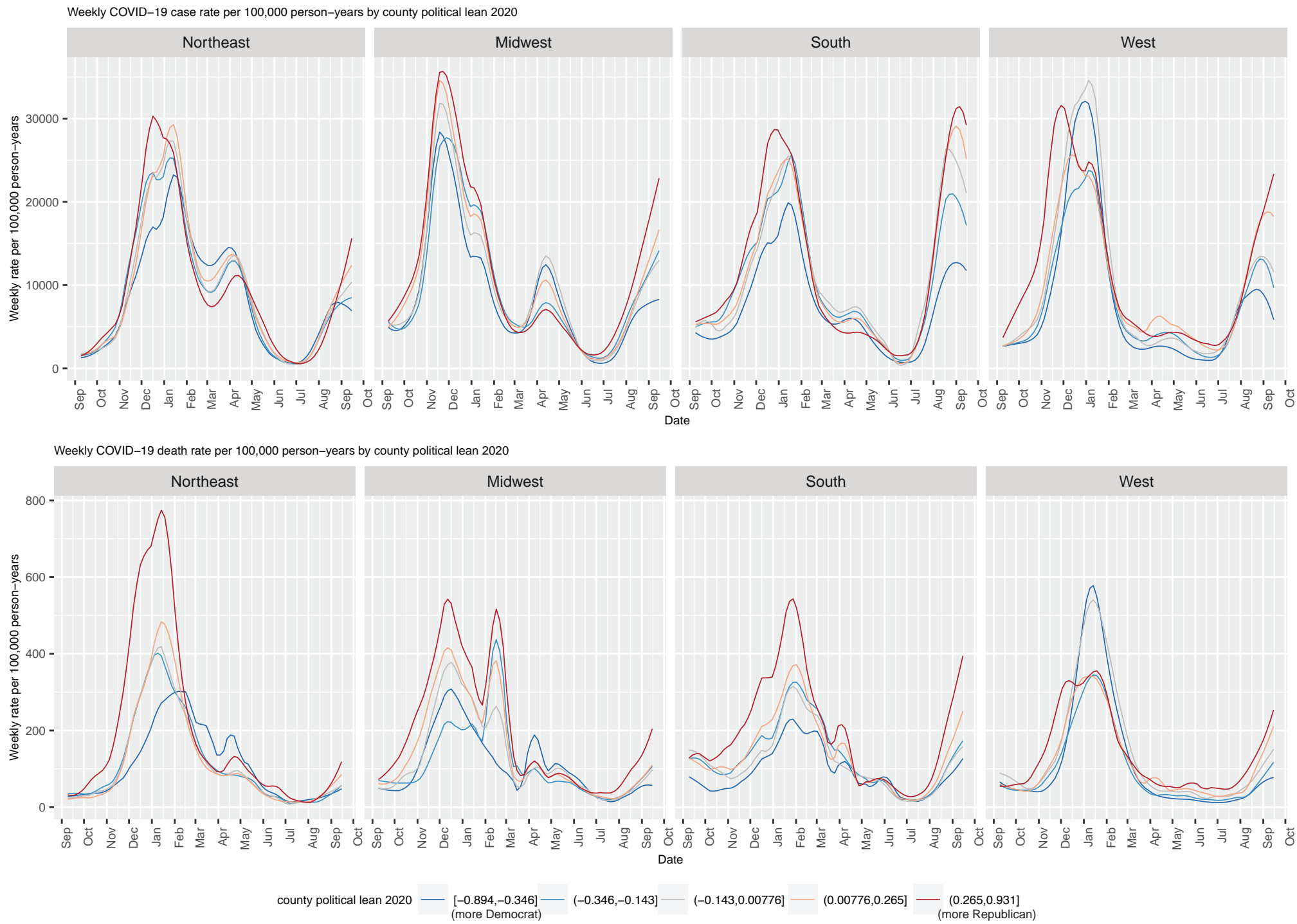
# Figure S2a: Weekly COVID-19 case and death rate per 100,000 person-years by county composite political lean X % below poverty and federal region, United States, September 1, 2020 - September 15, 2021
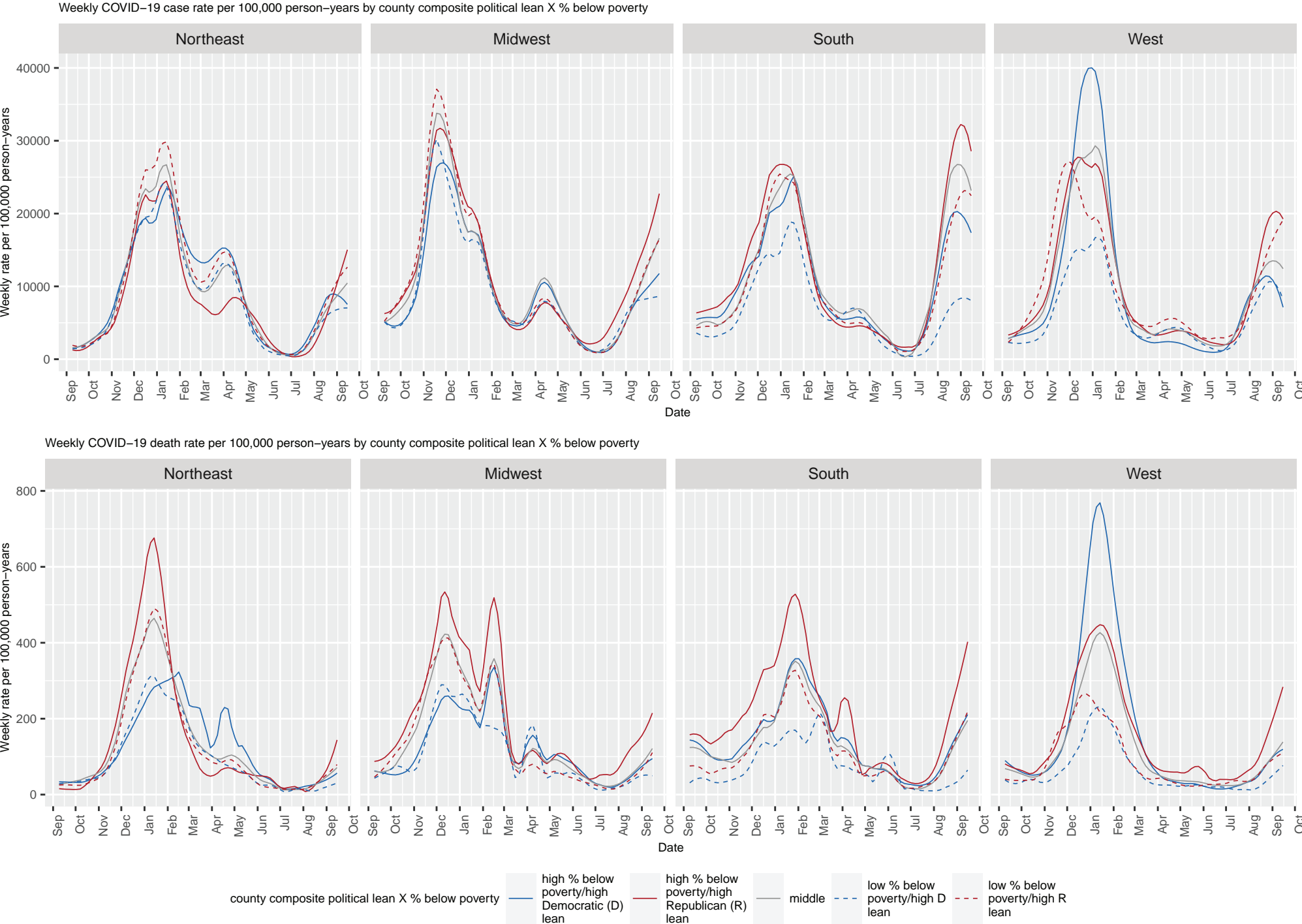
Weekly COVID−19 case rate per 100,000 person−years by county composite political lean X % below poverty



Weekly COVID−19 death rate per 100,000 person−years by county composite political lean X % below poverty



county composite political lean X % below poverty — high % below poverty/high Democratic (D) lean — high % below poverty/high Republican (R) lean — middle - - - low % below poverty/high D lean - - - low % below poverty/high R lean

Figure S2b: Weekly COVID-19 case and death rate per 100,000 person-years by county composite political lean X % population of color and federal region, United States, September 1, 2020 - September 15, 2021
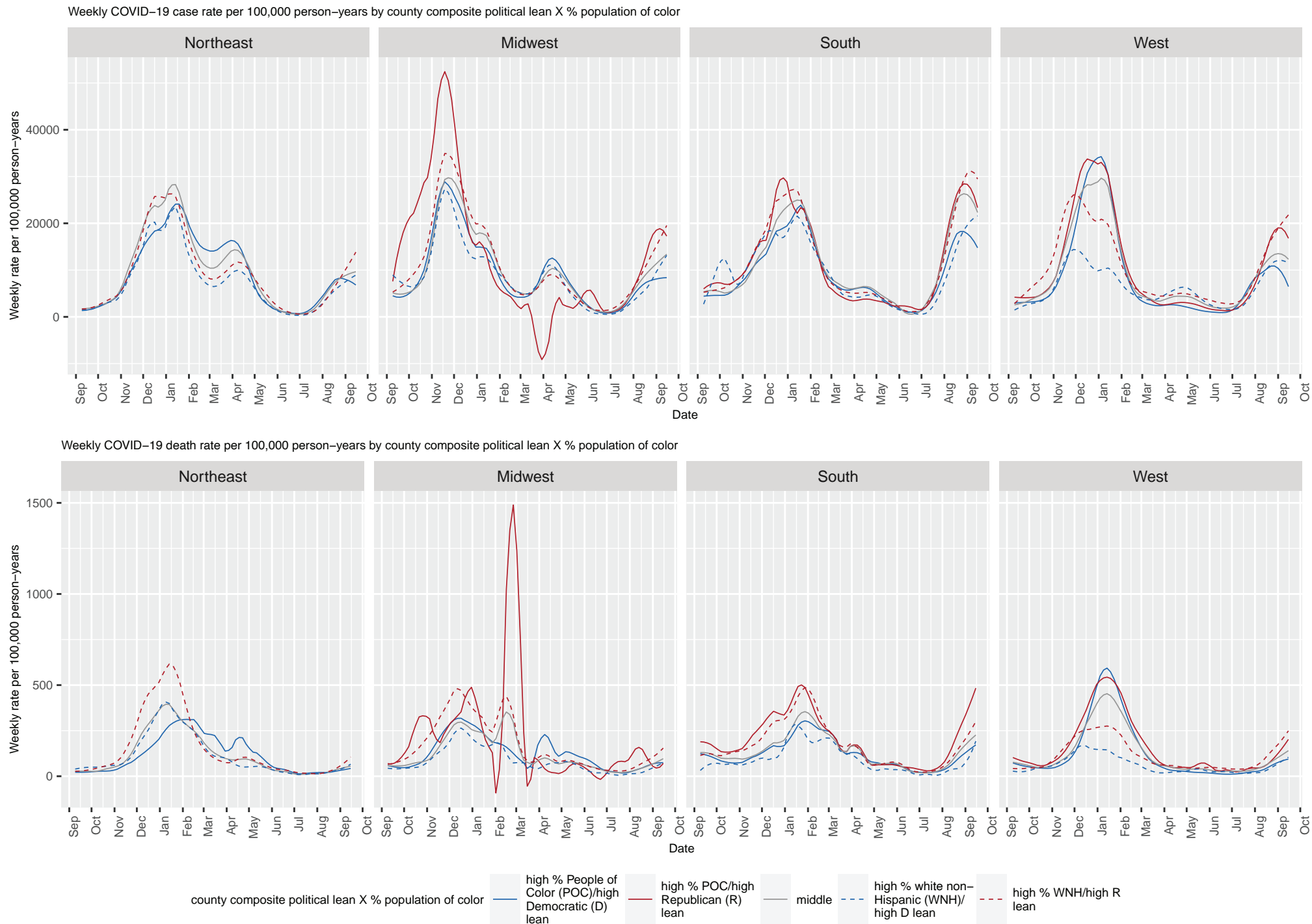
Figure S2c: Weekly COVID-19 case and death rate per 100,000 person-years by county composite political lean X racialized economic segregation and federal region, United States, September 1, 2020 - September 15, 2021
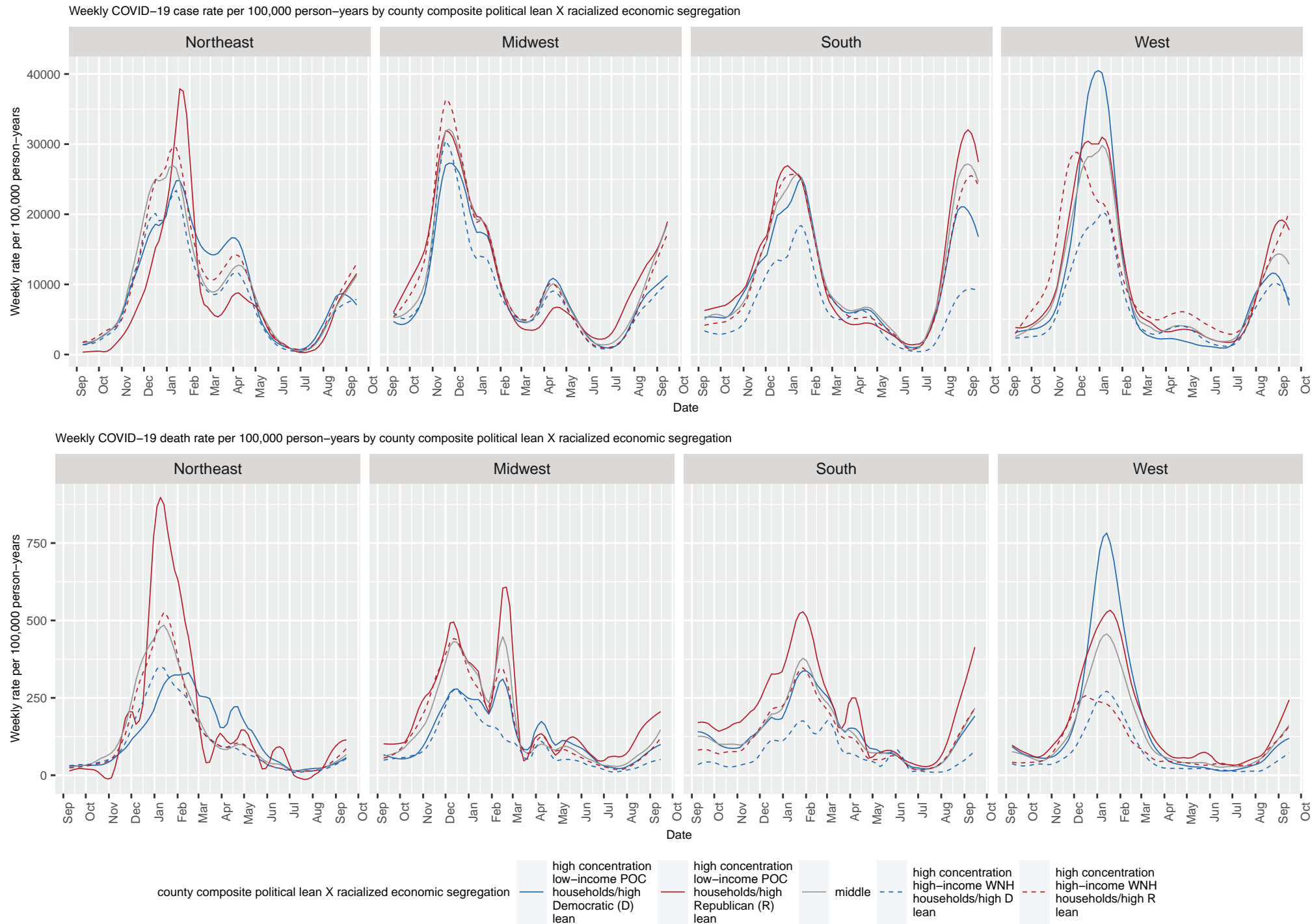
Weekly COVID−19 case rate per 100,000 person−years by county composite political lean X racialized economic segregation



Weekly COVID−19 death rate per 100,000 person−years by county composite political lean X racialized economic segregation

Figure S2d: Weekly COVID-19 case and death rate per 100,000 person-years by county composite political lean X Social Vulnerability Index (SVI) and federal region, United States, September 1, 2020 - September 15, 2021
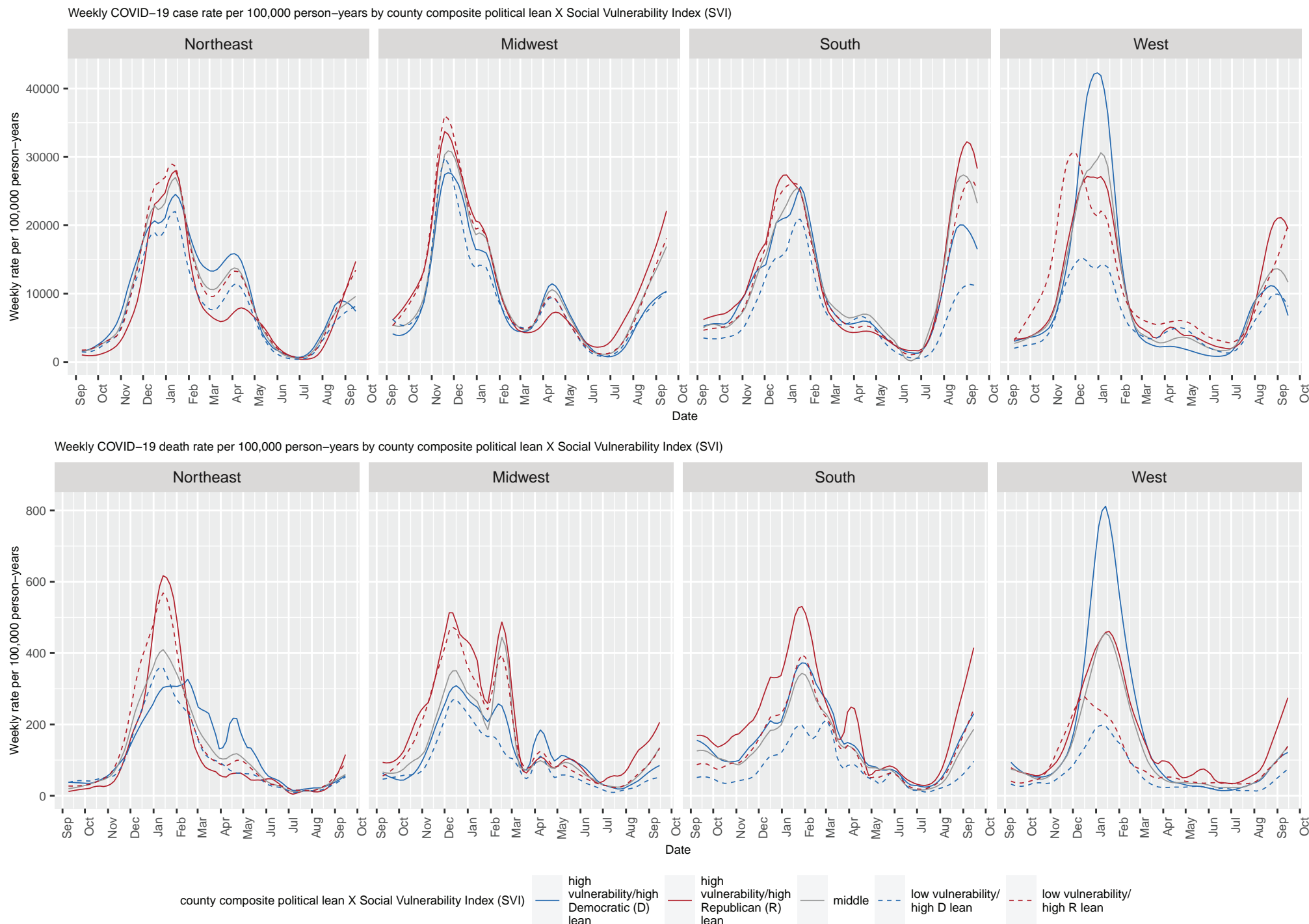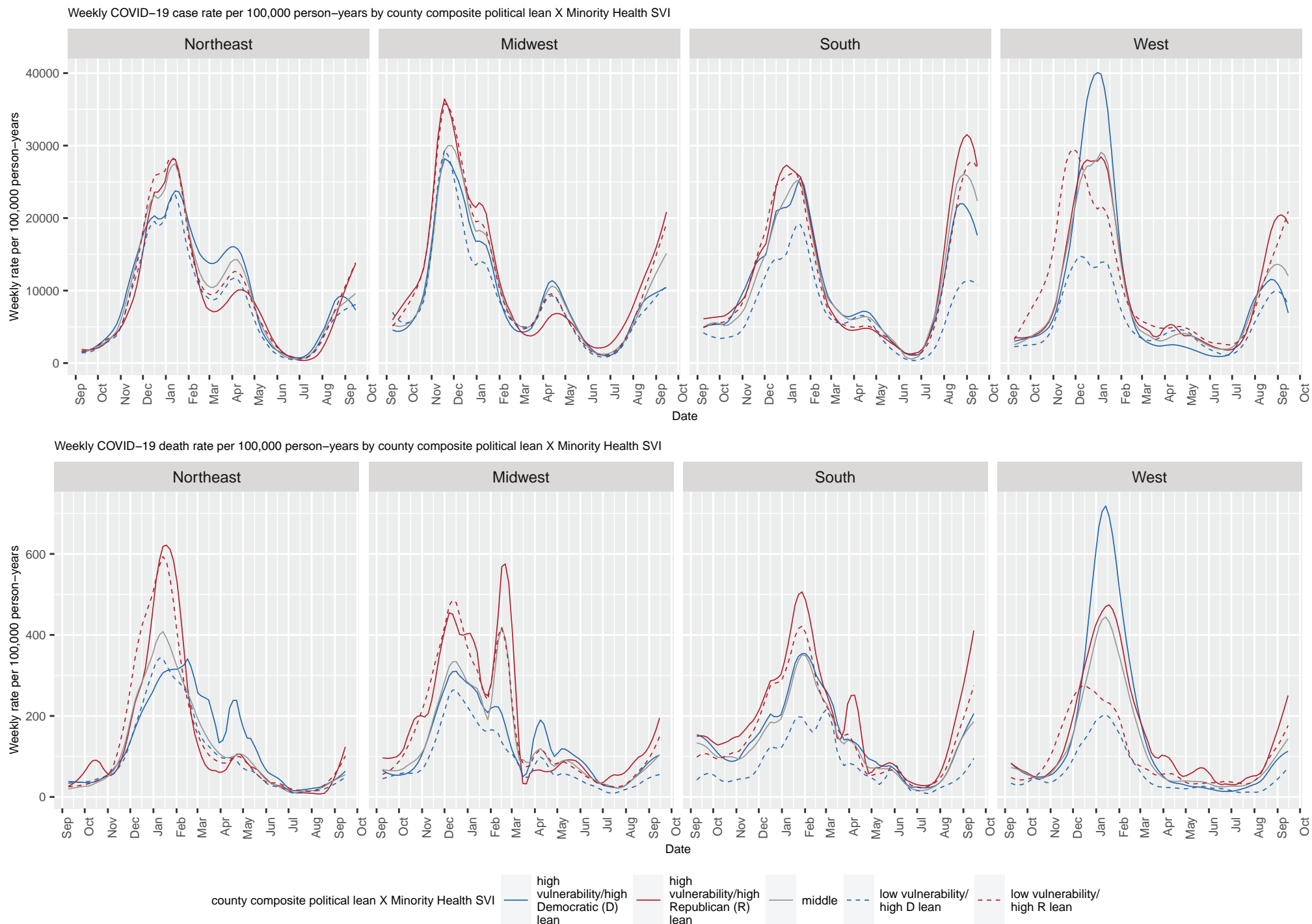
# Figure S2e: Weekly COVID-19 case and death rate per 100,000 person-years by county composite political lean X Minority Health SVI and federal region, United States, September 1, 2020 - September 15, 2021
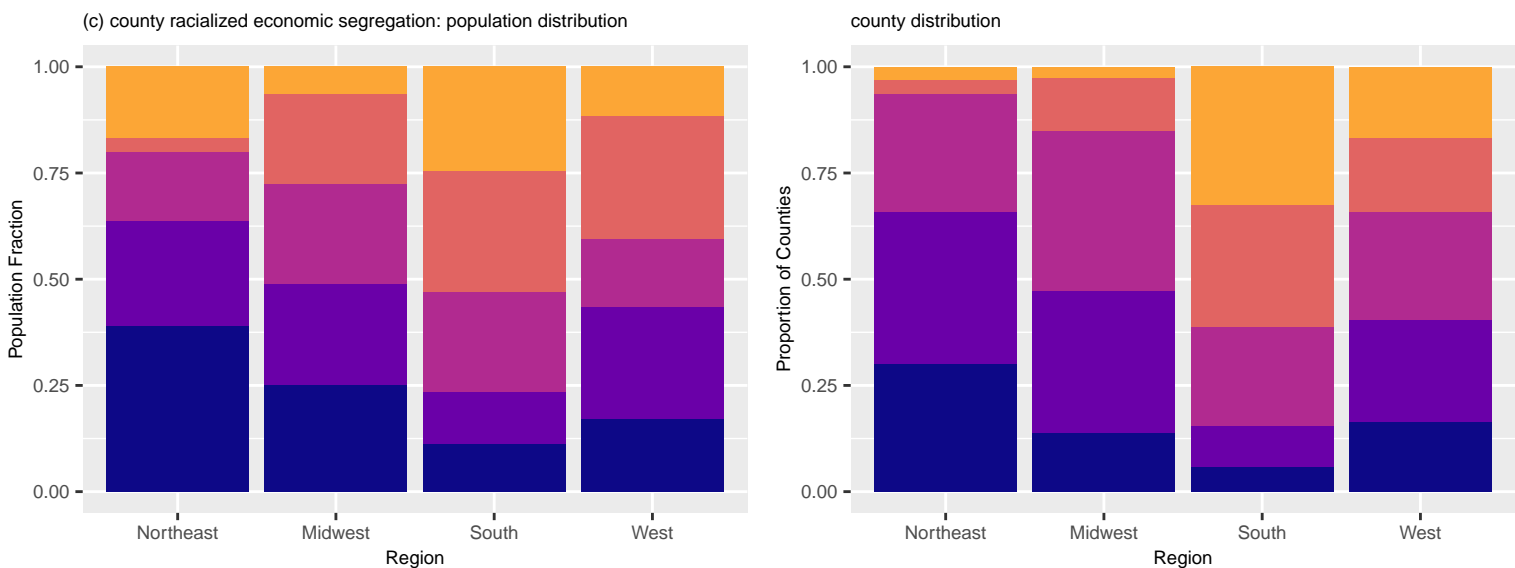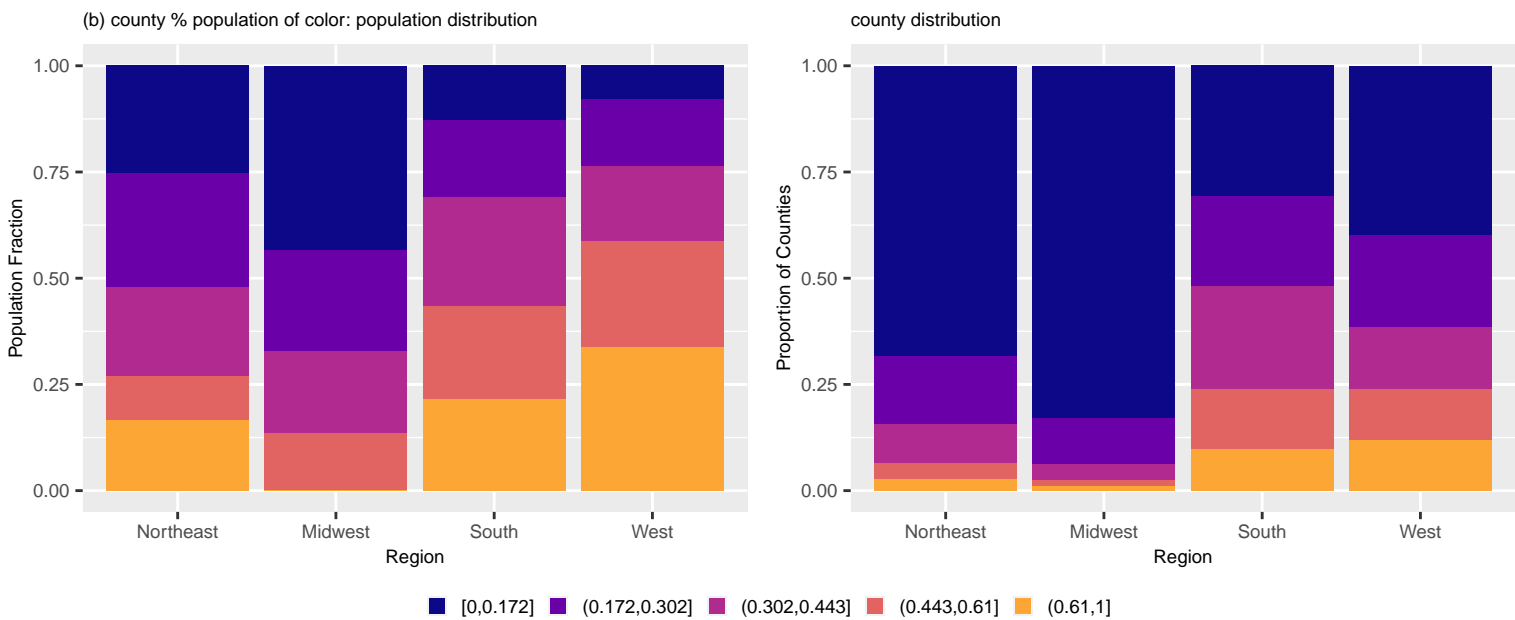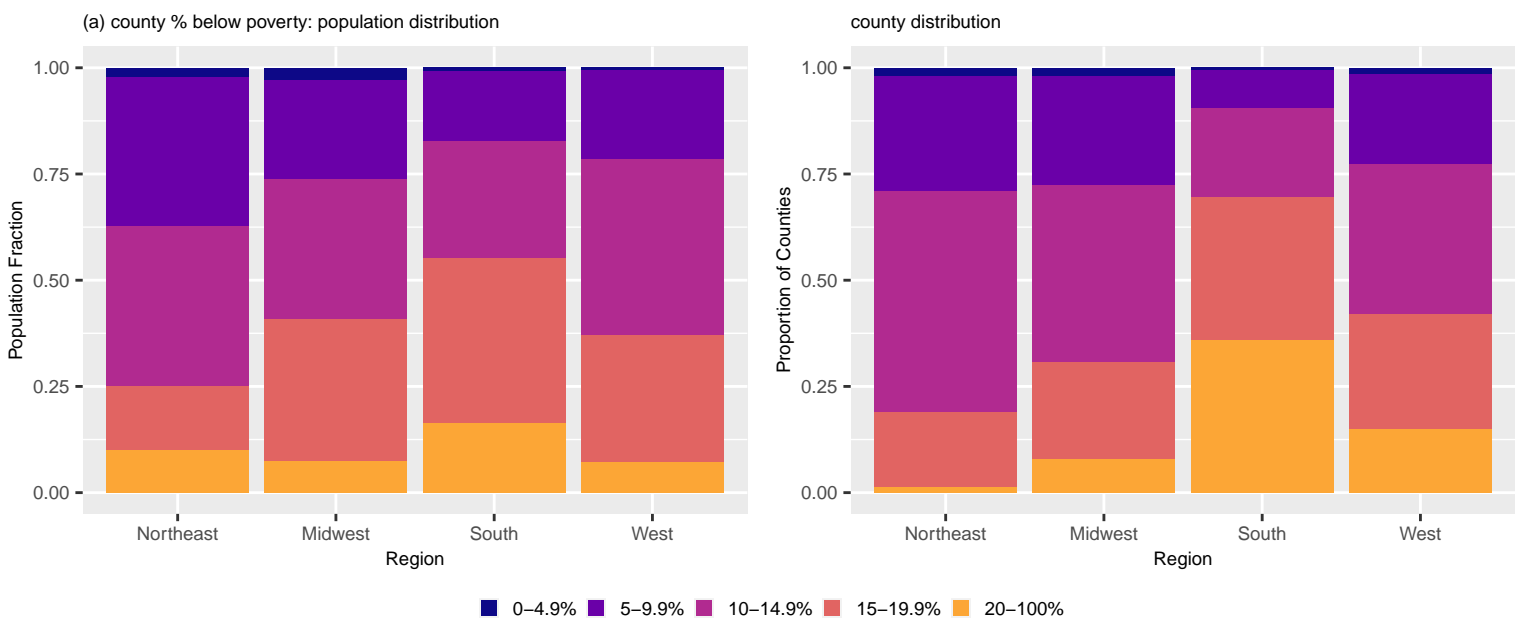
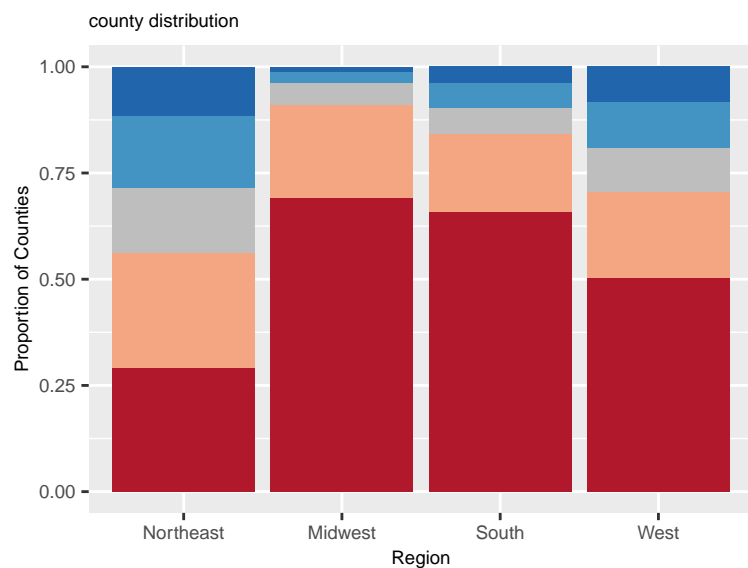Weekly COVID−19 case rate per 100,000 person−years by county composite political lean X Minority Health SVI



Weekly COVID−19 death rate per 100,000 person−years by county composite political lean X Minority Health SVI

**(a) county % below poverty: population distribution** — county distribution

Legend: 0–4.9% | 5–9.9% | 10–14.9% | 15–19.9% | 20–100%

**(b) county % population of color: population distribution** — county distribution

Legend: [0,0.172] | (0.172,0.302] | (0.302,0.443] | (0.443,0.61] | (0.61,1]

**(c) county racialized economic segregation: population distribution** — county distribution

Legend: [−0.774,0.0124] | (0.0124,0.0959] | (0.0959,0.16] | (0.16,0.231] | (0.231,0.502]

Figure S3

**(d) county Social Vulnerability Index: population distribution**

**county distribution**

Legend: [0,0.267] (0.267,0.46] (0.46,0.62] (0.62,0.768] (0.768,1]

**(e) county Minority Health SVI: population distribution**

**county distribution**

Legend: [0,0.412] (0.412,0.618] (0.618,0.773] (0.773,0.908] (0.908,1]

**(f) county political lean (2020): population distribution**

**county distribution**

Legend: [−0.894,−0.346] (−0.346,−0.143] (−0.143,0.00776] (0.00776,0.265] (0.265,0.931]

Figure S3 (cont.)

**(a) county political lean X % below poverty: population distribution** / county distribution

Legend: poor/dem, poor/rep, middle, rich/dem, rich/rep

**(b) county political lean X % population of color: population distribution** / county distribution

Legend: poc/dem, poc/rep, middle, wnh/dem, wnh/rep

**(c) county political lean X racialized economic segregation: population distribution** / county distribution

Legend: poc low inc/dem, poc low inc/rep, middle, wnh high inc/dem, wnh high inc/rep

Figure S4

(d) county political lean X Social Vulnerability Index: population distribution

county distribution

high vulnerability/dem · high vulnerability/rep · middle · low vulnerability/dem · low vulnerability/rep

(e) county political lean X Minority Health SVI: population distribution

county distribution

high vulnerability/dem · high vulnerability/rep · middle · low vulnerability/dem · low vulnerability/rep
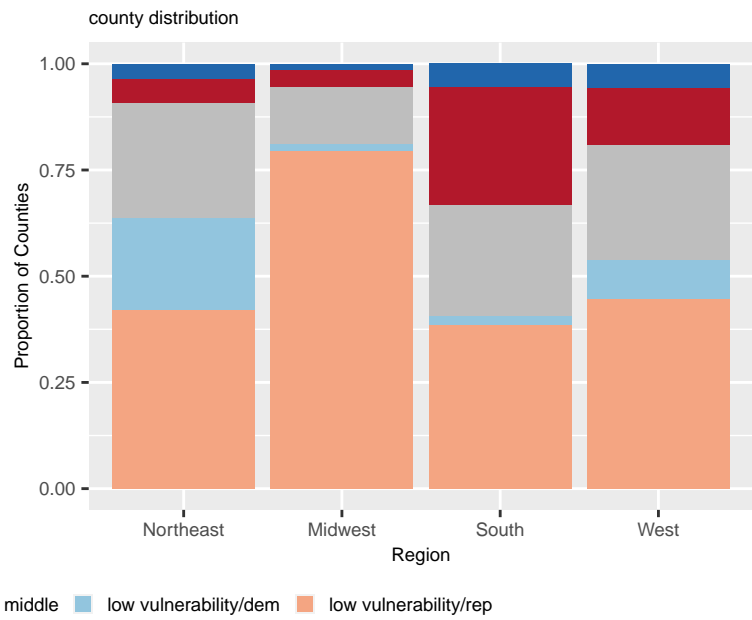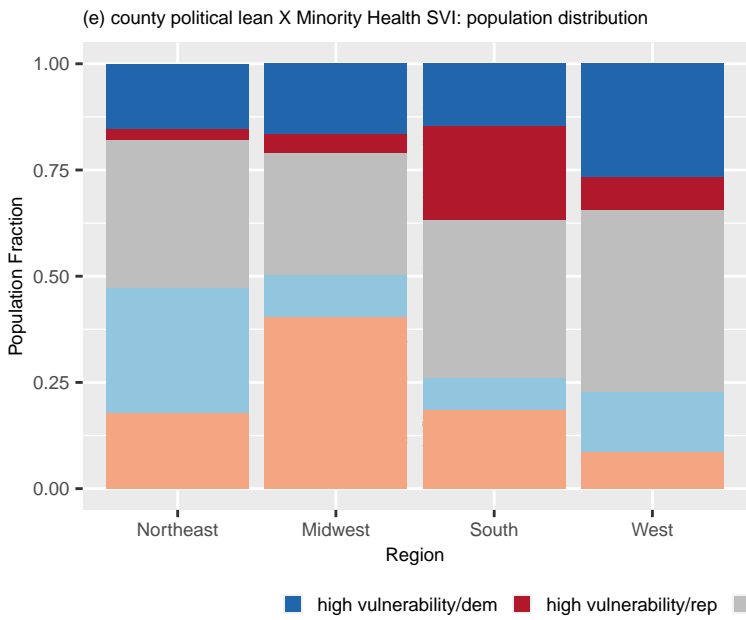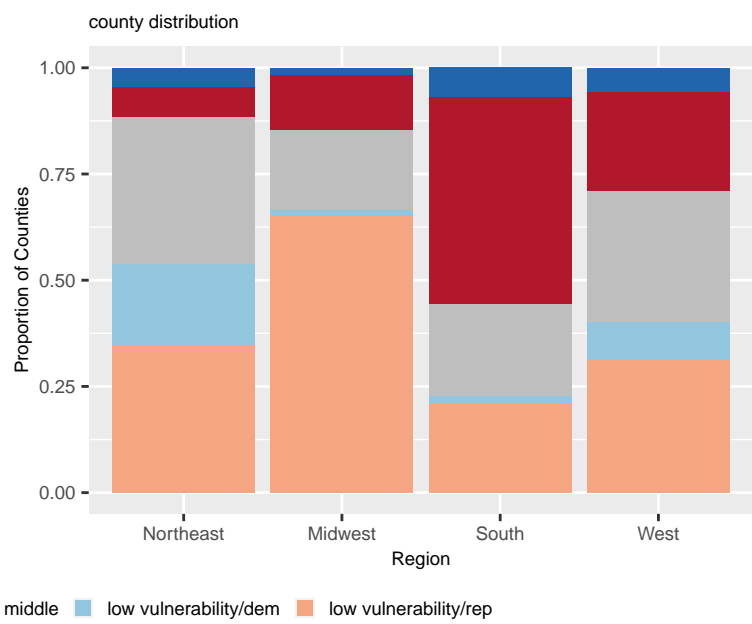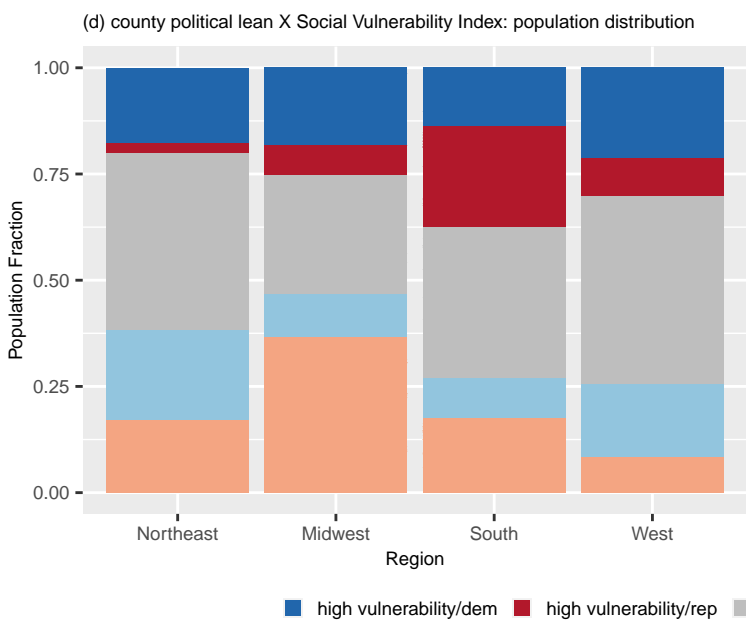
Figure S4 (cont.)

Table 1. US national cumulative COVID-19 case and mortality rates per 100,000 person years, and incidence and mortality rate ratios and 95% confidence intervals, for July 1, 2021-September 15, 2021 (delta surge), stratified by county-level metrics for:
(a) percent of population below the poverty line; (b) percent of population categorized as people of color; (c) racialized economic segregation (Index of Concentration at the Extremes (ICE)); (d) Social Vulnerability Index (SVI); (e) the Minority Social Vulnerability Index (MSVI);
 (f) 2020 political lean, and also political lean combined with each of the listed variables.

| County social metric | Category | Number of counties | Cases | Population | Rate per 100,000 person-years | (95% CI) | Incidence rate ratio | (95% CI) | Deaths | Population | Rate per 100,000 person-years | (95% CI) | Mortality rate ratio | (95% CI) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| % below poverty | 0-4.9% | 40 | 65,473 | 4,652,010 | 8,291 | (6,665 , 10,315) | 1.00 | (reference) | 216 | 4,652,010 | 27 | (16 , 46) | 1.00 | (reference) |
| | 5-9.9% | 524 | 1,188,423 | 72,248,477 | 9,694 | (9,210 , 10,204) | 1.17 | (0.95 , 1.47) | 6,328 | 72,248,477 | 52 | (47 , 57) | 1.89 | (1.16 , 3.34) |
| | 10-14.9% | 974 | 2,528,708 | 109,960,151 | 13,548 | (13,080 , 14,032) | 1.63 | (1.33 , 2.05) | 14,540 | 109,960,151 | 78 | (73 , 83) | 2.85 | (1.77 , 5.02) |
| | 15-19.9% | 852 | 2,790,828 | 103,074,847 | 15,951 | (15,426 , 16,493) | 1.92 | (1.56 , 2.41) | 18,785 | 103,074,847 | 107 | (102 , 114) | 3.93 | (2.44 , 6.91) |
| | 20-100% | 658 | 987,090 | 36,330,709 | 16,006 | (15,131 , 16,932) | 1.93 | (1.56 , 2.43) | 8,558 | 36,330,709 | 139 | (128 , 151) | 5.08 | (3.14 , 8.97) |
| % population of color | [0,0.172] | 1559 | 1,509,327 | 65,309,717 | 13,615 | (12,972 , 14,289) | 1.00 | (reference) | 10,663 | 65,309,717 | 96 | (89 , 104) | 1.00 | (reference) |
| | (0.172,0.302] | 539 | 1,538,309 | 65,995,059 | 13,732 | (13,090 , 14,406) | 1.01 | (0.94 , 1.08) | 9,368 | 65,995,059 | 84 | (77 , 91) | 0.87 | (0.77 , 0.97) |
| | (0.302,0.443] | 465 | 1,758,406 | 70,380,486 | 14,719 | (14,074 , 15,393) | 1.08 | (1.01 , 1.15) | 11,403 | 70,380,486 | 96 | (88 , 103) | 0.99 | (0.89 , 1.11) |
| | (0.443,0.61] | 278 | 1,370,626 | 61,849,318 | 13,055 | (12,409 , 13,735) | 0.96 | (0.90 , 1.03) | 8,479 | 61,849,318 | 81 | (74 , 88) | 0.84 | (0.74 , 0.94) |
| | (0.61,1] | 208 | 1,384,379 | 62,770,535 | 12,997 | (12,357 , 13,670) | 0.95 | (0.89 , 1.02) | 8,517 | 62,770,535 | 80 | (73 , 88) | 0.83 | (0.74 , 0.93) |
| Racialized economic segregation( ICE: high income | [-0.774,0.0124] | 576 | 1,422,525 | 53,870,312 | 15,556 | (14,859 , 16,286) | 1.72 | (1.60 , 1.84) | 11,019 | 53,870,312 | 121 | (112 , 130) | 2.65 | (2.34 , 3.02) |
| | (0.0124,0.0959] | 609 | 2,058,641 | 74,487,778 | 16,282 | (15,673 , 16,914) | 1.80 | (1.68 , 1.92) | 13,606 | 74,487,778 | 108 | (101 , 115) | 2.37 | (2.09 , 2.68) |
| | (0.0959,0.16] | 866 | 1,814,421 | 66,616,875 | 16,050 | (15,411 , 16,714) | 1.77 | (1.66 , 1.89) | 11,463 | 66,616,875 | 101 | (94 , 109) | 2.23 | (1.97 , 2.54) |
| | (0.16,0.231] | 647 | 1,254,680 | 65,664,207 | 11,256 | (10,720 , 11,820) | 1.24 | (1.16 , 1.33) | 7,277 | 65,664,207 | 65 | (60 , 72) | 1.44 | (1.25 , 1.65) |
| | (0.231,0.502] | 350 | 1,010,255 | 65,627,022 | 9,069 | (8,589 , 9,576) | 1.00 | (reference) | 5,062 | 65,627,022 | 45 | (41 , 51) | 1.00 | (reference) |
| Social Vulnerability Index (SVI) | [0,0.267] | 768 | 1,100,625 | 65,459,026 | 9,905 | (9,388 , 10,451) | 1.00 | (reference) | 5,804 | 65,459,026 | 52 | (47 , 58) | 1.00 | (reference) |
| | (0.267,0.46] | 598 | 1,333,992 | 65,610,108 | 11,978 | (11,408 , 12,576) | 1.21 | (1.13 , 1.30) | 8,154 | 65,610,108 | 73 | (67 , 80) | 1.40 | (1.23 , 1.60) |
| | (0.46,0.62] | 493 | 1,631,801 | 65,170,553 | 14,755 | (14,119 , 15,420) | 1.49 | (1.39 , 1.59) | 8,350 | 65,170,553 | 76 | (69 , 82) | 1.45 | (1.27 , 1.65) |
| | (0.62,0.768] | 464 | 1,790,170 | 70,140,414 | 15,036 | (14,416 , 15,682) | 1.52 | (1.42 , 1.62) | 12,887 | 70,140,414 | 108 | (101 , 116) | 2.07 | (1.84 , 2.34) |
| | (0.768,1] | 725 | 1,703,934 | 59,886,093 | 16,762 | (16,054 , 17,501) | 1.69 | (1.58 , 1.81) | 13,232 | 59,886,093 | 130 | (122 , 139) | 2.49 | (2.21 , 2.81) |
| Minority Health SVI | [0,0.412] | 1214 | 1,121,863 | 64,759,339 | 10,206 | (9,671 , 10,769) | 1.00 | (reference) | 6,552 | 64,759,339 | 60 | (54 , 66) | 1.00 | (reference) |
| | (0.412,0.618] | 641 | 1,425,097 | 66,726,051 | 12,582 | (11,996 , 13,197) | 1.23 | (1.15 , 1.32) | 8,585 | 66,726,051 | 76 | (69 , 83) | 1.27 | (1.11 , 1.45) |
| | (0.618,0.773] | 483 | 1,481,651 | 64,485,901 | 13,536 | (12,917 , 14,184) | 1.33 | (1.24 , 1.42) | 9,037 | 64,485,901 | 83 | (76 , 90) | 1.38 | (1.21 , 1.58) |
| | (0.773,0.908] | 423 | 1,886,467 | 64,827,663 | 17,147 | (16,451 , 17,873) | 1.68 | (1.57 , 1.80) | 10,496 | 64,827,663 | 95 | (88 , 103) | 1.60 | (1.41 , 1.82) |
| | (0.908,1] | 287 | 1,645,444 | 65,467,240 | 14,807 | (14,164 , 15,479) | 1.45 | (1.36 , 1.55) | 13,757 | 65,467,240 | 124 | (115 , 133) | 2.07 | (1.84 , 2.34) |
| political lean (2020) | [-0.894,-0.346] | 130 | 874,941 | 64,417,849 | 8,001 | (7,573 , 8,454) | 1.00 | (reference) | 5,224 | 64,417,849 | 48 | (43 , 53) | 1.00 | (reference) |
| | (-0.346,-0.143] | 189 | 1,262,444 | 64,935,328 | 11,453 | (10,940 , 11,990) | 1.43 | (1.33 , 1.54) | 7,076 | 64,935,328 | 64 | (59 , 70) | 1.34 | (1.18 , 1.53) |
| | (-0.143,0.00776] | 212 | 1,569,525 | 65,715,616 | 14,070 | (13,504 , 14,660) | 1.76 | (1.64 , 1.88) | 8,283 | 65,715,616 | 74 | (69 , 80) | 1.56 | (1.38 , 1.76) |
| | (0.00776,0.265] | 616 | 1,728,367 | 65,785,809 | 15,478 | (14,883 , 16,096) | 1.93 | (1.81 , 2.07) | 10,232 | 65,785,809 | 92 | (85 , 98) | 1.92 | (1.70 , 2.16) |
| | (0.265,0.931] | 1871 | 2,102,076 | 64,715,061 | 19,136 | (18,468 , 19,827) | 2.39 | (2.24 , 2.55) | 17,524 | 64,715,061 | 160 | (151 , 168) | 3.34 | (2.99 , 3.73) |
| political lean X % below poverty | low % below poverty/high D lean | 73 | 390,448 | 32,800,667 | 7,013 | (6,455 , 7,618) | 1.00 | (reference) | 1,678 | 32,800,667 | 30 | (25 , 36) | 1.00 | (reference) |
| | low % below poverty/high R lean | 430 | 628,048 | 29,392,432 | 12,588 | (11,792 , 13,438) | 1.80 | (1.62 , 1.99) | 3,659 | 29,392,432 | 73 | (65 , 82) | 2.43 | (1.99 , 2.99) |
| | middle | 1152 | 3,496,296 | 148,105,799 | 13,909 | (13,529 , 14,299) | 1.98 | (1.82 , 2.16) | 19,221 | 148,105,799 | 77 | (73 , 81) | 2.54 | (2.14 , 3.04) |
| | high % below poverty/high D lean | 175 | 1,222,240 | 64,612,654 | 11,144 | (10,634 , 11,678) | 1.59 | (1.45 , 1.75) | 8,366 | 64,612,654 | 76 | (71 , 82) | 2.53 | (2.11 , 3.06) |
| | high % below poverty/high R lean | 1219 | 1,824,015 | 51,393,563 | 20,908 | (20,122 , 21,725) | 2.98 | (2.73 , 3.26) | 15,506 | 51,393,563 | 178 | (168 , 188) | 5.90 | (4.96 , 7.07) |
| political lean X % population of color | high % white non-Hispanic/high D lean | 87 | 231,899 | 18,676,701 | 7,315 | (6,523 , 8,202) | 1.00 | (reference) | 1,225 | 18,676,701 | 39 | (31 , 48) | 1.00 | (reference) |
| | high % white non-Hispanic/high R lean | 1900 | 2,487,640 | 91,701,069 | 15,981 | (15,432 , 16,550) | 2.18 | (1.95 , 2.46) | 17,158 | 91,701,069 | 110 | (104 , 117) | 2.85 | (2.29 , 3.61) |
| | middle | 672 | 3,029,387 | 122,897,008 | 14,524 | (14,071 , 14,991) | 1.99 | (1.77 , 2.24) | 17,872 | 122,897,008 | 86 | (81 , 91) | 2.22 | (1.78 , 2.80) |

| Category | Subgroup | N | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | high % People of Color/high D lean | 181 | 1,479,906 | 82,830,097 | 10,526 | (10,059 , 11,014) | 1.44 | (1.28 , 1.63) | 8,987 | 82,830,097 | 64 | (59 , 69) | 1.65 | (1.32 , 2.10) |
| | high % People of color/high R lean | 209 | 332,215 | 10,200,240 | 19,187 | (17,436 , 21,113) | 2.62 | (2.27 , 3.04) | 3,188 | 10,200,240 | 184 | (160 , 211) | 4.77 | (3.70 , 6.20) |
| political lean X racialized economic segregation | high concentration high-income WNH households/high D lean | 124 | 635,323 | 51,471,848 | 7,271 | (6,826 , 7,746) | 1.00 | (reference) | 2,901 | 51,471,848 | 33 | (29 , 38) | 1.00 | (reference) |
| | high concentration high-income WNH households/high R lean | 777 | 1,258,479 | 55,937,651 | 13,254 | (12,671 , 13,863) | 1.82 | (1.69 , 1.97) | 7,470 | 55,937,651 | 79 | (73 , 85) | 2.37 | (2.04 , 2.76) |
| | middle | 1067 | 2,973,179 | 116,222,828 | 15,073 | (14,638 , 15,520) | 2.07 | (1.94 , 2.22) | 17,747 | 116,222,828 | 90 | (85 , 95) | 2.71 | (2.37 , 3.12) |
| | high concentration low-income POC households/high D lean | 167 | 1,293,697 | 65,311,495 | 11,669 | (11,163 , 12,198) | 1.60 | (1.49 , 1.73) | 8,408 | 65,311,495 | 76 | (70 , 82) | 2.28 | (1.97 , 2.65) |
| | high concentration low-income POC households/high R lean | 914 | 1,400,369 | 37,361,293 | 22,081 | (21,160 , 23,043) | 3.04 | (2.82 , 3.27) | 11,904 | 37,361,293 | 188 | (176 , 200) | 5.65 | (4.92 , 6.53) |
| political lean X Social Vulnerability Index | low vulnerability/high D lean | 125 | 561,279 | 44,014,554 | 7,512 | (7,013 , 8,047) | 1.00 | (reference) | 2,797 | 44,014,554 | 37 | (33 , 43) | 1.00 | (reference) |
| | low vulnerability/high R lean | 1135 | 1,466,457 | 62,227,758 | 13,883 | (13,305 , 14,486) | 1.85 | (1.71 , 2.00) | 9,113 | 62,227,758 | 86 | (80 , 93) | 2.30 | (1.98 , 2.68) |
| | middle | 701 | 2,951,506 | 121,085,344 | 14,362 | (13,938 , 14,799) | 1.91 | (1.78 , 2.06) | 15,594 | 121,085,344 | 76 | (72 , 80) | 2.03 | (1.76 , 2.35) |
| | high vulnerability/high D lean | 151 | 1,035,994 | 56,233,785 | 10,853 | (10,318 , 11,417) | 1.44 | (1.33 , 1.57) | 7,584 | 56,233,785 | 79 | (73 , 86) | 2.12 | (1.82 , 2.48) |
| | high vulnerability/high R lean | 937 | 1,545,811 | 42,743,674 | 21,305 | (20,440 , 22,206) | 2.84 | (2.62 , 3.07) | 13,342 | 42,743,674 | 184 | (173 , 196) | 4.91 | (4.25 , 5.69) |
| political lean X Minority Health SVI | low vulnerability/high D lean | 133 | 540,178 | 43,567,808 | 7,304 | (6,802 , 7,844) | 1.00 | (reference) | 2,557 | 43,567,808 | 7,304 | (6,802 , 7,844) | 1.00 | (reference) |
| | low vulnerability/high R lean | 1603 | 1,601,572 | 66,536,527 | 14,180 | (13,605 , 14,780) | 1.94 | (1.79 , 2.11) | 10,833 | 66,536,527 | 14,180 | (13,605 , 14,780) | 2.77 | (2.37 , 3.26) |
| | middle | 681 | 2,850,925 | 118,680,172 | 14,154 | (13,721 , 14,600) | 1.94 | (1.80 , 2.09) | 16,183 | 118,680,172 | 14,154 | (13,721 , 14,600) | 2.32 | (2.00 , 2.72) |
| | high vulnerability/high D lean | 126 | 1,170,126 | 59,027,765 | 11,678 | (11,126 , 12,258) | 1.60 | (1.47 , 1.74) | 7,648 | 59,027,765 | 11,678 | (11,126 , 12,258) | 2.21 | (1.87 , 2.61) |
| | high vulnerability/high R lean | 506 | 1,398,246 | 38,492,843 | 21,399 | (20,472 , 22,369) | 2.93 | (2.70 , 3.18) | 11,209 | 38,492,843 | 21,399 | (20,472 , 22,369) | 4.96 | (4.24 , 5.83) |

Table S1. US regional cumulative COVID-19 case and mortality rates per 100,000 person years, and incidence and mortality rate ratios and 95% confidence intervals, for July 1, 2021-September 15, 2021 (delta surge), stratified by county-level metrics for: (a) percent of population below the poverty line; (b) percent of population categorized as people of color; (c) racialized economic segregation (Index of Concentration at the Extremes (ICE)); (d) Social Vulnerability Index (SVI); (e) the Minority Social Vulnerability Index (MSVI); (f) 2020 political lean, and also political lean combined with each of the listed variables.

| County social metric | Region | Category | Number of counties | Cases | Population | Rate per 100,000 person-years | (95% CI) | Incidence rate ratio | (95% CI) | Deaths | Population | Rate per 100,000 person-years | (95% CI) | Mortality rate ratio | (95% CI) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| % below poverty | Northeast | 0-4.9% | 4 | 11,545 | 1,254,919 | 5,420 | (3,755 , 7,822) | 1.00 | (reference) | 25 | 1,254,919 | 12 | (3 , 46) | 1.00 | (reference) |
| | Northeast | 5-9.9% | 59 | 216,138 | 19,622,615 | 6,489 | (5,961 , 7,063) | 1.20 | (0.83 , 1.73) | 932 | 19,622,615 | 28 | (22 , 35) | 2.38 | (0.62 , 9.18) |
| | Northeast | 10-14.9% | 113 | 235,813 | 21,023,979 | 6,608 | (6,092 , 7,167) | 1.22 | (0.84 , 1.76) | 1,430 | 21,023,979 | 40 | (33 , 48) | 3.41 | (0.89 , 13.06) |
| | Northeast | 15-19.9% | 38 | 97,273 | 8,519,116 | 6,727 | (5,928 , 7,633) | 1.24 | (0.85 , 1.82) | 495 | 8,519,116 | 34 | (25 , 46) | 2.92 | (0.75 , 11.40) |
| | Northeast | 20-100% | 3 | 68,279 | 5,562,174 | 7,232 | (6,219 , 8,409) | 1.33 | (0.90 , 1.97) | 406 | 5,562,174 | 43 | (31 , 60) | 3.66 | (0.93 , 14.43) |
| | Midwest | 0-4.9% | 19 | 31,638 | 2,045,167 | 9,113 | (7,302 , 11,375) | 1.00 | (reference) | 120 | 2,045,167 | 35 | (19 , 64) | 1.00 | (reference) |
| | Midwest | 5-9.9% | 246 | 241,880 | 15,406,102 | 9,249 | (8,537 , 10,021) | 1.01 | (0.81 , 1.28) | 1,340 | 15,406,102 | 51 | (43 , 62) | 1.48 | (0.79 , 2.79) |
| | Midwest | 10-14.9% | 402 | 388,822 | 21,808,092 | 10,503 | (9,860 , 11,189) | 1.15 | (0.92 , 1.44) | 2,560 | 21,808,092 | 69 | (61 , 79) | 2.00 | (1.08 , 3.73) |
| | Midwest | 15-19.9% | 218 | 399,461 | 22,291,709 | 10,557 | (9,918 , 11,236) | 1.16 | (0.92 , 1.45) | 3,100 | 22,291,709 | 82 | (73 , 93) | 2.37 | (1.28 , 4.40) |
| | Midwest | 20-100% | 76 | 84,024 | 4,829,349 | 10,250 | (8,946 , 11,743) | 1.12 | (0.87 , 1.45) | 742 | 4,829,349 | 91 | (71 , 116) | 2.62 | (1.36 , 5.04) |
| | South | 0-4.9% | 10 | 16,293 | 952,306 | 10,079 | (7,401 , 13,726) | 1.00 | (reference) | 53 | 952,306 | 33 | (13 , 83) | 1.00 | (reference) |
| | South | 5-9.9% | 125 | 456,834 | 20,761,477 | 12,963 | (12,228 , 13,741) | 1.29 | (0.95 , 1.75) | 2,704 | 20,761,477 | 77 | (67 , 87) | 2.34 | (0.93 , 5.89) |
| | South | 10-14.9% | 300 | 1,262,103 | 34,631,025 | 21,470 | (20,729 , 22,237) | 2.13 | (1.57 , 2.89) | 6,103 | 34,631,025 | 104 | (95 , 113) | 3.17 | (1.27 , 7.93) |
| | South | 15-19.9% | 476 | 1,839,535 | 48,854,356 | 22,182 | (21,547 , 22,836) | 2.20 | (1.62 , 2.98) | 11,526 | 48,854,356 | 139 | (131 , 148) | 4.24 | (1.70 , 10.60) |
| | South | 20-100% | 511 | 722,629 | 20,381,284 | 20,887 | (19,941 , 21,879) | 2.07 | (1.53 , 2.81) | 6,597 | 20,381,284 | 191 | (176 , 208) | 5.83 | (2.33 , 14.59) |
| | West | 0-4.9% | 7 | 5,997 | 399,618 | 8,841 | (5,314 , 14,709) | 1.00 | (reference) | 18 | 399,618 | 27 | (5 , 131) | 1.00 | (reference) |
| | West | 5-9.9% | 94 | 273,571 | 16,458,283 | 9,809 | (9,097 , 10,576) | 1.11 | (0.67 , 1.84) | 1,352 | 16,458,283 | 48 | (40 , 58) | 1.82 | (0.38 , 8.84) |
| | West | 10-14.9% | 158 | 641,970 | 32,496,969 | 11,638 | (11,079 , 12,225) | 1.32 | (0.80 , 2.17) | 4,447 | 32,496,969 | 81 | (73 , 89) | 3.04 | (0.63 , 14.62) |
| | West | 15-19.9% | 120 | 454,559 | 23,409,666 | 11,439 | (10,789 , 12,128) | 1.29 | (0.78 , 2.14) | 3,664 | 23,409,666 | 92 | (82 , 103) | 3.47 | (0.72 , 16.73) |
| | West | 20-100% | 67 | 112,053 | 5,549,588 | 11,895 | (10,573 , 13,382) | 1.35 | (0.81 , 2.25) | 813 | 5,549,588 | 86 | (68 , 109) | 3.25 | (0.67 , 15.87) |
| % population of color | Northeast | [0,0.172] | 148 | 157,874 | 14,224,983 | 6,538 | (5,920 , 7,221) | 1.00 | (reference) | 1,043 | 14,224,983 | 43 | (35 , 53) | 1.00 | (reference) |
| | Northeast | (0.172,0.302] | 35 | 158,229 | 14,986,100 | 6,220 | (5,632 , 6,869) | 0.95 | (0.83 , 1.09) | 825 | 14,986,100 | 32 | (26 , 41) | 0.75 | (0.55 , 1.03) |
| | Northeast | (0.302,0.443] | 20 | 144,893 | 11,684,017 | 7,306 | (6,586 , 8,104) | 1.12 | (0.97 , 1.29) | 651 | 11,684,017 | 33 | (25 , 43) | 0.76 | (0.54 , 1.06) |
| | Northeast | (0.443,0.61] | 8 | 61,908 | 5,800,305 | 6,288 | (5,365 , 7,369) | 0.96 | (0.80 , 1.16) | 188 | 5,800,305 | 19 | (12 , 32) | 0.44 | (0.26 , 0.75) |
| | Northeast | (0.61,1] | 6 | 106,144 | 9,287,398 | 6,733 | (5,964 , 7,601) | 1.03 | (0.88 , 1.20) | 581 | 9,287,398 | 37 | (28 , 49) | 0.85 | (0.60 , 1.21) |
| | Midwest | [0,0.172] | 797 | 589,215 | 28,780,493 | 12,061 | (11,456 , 12,698) | 1.00 | (reference) | 4,265 | 28,780,493 | 87 | (79 , 97) | 1.00 | (reference) |
| | Midwest | (0.172,0.302] | 104 | 244,364 | 15,798,194 | 9,112 | (8,413 , 9,870) | 0.76 | (0.69 , 0.83) | 1,520 | 15,798,194 | 57 | (48 , 68) | 0.65 | (0.53 , 0.79) |
| | Midwest | (0.302,0.443] | 37 | 208,087 | 12,837,304 | 9,549 | (8,757 , 10,413) | 0.79 | (0.72 , 0.87) | 1,260 | 12,837,304 | 58 | (48 , 70) | 0.66 | (0.53 , 0.82) |
| | Midwest | (0.443,0.61] | 13 | 102,945 | 8,891,800 | 6,820 | (6,031 , 7,714) | 0.57 | (0.50 , 0.64) | 812 | 8,891,800 | 54 | (42 , 68) | 0.62 | (0.48 , 0.80) |
| | Midwest | (0.61,1] | 10 | 1,214 | 72,628 | 9,847 | (3,170 , 30,591) | 0.82 | (0.27 , 2.48) | 5 | 72,628 | 41 | (2 , 880) | 0.46 | (0.02 , 9.49) |
| | South | [0,0.172] | 436 | 609,435 | 16,137,907 | 22,247 | (21,150 , 23,402) | 1.00 | (reference) | 4,047 | 16,137,907 | 148 | (133 , 165) | 1.00 | (reference) |
| | South | (0.172,0.302] | 303 | 881,783 | 22,892,847 | 22,691 | (21,757 , 23,666) | 1.02 | (0.96 , 1.09) | 5,231 | 22,892,847 | 135 | (122 , 148) | 0.91 | (0.79 , 1.05) |
| | South | (0.302,0.443] | 343 | 1,115,642 | 31,992,796 | 20,543 | (19,789 , 21,326) | 0.92 | (0.87 , 0.98) | 7,573 | 31,992,796 | 140 | (129 , 151) | 0.94 | (0.83 , 1.07) |
| | South | (0.443,0.61] | 203 | 863,626 | 27,612,370 | 18,426 | (17,659 , 19,225) | 0.83 | (0.78 , 0.88) | 4,953 | 27,612,370 | 106 | (96 , 117) | 0.71 | (0.62 , 0.82) |
| | South | (0.61,1] | 137 | 826,908 | 26,944,528 | 18,079 | (17,311 , 18,882) | 0.81 | (0.76 , 0.87) | 5,179 | 26,944,528 | 113 | (103 , 125) | 0.76 | (0.66 , 0.88) |
| | West | [0,0.172] | 178 | 152,803 | 6,166,334 | 14,598 | (13,195 , 16,150) | 1.00 | (reference) | 1,308 | 6,166,334 | 125 | (103 , 151) | 1.00 | (reference) |
| | West | (0.172,0.302] | 97 | 253,933 | 12,317,918 | 12,145 | (11,229 , 13,135) | 0.83 | (0.73 , 0.94) | 1,792 | 12,317,918 | 86 | (73 , 101) | 0.69 | (0.54 , 0.88) |
| | West | (0.302,0.443] | 65 | 289,784 | 13,866,369 | 12,311 | (11,441 , 13,249) | 0.84 | (0.75 , 0.95) | 1,919 | 13,866,369 | 82 | (70 , 95) | 0.65 | (0.51 , 0.83) |
| | West | (0.443,0.61] | 54 | 342,147 | 19,544,843 | 10,313 | (9,640 , 11,033) | 0.71 | (0.63 , 0.80) | 2,526 | 19,544,843 | 76 | (66 , 87) | 0.61 | (0.48 , 0.77) |
| | West | (0.61,1] | 53 | 450,008 | 26,457,581 | 10,030 | (9,457 , 10,638) | 0.69 | (0.61 , 0.77) | 2,752 | 26,457,581 | 61 | (54 , 70) | 0.49 | (0.39 , 0.61) |
| Index of Concentration at the Extremes (high income white non-Hispanic vs. low income people of color) | Northeast | [-0.774,0.0124] | 7 | 107,927 | 9,436,925 | 6,737 | (5,976 , 7,596) | 1.04 | (0.90 , 1.20) | 581 | 9,436,925 | 36 | (27 , 48) | 1.33 | (0.94 , 1.87) |
| | Northeast | (0.0124,0.0959] | 7 | 22,085 | 1,866,115 | 6,972 | (5,349 , 9,088) | 1.07 | (0.82 , 1.41) | 97 | 1,866,115 | 31 | (15 , 61) | 1.12 | (0.55 , 2.27) |
| | Northeast | (0.0959,0.16] | 60 | 101,045 | 9,066,614 | 6,566 | (5,800 , 7,432) | 1.01 | (0.88 , 1.17) | 619 | 9,066,614 | 40 | (31 , 53) | 1.47 | (1.05 , 2.06) |
| | Northeast | (0.16,0.231] | 78 | 158,141 | 13,845,472 | 6,729 | (6,094 , 7,429) | 1.04 | (0.91 , 1.17) | 981 | 13,845,472 | 42 | (34 , 52) | 1.53 | (1.13 , 2.06) |
| | Northeast | (0.231,0.502] | 65 | 239,850 | 21,767,677 | 6,491 | (5,990 , 7,035) | 1.00 | (reference) | 1,010 | 21,767,677 | 27 | (22 , 34) | 1.00 | (reference) |
| | Midwest | [-0.774,0.0124] | 27 | 72,269 | 4,360,183 | 9,764 | (8,433 , 11,305) | 1.11 | (0.95 , 1.31) | 547 | 4,360,183 | 74 | (55 , 99) | 1.69 | (1.20 , 2.38) |
| | Midwest | (0.0124,0.0959] | 118 | 219,441 | 13,948,899 | 9,268 | (8,520 , 10,081) | 1.06 | (0.94 , 1.19) | 1,851 | 13,948,899 | 78 | (67 , 92) | 1.79 | (1.40 , 2.28) |
| | Midwest | (0.0959,0.16] | 362 | 344,703 | 15,638,862 | 12,985 | (12,142 , 13,886) | 1.48 | (1.34 , 1.64) | 2,563 | 15,638,862 | 97 | (85 , 110) | 2.21 | (1.76 , 2.79) |
| | Midwest | (0.16,0.231] | 323 | 262,566 | 15,829,010 | 9,772 | (9,049 , 10,553) | 1.12 | (1.00 , 1.24) | 1,670 | 15,829,010 | 62 | (53 , 73) | 1.42 | (1.11 , 1.83) |
| | Midwest | (0.231,0.502] | 131 | 246,846 | 16,603,465 | 8,758 | (8,091 , 9,481) | 1.00 | (reference) | 1,231 | 16,603,465 | 44 | (36 , 53) | 1.00 | (reference) |
| | South | [-0.774,0.0124] | 465 | 1,062,290 | 30,862,581 | 20,277 | (19,517 , 21,067) | 1.64 | (1.52 , 1.78) | 8,741 | 30,862,581 | 167 | (155 , 179) | 2.34 | (1.96 , 2.80) |
| | South | (0.0124,0.0959] | 406 | 1,379,619 | 35,985,659 | 22,585 | (21,841 , 23,356) | 1.83 | (1.69 , 1.98) | 7,847 | 35,985,659 | 129 | (119 , 139) | 1.81 | (1.51 , 2.16) |
| | South | (0.0959,0.16] | 331 | 1,088,181 | 29,465,624 | 21,756 | (20,950 , 22,594) | 1.76 | (1.63 , 1.91) | 6,052 | 29,465,624 | 121 | (111 , 132) | 1.70 | (1.42 , 2.04) |
| | South | (0.16,0.231] | 139 | 476,472 | 15,384,365 | 18,246 | (17,233 , 19,317) | 1.48 | (1.35 , 1.62) | 2,667 | 15,384,365 | 103 | (90 , 117) | 1.44 | (1.17 , 1.77) |
| | South | (0.231,0.502] | 81 | 290,832 | 13,882,219 | 12,342 | (11,472 , 13,277) | 1.00 | (reference) | 1,676 | 13,882,219 | 71 | (60 , 84) | 1.00 | (reference) |
| | West | [-0.774,0.0124] | 75 | 179,934 | 9,202,223 | 11,519 | (10,498 , 12,640) | 1.12 | (1.00 , 1.27) | 1,150 | 9,202,223 | 74 | (60 , 90) | 1.46 | (1.11 , 1.93) |
| | West | (0.0124,0.0959] | 78 | 437,496 | 22,687,105 | 11,360 | (10,704 , 12,058) | 1.11 | (1.00 , 1.22) | 3,811 | 22,687,105 | 99 | (89 , 110) | 1.96 | (1.57 , 2.45) |
| | West | (0.0959,0.16] | 113 | 280,492 | 12,445,775 | 13,299 | (12,346 , 14,325) | 1.30 | (1.16 , 1.45) | 2,229 | 12,445,775 | 106 | (91 , 122) | 2.09 | (1.64 , 2.66) |
| | West | (0.16,0.231] | 107 | 357,501 | 20,605,360 | 10,221 | (9,569 , 10,917) | 1.00 | (0.90 , 1.10) | 1,959 | 20,605,360 | 56 | (48 , 65) | 1.11 | (0.87 , 1.42) |

| Category | Region | Bin | n | Count | Population | Rate | (95% CI) | RR | (95% CI) | Count | Population | Rate | (95% CI) | RR | (95% CI) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | West | (0.231,0.502] | 73 | 232,727 | 13,373,661 | 10,252 | (9,448 , 11,124) | 1.00 | (reference) | 1,145 | 13,373,661 | 50 | (41 , 62) | 1.00 | (reference) |
| Social Vulnerability Index (SVI) | Northeast | [0,0.267] | 79 | 203,897 | 18,587,544 | 6,462 | (5,921 , 7,054) | 1.00 | (reference) | 934 | 18,587,544 | 30 | (24 , 37) | 1.00 | (reference) |
| | Northeast | (0.267,0.46] | 62 | 106,320 | 9,619,959 | 6,511 | (5,768 , 7,350) | 1.01 | (0.87 , 1.17) | 671 | 9,619,959 | 41 | (32 , 53) | 1.39 | (0.99 , 1.94) |
| | Northeast | (0.46,0.62] | 48 | 177,124 | 15,747,933 | 6,626 | (6,032 , 7,279) | 1.03 | (0.90 , 1.16) | 964 | 15,747,933 | 36 | (29 , 45) | 1.22 | (0.90 , 1.65) |
| | Northeast | (0.62,0.768] | 18 | 45,593 | 4,160,170 | 6,456 | (5,365 , 7,769) | 1.00 | (0.82 , 1.22) | 210 | 4,160,170 | 30 | (19 , 48) | 1.00 | (0.60 , 1.67) |
| | Northeast | (0.768,1] | 10 | 96,114 | 7,867,197 | 7,197 | (6,336 , 8,176) | 1.11 | (0.96 , 1.30) | 509 | 7,867,197 | 38 | (28 , 52) | 1.29 | (0.89 , 1.86) |
| | Midwest | [0,0.267] | 436 | 382,341 | 23,200,546 | 9,708 | (9,107 , 10,349) | 1.00 | (reference) | 2,167 | 23,200,546 | 55 | (48 , 64) | 1.00 | (reference) |
| | Midwest | (0.267,0.46] | 240 | 240,965 | 14,000,882 | 10,139 | (9,355 , 10,989) | 1.04 | (0.94 , 1.16) | 1,706 | 14,000,882 | 72 | (61 , 89) | 1.31 | (1.05 , 1.62) |
| | Midwest | (0.46,0.62] | 136 | 224,975 | 10,579,296 | 12,528 | (11,526 , 13,617) | 1.29 | (1.16 , 1.43) | 1,589 | 10,579,296 | 88 | (75 , 105) | 1.61 | (1.29 , 2.00) |
| | Midwest | (0.62,0.768] | 95 | 192,647 | 13,080,700 | 8,676 | (7,929 , 9,494) | 0.89 | (0.80 , 1.00) | 1,565 | 13,080,700 | 70 | (59 , 84) | 1.28 | (1.03 , 1.60) |
| | Midwest | (0.768,1] | 54 | 104,897 | 5,518,995 | 11,197 | (9,911 , 12,650) | 1.15 | (1.01 , 1.32) | 835 | 5,518,995 | 89 | (70 , 113) | 1.62 | (1.23 , 2.12) |
| | South | [0,0.267] | 131 | 380,524 | 16,240,579 | 13,803 | (12,946 , 14,717) | 1.00 | (reference) | 1,976 | 16,240,579 | 72 | (62 , 84) | 1.00 | (reference) |
| | South | (0.267,0.46] | 211 | 676,669 | 22,685,452 | 17,572 | (16,748 , 18,437) | 1.27 | (1.18 , 1.38) | 4,126 | 22,685,452 | 108 | (97 , 120) | 1.50 | (1.25 , 1.80) |
| | South | (0.46,0.62] | 226 | 962,582 | 25,120,441 | 22,574 | (21,683 , 23,502) | 1.64 | (1.52 , 1.76) | 4,259 | 25,120,441 | 100 | (90 , 111) | 1.39 | (1.16 , 1.67) |
| | South | (0.62,0.768] | 293 | 1,091,902 | 30,500,152 | 21,090 | (20,307 , 21,903) | 1.53 | (1.42 , 1.64) | 7,053 | 30,500,152 | 136 | (126 , 148) | 1.90 | (1.60 , 2.25) |
| | South | (0.768,1] | 561 | 1,185,717 | 31,033,824 | 22,508 | (21,706 , 23,340) | 1.63 | (1.52 , 1.75) | 9,569 | 31,033,824 | 182 | (169 , 195) | 2.53 | (2.15 , 2.99) |
| | West | [0,0.267] | 122 | 133,863 | 7,430,357 | 10,613 | (9,526 , 11,824) | 1.00 | (reference) | 727 | 7,430,357 | 58 | (45 , 74) | 1.00 | (reference) |
| | West | (0.267,0.46] | 84 | 310,038 | 19,303,729 | 9,462 | (8,813 , 10,158) | 0.89 | (0.79 , 1.01) | 1,651 | 19,303,729 | 50 | (43 , 60) | 0.87 | (0.65 , 1.18) |
| | West | (0.46,0.62] | 83 | 267,120 | 13,722,883 | 11,487 | (10,642 , 12,399) | 1.08 | (0.95 , 1.23) | 1,538 | 13,722,883 | 66 | (56 , 79) | 1.15 | (0.85 , 1.55) |
| | West | (0.62,0.768] | 58 | 460,028 | 22,399,392 | 12,099 | (11,414 , 12,825) | 1.14 | (1.01 , 1.29) | 4,059 | 22,399,392 | 107 | (96 , 119) | 1.85 | (1.42 , 2.42) |
| | West | (0.768,1] | 99 | 317,101 | 15,457,763 | 12,085 | (11,266 , 12,964) | 1.14 | (1.00 , 1.29) | 2,319 | 15,457,763 | 88 | (77 , 102) | 1.53 | (1.16 , 2.04) |
| Minority Health SVI | Northeast | [0,0.412] | 103 | 211,009 | 19,348,955 | 6,425 | (5,885 , 7,014) | 1.00 | (reference) | 1,013 | 19,348,955 | 31 | (25 , 39) | 1.00 | (reference) |
| | Northeast | (0.412,0.618] | 60 | 157,256 | 13,681,140 | 6,771 | (6,117 , 7,496) | 1.05 | (0.92 , 1.20) | 874 | 13,681,140 | 38 | (30 , 48) | 1.22 | (0.88 , 1.69) |
| | Northeast | (0.618,0.773] | 32 | 135,096 | 12,405,419 | 6,415 | (5,749 , 7,160) | 1.00 | (0.87 , 1.15) | 737 | 12,405,419 | 35 | (27 , 46) | 1.13 | (0.81 , 1.59) |
| | Northeast | (0.773,0.908] | 17 | 85,687 | 7,211,634 | 7,000 | (6,099 , 8,034) | 1.09 | (0.93 , 1.28) | 448 | 7,211,634 | 37 | (26 , 51) | 1.19 | (0.80 , 1.77) |
| | Northeast | (0.908,1] | 5 | 40,000 | 3,335,655 | 7,064 | (5,774 , 8,643) | 1.10 | (0.89 , 1.36) | 216 | 3,335,655 | 38 | (23 , 62) | 1.24 | (0.73 , 2.09) |
| | Midwest | [0,0.412] | 645 | 443,758 | 25,894,690 | 10,096 | (9,503 , 10,726) | 1.00 | (reference) | 2,726 | 25,894,690 | 62 | (54 , 71) | 1.00 | (reference) |
| | Midwest | (0.412,0.618] | 170 | 246,790 | 13,502,688 | 10,767 | (9,928 , 11,678) | 1.07 | (0.97 , 1.18) | 1,698 | 13,502,688 | 74 | (62 , 88) | 1.19 | (0.96 , 1.48) |
| | Midwest | (0.618,0.773] | 86 | 212,903 | 11,854,280 | 10,580 | (9,695 , 11,547) | 1.05 | (0.94 , 1.16) | 1,452 | 11,854,280 | 72 | (60 , 87) | 1.16 | (0.93 , 1.46) |
| | Midwest | (0.773,0.908] | 44 | 157,465 | 9,996,364 | 9,280 | (8,383 , 10,273) | 0.92 | (0.82 , 1.03) | 1,290 | 9,996,364 | 76 | (62 , 93) | 1.22 | (0.97 , 1.55) |
| | Midwest | (0.908,1] | 16 | 84,909 | 5,132,397 | 9,746 | (8,486 , 11,193) | 0.97 | (0.83 , 1.12) | 696 | 5,132,397 | 80 | (61 , 105) | 1.29 | (0.96 , 1.73) |
| | South | [0,0.412] | 273 | 338,982 | 13,204,209 | 15,124 | (14,112 , 16,209) | 1.00 | (reference) | 1,985 | 13,204,209 | 89 | (76 , 104) | 1.00 | (reference) |
| | South | (0.412,0.618] | 332 | 812,228 | 26,490,509 | 18,063 | (17,272 , 18,890) | 1.19 | (1.10 , 1.29) | 4,901 | 26,490,509 | 109 | (99 , 121) | 1.23 | (1.02 , 1.48) |
| | South | (0.618,0.773] | 298 | 840,766 | 23,834,734 | 20,781 | (19,887 , 21,715) | 1.37 | (1.27 , 1.49) | 4,962 | 23,834,734 | 123 | (111 , 136) | 1.38 | (1.15 , 1.66) |
| | South | (0.773,0.908] | 310 | 1,341,495 | 33,804,768 | 23,378 | (22,578 , 24,207) | 1.55 | (1.43 , 1.67) | 6,811 | 33,804,768 | 119 | (109 , 129) | 1.34 | (1.12 , 1.60) |
| | South | (0.908,1] | 209 | 963,923 | 28,246,228 | 20,104 | (19,295 , 20,947) | 1.33 | (1.23 , 1.44) | 8,324 | 28,246,228 | 174 | (161 , 188) | 1.96 | (1.64 , 2.33) |
| | West | [0,0.412] | 192 | 128,114 | 6,311,399 | 11,958 | (10,684 , 13,385) | 1.00 | (reference) | 828 | 6,311,399 | 77 | (60 , 99) | 1.00 | (reference) |
| | West | (0.412,0.618] | 79 | 208,823 | 13,051,714 | 9,426 | (8,629 , 10,295) | 0.79 | (0.69 , 0.91) | 1,112 | 13,051,714 | 50 | (41 , 62) | 0.65 | (0.47 , 0.90) |
| | West | (0.618,0.773] | 67 | 292,886 | 16,391,468 | 10,526 | (9,770 , 11,341) | 0.88 | (0.77 , 1.00) | 1,886 | 16,391,468 | 68 | (57 , 80) | 0.88 | (0.65 , 1.17) |
| | West | (0.773,0.908] | 51 | 301,715 | 13,806,583 | 12,893 | (11,981 , 13,875) | 1.08 | (0.95 , 1.23) | 1,947 | 13,806,583 | 83 | (71 , 98) | 1.07 | (0.80 , 1.44) |
| | West | (0.908,1] | 57 | 556,612 | 28,752,960 | 11,404 | (10,804 , 12,038) | 0.95 | (0.84 , 1.08) | 4,521 | 28,752,960 | 93 | (83 , 103) | 1.20 | (0.92 , 1.56) |
| political lean (2020) | Northeast | [-0.894,-0.346] | 25 | 173,018 | 16,125,730 | 6,321 | (5,806 , 6,882) | 1.00 | (reference) | 872 | 16,125,730 | 32 | (26 , 39) | 1.00 | (reference) |
| | Northeast | (-0.346,-0.143] | 37 | 157,533 | 15,311,888 | 6,061 | (5,544 , 6,626) | 0.96 | (0.85 , 1.08) | 754 | 15,311,888 | 29 | (23 , 36) | 0.91 | (0.67 , 1.24) |
| | Northeast | (-0.143,0.00776] | 33 | 111,552 | 9,850,771 | 6,671 | (6,001 , 7,416) | 1.06 | (0.92 , 1.21) | 545 | 9,850,771 | 33 | (25 , 43) | 1.02 | (0.73 , 1.43) |
| | Northeast | (0.00776,0.265] | 59 | 127,426 | 9,887,095 | 7,593 | (6,876 , 8,383) | 1.20 | (1.06 , 1.37) | 715 | 9,887,095 | 43 | (34 , 54) | 1.34 | (0.98 , 1.82) |
| | Northeast | (0.265,0.931] | 63 | 59,519 | 4,807,319 | 7,294 | (6,310 , 8,432) | 1.15 | (0.98 , 1.36) | 402 | 4,807,319 | 49 | (36 , 67) | 1.55 | (1.07 , 2.24) |
| | Midwest | [-0.894,-0.346] | 13 | 122,134 | 11,168,700 | 6,442 | (5,822 , 7,128) | 1.00 | (reference) | 807 | 11,168,700 | 43 | (34 , 53) | 1.00 | (reference) |
| | Midwest | (-0.346,-0.143] | 24 | 179,457 | 11,056,988 | 9,561 | (8,796 , 10,394) | 1.48 | (1.31 , 1.69) | 1,125 | 11,056,988 | 60 | (50 , 72) | 1.41 | (1.06 , 1.87) |
| | Midwest | (-0.143,0.00776] | 49 | 140,146 | 9,491,645 | 8,698 | (7,914 , 9,560) | 1.35 | (1.18 , 1.55) | 866 | 9,491,645 | 54 | (43 , 67) | 1.26 | (0.93 , 1.71) |
| | Midwest | (0.00776,0.265] | 212 | 312,492 | 18,383,635 | 10,014 | (9,400 , 10,668) | 1.55 | (1.38 , 1.75) | 1,929 | 18,383,635 | 62 | (54 , 71) | 1.45 | (1.12 , 1.88) |
| | Midwest | (0.265,0.931] | 662 | 391,433 | 16,275,630 | 14,168 | (13,390 , 14,992) | 2.20 | (1.96 , 2.46) | 3,134 | 16,275,630 | 114 | (101 , 127) | 2.67 | (2.09 , 3.40) |
| | South | [-0.894,-0.346] | 57 | 233,481 | 13,542,442 | 10,157 | (9,440 , 10,928) | 1.00 | (reference) | 1,606 | 13,542,442 | 70 | (60 , 82) | 1.00 | (reference) |
| | South | (-0.346,-0.143] | 82 | 634,781 | 22,297,250 | 16,771 | (16,043 , 17,533) | 1.65 | (1.52 , 1.80) | 3,504 | 22,297,250 | 93 | (83 , 103) | 1.32 | (1.10 , 1.59) |
| | South | (-0.143,0.00776] | 87 | 878,046 | 24,291,820 | 21,294 | (20,505 , 22,113) | 2.10 | (1.93 , 2.27) | 3,542 | 24,291,820 | 86 | (78 , 96) | 1.23 | (1.02 , 1.48) |
| | South | (0.00776,0.265] | 260 | 1,065,774 | 28,279,152 | 22,202 | (21,455 , 22,976) | 2.19 | (2.02 , 2.37) | 5,923 | 28,279,152 | 124 | (114 , 134) | 1.76 | (1.48 , 2.10) |
| | South | (0.265,0.931] | 936 | 1,485,312 | 37,169,784 | 23,541 | (22,868 , 24,234) | 2.32 | (2.15 , 2.50) | 12,408 | 37,169,784 | 197 | (186 , 208) | 2.81 | (2.39 , 3.31) |
| | West | [-0.894,-0.346] | 35 | 346,308 | 23,580,977 | 8,652 | (8,147 , 9,188) | 1.00 | (reference) | 1,939 | 23,580,977 | 48 | (42 , 56) | 1.00 | (reference) |
| | West | (-0.346,-0.143] | 46 | 290,673 | 16,269,202 | 10,525 | (9,857 , 11,239) | 1.22 | (1.12 , 1.33) | 1,693 | 16,269,202 | 61 | (53 , 71) | 1.27 | (1.03 , 1.55) |
| | West | (-0.143,0.00776] | 43 | 439,781 | 22,081,380 | 11,733 | (11,124 , 12,376) | 1.36 | (1.25 , 1.47) | 3,330 | 22,081,380 | 89 | (80 , 99) | 1.83 | (1.54 , 2.19) |
| | West | (0.00776,0.265] | 85 | 222,675 | 9,235,927 | 14,203 | (13,178 , 15,309) | 1.64 | (1.49 , 1.80) | 1,665 | 9,235,927 | 106 | (91 , 124) | 2.19 | (1.78 , 2.69) |
| | West | (0.265,0.931] | 210 | 165,812 | 6,462,328 | 15,116 | (13,858 , 16,487) | 1.75 | (1.58 , 1.94) | 1,580 | 6,462,328 | 144 | (123 , 169) | 2.97 | (2.41 , 3.66) |
| political lean X % below poverty | Northeast | low % below poverty/high D lean | 25 | 91,732 | 10,004,874 | 5,401 | (4,799 , 6,080) | 1.00 | (reference) | 333 | 10,004,874 | 20 | (14 , 28) | 1.00 | (reference) |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Northeast | low % below poverty/high R lean | 24 | 76,967 | 5,778,347 | 7,847 | (6,896 , 8,929) | 1.45 | (1.22 , 1.72) | 398 | 5,778,347 | 41 | (30 , 56) | 2.07 | (1.31 , 3.27) |
| Northeast | middle | 131 | 302,464 | 26,909,606 | 6,622 | (6,204 , 7,067) | 1.23 | (1.07 , 1.40) | 1,698 | 26,909,606 | 37 | (32 , 43) | 1.90 | (1.31 , 2.74) |
| Northeast | high % below poverty/high D lean | 11 | 132,825 | 11,175,462 | 7,002 | (6,346 , 7,725) | 1.30 | (1.11 , 1.51) | 672 | 11,175,462 | 35 | (28 , 45) | 1.81 | (1.20 , 2.73) |
| Northeast | high % below poverty/high R lean | 26 | 25,060 | 2,114,514 | 6,982 | (5,567 , 8,756) | 1.29 | (1.01 , 1.66) | 187 | 2,114,514 | 52 | (33 , 82) | 2.66 | (1.51 , 4.66) |
| Midwest | low % below poverty/high D lean | 4 | 41,837 | 3,146,064 | 7,834 | (6,575 , 9,334) | 1.00 | (reference) | 203 | 3,146,064 | 38 | (24 , 59) | 1.00 | (reference) |
| Midwest | low % below poverty/high R lean | 247 | 179,647 | 10,394,045 | 10,182 | (9,357 , 11,080) | 1.30 | (1.07 , 1.57) | 948 | 10,394,045 | 54 | (44 , 66) | 1.41 | (0.88 , 2.28) |
| Midwest | middle | 434 | 490,783 | 28,629,849 | 10,099 | (9,595 , 10,629) | 1.29 | (1.08 , 1.54) | 3,206 | 28,629,849 | 66 | (59 , 74) | 1.74 | (1.11 , 2.71) |
| Midwest | high % below poverty/high D lean | 27 | 222,221 | 15,853,540 | 8,258 | (7,653 , 8,910) | 1.05 | (0.87 , 1.27) | 1,579 | 15,853,540 | 59 | (50 , 69) | 1.54 | (0.98 , 2.44) |
| Midwest | high % below poverty/high R lean | 249 | 211,337 | 8,356,921 | 14,898 | (13,781 , 16,106) | 1.90 | (1.58 , 2.29) | 1,926 | 8,356,921 | 136 | (118 , 157) | 3.57 | (2.27 , 5.63) |
| South | low % below poverty/high D lean | 17 | 83,747 | 7,772,921 | 6,347 | (5,608 , 7,184) | 1.00 | (reference) | 379 | 7,772,921 | 29 | (21 , 40) | 1.00 | (reference) |
| South | low % below poverty/high R lean | 109 | 320,958 | 10,964,879 | 17,244 | (16,187 , 18,370) | 2.72 | (2.37 , 3.11) | 2,026 | 10,964,879 | 109 | (95 , 125) | 3.78 | (2.68 , 5.33) |
| South | middle | 373 | 1,899,922 | 52,129,937 | 21,471 | (20,920 , 22,036) | 3.38 | (2.99 , 3.83) | 8,894 | 52,129,937 | 101 | (94 , 108) | 3.50 | (2.53 , 4.83) |
| South | high % below poverty/high D lean | 108 | 571,763 | 20,389,817 | 16,520 | (15,755 , 17,321) | 2.60 | (2.29 , 2.96) | 3,973 | 20,389,817 | 115 | (104 , 127) | 3.99 | (2.86 , 5.55) |
| South | high % below poverty/high R lean | 815 | 1,421,004 | 34,322,894 | 24,390 | (23,668 , 25,134) | 3.84 | (3.39 , 4.35) | 11,711 | 34,322,894 | 201 | (190 , 213) | 6.98 | (5.06 , 9.62) |
| West | low % below poverty/high D lean | 27 | 173,132 | 11,876,808 | 8,588 | (7,879 , 9,360) | 1.00 | (reference) | 763 | 11,876,808 | 38 | (30 , 48) | 1.00 | (reference) |
| West | low % below poverty/high R lean | 50 | 50,476 | 2,255,161 | 13,186 | (11,242 , 15,466) | 1.54 | (1.29 , 1.83) | 287 | 2,255,161 | 75 | (52 , 109) | 1.98 | (1.29 , 3.03) |
| West | middle | 212 | 803,022 | 40,428,007 | 11,708 | (11,249 , 12,186) | 1.36 | (1.24 , 1.50) | 5,423 | 40,428,007 | 79 | (73 , 86) | 2.09 | (1.65 , 2.65) |
| West | high % below poverty/high D lean | 29 | 295,431 | 17,193,835 | 10,122 | (9,477 , 10,812) | 1.18 | (1.06 , 1.31) | 2,142 | 17,193,835 | 73 | (64 , 84) | 1.94 | (1.50 , 2.51) |
| West | high % below poverty/high R lean | 129 | 166,614 | 6,599,234 | 14,874 | (13,624 , 16,238) | 1.73 | (1.54 , 1.95) | 1,682 | 6,599,234 | 150 | (129 , 175) | 3.97 | (3.03 , 5.19) |
| political lean X % population of color — Northeast | high % white non-Hispanic/high D lean | 39 | 94,910 | 9,924,627 | 5,634 | (5,234 , 6,064) | 1.00 | (reference) | 527 | 9,924,627 | 31 | (26 , 38) | 1.00 | (reference) |
| Northeast | high % white non-Hispanic/high R lean | 117 | 146,317 | 12,023,694 | 7,169 | (6,756 , 7,607) | 1.27 | (1.16 , 1.40) | 936 | 12,023,694 | 46 | (40 , 53) | 1.47 | (1.17 , 1.84) |
| Northeast | middle | 48 | 221,552 | 19,096,306 | 6,835 | (6,513 , 7,172) | 1.21 | (1.11 , 1.32) | 1,056 | 19,096,306 | 33 | (29 , 37) | 1.04 | (0.83 , 1.30) |
| Northeast | high % People of Color/high D lean | 13 | 166,269 | 14,938,176 | 6,557 | (6,202 , 6,932) | 1.16 | (1.06 , 1.27) | 769 | 14,938,176 | 30 | (26 , 35) | 0.97 | (0.77 , 1.23) |
| Northeast | high % People of color/high R lean | | | | | | | | | | | | | |
| Northeast | high % white non-Hispanic/high D lean | 12 | 33,460 | 2,750,736 | 7,166 | (6,065 , 8,467) | 1.00 | (reference) | 156 | 2,750,736 | 33 | (22 , 50) | 1.00 | (reference) |
| Midwest | high % white non-Hispanic/high R lean | 843 | 677,330 | 33,476,209 | 11,920 | (11,486 , 12,370) | 1.66 | (1.41 , 1.97) | 4,876 | 33,476,209 | 86 | (80 , 92) | 2.57 | (1.71 , 3.87) |
| Midwest | middle | 84 | 330,905 | 21,191,802 | 9,199 | (8,724 , 9,700) | 1.28 | (1.08 , 1.52) | 2,013 | 21,191,802 | 56 | (50 , 63) | 1.68 | (1.10 , 2.55) |
| Midwest | high % People of Color/high D lean | 12 | 101,465 | 8,837,793 | 6,763 | (6,146 , 7,444) | 0.94 | (0.78 , 1.14) | 794 | 8,837,793 | 53 | (44 , 64) | 1.58 | (1.02 , 2.46) |
| Midwest | high % People of color/high R lean | 10 | 2,665 | 123,879 | 12,674 | (7,017 , 22,889) | 1.77 | (0.97 , 3.23) | 23 | 123,879 | 109 | (37 , 319) | 3.27 | (1.06 , 10.08) |
| Midwest | high % white non-Hispanic/high D lean | 5 | 17,341 | 715,736 | 14,273 | (10,194 , 19,984) | 1.00 | (reference) | 77 | 715,736 | 63 | (26 , 155) | 1.00 | (reference) |
| South | high % white non-Hispanic/high R lean | 723 | 1,414,468 | 36,440,513 | 22,867 | (22,030 , 23,735) | 1.60 | (1.15 , 2.23) | 9,116 | 36,440,513 | 147 | (136 , 160) | 2.33 | (0.97 , 5.60) |
| South | middle | 417 | 1,892,950 | 52,864,624 | 21,095 | (20,426 , 21,785) | 1.48 | (1.06 , 2.06) | 10,670 | 52,864,624 | 119 | (110 , 129) | 1.88 | (0.78 , 4.52) |
| South | high % People of Color/high D lean | 117 | 723,589 | 28,957,022 | 14,721 | (13,974 , 15,508) | 1.03 | (0.74 , 1.44) | 4,540 | 28,957,022 | 92 | (82 , 104) | 1.46 | (0.60 , 3.52) |
| South | high % People of color/high R lean | 160 | 249,046 | 6,602,553 | 22,221 | (20,333 , 24,285) | 1.56 | (1.11 , 2.19) | 2,580 | 6,602,553 | 230 | (197 , 269) | 3.63 | (1.49 , 8.83) |
| West | high % white non-Hispanic/high D lean | 31 | 86,188 | 5,285,602 | 9,606 | (8,490 , 10,869) | 1.00 | (reference) | 465 | 5,285,602 | 52 | (38 , 71) | 1.00 | (reference) |
| West | high % white non-Hispanic/high R lean | 217 | 249,525 | 9,760,653 | 15,060 | (14,006 , 16,194) | 1.57 | (1.36 , 1.80) | 2,230 | 9,760,653 | 135 | (117 , 155) | 2.60 | (1.86 , 3.62) |
| West | middle | 121 | 583,875 | 29,735,876 | 11,577 | (11,040 , 12,139) | 1.21 | (1.06 , 1.37) | 4,133 | 29,735,876 | 82 | (74 , 91) | 1.58 | (1.15 , 2.18) |

| | Region | Subgroup | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | West | high % People of Color/high D lean | 39 | 488,583 | 30,097,106 | 9,563 | (9,080 , 10,072) | 1.00 | (0.87 , 1.14) | 2,884 | 30,097,106 | 56 | (50 , 64) | 1.09 | (0.79 , 1.51) |
| | West | high % People of color/high R lean | 39 | 80,504 | 3,473,808 | 13,652 | (12,015 , 15,513) | 1.42 | (1.19 , 1.69) | 585 | 3,473,808 | 99 | (75 , 131) | 1.91 | (1.28 , 2.87) |
| political lean X racialized economic segregation | Northeast | high concentration high-income WNH households/high D lean | 49 | 175,104 | 17,851,310 | 5,779 | (5,296 , 6,305) | 1.00 | (reference) | 865 | 17,851,310 | 29 | (23 , 35) | 1.00 | (reference) |
| | Northeast | high concentration high-income WNH households/high R lean | 71 | 144,107 | 10,979,461 | 7,732 | (7,023 , 8,513) | 1.04 | (0.90 , 1.20) | 766 | 10,979,461 | 41 | (33 , 52) | 1.33 | (0.94 , 1.87) |
| | Northeast | middle | 84 | 181,608 | 15,998,519 | 6,687 | (6,138 , 7,285) | 1.07 | (0.82 , 1.41) | 979 | 15,998,519 | 36 | (29 , 44) | 1.12 | (0.55 , 2.27) |
| | Northeast | high concentration low-income POC households/high D lean | 9 | 127,223 | 11,059,503 | 6,777 | (6,118 , 7,507) | 1.01 | (0.88 , 1.17) | 670 | 11,059,503 | 36 | (28 , 46) | 1.47 | (1.05 , 2.06) |
| | Northeast | high concentration low-income POC households/high R lean | 4 | 1,006 | 94,010 | 6,304 | (1,995 , 19,924) | 1.04 | (0.91 , 1.17) | 8 | 94,010 | 50 | (5 , 474) | 1.53 | (1.13 , 2.06) |
| | Midwest | high concentration high-income WNH households/high D lean | 13 | 86,515 | 6,936,271 | 7,348 | (6,490 , 8,319) | 1.00 | (reference) | 385 | 6,936,271 | 33 | (24 , 45) | 1.00 | (reference) |
| | Midwest | high concentration high-income WNH households/high R lean | 413 | 346,921 | 19,792,504 | 10,326 | (9,705 , 10,986) | 1.11 | (0.95 , 1.31) | 2,088 | 19,792,504 | 62 | (54 , 71) | 1.69 | (1.20 , 2.38) |
| | Midwest | middle | 399 | 453,531 | 23,250,747 | 11,491 | (10,885 , 12,131) | 1.06 | (0.94 , 1.19) | 3,224 | 23,250,747 | 82 | (73 , 91) | 1.79 | (1.40 , 2.28) |
| | Midwest | high concentration low-income POC households/high D lean | 20 | 191,288 | 13,553,701 | 8,314 | (7,649 , 9,038) | 1.48 | (1.34 , 1.64) | 1,451 | 13,553,701 | 63 | (53 , 75) | 2.21 | (1.76 , 2.79) |
| | Midwest | high concentration low-income POC households/high R lean | 116 | 67,570 | 2,847,196 | 13,981 | (12,149 , 16,088) | 1.12 | (1.00 , 1.24) | 714 | 2,847,196 | 148 | (116 , 187) | 1.42 | (1.11 , 1.83) |
| | South | high concentration high-income WNH households/high D lean | 17 | 98,990 | 8,097,156 | 7,202 | (6,413 , 8,088) | 1.00 | (reference) | 499 | 8,097,156 | 36 | (27 , 48) | 1.00 | (reference) |
| | South | high concentration high-income WNH households/high R lean | 190 | 600,211 | 17,996,388 | 19,648 | (18,744 , 20,596) | 1.64 | (1.52 , 1.78) | 3,503 | 17,996,388 | 115 | (103 , 128) | 2.34 | (1.96 , 2.80) |
| | South | middle | 407 | 1,720,358 | 46,952,320 | 21,585 | (20,993 , 22,194) | 1.83 | (1.69 , 1.98) | 8,834 | 46,952,320 | 111 | (104 , 119) | 1.81 | (1.51 , 2.16) |
| | South | high concentration low-income POC households/high D lean | 111 | 678,482 | 23,577,026 | 16,953 | (16,218 , 17,721) | 1.76 | (1.63 , 1.91) | 4,144 | 23,577,026 | 104 | (94 , 114) | 1.70 | (1.42 , 2.04) |
| | South | high concentration low-income POC households/high R lean | 697 | 1,199,353 | 28,957,558 | 24,400 | (23,600 , 25,227) | 1.48 | (1.35 , 1.62) | 10,003 | 28,957,558 | 204 | (191 , 217) | 1.44 | (1.17 , 1.77) |
| | West | high concentration high-income WNH households/high D lean | 45 | 274,714 | 18,587,111 | 8,707 | (8,121 , 9,335) | 1.00 | (reference) | 1,152 | 18,587,111 | 37 | (30 , 44) | 1.00 | (reference) |
| | West | high concentration high-income WNH households/high R lean | 103 | 167,240 | 7,169,298 | 13,742 | (12,569 , 15,025) | 1.12 | (1.00 , 1.27) | 1,113 | 7,169,298 | 91 | (76 , 111) | 1.46 | (1.11 , 1.93) |
| | West | middle | 175 | 617,577 | 30,012,842 | 12,131 | (11,581 , 12,708) | 1.11 | (1.00 , 1.22) | 4,710 | 30,012,842 | 92 | (84 , 101) | 1.96 | (1.57 , 2.45) |
| | West | high concentration low-income POC households/high D lean | 27 | 296,704 | 17,121,265 | 10,209 | (9,547 , 10,917) | 1.30 | (1.16 , 1.45) | 2,143 | 17,121,265 | 74 | (64 , 85) | 2.09 | (1.64 , 2.66) |
| | West | high concentration low-income POC households/high R lean | 97 | 132,440 | 5,462,529 | 14,283 | (12,920 , 15,790) | 1.00 | (0.90 , 1.10) | 1,179 | 5,462,529 | 127 | (106 , 153) | 1.11 | (0.87 , 1.42) |
| political lean X Social Vulnerability Index | Northeast | low vulnerability/high D lean | 42 | 111,669 | 11,891,629 | 5,532 | (4,972 , 6,155) | 1.00 | (reference) | 570 | 11,891,629 | 28 | (22 , 37) | 1.00 | (reference) |
| | Northeast | low vulnerability/high R lean | 75 | 122,758 | 9,489,879 | 7,621 | (6,884 , 8,437) | 1.38 | (1.19 , 1.59) | 690 | 9,489,879 | 43 | (34 , 55) | 1.52 | (1.07 , 2.16) |
| | Northeast | middle | 75 | 263,578 | 23,356,443 | 6,648 | (6,202 , 7,126) | 1.20 | (1.06 , 1.36) | 1,346 | 23,356,443 | 34 | (29 , 40) | 1.20 | (0.88 , 1.64) |
| | Northeast | high vulnerability/high D lean | 10 | 116,392 | 10,000,917 | 6,856 | (6,176 , 7,611) | 1.24 | (1.07 , 1.43) | 599 | 10,000,917 | 35 | (27 , 46) | 1.25 | (0.87 , 1.80) |
| | Northeast | high vulnerability/high R lean | 15 | 14,651 | 1,243,935 | 6,939 | (5,169 , 9,314) | 1.25 | (0.92 , 1.70) | 83 | 1,243,935 | 39 | (20 , 79) | 1.39 | (0.67 , 2.89) |

| | Region | Category | N | Pop | Denom | Rate | (95% CI) | Ratio | (95% CI) | N | Denom | Rate | (95% CI) | Ratio | (95% CI) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Midwest | low vulnerability/high D lean | 15 | 85,799 | 6,804,910 | 7,428 | (6,577 , 8,389) | 1.00 | (reference) | 388 | 6,804,910 | 34 | (24 , 46) | 1.00 | (reference) |
| | Midwest | low vulnerability/high R lean | 627 | 452,851 | 24,268,575 | 10,993 | (10,426 , 11,591) | 1.48 | (1.30 , 1.69) | 3,001 | 24,268,575 | 73 | (65 , 82) | 2.17 | (1.55 , 3.04) |
| | Midwest | middle | 178 | 338,528 | 18,482,055 | 10,791 | (10,149 , 11,472) | 1.45 | (1.27 , 1.66) | 2,274 | 18,482,055 | 72 | (63 , 83) | 2.16 | (1.53 , 3.04) |
| | Midwest | high vulnerability/high D lean | 17 | 151,277 | 12,081,443 | 7,377 | (6,731 , 8,084) | 0.99 | (0.86 , 1.15) | 1,106 | 12,081,443 | 54 | (45 , 65) | 1.61 | (1.11 , 2.32) |
| | Midwest | high vulnerability/high R lean | 124 | 117,370 | 4,743,436 | 14,577 | (13,137 , 16,175) | 1.96 | (1.68 , 2.30) | 1,093 | 4,743,436 | 136 | (112 , 164) | 4.04 | (2.80 , 5.84) |
| | South | low vulnerability/high D lean | 28 | 171,622 | 11,697,822 | 8,643 | (7,931 , 9,419) | 1.00 | (reference) | 950 | 11,697,822 | 48 | (39 , 59) | 1.00 | (reference) |
| | South | low vulnerability/high R lean | 294 | 751,399 | 22,076,173 | 20,051 | (19,244 , 20,893) | 2.32 | (2.11 , 2.55) | 4,536 | 22,076,173 | 121 | (110 , 133) | 2.52 | (2.02 , 3.15) |
| | South | middle | 308 | 1,661,008 | 44,596,836 | 21,942 | (21,343 , 22,557) | 2.54 | (2.32 , 2.77) | 7,315 | 44,596,836 | 97 | (90 , 104) | 2.02 | (1.63 , 2.50) |
| | South | high vulnerability/high D lean | 98 | 485,249 | 17,467,487 | 16,366 | (15,549 , 17,225) | 1.89 | (1.72 , 2.09) | 3,735 | 17,467,487 | 126 | (114 , 140) | 2.62 | (2.09 , 3.29) |
| | South | high vulnerability/high R lean | 694 | 1,228,116 | 29,742,130 | 24,326 | (23,556 , 25,121) | 2.81 | (2.57 , 3.08) | 10,447 | 29,742,130 | 207 | (194 , 220) | 4.31 | (3.49 , 5.32) |
| | West | low vulnerability/high D lean | 40 | 192,189 | 13,620,193 | 8,313 | (7,664 , 9,017) | 1.00 | (reference) | 889 | 13,620,193 | 38 | (31 , 48) | 1.00 | (reference) |
| | West | low vulnerability/high R lean | 139 | 139,449 | 6,393,131 | 12,850 | (11,680 , 14,137) | 1.55 | (1.37 , 1.75) | 886 | 6,393,131 | 82 | (66 , 101) | 2.12 | (1.58 , 2.85) |
| | West | middle | 138 | 688,287 | 34,641,610 | 11,713 | (11,220 , 12,227) | 1.41 | (1.29 , 1.54) | 4,659 | 34,641,610 | 79 | (72 , 87) | 2.06 | (1.64 , 2.59) |
| | West | high vulnerability/high D lean | 26 | 283,076 | 16,683,938 | 9,995 | (9,348 , 10,688) | 1.20 | (1.08 , 1.33) | 2,144 | 16,683,938 | 76 | (66 , 87) | 1.97 | (1.54 , 2.52) |
| | West | high vulnerability/high R lean | 104 | 185,674 | 7,014,173 | 15,595 | (14,357 , 16,939) | 1.88 | (1.67 , 2.10) | 1,719 | 7,014,173 | 144 | (124 , 168) | 3.75 | (2.90 , 4.85) |
| political lean X Minority Health SVI | Northeast | low vulnerability/high D lean | 47 | 161,940 | 16,417,755 | 5,811 | (5,295 , 6,377) | 1.00 | (reference) | 766 | 16,417,755 | 27 | (22 , 35) | 1.00 | (reference) |
| | Northeast | low vulnerability/high R lean | 91 | 129,128 | 9,930,156 | 7,661 | (6,903 , 8,502) | 1.32 | (1.15 , 1.51) | 766 | 9,930,156 | 45 | (36 , 58) | 1.65 | (1.19 , 2.30) |
| | Northeast | middle | 59 | 218,422 | 19,500,800 | 6,598 | (6,091 , 7,149) | 1.14 | (1.01 , 1.28) | 1,099 | 19,500,800 | 33 | (27 , 41) | 1.21 | (0.89 , 1.64) |
| | Northeast | high vulnerability/high D lean | 8 | 102,392 | 8,640,669 | 6,981 | (6,210 , 7,847) | 1.20 | (1.04 , 1.39) | 557 | 8,640,669 | 38 | (29 , 50) | 1.38 | (0.96 , 1.98) |
| | Northeast | high vulnerability/high R lean | 12 | 17,166 | 1,493,423 | 6,771 | (5,089 , 9,011) | 1.17 | (0.87 , 1.56) | 100 | 1,493,423 | 39 | (20 , 76) | 1.44 | (0.72 , 2.86) |
| | Midwest | low vulnerability/high D lean | 15 | 84,534 | 6,482,196 | 7,683 | (6,755 , 8,738) | 1.00 | (reference) | 394 | 6,482,196 | 36 | (26 , 50) | 1.00 | (reference) |
| | Midwest | low vulnerability/high R lean | 764 | 520,314 | 26,843,795 | 11,419 | (10,841 , 12,027) | 1.49 | (1.30 , 1.70) | 3,541 | 26,843,795 | 78 | (70 , 87) | 2.17 | (1.54 , 3.06) |
| | Midwest | middle | 128 | 316,616 | 19,098,382 | 9,766 | (9,138 , 10,438) | 1.27 | (1.10 , 1.47) | 2,082 | 19,098,382 | 64 | (56 , 74) | 1.79 | (1.26 , 2.56) |
| | Midwest | high vulnerability/high D lean | 14 | 155,825 | 10,980,329 | 8,360 | (7,604 , 9,192) | 1.09 | (0.93 , 1.27) | 1,255 | 10,980,329 | 67 | (56 , 81) | 1.88 | (1.29 , 2.73) |
| | Midwest | high vulnerability/high R lean | 40 | 68,536 | 2,975,717 | 13,568 | (11,761 , 15,654) | 1.77 | (1.46 , 2.13) | 590 | 2,975,717 | 117 | (89 , 153) | 3.26 | (2.14 , 4.97) |
| | South | low vulnerability/high D lean | 30 | 140,071 | 9,513,379 | 8,674 | (7,848 , 9,586) | 1.00 | (reference) | 751 | 9,513,379 | 47 | (37 , 59) | 1.00 | (reference) |
| | South | low vulnerability/high R lean | 548 | 801,900 | 23,176,365 | 20,383 | (19,549 , 21,253) | 2.35 | (2.11 , 2.61) | 5,423 | 23,176,365 | 138 | (126 , 151) | 2.95 | (2.30 , 3.80) |
| | South | middle | 371 | 1,649,998 | 46,555,495 | 20,879 | (20,279 , 21,496) | 2.41 | (2.17 , 2.67) | 8,202 | 46,555,495 | 104 | (97 , 112) | 2.23 | (1.74 , 2.85) |
| | South | high vulnerability/high D lean | 79 | 547,693 | 18,376,337 | 17,558 | (16,692 , 18,469) | 2.02 | (1.81 , 2.26) | 3,386 | 18,376,337 | 109 | (97 , 122) | 2.32 | (1.79 , 3.02) |
| | South | high vulnerability/high R lean | 394 | 1,157,732 | 27,958,872 | 24,394 | (23,560 , 25,258) | 2.81 | (2.54 , 3.12) | 9,221 | 27,958,872 | 194 | (181 , 208) | 4.16 | (3.26 , 5.32) |
| | West | low vulnerability/high D lean | 41 | 153,633 | 11,154,478 | 8,114 | (7,375 , 8,927) | 1.00 | (reference) | 646 | 11,154,478 | 34 | (26 , 44) | 1.00 | (reference) |
| | West | low vulnerability/high R lean | 200 | 150,230 | 6,586,211 | 13,438 | (12,201 , 14,800) | 1.66 | (1.45 , 1.89) | 1,103 | 6,586,211 | 99 | (81 , 120) | 2.89 | (2.10 , 3.99) |
| | West | middle | 121 | 665,784 | 33,517,095 | 11,710 | (11,185 , 12,260) | 1.44 | (1.30 , 1.60) | 4,800 | 33,517,095 | 84 | (77 , 93) | 2.47 | (1.88 , 3.24) |
| | West | high vulnerability/high D lean | 25 | 364,216 | 21,030,430 | 10,203 | (9,589 , 10,855) | 1.26 | (1.12 , 1.41) | 2,450 | 21,030,430 | 69 | (60 , 78) | 2.01 | (1.51 , 2.68) |
| | West | high vulnerability/high R lean | 60 | 154,812 | 6,064,831 | 15,038 | (13,673 , 16,539) | 1.85 | (1.62 , 2.12) | 1,298 | 6,064,831 | 126 | (105 , 151) | 3.70 | (2.70 , 5.05) |