Community Profile Report

April 25 2021

The Community Profile Report (CPR) is generated by the Data Strategy and Execution Workgroup, under the White House COVID-19 Team. It is managed by an interagency team with representatives from multiple agencies and offices (including the United States Department of Health and Human Services, the Centers for Disease Control and Prevention, the Assistant Secretary for Preparedness and Response, and the Indian Health Service). The CPR provides easily interpretable information on key indicators for all regions, states, core-based statistical areas (CBSAs), and counties across the United States. It is a daily snapshot in time that:

- Focuses on recent COVID-19 outcomes in the last seven days and changes relative to the week prior
- Provides additional contextual information at the county, CBSA, state and regional levels
- Supports rapid visual interpretation of results with color thresholds

Data in this report may differ from data on state and local websites. This may be due to differences in how data were reported (e.g., date specimen obtained, or date reported for cases) or how the metrics are calculated. Historical data may be updated over time due to delayed reporting. Data presented here use standard metrics across all geographic levels in the United States. It facilitates the understanding of COVID-19 pandemic trends across the United States by using standardized data. The footnotes describe each data source and the methods used for calculating the metrics. For additional data for any particular locality, visit the relevant health department website. Additional data and features are forthcoming.

White House COVID-19 Team, Data Strategy and Execution Workgroup
All inquiries and requests for information to DSEW should be directed to COVID-Data-RFI@hhs.gov.

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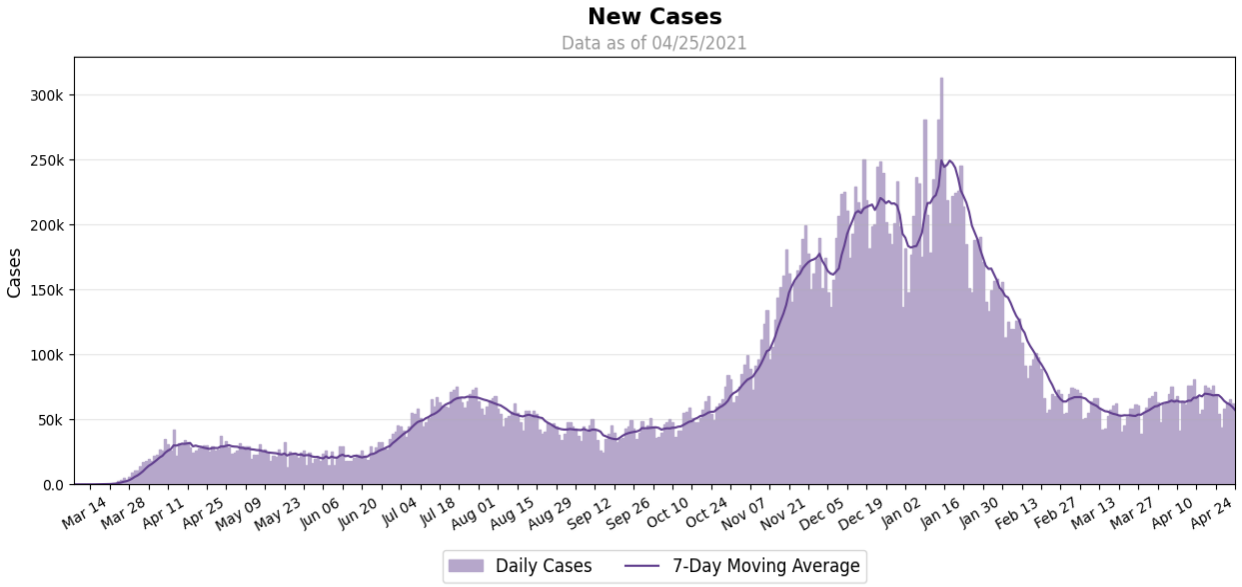
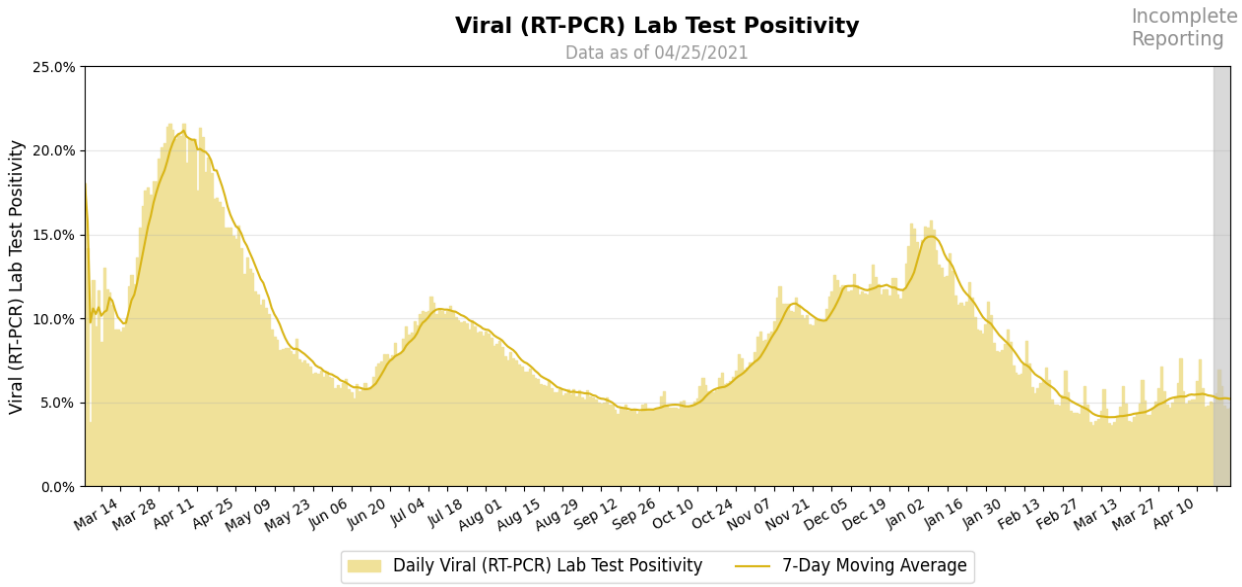
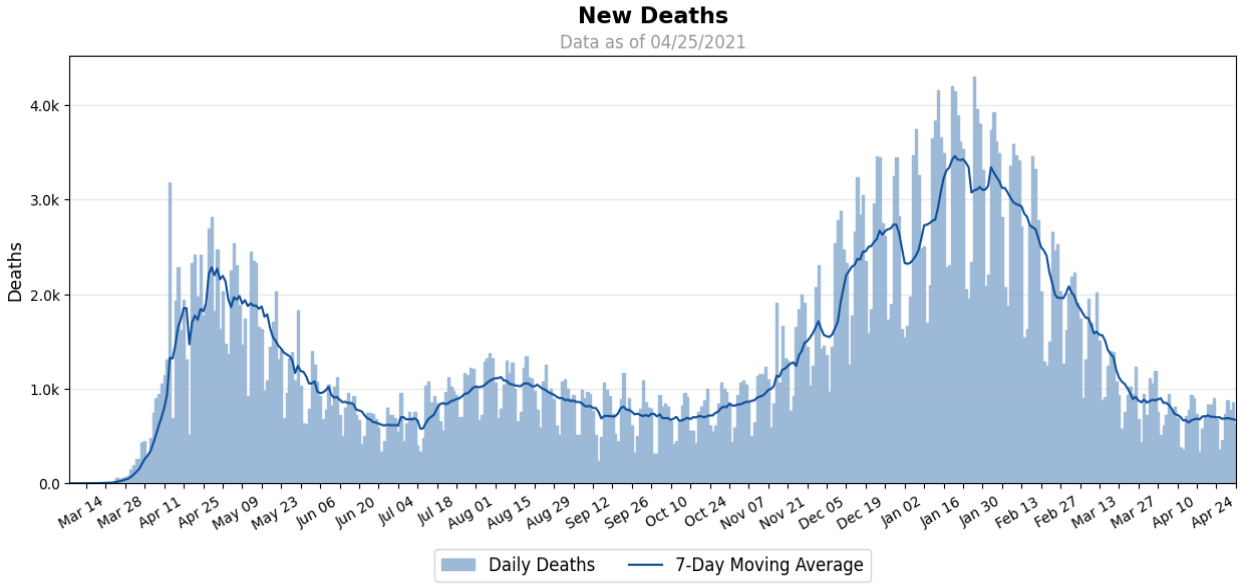
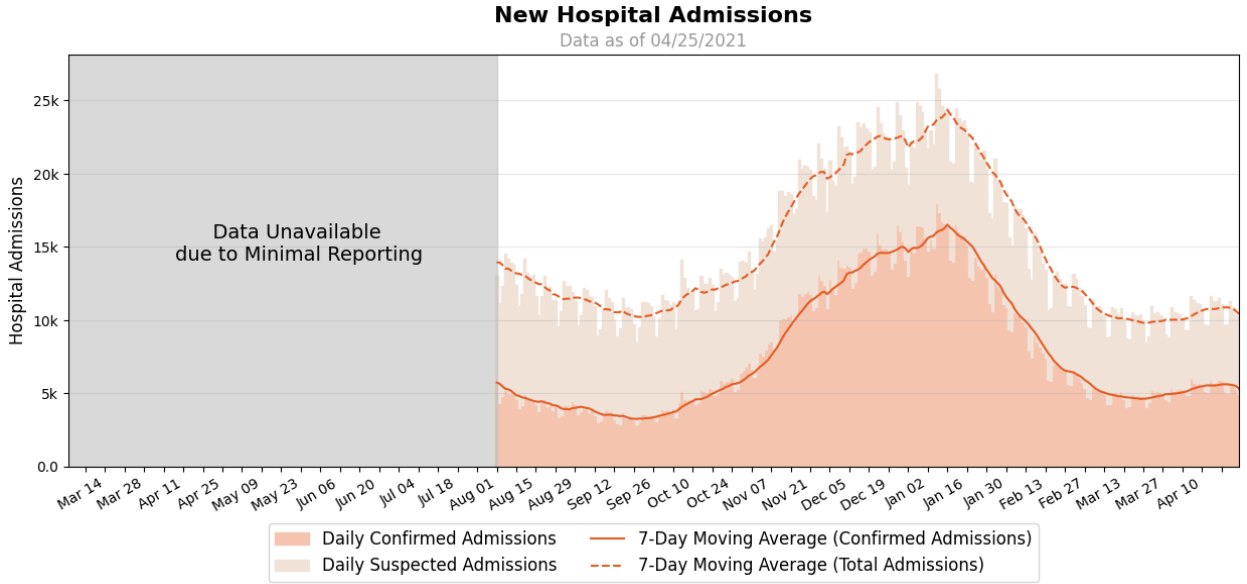
NATIONAL TIME SERIES



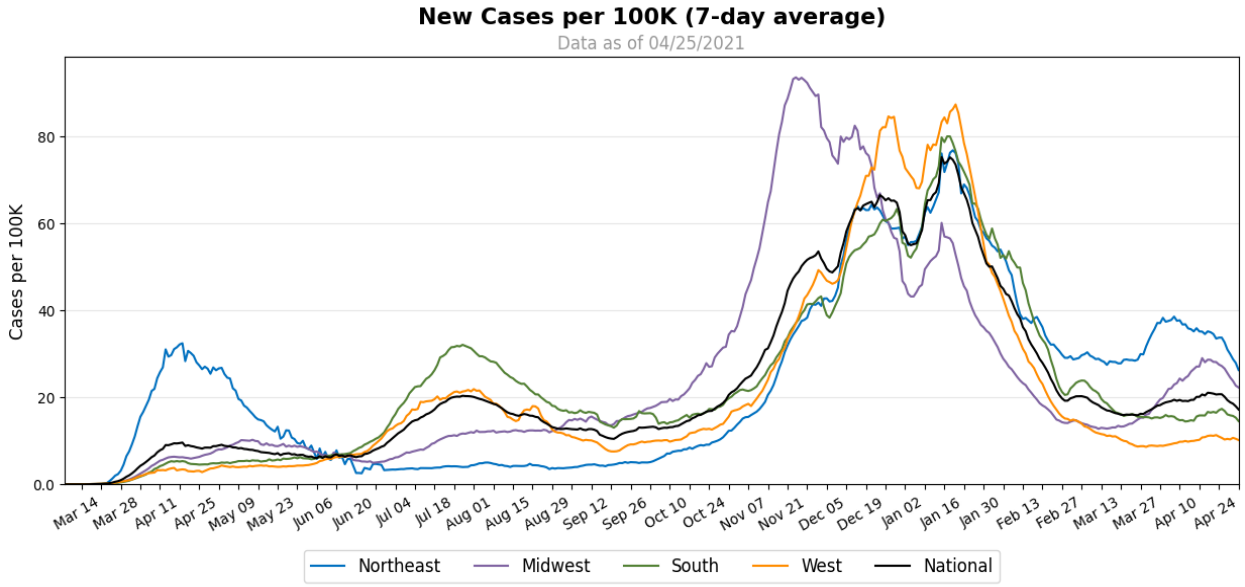


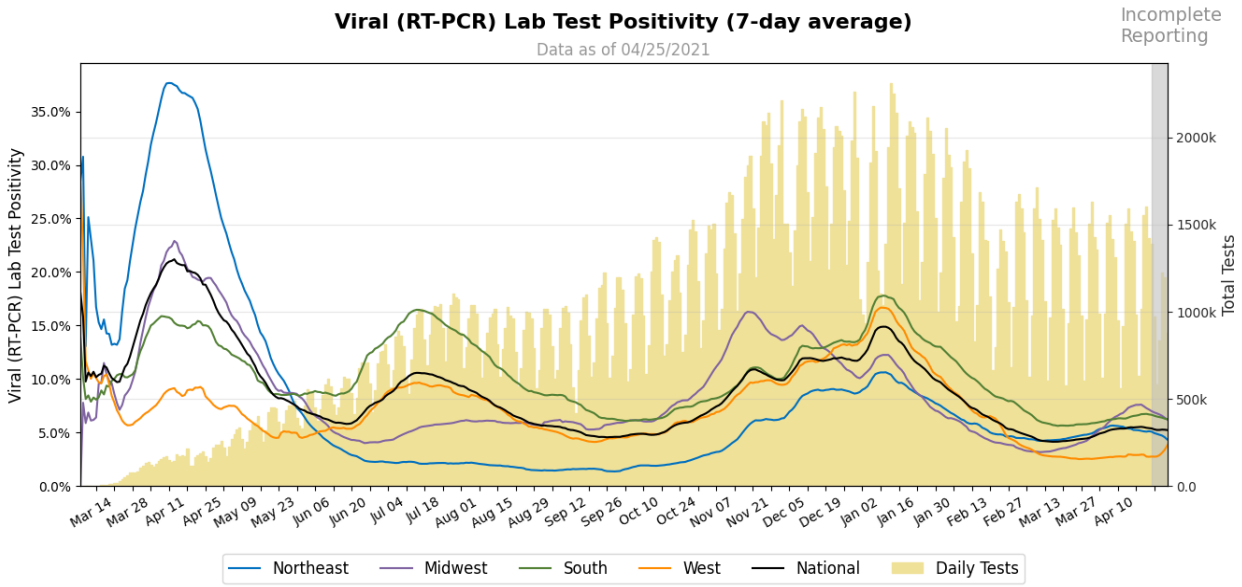


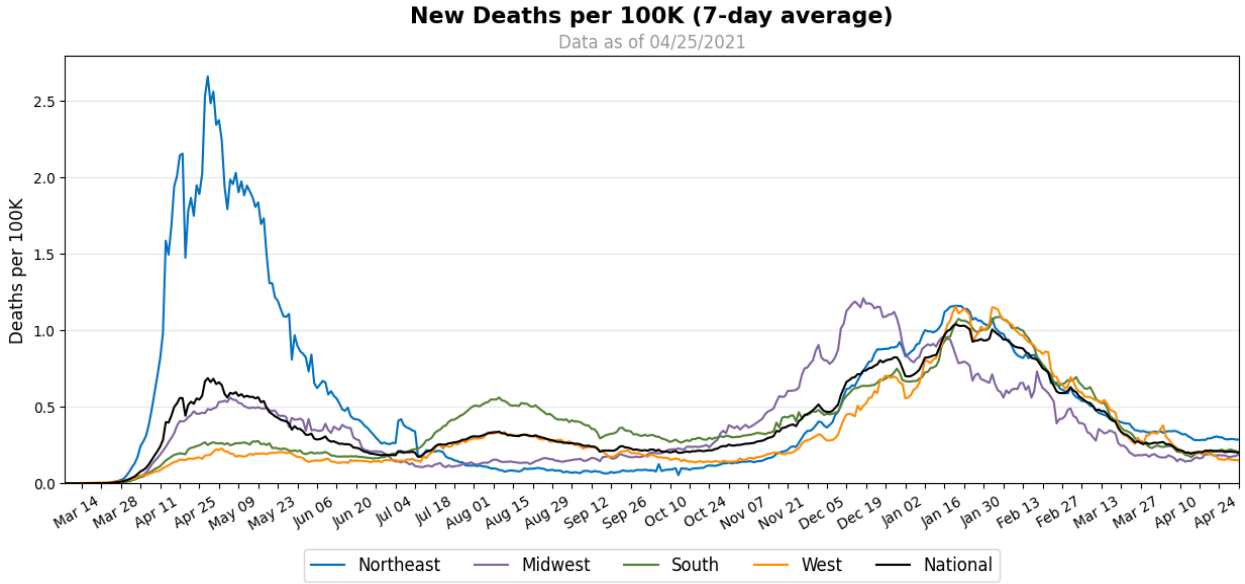


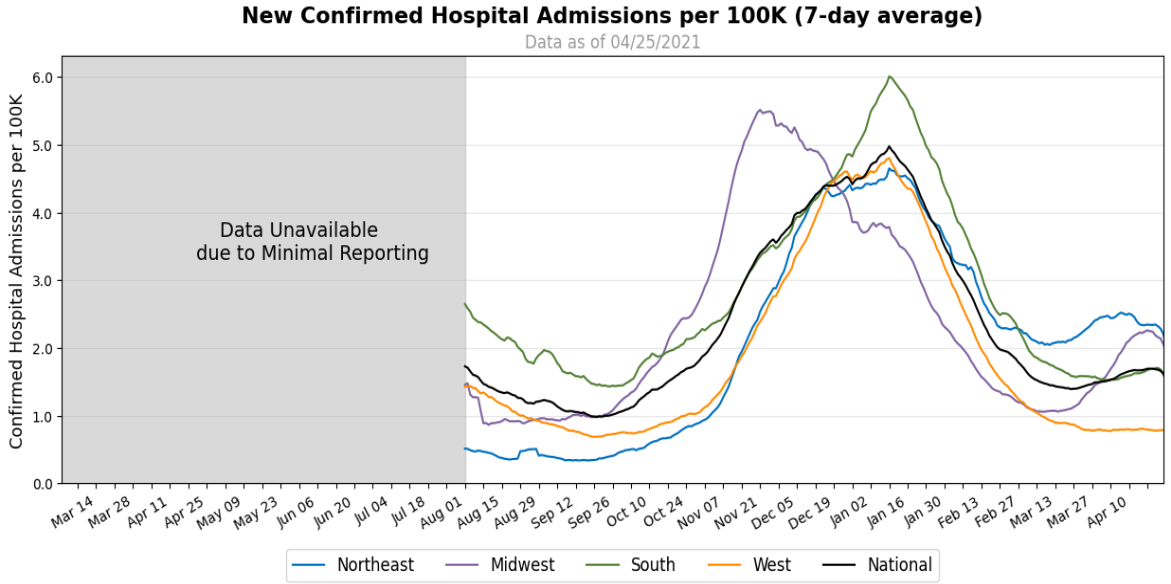
Source: CDC state-reported data (cases and deaths), Unified Testing Dataset, Unified Hospital Dataset.

TIME SERIES BY CENSUS REGION







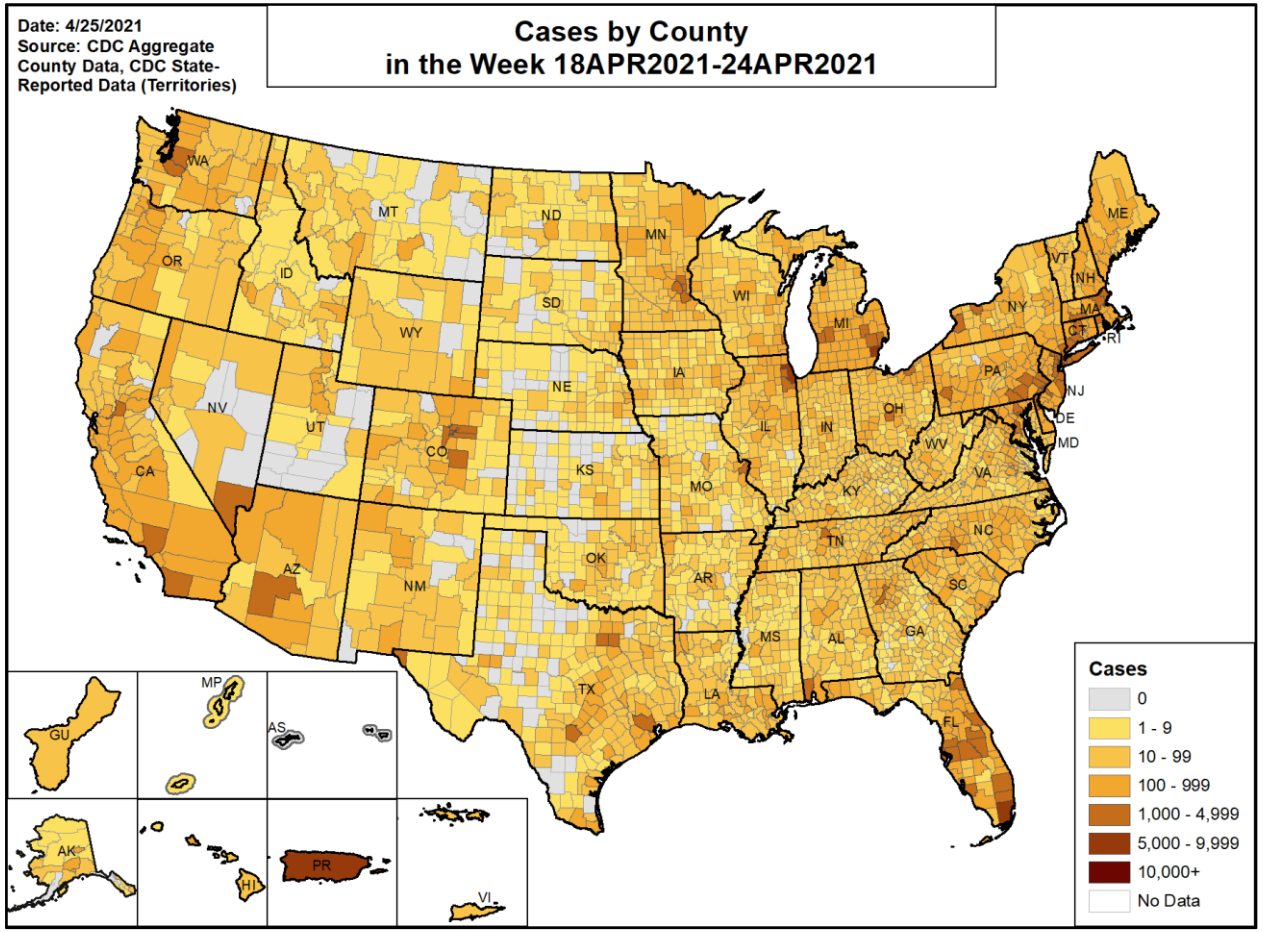


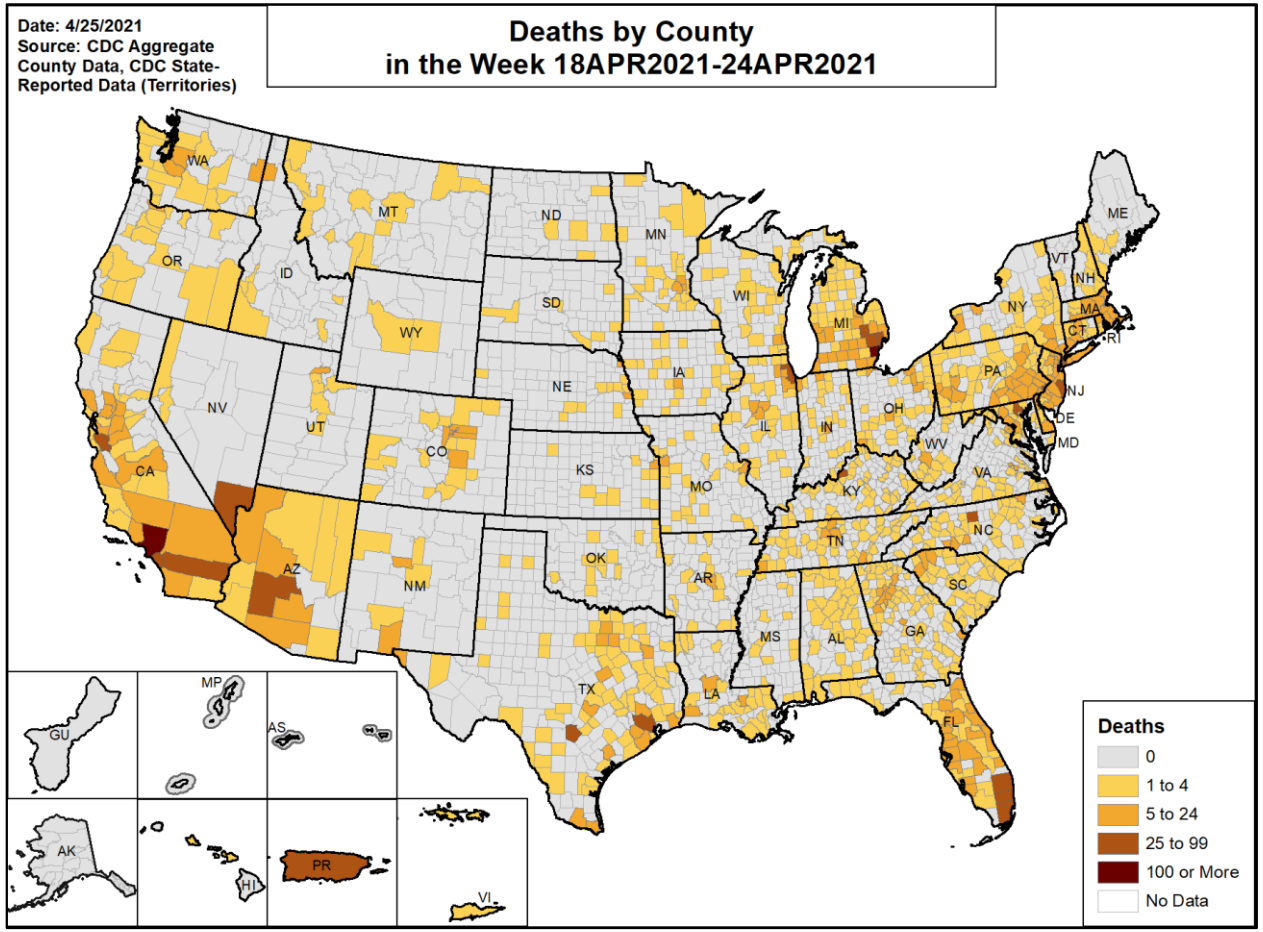
Source: CDC state-reported data (cases and deaths), Unified Testing Dataset, Unified Hospital Dataset.
See https://www.census.gov/geographies/reference-maps/2010/geo/2010-census-regions-and-divisions-of-the-united-states.html for census regions.

NUMBER OF NEW CASES AND DEATHS IN THE LAST 7 DAYS

Total Cumulative Cases: 31,848,068
New Cases in Last 7 Days: 399,863
Percent Change from Previous 7 Days: -16.9%

Total Cumulative Deaths: 568,969
New Deaths in Last 7 Days: 4,692
Percent Change from Previous 7 Days: -3.8%

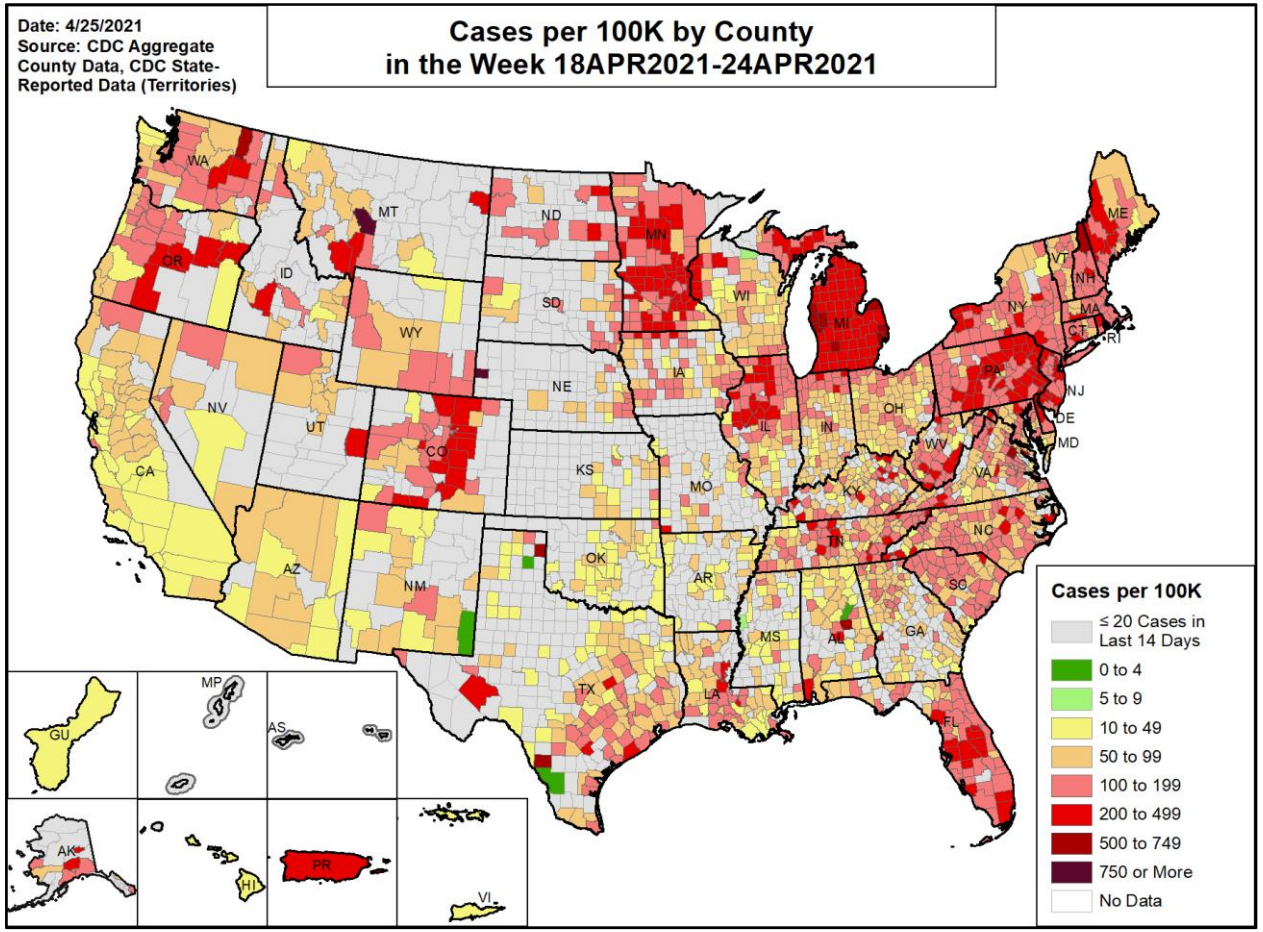


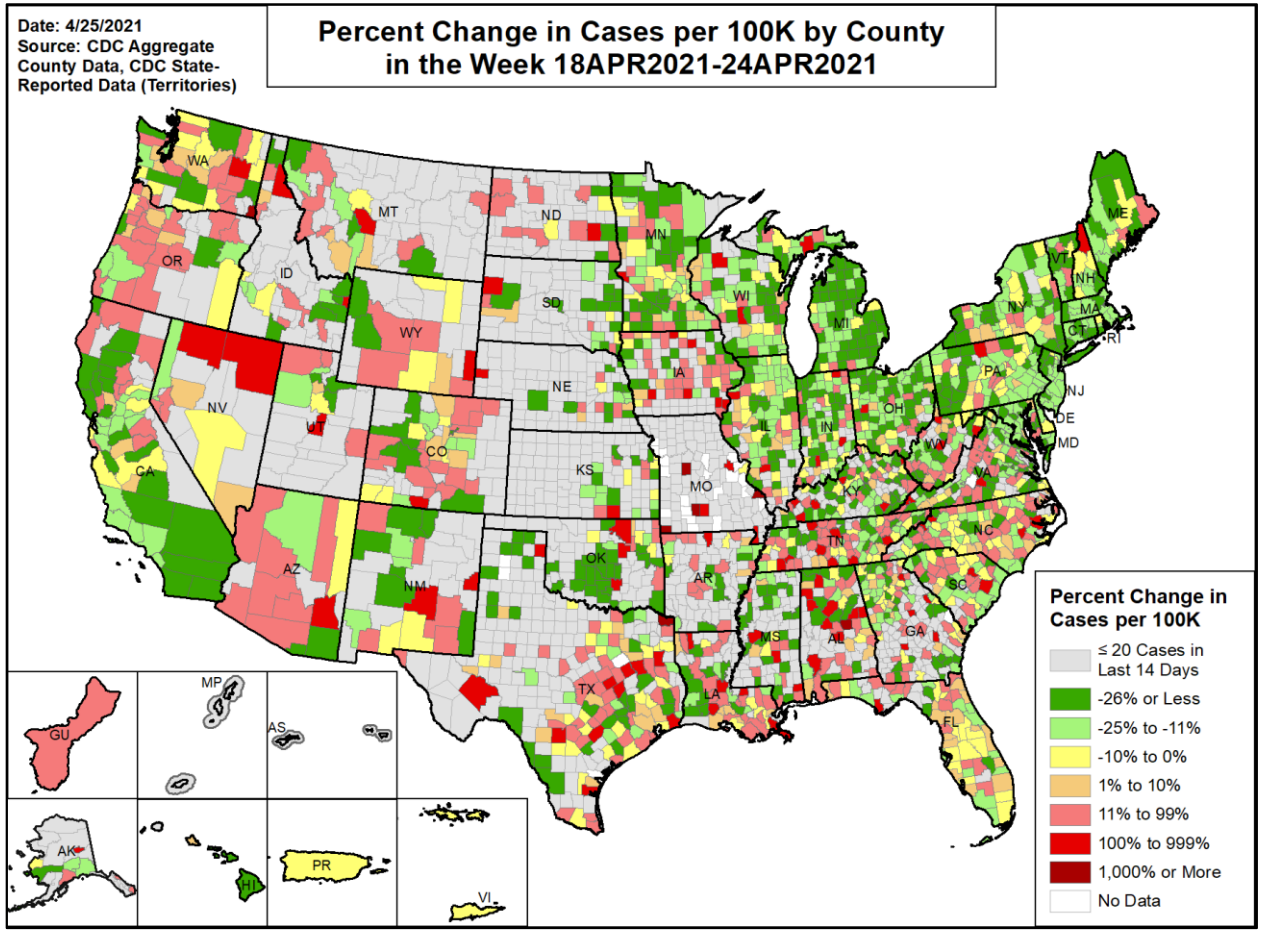


CASE INCIDENCE IN LAST 7 DAYS AND COMPARISON TO THE PREVIOUS 7 DAYS

Incidence Rate in the Last 7 Days: 120.4 per 100,000

Percent Change from Previous 7 Days: -16.9%

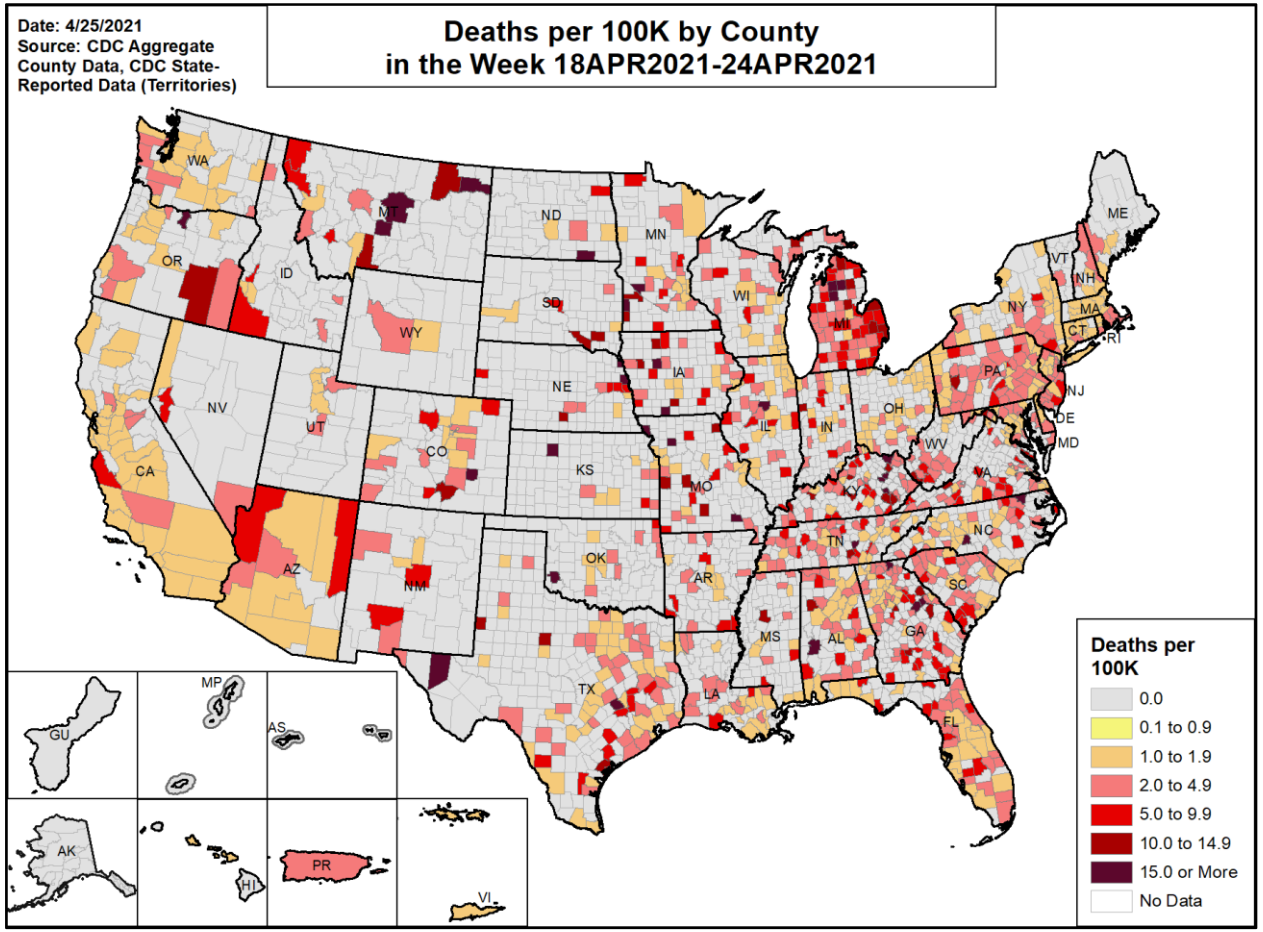


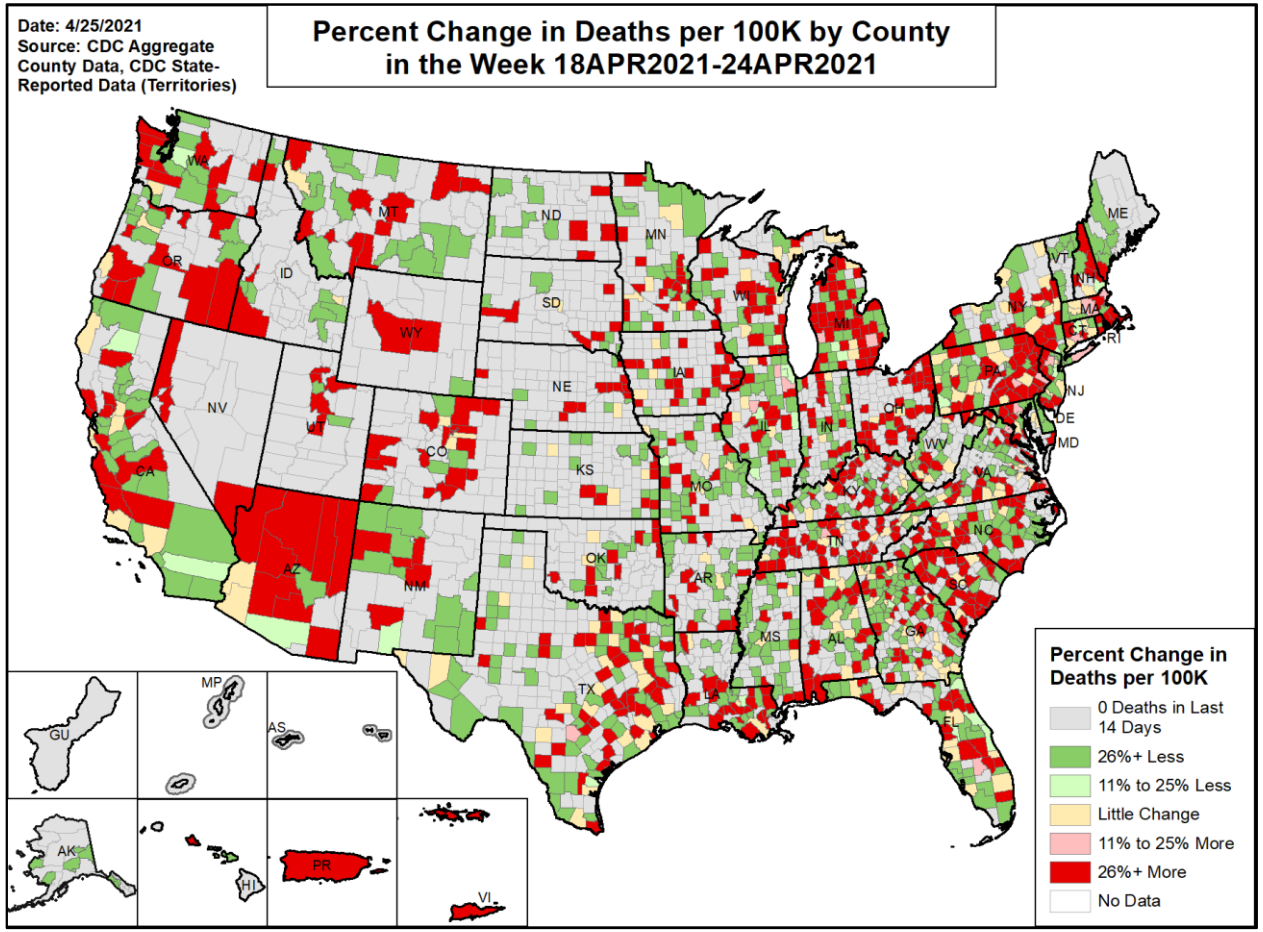


MORTALITY RATE IN THE LAST 7 DAYS AND COMPARISON TO THE PREVIOUS 7 DAYS

Mortality Rate in the Last 7 Days: 1.4 deaths per 100,000

Percent Change from Previous 7 Days: -3.8%

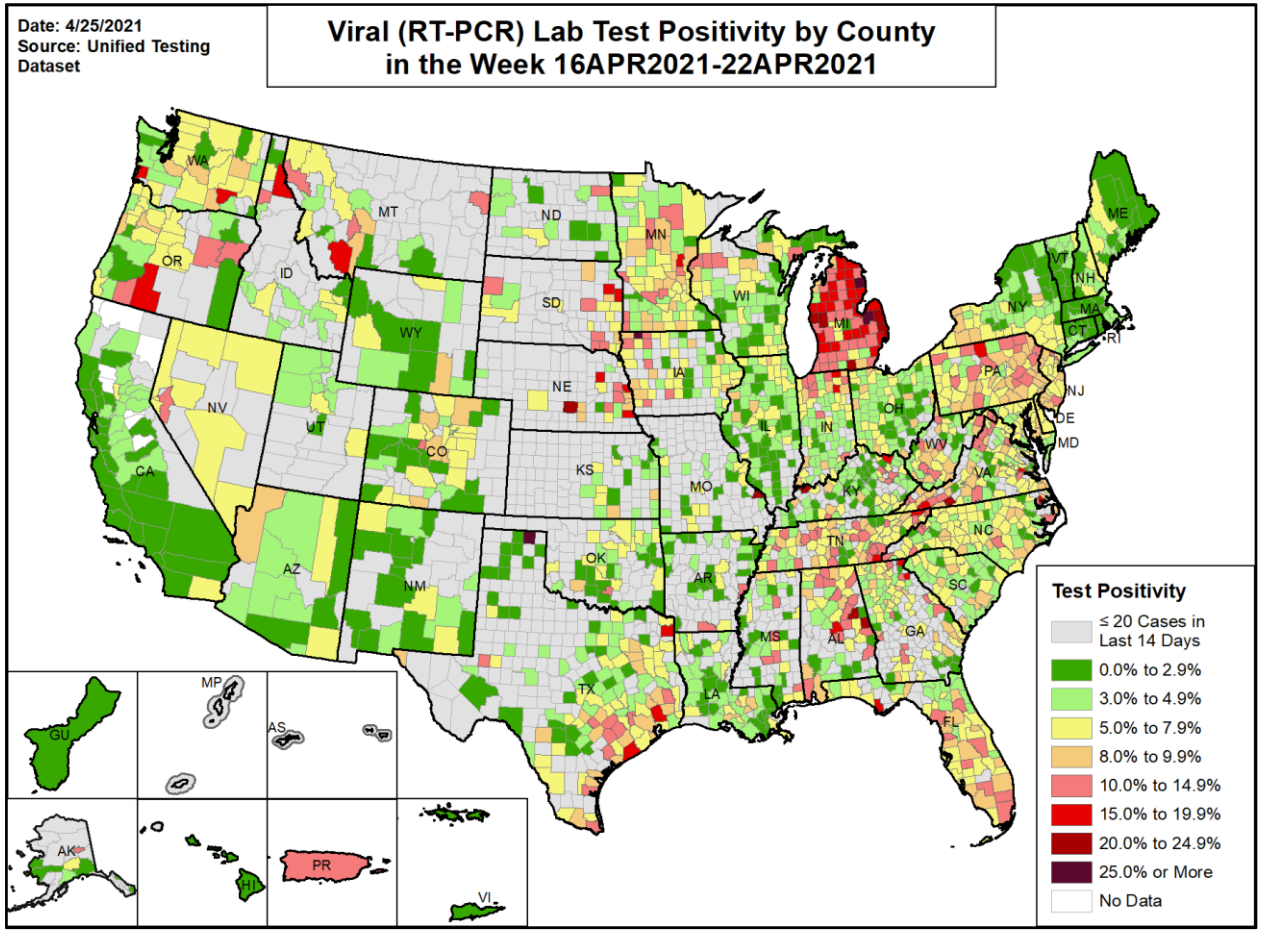


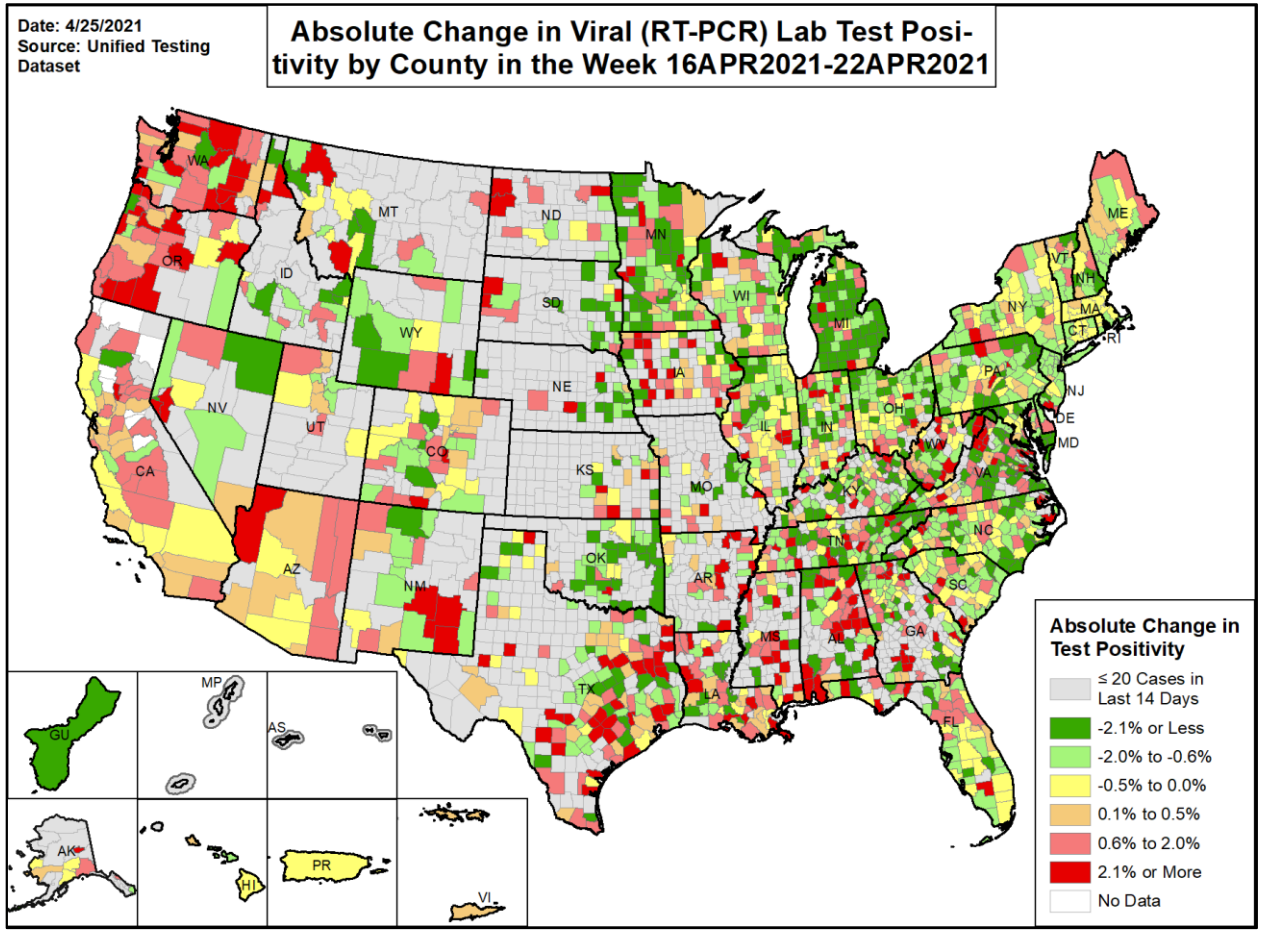


VIRAL (RT-PCR) LAB TEST POSITIVITY IN THE LAST 7 DAYS AND COMPARISON TO PREVIOUS 7 DAYS

Viral (RT-PCR) Lab Test Positivity in Last 7 Days: 5.2%

Absolute Change from Previous 7 Days: -0.2%

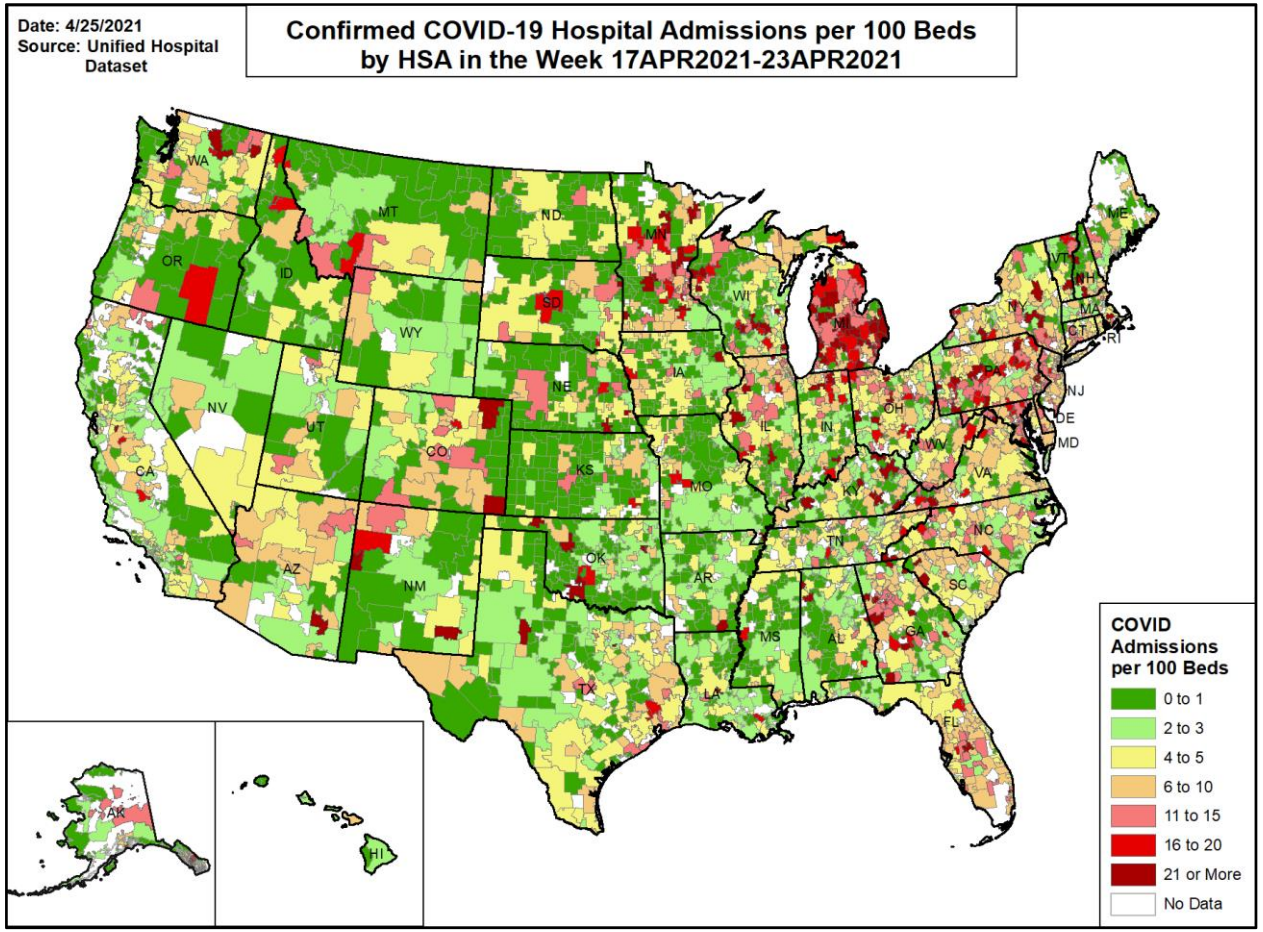


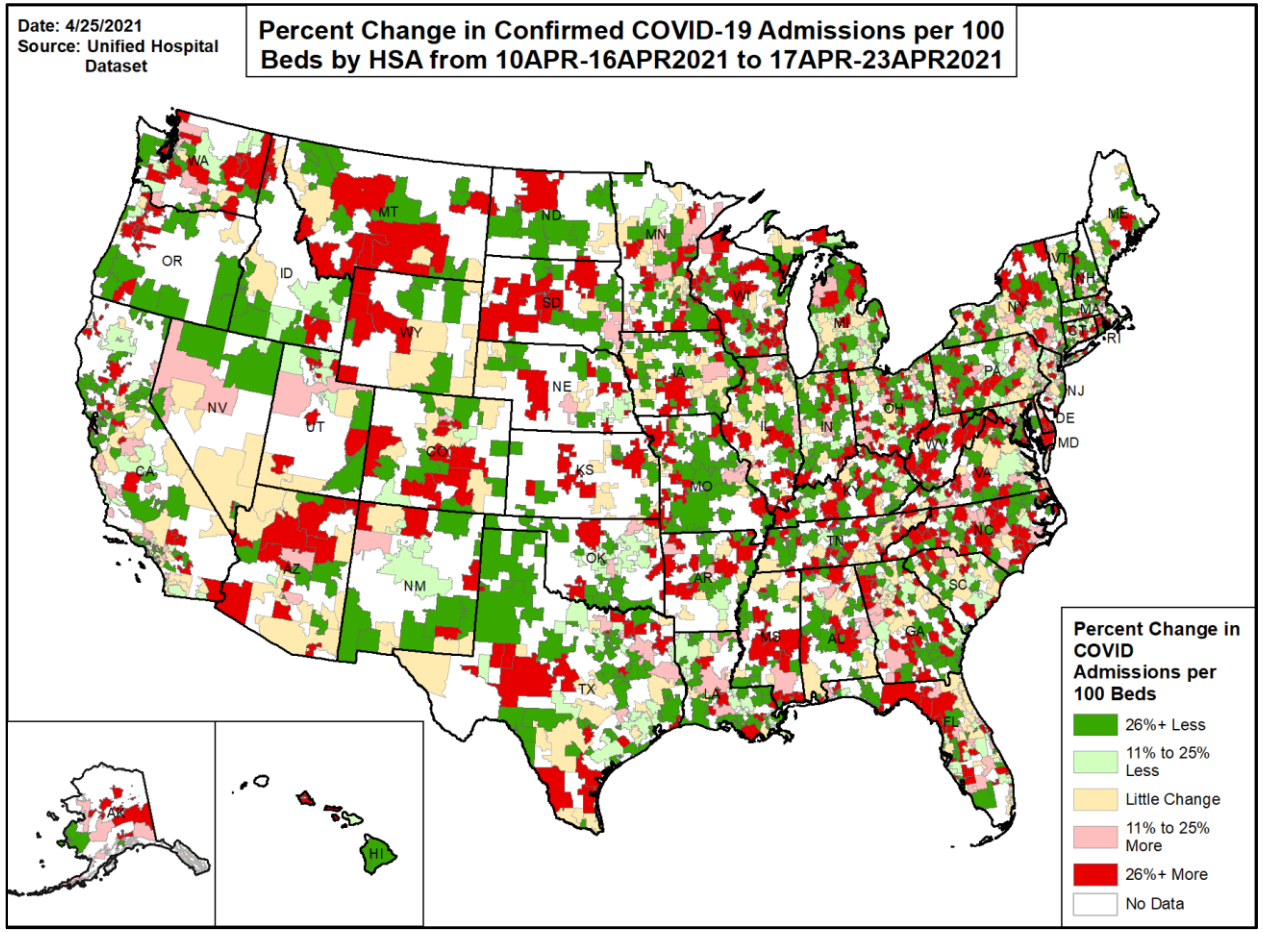


HOSPITAL ADMISSIONS IN THE LAST 7 DAYS AND COMPARISON TO THE PREVIOUS 7 DAYS

Total Confirmed COVID-19 Hospital Admissions in Last 7 Days: 37,629

Percent Change from Previous 7 Days: -3.7%



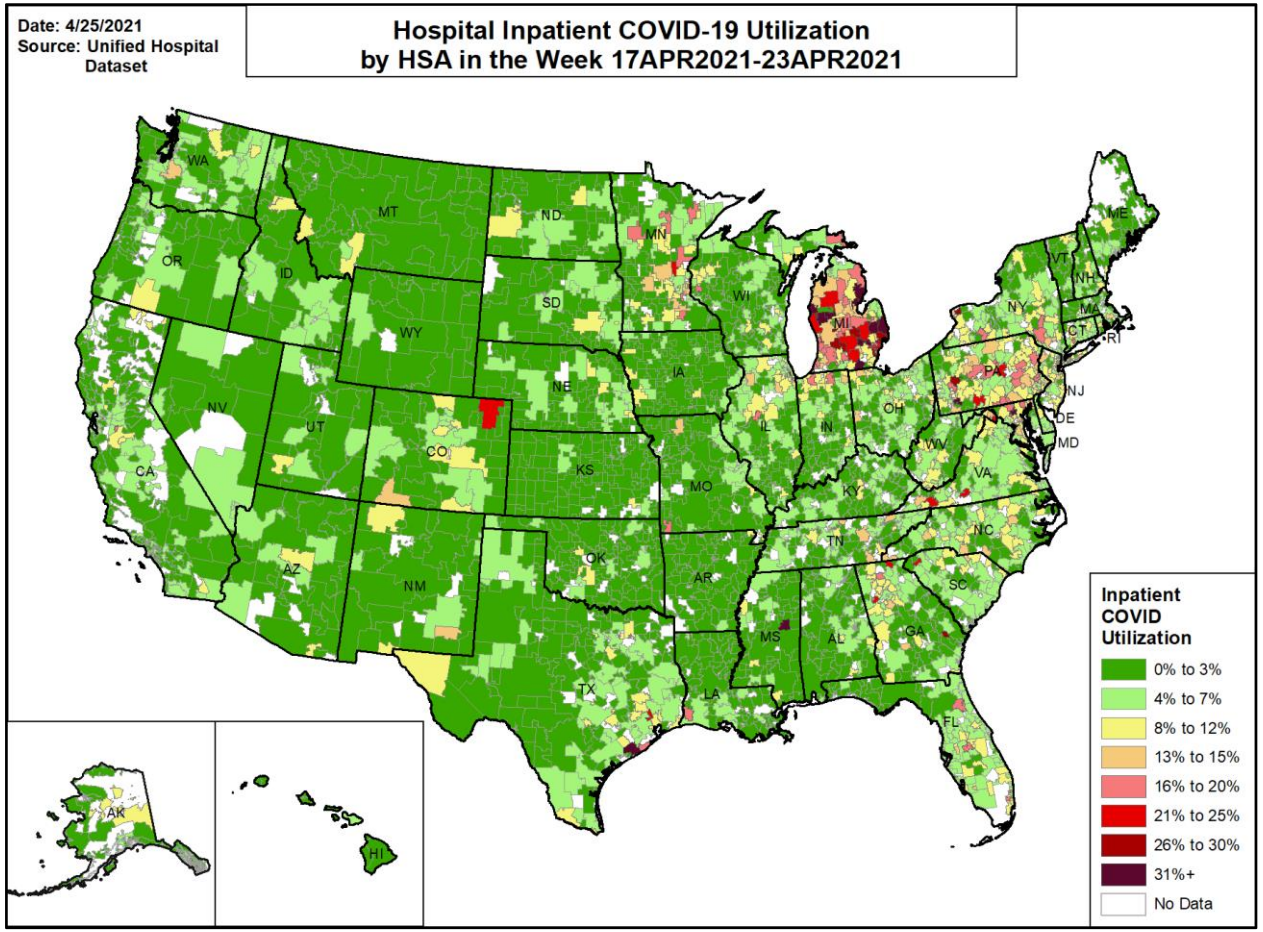


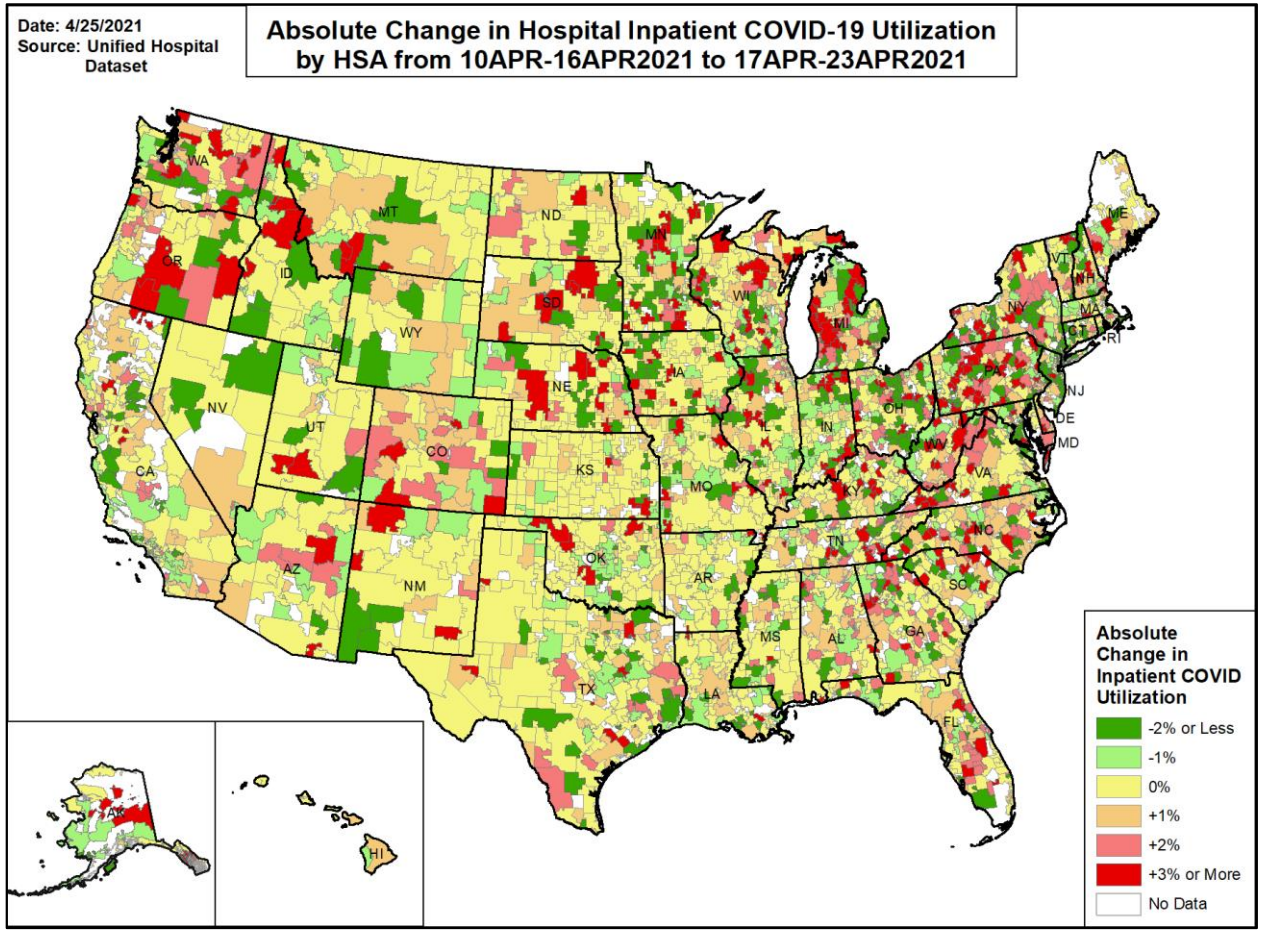
Source: Unified Hospital Dataset, excluding psychiatric, rehabilitation, and religious non-medical hospitals. Confirmed COVID-19 admissions are all confirmed daily admissions reported within the last 7 days. Denominator of per 100 beds calculation is the sum of average staffed inpatient bed count reported by hospitals within the geographic region and time period. HSA indicates Hospital Service Area. Hospitals are assigned to HSA based on zip code where known. In some areas, reports are aggregates of multiple facilities that cross HSA boundaries; in these cases, values are assigned based on the zip code for the aggregate.

HOSPITAL INPATIENT COVID-19 UTILIZATION IN THE LAST 7 DAYS AND COMPARISON TO THE PREVIOUS 7 DAYS

Average Daily COVID-19 Hospital Inpatients over Last 7 Days: 38,763

Percent Change from Previous 7 Days: +1.8%



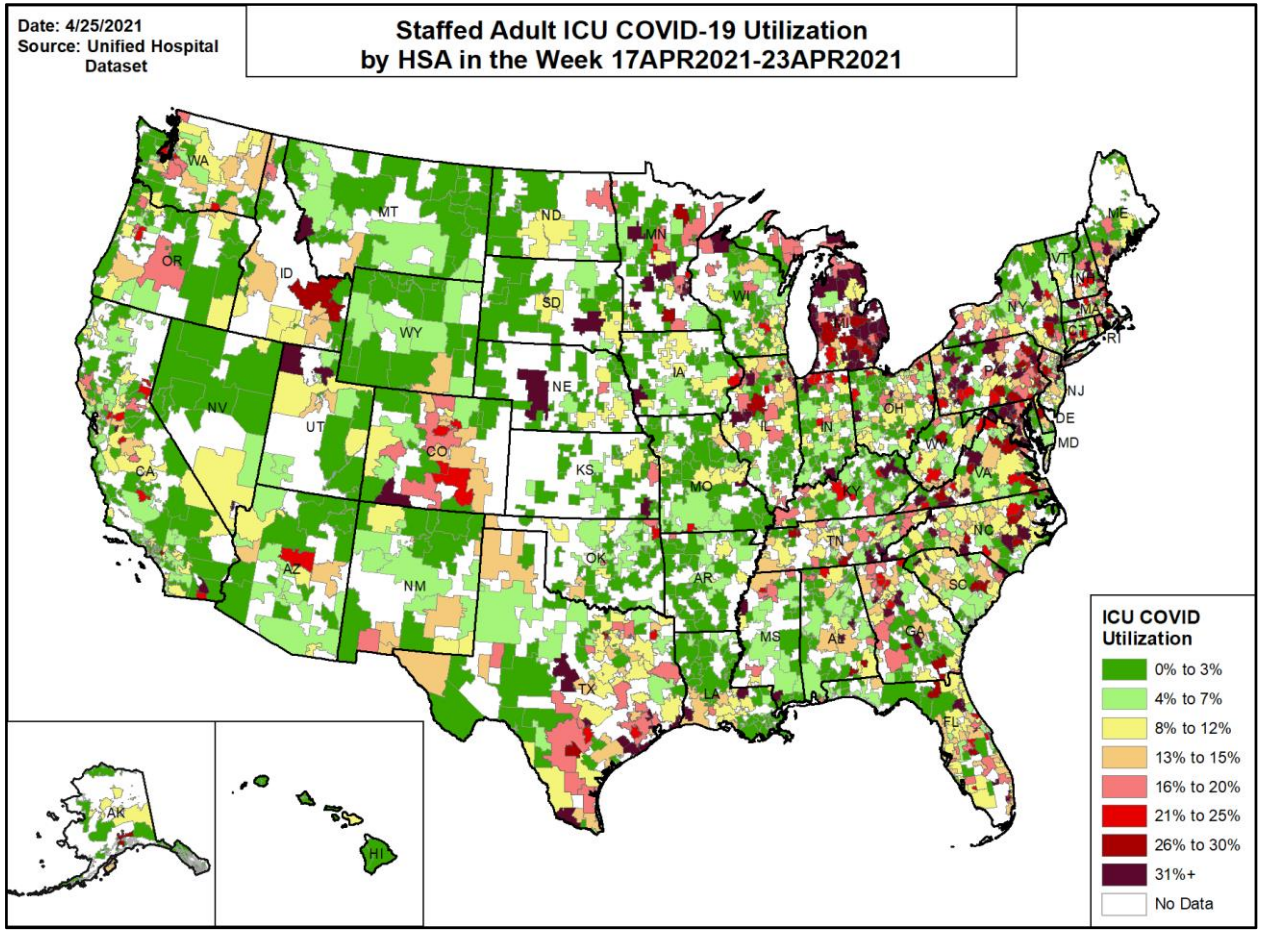


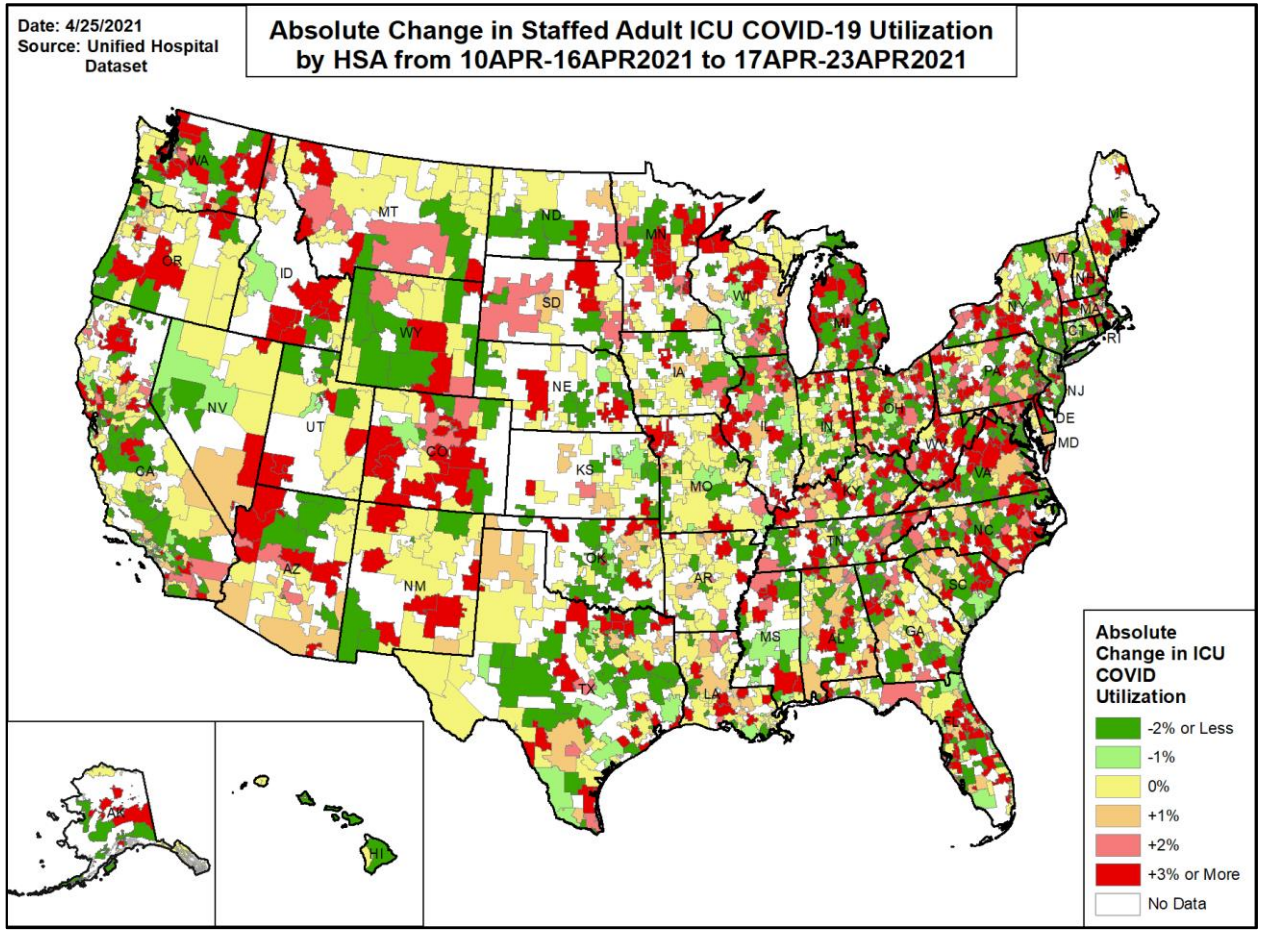
Source: Unified Hospital Dataset, excluding psychiatric, rehabilitation, and religious non-medical hospitals. COVID-19 inpatient utilization indicates average percentage of staffed inpatient beds occupied by confirmed COVID-19 patients within the given time period. HSA indicates Hospital Service Area. Hospitals are assigned to HSA based on zip code where known. In some areas, reports are aggregates of multiple facilities that cross HSA boundaries; in these cases, values are assigned based on the zip code for the aggregate. See Data Sources/Methods slides for additional details.

STAFFED ADULT ICU COVID-19 UTILIZATION IN THE LAST 7 DAYS AND COMPARISON TO THE PREVIOUS 7 DAYS

Average Daily Adult ICU COVID-19 Patients over Last 7 Days: 9,702

Percent Change from Previous 7 Days: +3.6%



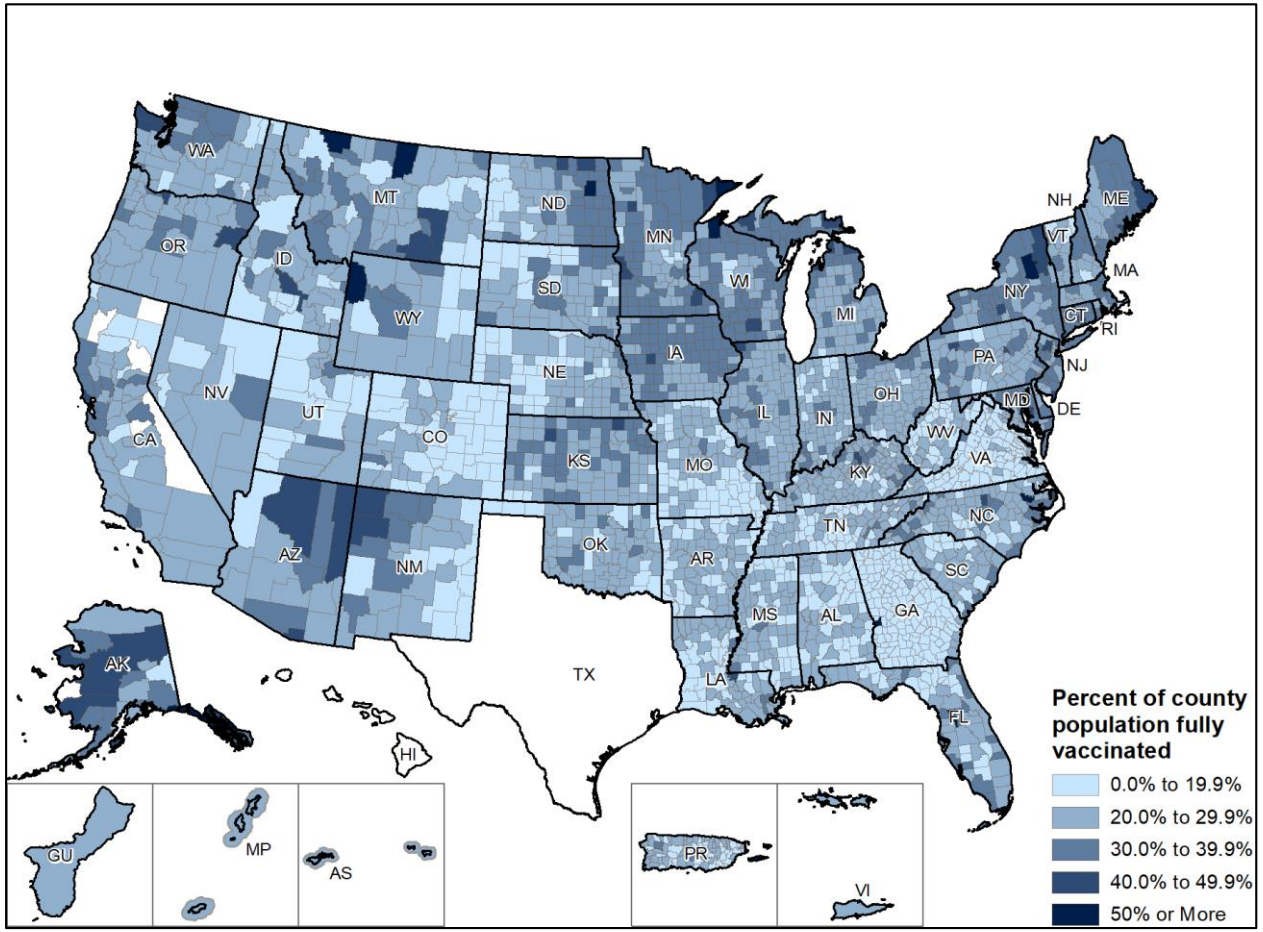


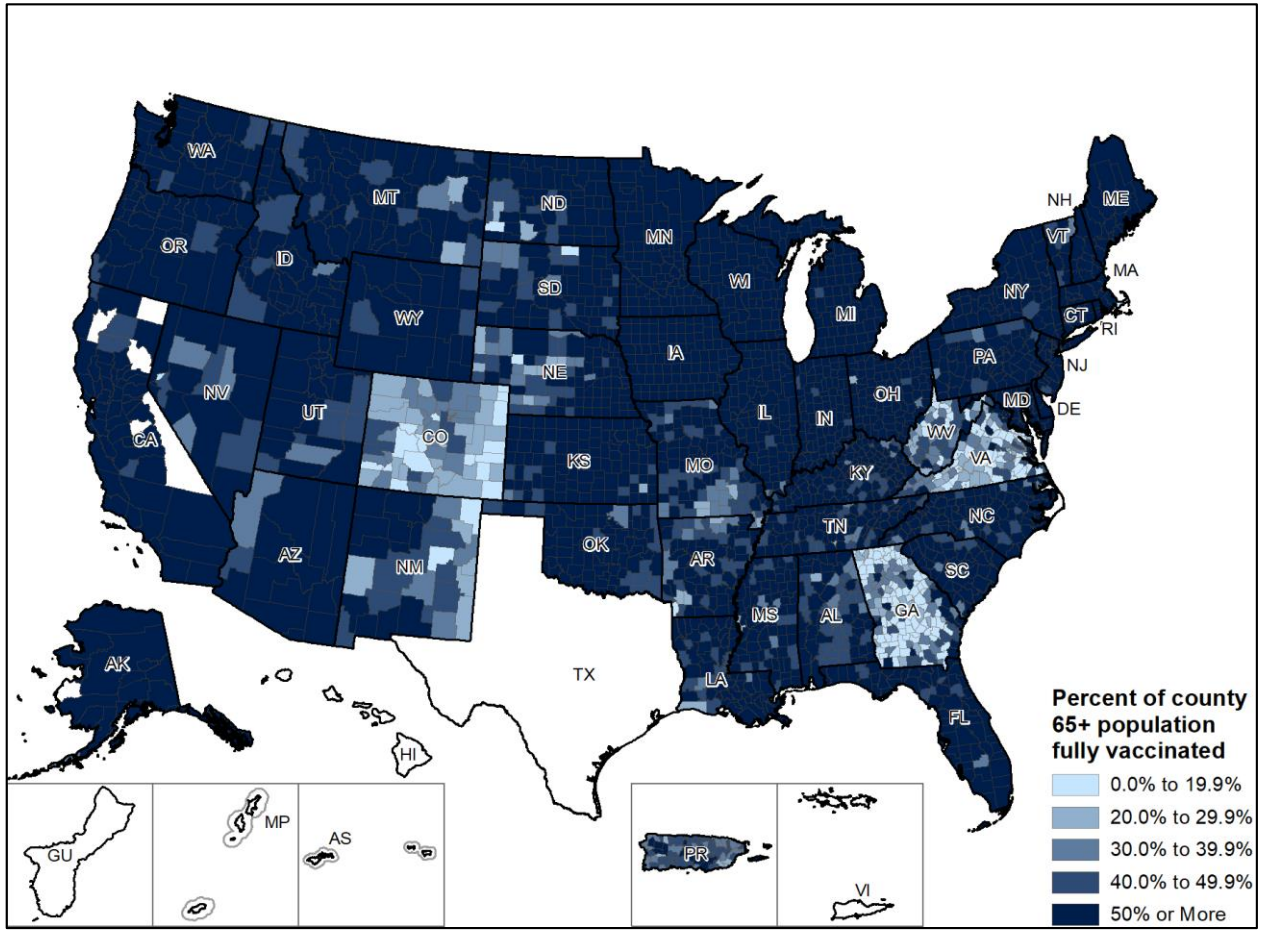
Source: Unified Hospital Dataset, excluding psychiatric, rehabilitation, and religious non-medical hospitals. Staffed adult ICU COVID-19 utilization indicates average percentage of staffed adult ICU beds occupied by confirmed COVID-19 patients within the given time period. HSA indicates Hospital Service Area. Hospitals are assigned to HSA based on zip code where known. In some areas, reports are aggregates of multiple facilities that cross HSA boundaries; in these cases, values are assigned based on the zip code for the aggregate. See Data Sources/Methods slides for additional details.

VACCINATION RATES BY COUNTY

Percent of Population Fully Vaccinated: 28.5%
Percent of Population with at Least 1 Dose: 42.2%

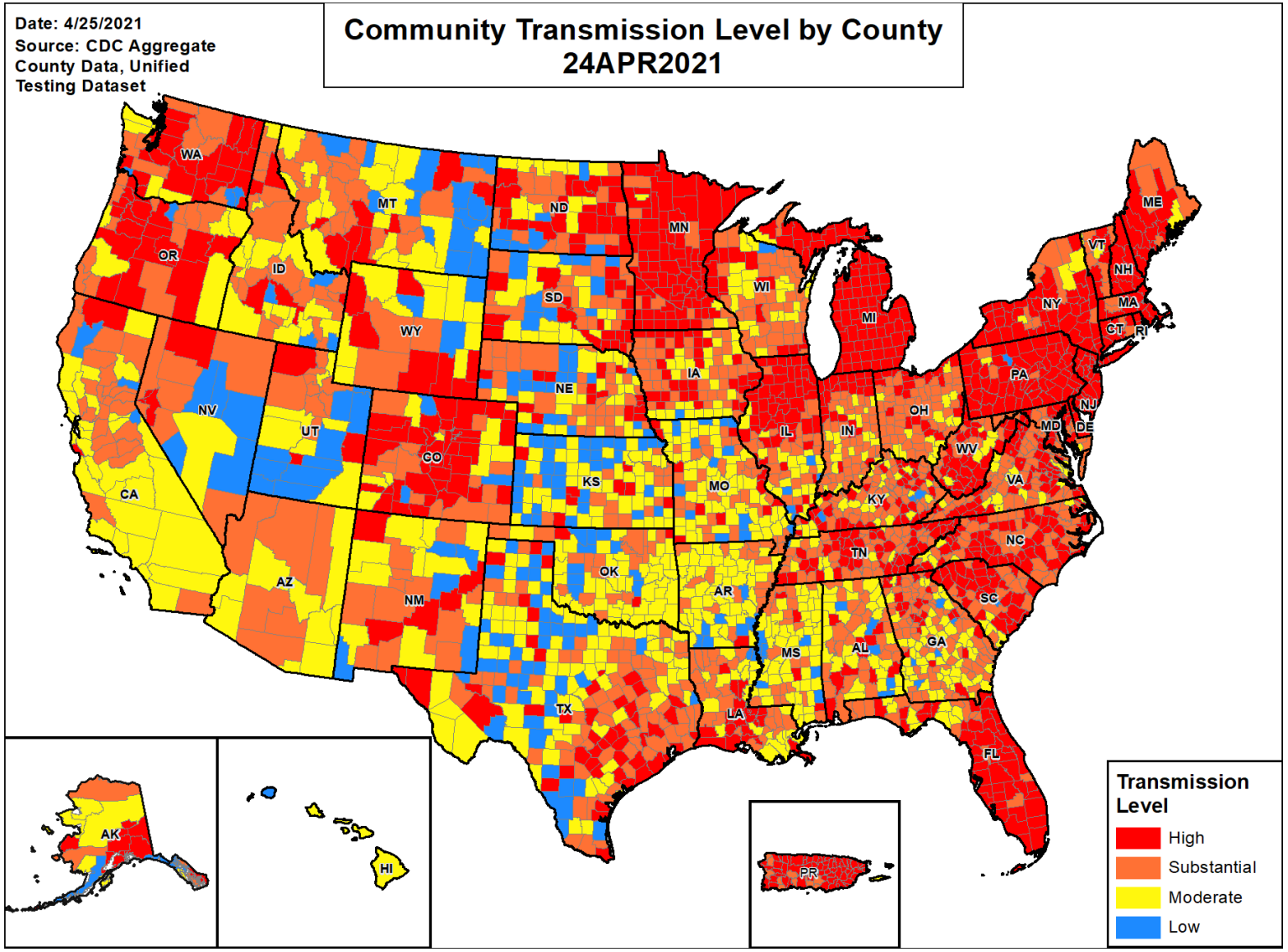
Percent of 65+ Population Fully Vaccinated: 67.3%
Percent of 65+ Population with at Least 1 Dose: 81.3%





Source: Unified COVID-19 Vaccine Dataset. Fully vaccinated indicates those who received the second dose of Pfizer-BioNTech or Moderna vaccines and those who received one dose of J&J/Janssen COVID-19 vaccine. Values reflect total by report date, not administered date. The following states have ≤80% completeness reporting vaccinations by county, which may result in underestimates of vaccination data for counties and CBSAs: SD (79%), VT (75%), NM (74%), CO (64%), WV (53%), VA (50%), GA (49%), HI (0%), TX (0%), AS (0%), MH (0%), FM (0%), MP (0%)

COMMUNITY TRANSMISSION LEVEL

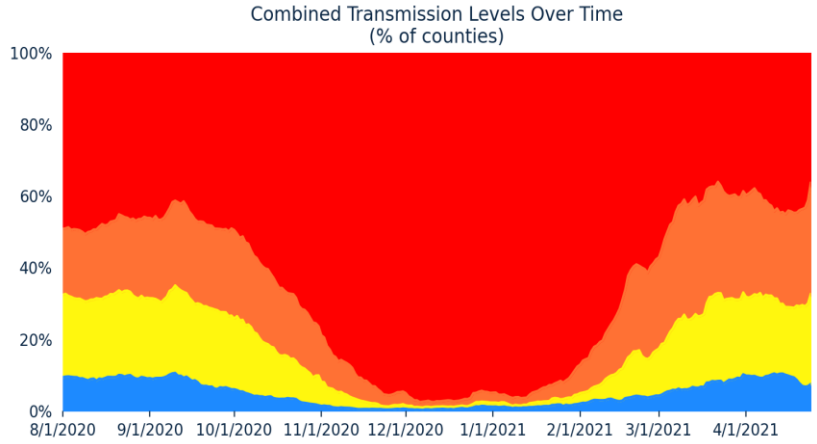


Counties by Community Transmission Indicator

Cases per 100k	0 to 9	10 to 49	50 to 99	100 +
# of counties (change)	240 (↓125)	808 (↑132)	1000 (↑101)	1172 (↓108)
% of counties (change)	7.5% (↓3.9%)	25.1% (↑4.1%)	31.1% (↑3.1%)	36.4% (↓3.4%)
Test Positivity	0.0% to 4.9%	5.0% to 7.9%	8.0% to 9.9%	10.0% +
# of counties (change)	3220 (↑1562)	0 (↓756)	0 (↓299)	0 (↓507)
% of counties (change)	100.0% (↑48.5%)	0.0% (↓23.5%)	0.0% (↓9.3%)	0.0% (↓15.7%)

Counties by Combined Transmission Level

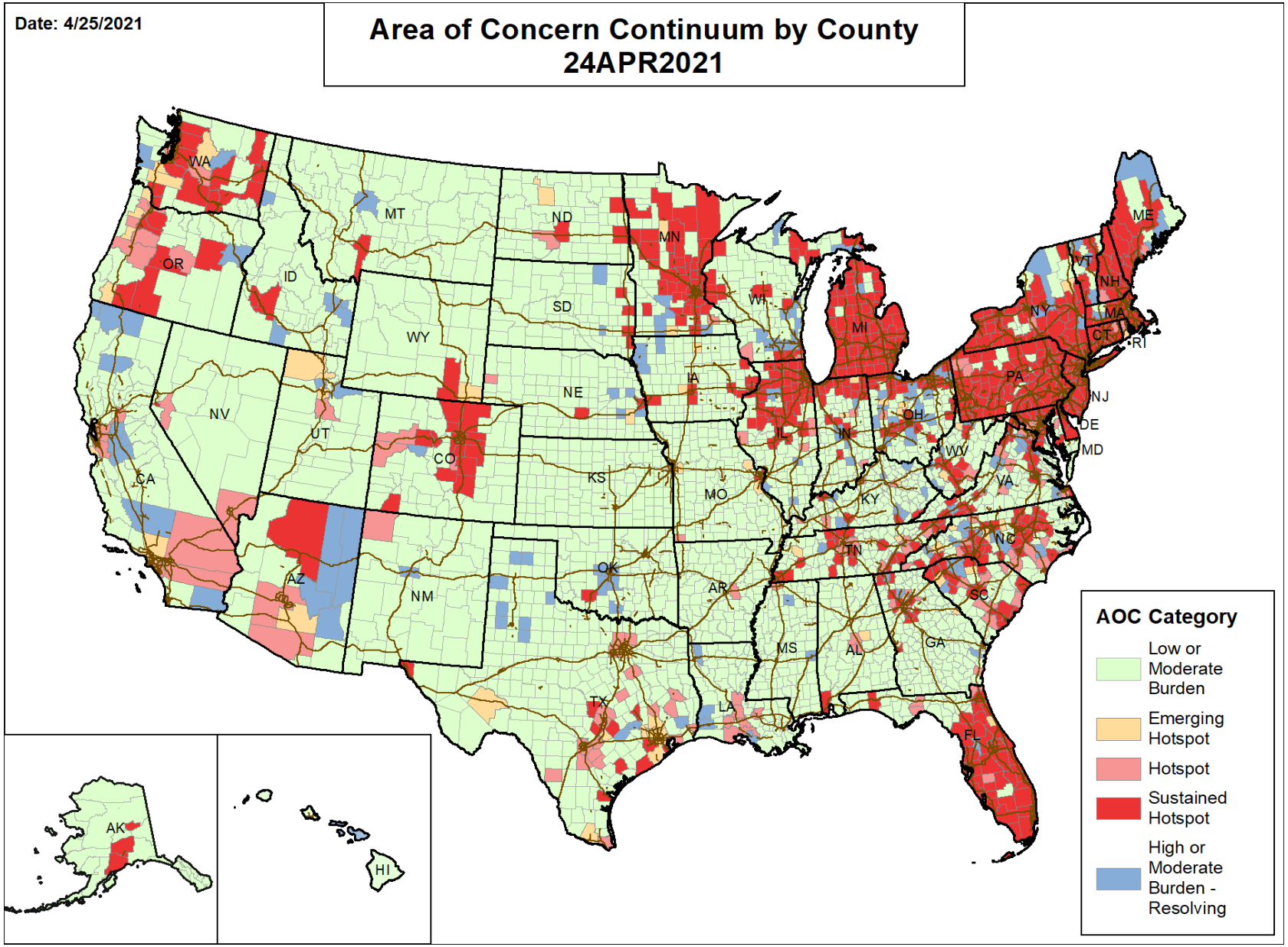
Category	Low Transmission Blue	Moderate Transmission Yellow	Substantial Transmission Orange	High Transmission Red
# of counties (change)	240 (↓67)	808 (↑185)	1000 (↑138)	1172 (↓256)
% of counties (change)	7.5% (↓2.1%)	25.1% (↑5.7%)	31.1% (↑4.3%)	36.4% (↓8.0%)



Source: CDC Aggregate County Dataset (cases), Unified Testing Dataset (tests)

Notes: Combined Transmission Level is the higher threshold among cases and testing thresholds.

AREA OF CONCERN CONTINUUM



The Areas of Concern Continuum (AOCC) is used to describe communities as they progress through stages of the epidemic. There are 7 possible AOC classifications based on current and recent history of case and testing data for the location:

(1) **Low Burden** – communities with minimal activity

(2) **Moderate Burden** – communities with moderate disease activity

(3) **Emerging Hotspot** – communities with a high likelihood to become hotspots in the next 1-7 days

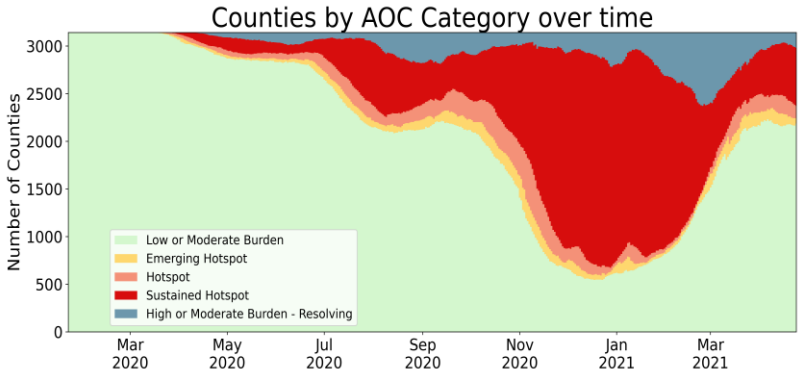
(4) **Hotspot** – communities that have reached a threshold of disease activity considered as being of high burden

(5) **Sustained Hotspot** – communities that have had a high sustained case burden and may be higher risk for experiencing healthcare resource limitations

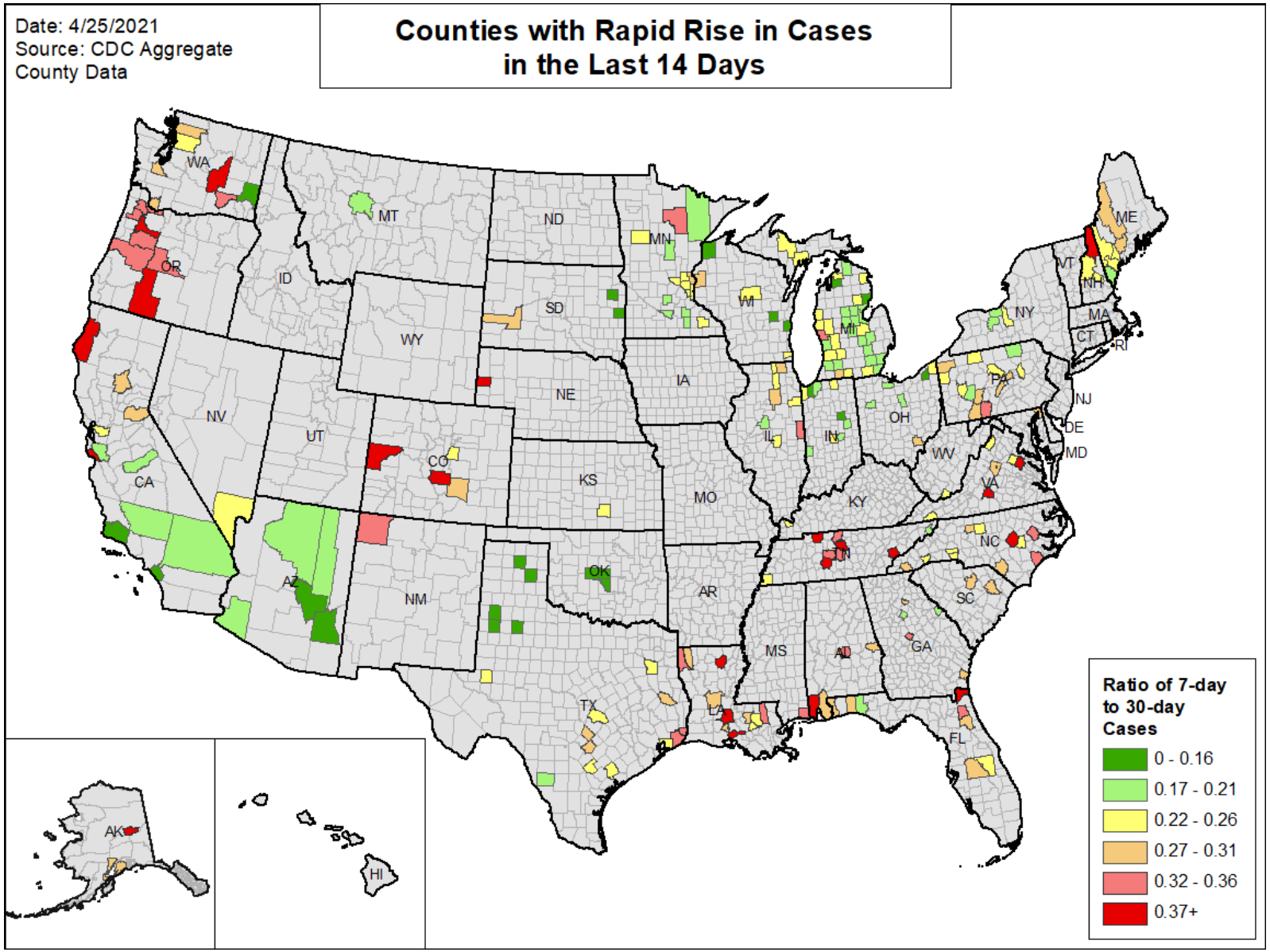
(6) **High Burden – Resolving** – communities that were recently identified as hotspots and are now improving

(7) **Moderate Burden – Resolving** – communities that have a moderate level of burden, but are demonstrating improvement

See Data Sources/Methods slides for more information.



AREA OF CONCERN CONTINUUM - RAPID RISER COUNTIES



This map shows counties that have seen a rapid rise in cases within the last 14 days by meeting the following **Rapid Riser County** criteria:

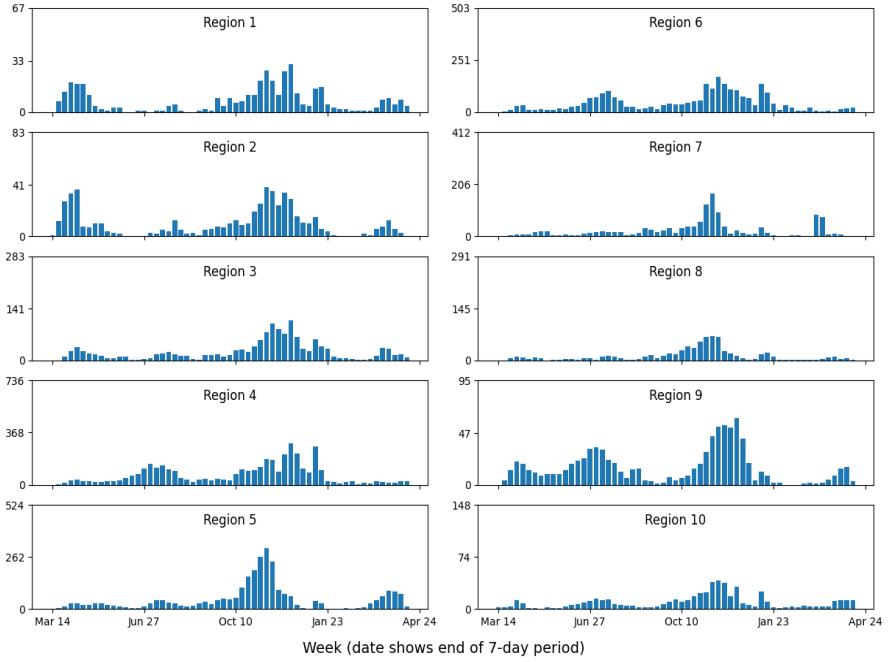
- >100 new cases in last 7 days
- >0% change in 7-day incidence
- >-60% change in 3-day incidence
- 7-day incidence / 30-day incidence ratio >0.31
- one or both of the following triggering criteria:
  (a) >60% change in 3-day incidence,
  (b) >60% change in 7-day incidence

The color indicates *current* acceleration in cases (ratio of 7-day to 30-day cases). Counties in **light red** and **red** are continuing to see accelerating cases in the most recent week, while those in **dark green** and **green** may have seen declines in the most recent week.

The bar charts below show the history of rapid riser counties by FEMA region and week, indicating when different geographic areas have seen the greatest acceleration in cases.

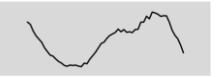
# of Distinct Rapid Riser Counties by Week and FEMA Region

(vertical axis scaled to number of counties in region)



NATIONAL AND REGIONAL METRICS

National Metrics

	Last 7 days					Change from previous week					Daily case trend - last 8 weeks
	Cases (per 100k)	Viral (RT-PCR) lab test positivity	Confirmed admissions (per 100 beds)	ICU COVID-19 utilization	Deaths (per 100k)	Pct change in cases	Absolute change in test pos.	Pct change in conf. adm. per 100 beds	Absolute change in ICU COVID-19 util.	Pct change in deaths	
U.S Total - Last 7 Days	399,863 (120)	5.2%	37,629 (5)	11%	4,692 (1.4)	-17%	-0.2%	-4%	0%	-4%	
U.S. Total - 1 Week Ago	481,171 (145)	5.4%	39,077 (5)	11%	4,875 (1.5)	+3%	-0.1%	+2%	1%	+2%	
U.S. Total - Apr 2021 Peak	489,148 (147)	5.5%	39,385 (5)	11%	5,497 (1.7)						
U.S. Total - Mar 2021 Peak	462,307 (139)	5.2%	39,633 (5)	14%	12,261 (3.7)						
U.S. Total - Feb 2021 Peak	1,007,586 (303)	8.3%	78,127 (11)	26%	21,511 (6.5)						
U.S. Total - Jan 2021 Peak	1,746,053 (526)	14.9%	115,645 (16)	31%	24,200 (7.3)						
U.S. Total - Dec 2020 Peak	1,543,386 (465)	14.5%	105,882 (15)	30%	19,135 (5.8)						
U.S. Total - Nov 2020 Peak	1,242,798 (374)	11.0%	85,871 (12)	24%	11,990 (3.6)						
U.S. Total - Oct 2020 Peak	572,037 (172)	7.4%	44,126 (6)	13%	6,032 (1.8)						
U.S. Total - Sep 2020 Peak	307,795 (93)	5.5%	28,366 (4)	12%	5,931 (1.8)						
U.S. Total - Aug 2020 Peak	429,899 (129)	8.5%	40,179 (6)	17%	7,850 (2.4)						

Last 7 days indicates cases/deaths data from 4/18-4/24, admissions data from 4/17-4/23, and testing data from 4/16-4/22.

Regional Metrics

FEMA Region (Population)	Last 7 days					Change from previous week					Daily case trend - last 8 weeks
	Cases (per 100k)	Viral (RT-PCR) lab test positivity	Confirmed admissions (per 100 beds)	ICU COVID-19 utilization	Deaths (per 100k)	Pct change in cases	Absolute change in test pos.	Pct change in conf. adm. per 100 beds	Absolute change in ICU COVID-19 util.	Pct change in deaths	
Region 5 (52,542,063)	92,959 (177)	6.3%	8,746 (7)	14%	750 (1.4)	-22%	-1.0%	-9%	1%	+5%	
Region 4 (66,908,139)	80,987 (121)	7.0%	8,618 (5)	10%	996 (1.5)	-16%	-0.4%	+2%	0%	-9%	
Region 2 (31,635,850)	61,360 (194)	5.2%	4,996 (6)	14%	701 (2.2)	-18%	-0.9%	-6%	-1%	-11%	
Region 3 (30,854,848)	48,045 (156)	6.5%	5,095 (8)	16%	585 (1.9)	-21%	-1.1%	+4%	1%	+6%	
Region 6 (42,716,279)	27,328 (64)	4.7%	3,300 (3)	10%	532 (1.2)	-7%	-0.3%	-12%	0%	-1%	
Region 9 (51,555,755)	21,731 (42)	2.5%	2,476 (3)	6%	614 (1.2)	-17%	+0.6%	-7%	-0%	-9%	
Region 1 (14,845,063)	20,944 (141)	2.3%	1,570 (5)	11%	163 (1.1)	-30%	-0.5%	-3%	-0%	-9%	
Region 8 (12,258,952)	17,503 (143)	5.2%	1,052 (4)	11%	109 (0.9)	-3%	+0.1%	+8%	1%	+42%	
Region 10 (14,351,240)	17,388 (121)	5.3%	832 (3)	10%	92 (0.6)	+5%	+1.0%	+9%	2%	-11%	
Region 7 (14,140,220)	11,618 (82)	5.2%	944 (3)	7%	150 (1.1)	+12%	-0.4%	-3%	-0%	-1%	

STATE PROFILES AND WEEKLY CATEGORIES

Weekly Categorization of States, DC, and Territories: color categories based on last week's CDC combined transmission level data (baseline dates: April 18-24)
Case Data from April 18-24, Admissions Data from April 17-23, Test Positivity Data from April 16-22

High Transmission States/Territories

State	Last 7 days			Change from previous week			Daily case trend - last 8 weeks
	Cases (per 100k)	Viral (RT-PCR) lab test positivity	Confirmed admissions (per 100 beds)	Pct. change in cases	Abs. change in test pos.	Pct. change in conf. adm. per 100 beds	
AK	961 (131)	3.3%	43 (3)	-22%	+0.4%	+27%	
CO	11,647 (202)	5.7%	625 (6)	+1%	+0.1%	+8%	
CT	4,925 (138)	2.8%	595 (8)	-40%	-0.6%	-6%	
DE	2,150 (221)	5.7%	171 (6)	-16%	-0.7%	+18%	
FL	41,225 (192)	8.6%	3,767 (7)	-3%	-0.2%	+1%	
IL	19,423 (153)	4.0%	1,756 (6)	-15%	-0.6%	-5%	
IN	6,839 (102)	5.1%	688 (4)	-15%	-0.3%	+2%	
ME	2,492 (185)	3.1%	89 (3)	-25%	-0.5%	-4%	
MD	7,229 (120)	5.5%	1,142 (11)	-22%	-1.8%	-3%	
MA	9,108 (132)	2.0%	638 (4)	-25%	-0.4%	-2%	
MI	38,100 (382)	12.3%	3,610 (17)	-29%	-2.2%	-15%	
MN	12,151 (215)	6.4%	675 (7)	-15%	-0.6%	-6%	
NE	2,435 (126)	7.2%	124 (3)	+17%	-1.9%	+2%	
NH	2,263 (166)	3.5%	121 (4)	-20%	-0.9%	-10%	
NJ	20,493 (231)	7.6%	1,631 (8)	-20%	-1.0%	-9%	
NY	34,057 (175)	4.2%	2,848 (6)	-18%	-0.7%	-13%	
NC	10,901 (104)	6.0%	963 (4)	-34%	-0.6%	+12%	
ND	934 (123)	3.3%	67 (3)	-7%	+0.0%	-16%	
OR	5,429 (129)	5.9%	253 (4)	+23%	+1.5%	+23%	
PA	27,398 (214)	7.9%	2,606 (9)	-21%	-0.9%	+6%	
PR	6,758 (212)	12.9%	513 (6)	-10%	-0.4%	+81%	
RI	1,546 (146)	2.1%	88 (4)	-42%	-0.4%	+30%	
SD	930 (105)	7.4%	91 (4)	-31%	-1.3%	+47%	
TN	7,178 (105)	6.8%	699 (4)	-37%	-0.4%	-4%	
WA	9,763 (128)	5.8%	432 (3)	+5%	+1.2%	+6%	
WV	2,551 (142)	6.8%	258 (5)	-8%	-0.6%	+33%	

Substantial Transmission States/Territories

State	Last 7 days			Change from previous week			Daily case trend - last 8 weeks
	Cases (per 100k)	Viral (RT-PCR) lab test positivity	Confirmed admissions (per 100 beds)	Pct. change in cases	Abs. change in test pos.	Pct. change in conf. adm. per 100 beds	
AL	2,657 (54)	7.8%	402 (3)	+11%	+1.8%	+16%	
AZ	5,026 (69)	4.4%	460 (3)	+25%	+0.1%	-0%	
DC	640 (91)	2.4%	133 (5)	-22%	-0.5%	+15%	
GA	9,552 (90)	5.4%	1,363 (7)	-10%	-0.3%	+0%	
ID	1,235 (69)	4.4%	104 (3)	-22%	-0.3%	-8%	
IA	2,968 (94)	5.8%	239 (3)	-9%	-0.5%	-12%	
KS	1,511 (52)	3.9%	160 (2)	-7%	+0.1%	+0%	
KY	3,594 (80)	3.6%	807 (7)	-17%	-0.7%	-4%	
LA	3,121 (67)	3.1%	303 (2)	-13%	+0.2%	-15%	
MO	4,704 (77)	4.8%	421 (3)	+39%	-0.2%	-0%	
MT	959 (90)	4.9%	76 (3)	+1%	+0.6%	+17%	
NV	2,373 (77)	6.2%	289 (4)	-14%	-0.1%	+4%	
NM	1,150 (55)	2.6%	116 (3)	-32%	-0.2%	-2%	
OH	11,334 (97)	4.5%	1,423 (5)	-22%	-0.9%	-6%	
SC	4,717 (92)	5.0%	472 (5)	-29%	-0.8%	-2%	
TX	20,270 (70)	5.7%	2,457 (4)	-2%	+0.0%	-13%	
UT	2,641 (82)	4.0%	159 (3)	-4%	+0.1%	+5%	
VT	610 (98)	1.5%	39 (3)	-33%	-0.6%	+8%	
VA	8,077 (95)	5.4%	785 (5)	-24%	-1.0%	-1%	
WI	5,112 (88)	3.5%	594 (5)	-15%	-0.5%	+5%	
WY	392 (68)	3.0%	34 (2)	-9%	-0.5%	-19%	

The Weekly Categories slides indicate which states and territories fell in the high, substantial, moderate, and low transmission level categories at the beginning of the week (as of Sunday data). The indicators shown here are fixed throughout the week and provide a common reference point for states from week to week.

STATE PROFILES AND WEEKLY CATEGORIES CONT.

Weekly Categorization of States, DC, and Territories: color categories based on last week's CDC combined transmission level data (baseline dates: April 18-24)
Case Data from April 18-24, Admissions Data from April 17-23, Test Positivity Data from April 16-22

Moderate Transmission States/Territories

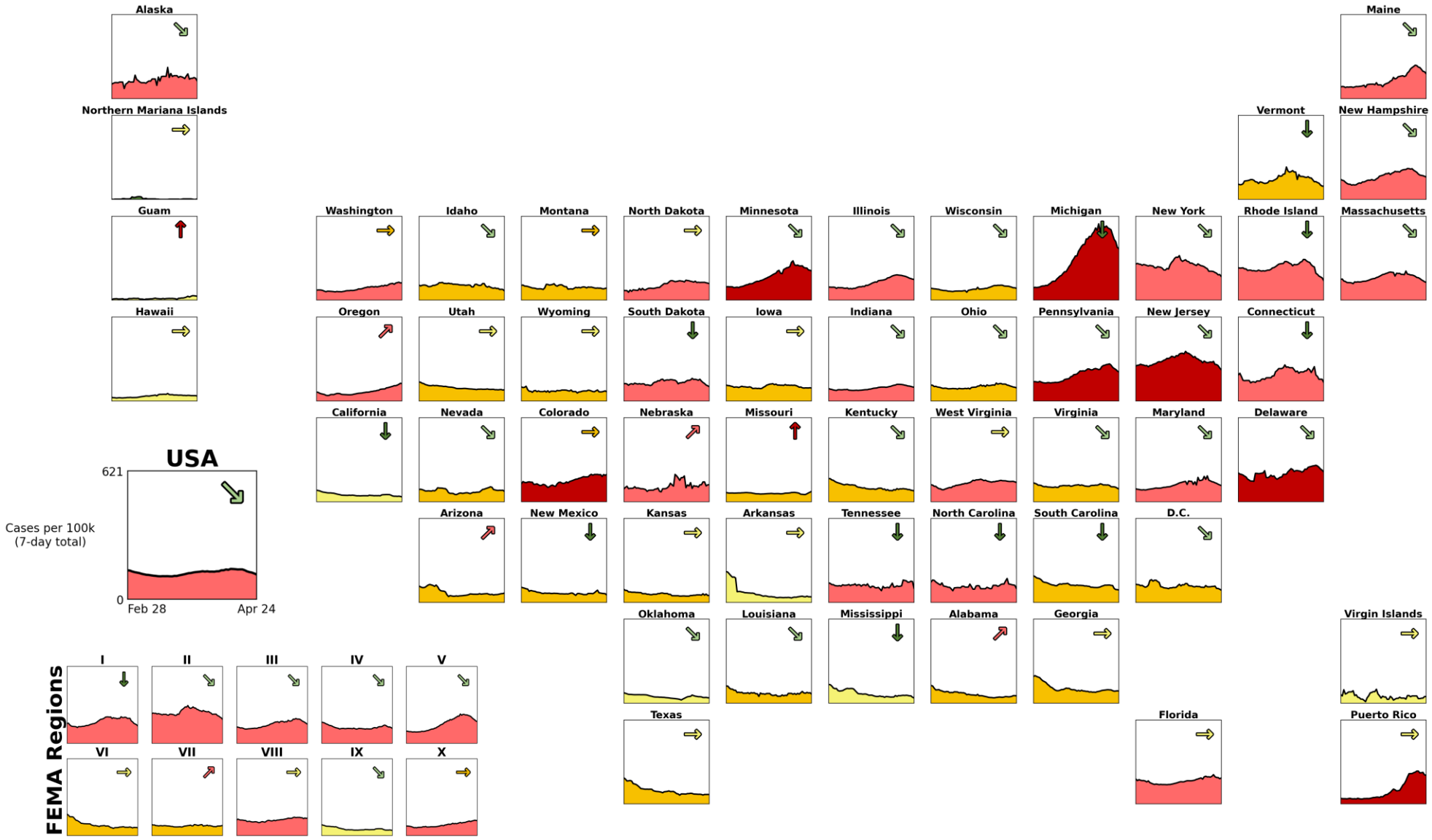
State	Last 7 days			Change from previous week			Daily case trend - last 8 weeks
	Cases (per 100k)	Viral (RT-PCR) lab test positivity	Confirmed admissions (per 100 beds)	Pct. change in cases	Abs. change in test pos.	Pct. change in conf. adm. per 100 beds	
AR	1,235 (41)	2.7%	171 (2)	-9%	+0.5%	+3%	
CA	13,773 (35)	1.8%	1,685 (3)	-27%	+0.2%	-11%	
GU	46 (29)	0.7%	3 (1)	+28%	-4.1%	-51%	
HI	511 (36)	1.7%	39 (2)	-9%	-0.1%	-6%	
MS	1,163 (39)	4.5%	145 (2)	-33%	+0.5%	+10%	
OK	1,552 (39)	4.6%	253 (3)	-18%	-2.5%	-7%	
VI	52 (49)	1.6%	4 (2)	-9%	+0.2%	+300%	

Low Transmission States/Territories

State	Last 7 days			Change from previous week			Daily case trend - last 8 weeks
	Cases (per 100k)	Viral (RT-PCR) lab test positivity	Confirmed admissions (per 100 beds)	Pct. change in cases	Abs. change in test pos.	Pct. change in conf. adm. per 100 beds	
AS	0 (0)	N/A	0 (N/A)	+0%	N/A	N/A	
MP	2 (4)	N/A	0 (0)	+0%	N/A	N/A	

The Weekly Categories slides indicate which states and territories fell in the high, substantial, moderate, and low transmission level categories at the beginning of the week (as of Sunday data). The indicators shown here are fixed throughout the week and provide a common reference point for states from week to week.

TRENDS IN CASE INCIDENCE DURING THE LAST 8 WEEKS



Case incidence categories

(based on cases per 100,000 population in the last 7 days)

- 4 or less
- 5 - 9
- 10 - 49
- 50 - 99
- 100 - 199
- 200 or more

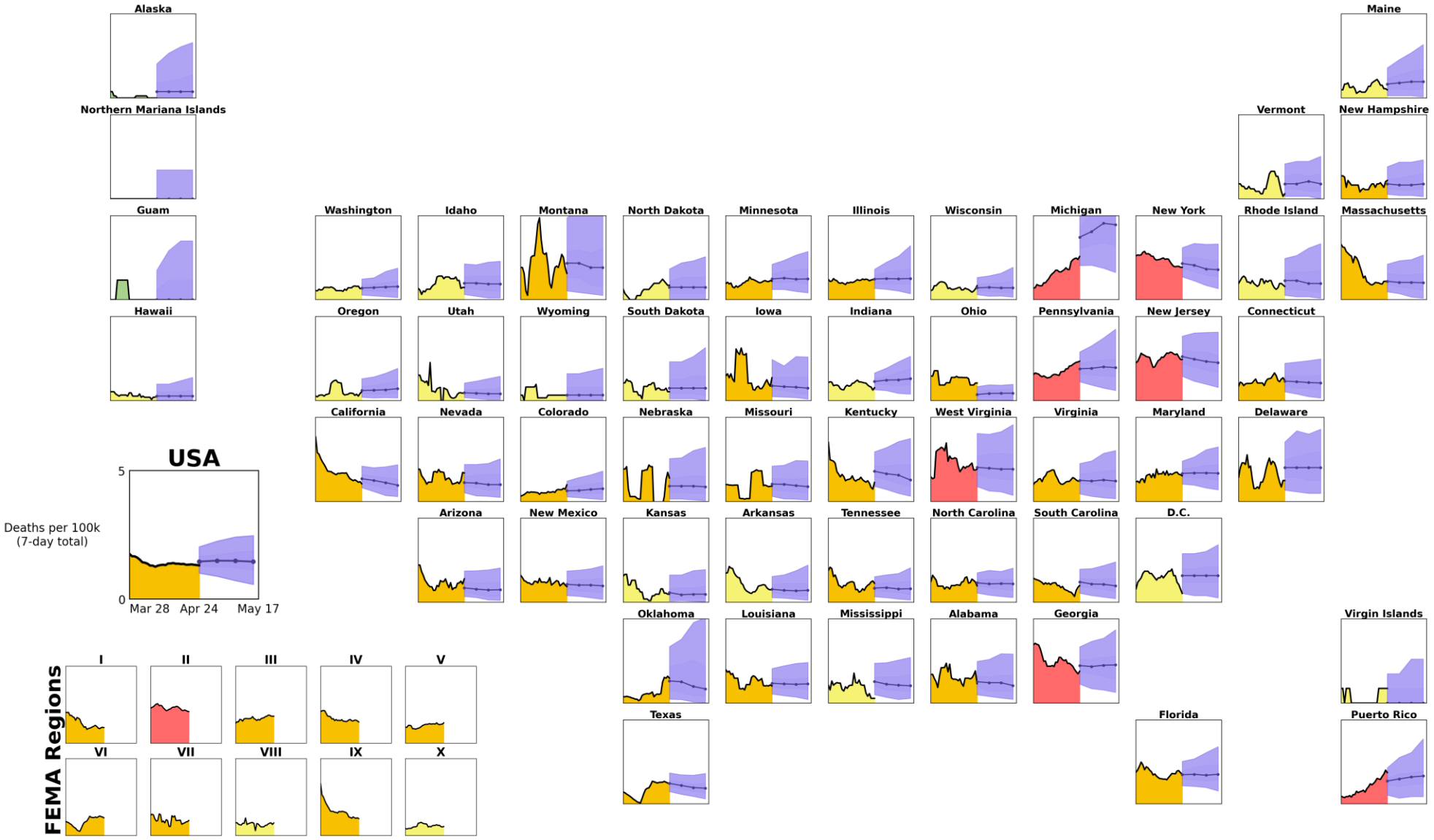
Weekly % change categories

(arrow based on % change in weekly cases)

- -26% or less ↓
- -25% - -11% ↘
- -10% - 0% →
- +1% - +10% →
- +11% - +25% ↗
- +26% or more ↑

Source: CDC state-reported data. See Data Sources/Methods slides for additional details.

TRENDS IN MORTALITY RATE DURING THE LAST 4 WEEKS AND 4 WEEK FORECAST



Mortality rate categories

(based on deaths per 100,000 population in the last 7 days)

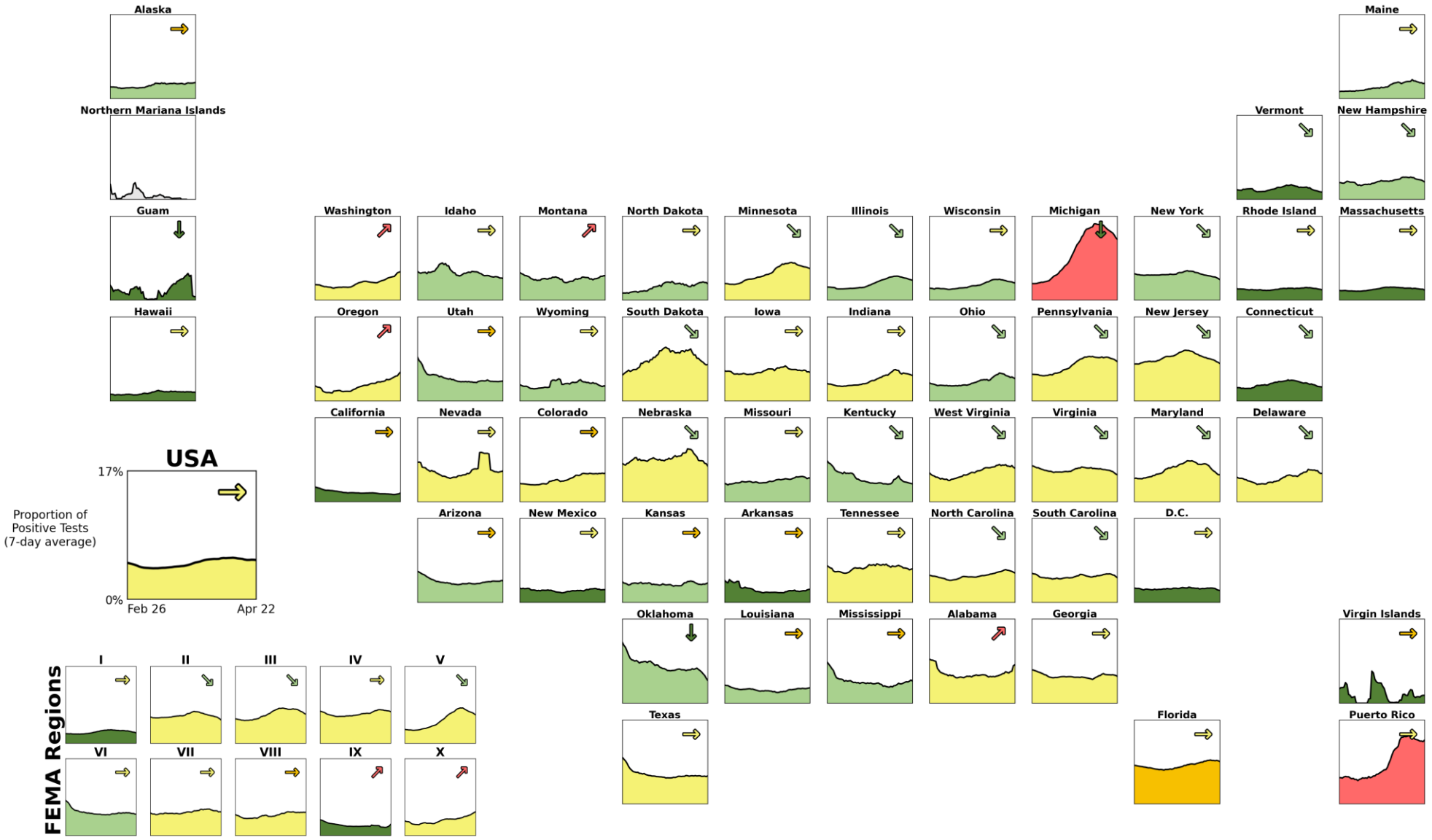
0.0
0.1 - 0.9
1.0 - 1.9
2.0 - 4.9
5.0 or more

Projected Deaths
50% Prediction Interval
95% Prediction Interval

Source: CDC state-reported data. See Data Sources/Methods slides for additional details.

Forecast: The forecast displays projected weekly death totals using an ensemble of predictive models generated by academic, private industry, and governmental groups. Models make various assumptions about the levels of social distancing and other interventions, which may not reflect recent changes in behavior. FEMA regions are not included in the forecast. More information is available at the COVID-19 Forecast Hub. The forecast date is as of 4/19.

TRENDS IN VIRAL (RT-PCR) LAB TEST POSITIVITY DURING THE LAST 8 WEEKS



Viral (RT-PCR) lab test positivity categories
(based on proportion of positive tests over the last 7 days)

- 2.9% or less
- 3.0% - 4.9%
- 5.0% - 7.9%
- 8.0% - 9.9%
- 10.0% - 14.9%
- 15.0% or more

Weekly absolute change categories
(arrow based on absolute change in weekly test positivity)

- -2.1% or less ↓
- -2.0% - -0.6% ↘
- -0.5% - 0.0% →
- +0.1% - +0.5% →
- +0.6% - +2.0% ↗
- +2.1% or more ↑

Most recent dates may be less reliable due to delayed reporting. States in gray have limited or no reporting in most recent week.

Source: Unified Testing Dataset. See Data Sources/Methods slides for additional details.

TRENDS IN EMERGENCY DEPARTMENT DISCHARGE DIAGNOSES DURING THE LAST 8 WEEKS

**Some states have low participation rates in NSSP (<15% of facilities) or unavailable ED diagnosis data. Therefore, the Unified Hospital Dataset was used to generate the trend arrow for comparison.*

Average percent of ED visits with COVID-19 discharge diagnosis

(based on proportion of discharge diagnoses including COVID-19 over the last 7 days)

- 0.9% or less
- 1.0% - 2.9%
- 3.0% - 4.9%
- 5.0% - 7.9%
- 8.0% or more

Weekly absolute change

(based on change in COVID-19 diagnosis percentage, or COVID-19 ED visit percentage where diagnosis data is incomplete)

- -2% or less ↓
- -1% ↘
- 0% →
- +1% →
- +2% ↗
- +3% or more ↑

Primary Source: National Syndromic Surveillance Program (NSSP). <15% of ED facilities in CA, HI, IA, MN, and OK participate in NSSP. OH data stream is currently down due to a recent system upgrade. MO discharge diagnosis data is incomplete

Secondary Source: Unified Hospital Dataset ED visits. This includes all visits related to COVID-19, which includes patients that *"meet suspected or confirmed definition or presents for COVID diagnostic testing"*.

See Data Sources/Methods slides for additional details.

TRENDS IN HOSPITAL ADMISSIONS PER 100 BEDS DURING THE LAST 8 WEEKS

Confirmed admission rate categories
(based on confirmed COVID-19 admissions per 100 beds over the last 7 days)

- 1 or less
- 2 - 3
- 4 - 5
- 6 - 10
- 11 - 15
- 16 or more

Weekly % change categories
(arrow based on % change in weekly confirmed COVID-19 admissions)

- -26% or less ↓
- -25% - -11% ↘
- -10% - 0% →
- +1% - +10% →
- +11% - +25% ↗
- +26% or more ↑

Figure depicts total confirmed (darker color) and suspected (lighter color) hospital admissions per 100 inpatient beds.

Source: Unified Hospital Dataset. See Data Sources/Methods slides for additional details.

TRENDS IN HOSPITAL INPATIENT COVID UTILIZATION DURING THE LAST 8 WEEKS

Inpatient bed utilization categories

(based on average percentage of beds occupied by confirmed COVID-19 patients over the last 7 days)

- 3% or less
- 4% - 7%
- 8% - 12%
- 13% - 15%
- 16% - 20%
- 21% or more

Weekly absolute change categories

(arrow based on absolute change in weekly % of beds occupied by confirmed COVID-19 patients)

- -2% or less ↓
- -1% ↘
- 0% →
- +1% →
- +2% ↗
- +3% or more ↑

Source: Unified Hospital Dataset. See Data Sources/Methods slides for additional details.

TRENDS IN STAFFED ADULT ICU BED CAPACITY DURING THE LAST 8 WEEKS

Staffed Adult ICU COVID Utilization categories

(based on average percentage of beds occupied by confirmed COVID-19 patients over the last 7 days)

- 3% or less
- 4% - 7%
- 8% - 12%
- 13% - 15%
- 16% - 20%
- 21% or more

Weekly absolute change categories

(arrow based on absolute change in weekly % of ICU beds occupied by confirmed COVID-19 patients)

- -2% or less ↓
- -1% ↘
- 0% →
- +1% →
- +2% ↗
- +3% or more ↑

Color based on ICU confirmed COVID-19 utilization only. Light gray based on overall ICU utilization. Most recent dates may be less reliable due to delayed reporting.

Source: Unified Hospital Dataset. See Data Sources/Methods slides for additional details.

NATIONAL TRENDS - IN VIRAL (RT-PCR) LAB TEST POSITIVITY BY AGE GROUP

Tests per 100k population aged 18-24 in the last 7 days: 4,287 (-0% from previous 7 days)

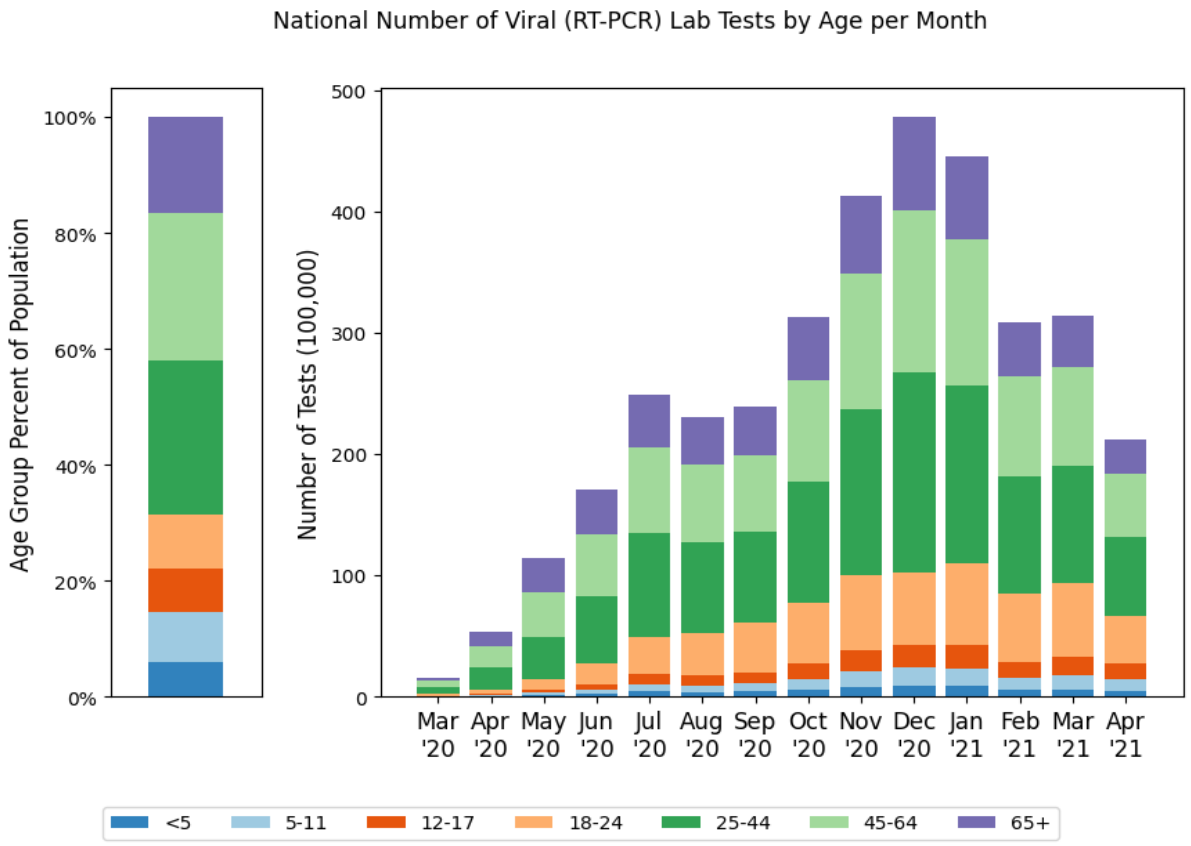
Tests per 100k population aged 25-64 in the last 7 days: 2,279 (-0% from previous 7 days)

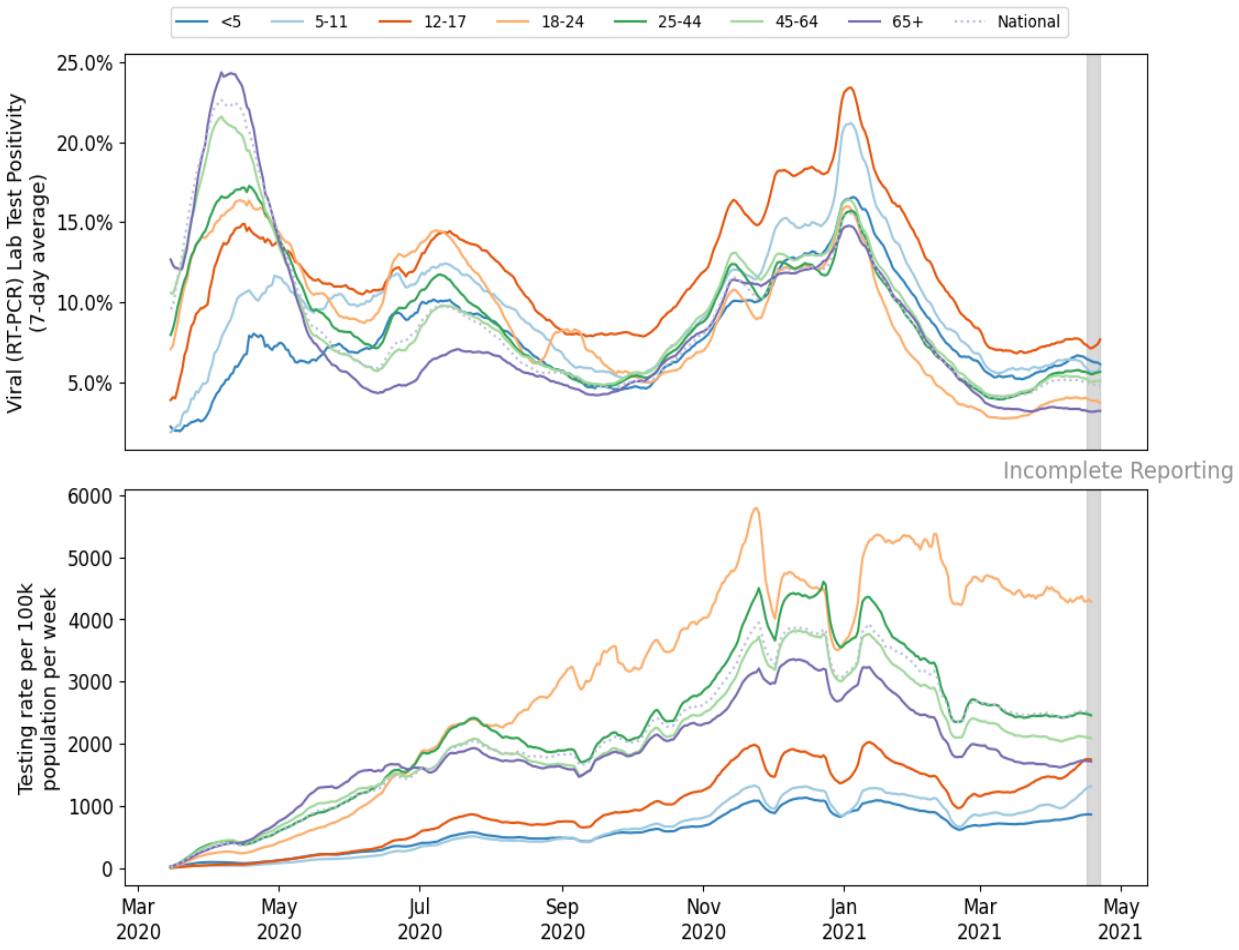
Tests per 100k population aged 65+ in the last 7 days: 1,717 (+1% from previous 7 days)

Viral (RT-PCR) lab test positivity for ages 18-24 in the last 7 days: 3.7% (-0.3% from previous 7 days)

Viral (RT-PCR) lab test positivity for ages 25-64 in the last 7 days: 5.4% (-0.1% from previous 7 days)

Viral (RT-PCR) lab test positivity for ages 65+ in the last 7 days: 3.2% (-0.0% from previous 7 days)





Source: COVID-19 Electronic Lab Reporting (CELR) and Federal Direct Report Testing Data. Test positivity limited to records with known age over the period 3/15/2020-4/22/2021. Test volume data limited to records with known age over the period 3/15/2020-4/18/2021.

TRENDS IN VIRAL (RT-PCR) LAB TEST POSITIVITY BY AGE GROUP AND REGION

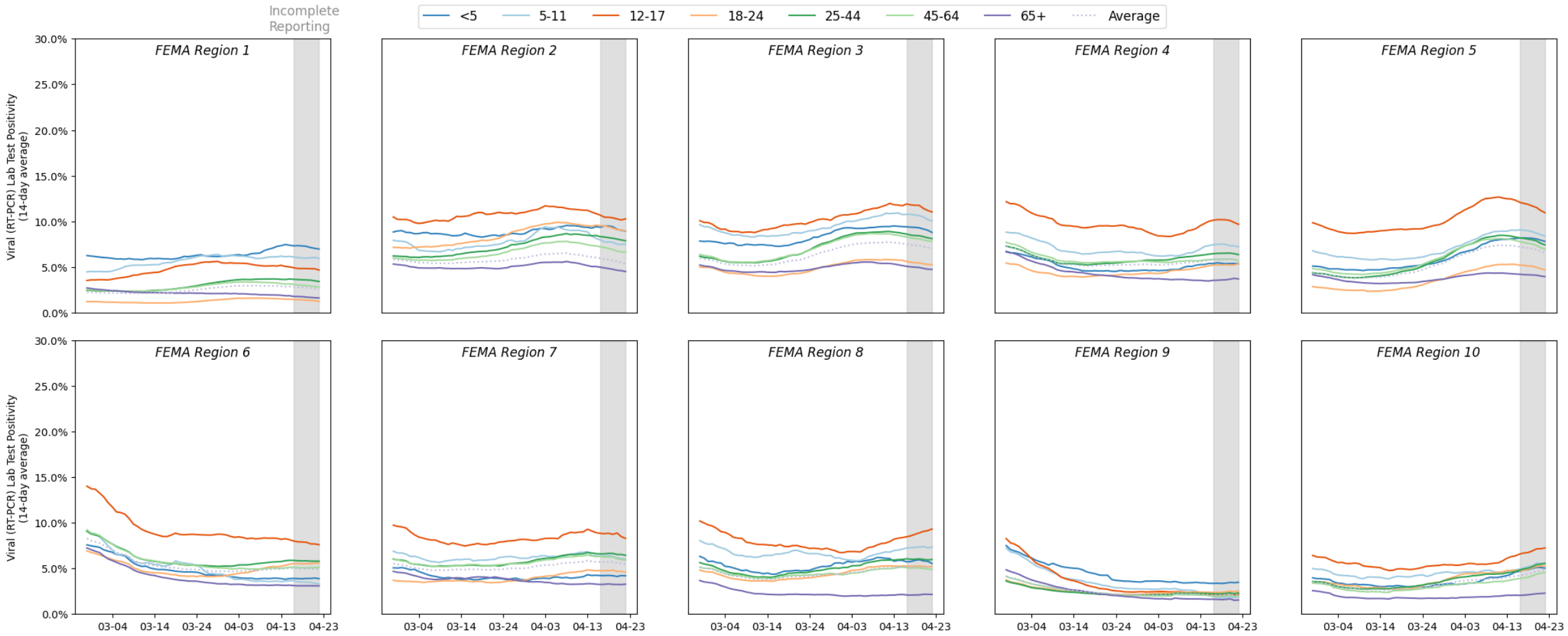
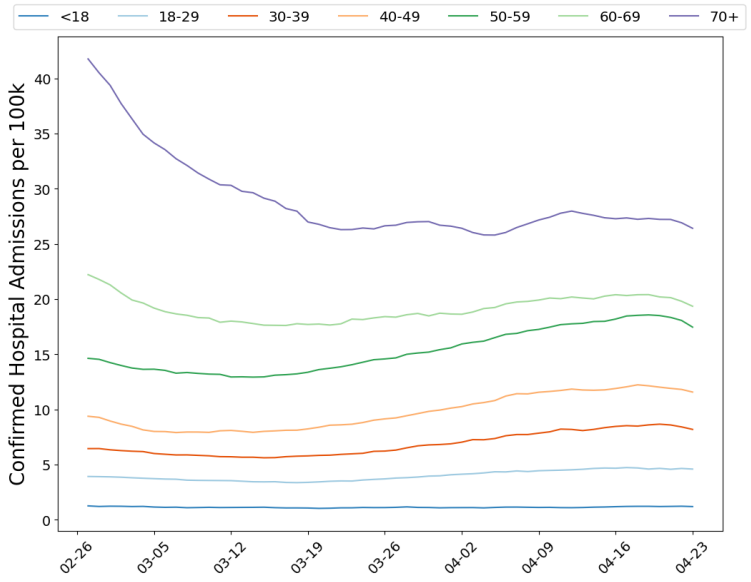


Figure depicts the 14-day average percent test positivity for each region and age group over the 8-week period of 2/25-4/22. Average includes records with known age only.

Source: COVID-19 Electronic Lab Reporting (CELR) and Federal Direct Report Testing Data, limited to records with known age over the period 2/25-4/22.

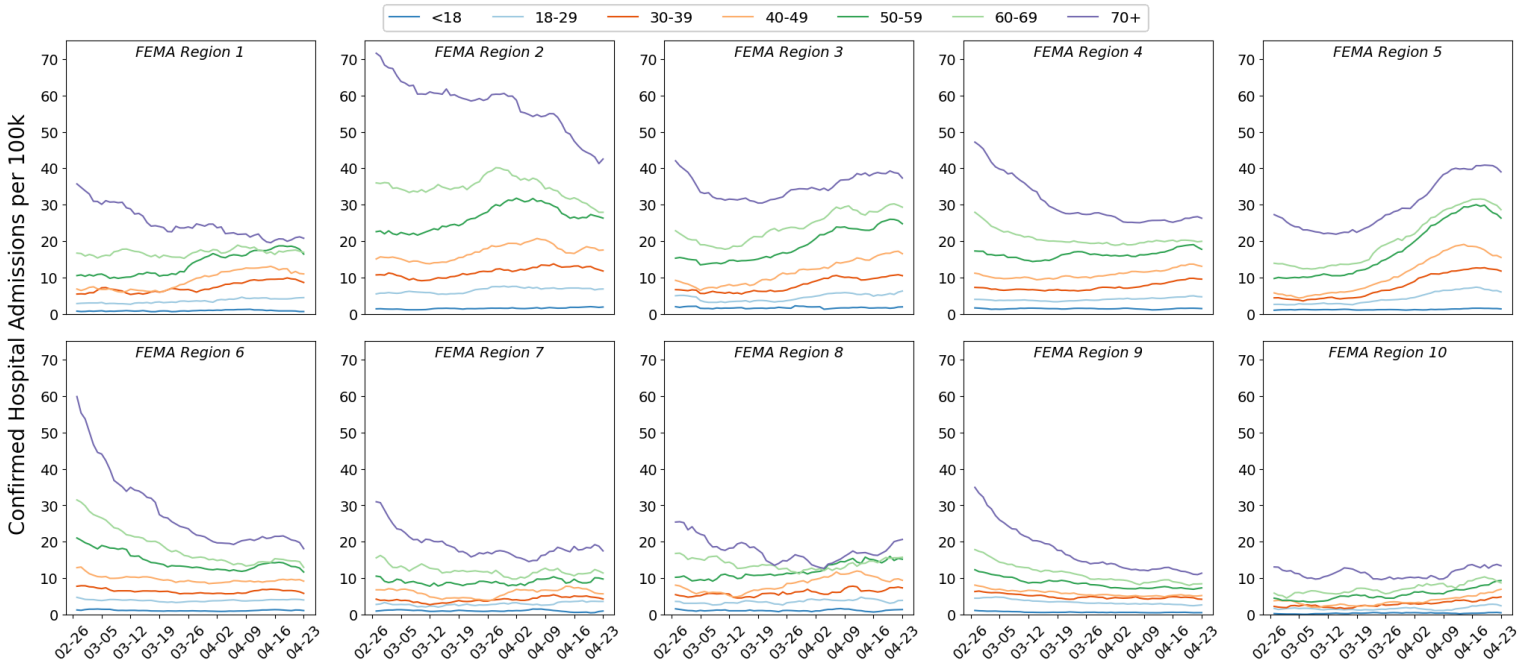
TRENDS IN CONFIRMED COVID-19 ADMISSIONS BY AGE GROUP AND REGION

National



Age group	Conf. admits per 100k (last 7 days)	% change from previous week
<18	1.2	+1% →
18-29	4.6	-2% →
30-39	8.2	-3% →
40-49	11.6	-3% →
50-59	17.5	-4% →
60-69	19.4	-5% →
70+	26.4	-3% →

Regional



Age group	Region 1 % change	Region 2 % change	Region 3 % change	Region 4 % change	Region 5 % change	Region 6 % change	Region 7 % change	Region 8 % change	Region 9 % change	Region 10 % change
<18	-28% ↓	+5% →	+20% ↗	+5% →	-12% ↘	-18% ↘	+63% ↑	+100% ↑	-16% ↘	+36% ↑
18-29	+8% →	-4% →	+29% ↑	+3% →	-16% ↘	-2% →	0% →	-10% →	-5% →	+2% →
30-39	-9% →	-10% →	+8% →	+7% →	-6% →	-16% ↘	-16% ↘	+14% ↗	-14% ↘	+39% ↑
40-49	-13% ↘	+6% →	+7% →	+3% →	-16% ↘	-0% →	-22% ↘	-10% →	-1% →	+37% ↑
50-59	-11% ↘	-1% →	+6% →	+0% →	-11% ↘	-18% ↘	+1% →	+1% →	+1% →	+28% ↑
60-69	+4% →	-12% ↘	+5% →	-1% →	-9% →	-16% ↘	+7% →	+7% →	-6% →	-6% →
70+	+3% →	-10% →	-3% →	+4% →	-2% →	-16% ↘	-7% →	+26% ↑	-9% →	-2% →

Source: Unified Hospital Dataset. Figures show 7-day totals over the last 8 weeks. See Data Sources/Methods slides for additional details. Percent change is shown as light red if +11% to +25%, and dark red if +26% or greater.

SELECT HIGH BURDEN CORE-BASED STATISTICAL AREAS (CBSAS)

Population over 1 million

CBSA (population)	Last 7 days		Change from previous week		Daily case trend - last 8 weeks
	Cases (per 100k)	Viral (RT-PCR) lab test positivity	Percent change in cases	Absolute change in test pos.	
Detroit, MI (4,319,629)	17,762 (411)	14.6%	-31%	-2.7%	
Miami, FL (6,166,488)	16,508 (268)	10.7%	-5%	-0.2%	
Philadelphia, PA (6,102,434)	13,739 (225)	7.5%	-18%	-0.8%	
Grand Rapids, MI (1,077,370)	4,379 (406)	13.4%	-24%	-1.8%	
San Juan, PR (2,023,227)	5,185 (256)	12.9%	-7%	-0.9%	
Minneapolis, MN (3,640,043)	8,471 (233)	6.9%	-13%	-0.8%	
Orlando, FL (2,608,147)	5,527 (212)	8.0%	-5%	-0.1%	
Tampa, FL (3,194,831)	6,132 (192)	7.1%	-5%	-0.8%	
Buffalo, NY (1,127,983)	2,966 (263)	8.6%	-28%	-1.7%	
Denver, CO (2,967,239)	6,140 (207)	5.9%	-6%	+0.1%	

Population 250k - 1 million

CBSA (population)	Last 7 days		Change from previous week		Daily case trend - last 8 weeks
	Cases (per 100k)	Viral (RT-PCR) lab test positivity	Percent change in cases	Absolute change in test pos.	
Flint, MI (405,813)	1,886 (465)	15.2%	-28%	-3.3%	
Lansing, MI (550,391)	1,635 (297)	13.6%	-34%	-3.1%	
Mobile, AL (429,536)	1,484 (345)	14.1%	+4%	+10.0%	
Allentown, PA (844,052)	2,066 (245)	8.4%	-21%	-0.5%	
Reading, PA (421,164)	1,170 (278)	10.5%	-25%	-0.7%	
Kalamazoo, MI (265,066)	909 (343)	11.4%	-16%	-2.3%	
Scranton, PA (553,885)	1,332 (240)	9.1%	-11%	-1.6%	
Lancaster, PA (545,724)	1,196 (219)	9.4%	-20%	+0.1%	
Cape Coral, FL (770,577)	1,619 (210)	9.1%	+1%	-0.4%	
York, PA (449,058)	1,037 (231)	9.6%	-18%	-0.9%	

Population 50k - 250k

CBSA (population)	Last 7 days		Change from previous week		Daily case trend - last 8 weeks
	Cases (per 100k)	Viral (RT-PCR) lab test positivity	Percent change in cases	Absolute change in test pos.	
Muskegon, MI (173,566)	990 (570)	14.0%	+29%	+0.9%	
Monroe, MI (150,500)	555 (369)	14.0%	-34%	-3.6%	
Holland, MI (118,081)	446 (378)	16.7%	-24%	-3.3%	
Bay City, MI (103,126)	443 (430)	16.6%	-33%	-3.1%	
Saginaw, MI (190,539)	863 (453)	11.7%	-9%	-1.6%	
East Stroudsburg, PA (170,271)	494 (290)	13.4%	-21%	-3.0%	
Klamath Falls, OR (68,238)	316 (463)	16.3%	+44%	+4.7%	
Lebanon, PA (141,793)	410 (289)	12.3%	+3%	+0.1%	
Battle Creek, MI (134,159)	464 (346)	10.0%	-31%	-2.1%	
Niles, MI (153,401)	373 (243)	13.7%	-31%	-0.9%	

Within each population bin, CBSAs are ordered by the sum of 3 individual attribute rankings: 7-day case count, 7-day cases per 100,000 population, and 7-day average viral (RT-PCR) lab test positivity. The CBSAs with the ten smallest sums are shown.

Last 7 days indicates cases/deaths data from 4/18-4/24 and testing data from 4/16-4/22

SELECT CORE-BASED STATISTICAL AREAS (CBSAS) WITH INCREASING BURDEN

Population over 1 million

CBSA (population)	Last 7 days		Change from previous week		Daily case trend - last 8 weeks
	Cases (per 100k)	Viral (RT-PCR) lab test positivity	Percent change in cases	Absolute change in test pos.	
Kansas City, MO (2,157,990)	1,579 (73)	4.3%	+170%	+0.5%	
Portland, OR (2,492,412)	2,966 (119)	5.6%	+26%	+1.1%	
Birmingham, AL (1,090,435)	618 (57)	5.2%	+52%	+0.6%	
Nashville, TN (1,934,317)	3,978 (206)	6.3%	+71%	+0.4%	
Seattle, WA (3,979,845)	5,400 (136)	5.8%	+7%	+1.2%	
Phoenix, AZ (4,948,203)	3,704 (75)	4.8%	+30%	+0.0%	
Salt Lake City, UT (1,232,696)	1,046 (85)	3.8%	+7%	+0.2%	
New Orleans, LA (1,270,530)	594 (47)	1.6%	+12%	+0.1%	
San Antonio, TX (2,550,960)	3,796 (149)	2.7%	+25%	-0.0%	
Austin, TX (2,227,083)	1,647 (74)	5.9%	-12%	+0.7%	

Population 250k - 1 million

CBSA (population)	Last 7 days		Change from previous week		Daily case trend - last 8 weeks
	Cases (per 100k)	Viral (RT-PCR) lab test positivity	Percent change in cases	Absolute change in test pos.	
Salem, OR (433,903)	669 (154)	9.3%	+37%	+2.0%	
Brownsville, TX (423,163)	533 (126)	11.4%	+34%	+1.1%	
Gainesville, FL (329,128)	446 (136)	5.1%	+19%	+1.2%	
Kennewick, WA (299,612)	428 (143)	10.9%	+11%	+5.2%	
Shreveport, LA (394,706)	321 (81)	5.0%	+14%	+1.4%	
Santa Cruz, CA (273,213)	277 (101)	1.1%	+26%	+0.6%	
Mobile, AL (429,536)	1,484 (345)	14.1%	+4%	+10.0%	
Ocala, FL (365,579)	441 (121)	8.3%	+10%	+1.1%	
Eugene, OR (382,067)	444 (116)	3.8%	+17%	+0.5%	
Des Moines, IA (699,292)	841 (120)	6.9%	+26%	+0.3%	

Population 50k - 250k

CBSA (population)	Last 7 days		Change from previous week		Daily case trend - last 8 weeks
	Cases (per 100k)	Viral (RT-PCR) lab test positivity	Percent change in cases	Absolute change in test pos.	
Fairbanks, AK (96,849)	274 (283)	10.8%	+132%	+5.2%	
Klamath Falls, OR (68,238)	316 (463)	16.3%	+44%	+4.7%	
Medford, OR (220,944)	327 (148)	10.9%	+17%	+6.8%	
Bend, OR (197,692)	469 (237)	7.1%	+25%	+1.6%	
Muskegon, MI (173,566)	990 (570)	14.0%	+29%	+0.9%	
Farmington, NM (123,958)	203 (164)	5.1%	+21%	+1.0%	
Arecibo, PR (174,606)	281 (161)	11.9%	+24%	+0.3%	
Johnstown, PA (130,192)	402 (309)	9.8%	+8%	+0.4%	
Greenville, NC (180,742)	296 (164)	7.6%	+10%	+0.4%	
Altoona, PA (121,829)	374 (307)	9.6%	-3%	+0.7%	

Within each population bin, CBSAs with at least 200 total cases and at least 30 cases per 100k in the past 7 days are ordered by the sum of 2 individual attribute rankings: 7-day percent change in cases and 7-day absolute change in viral (RT-PCR) lab test positivity. The CBSAs with the ten smallest sums are shown.

Last 7 days indicates cases/deaths data from 4/18-4/24 and testing data from 4/16-4/22

SELECT CORE-BASED STATISTICAL AREAS (CBSAS) WITH HIGH MORTALITY

Population over 1 million

CBSA (population)	Last 7 days		Change from previous week		Daily death trend - last 8 weeks
	Deaths	Deaths (per 100k)	Percent change in deaths	Absolute change in deaths	
Detroit, MI (4,319,629)	248	5.7	+28%	54	
New York, NY (19,216,182)	480	2.5	-28%	-185	
Miami, FL (6,166,488)	170	2.8	+16%	23	
Philadelphia, PA (6,102,434)	147	2.4	+14%	18	
Houston, TX (7,066,141)	124	1.8	+12%	13	
Baltimore, MD (2,800,053)	61	2.2	-5%	-3	
Los Angeles, CA (13,214,799)	190	1.4	-14%	-31	
Tampa, FL (3,194,831)	61	1.9	+20%	10	
Pittsburgh, PA (2,317,600)	52	2.2	-16%	-10	
Atlanta, GA (6,020,364)	100	1.7	-28%	-39	

Population 250k - 1 million

CBSA (population)	Last 7 days		Change from previous week		Daily death trend - last 8 weeks
	Deaths	Deaths (per 100k)	Percent change in deaths	Absolute change in deaths	
Lansing, MI (550,391)	29	5.3	+16%	4	
Flint, MI (405,813)	26	6.4	+37%	7	
Greensboro, NC (771,851)	28	3.6	-20%	-7	
Poughkeepsie, NY (679,158)	26	3.8	+333%	20	
Salinas, CA (434,061)	24	5.5	+140%	14	
Greenville, SC (920,477)	26	2.8	+37%	7	
Deltona, FL (668,365)	25	3.7	-4%	-1	
El Paso, TX (844,124)	23	2.7	+5%	1	
Bakersfield, CA (900,202)	23	2.6	+28%	5	
Peoria, IL (400,561)	18	4.5	+50%	6	

Population 50k - 250k

CBSA (population)	Last 7 days		Change from previous week		Daily death trend - last 8 weeks
	Deaths	Deaths (per 100k)	Percent change in deaths	Absolute change in deaths	
Albemarle, NC (62,806)	19	30.3	-	19	
Lake Havasu City, AZ (212,181)	12	5.7	+100%	6	
Sioux City, IA (144,701)	10	6.9	+150%	6	
Roanoke Rapids, NC (69,493)	9	13.0	+800%	8	
Adrian, MI (98,451)	9	9.1	+125%	5	
Monroe, MI (150,500)	9	6.0	+29%	2	
Traverse City, MI (150,653)	9	6.0	+800%	8	
Saginaw, MI (190,539)	9	4.7	+80%	4	
Chambersburg, PA (155,027)	8	5.2	+167%	5	
Sebring, FL (106,221)	7	6.6	+17%	1	

Within each population bin, CBSAs are ordered by the sum of 2 individual attribute rankings: 7-day death count and 7-day deaths per 100,000 population. The CBSAs with the ten smallest sums are shown.

Data Source: CDC Aggregate Dataset. Last 7 days indicates deaths from 04/18-04/24.

SELECT CORE-BASED STATISTICAL AREAS (CBSAS) WITH HIGH HOSPITAL ADMISSIONS

Population over 1 million

CBSA (population)	Last 7 days		Change from previous week		Daily conf. adm. trend - last 8 weeks
	Conf. adm. (per 100 beds)	Susp. adm. (per 100 beds)	Percent change in conf. adm.	Percent change in susp. adm.	
Philadelphia, PA (6,102,434)	1,478 (10)	1,255 (8)	+11%	+0%	
San Juan, PR (2,023,227)	447 (8)	972 (16)	+85%	+531%	
Miami, FL (6,166,488)	1,357 (9)	311 (2)	+0%	-3%	
Atlanta, GA (6,020,364)	824 (10)	709 (8)	-1%	-6%	
Washington, DC (6,280,487)	602 (6)	1,817 (19)	+6%	+7%	
Orlando, FL (2,608,147)	460 (7)	448 (7)	+3%	+17%	
Baltimore, MD (2,800,053)	800 (13)	994 (16)	-3%	-16%	
Tampa, FL (3,194,831)	722 (8)	316 (3)	-0%	-6%	
Louisville, KY (1,265,108)	241 (7)	149 (4)	+9%	-5%	
Grand Rapids, MI (1,077,370)	341 (17)	13 (1)	-2%	+18%	

Population 250k - 1 million

CBSA (population)	Last 7 days		Change from previous week		Daily conf. adm. trend - last 8 weeks
	Conf. adm. (per 100 beds)	Susp. adm. (per 100 beds)	Percent change in conf. adm.	Percent change in susp. adm.	
Lakeland, FL (724,777)	239 (15)	74 (5)	+10%	-10%	
Colorado Springs, CO (745,791)	111 (10)	40 (4)	+32%	-7%	
Salisbury, MD (415,726)	75 (8)	262 (28)	+83%	-1%	
Scranton, PA (553,885)	169 (12)	170 (12)	+2%	-12%	
New Haven, CT (854,757)	253 (10)	9 (0)	-5%	-53%	
Poughkeepsie, NY (679,158)	131 (10)	48 (4)	+1%	+9%	
Rockford, IL (336,116)	84 (10)	47 (6)	+14%	+12%	
Lancaster, PA (545,724)	96 (12)	64 (8)	-2%	-26%	
Greenville, SC (920,477)	114 (6)	105 (5)	+16%	+18%	
Evansville, IN (315,086)	77 (6)	53 (4)	+48%	+51%	

Population 50k - 250k

CBSA (population)	Last 7 days		Change from previous week		Daily conf. adm. trend - last 8 weeks
	Conf. adm. (per 100 beds)	Susp. adm. (per 100 beds)	Percent change in conf. adm.	Percent change in susp. adm.	
Corning, NY (95,379)	38 (32)	2 (2)	+153%	-	
Altoona, PA (121,829)	51 (12)	13 (3)	+89%	+550%	
Racine, WI (196,311)	79 (23)	2 (1)	+13%	-60%	
Elkhart, IN (206,341)	53 (15)	2 (1)	+43%	+100%	
Traverse City, MI (150,653)	67 (15)	0 (0)	+24%	-100%	
Vineland, NJ (149,527)	68 (12)	5 (1)	+21%	+67%	
Lawton, OK (126,415)	52 (23)	7 (3)	+27%	+0%	
St. Cloud, MN (201,964)	61 (14)	10 (2)	+24%	+100%	
Gloversville, NY (53,383)	40 (95)	0 (0)	+43%	-	
Saginaw, MI (190,539)	82 (12)	30 (4)	-1%	-9%	

Within each population bin, CBSAs are ranked by the sum of 3 individual attribute rankings: 7-day confirmed COVID hospital admissions count, 7-day confirmed COVID hospital admissions per 100 staffed inpatient beds, and 7-day percent change in confirmed COVID hospital admissions.

Data Source: Unified Hospital Dataset. Last 7 days indicates admissions/bed data from 04/17-04/23.

SELECT CORE-BASED STATISTICAL AREAS (CBSAS) WITH HIGH STAFFED ADULT ICU BED USE

Population over 1 million

CBSA (population)	Last 7 days (weekly avg.)		Last 7 days (weekly avg.)		Daily COVID ICU utilization trend - last 8 weeks
	ICU beds occupied by COVID (%)	ICU beds occupied (%)	Abs. change in % ICU beds occupied by COVID	Abs change in % ICU beds occupied	
Detroit, MI (4,319,629)	421 (34%)	1042 (84%)	+1%	+0%	
Minneapolis, MN (3,640,043)	129 (24%)	482 (89%)	+2%	+3%	
Houston, TX (7,066,141)	273 (16%)	1416 (83%)	+0%	-2%	
Baltimore, MD (2,800,053)	187 (23%)	654 (80%)	+2%	-1%	
San Antonio, TX (2,550,960)	118 (16%)	611 (83%)	+1%	-5%	
Miami, FL (6,166,488)	314 (16%)	1526 (79%)	+1%	+1%	
Orlando, FL (2,608,147)	99 (15%)	567 (87%)	+2%	+4%	
Denver, CO (2,967,239)	122 (17%)	561 (80%)	+3%	+4%	
Pittsburgh, PA (2,317,600)	114 (14%)	656 (83%)	-0%	+1%	
Washington, DC (6,280,487)	204 (17%)	855 (73%)	-1%	-1%	

Population 250k - 1 million

CBSA (population)	Last 7 days (weekly avg.)		Last 7 days (weekly avg.)		Daily COVID ICU utilization trend - last 8 weeks
	ICU beds occupied by COVID (%)	ICU beds occupied (%)	Abs. change in % ICU beds occupied by COVID	Abs change in % ICU beds occupied	
Flint, MI (405,813)	69 (40%)	169 (97%)	+7%	-1%	
York, PA (449,058)	25 (27%)	82 (86%)	+1%	-2%	
Scranton, PA (553,885)	30 (22%)	115 (85%)	+3%	+2%	
Kalamazoo, MI (265,066)	21 (24%)	75 (87%)	+0%	-4%	
Durham, NC (644,367)	41 (13%)	276 (88%)	+0%	+0%	
Ann Arbor, MI (367,601)	56 (26%)	171 (80%)	+2%	+0%	
El Paso, TX (844,124)	48 (15%)	268 (85%)	-0%	+3%	
Stockton, CA (762,148)	18 (19%)	83 (90%)	+2%	+0%	
Allentown, PA (844,052)	38 (18%)	172 (82%)	-2%	-3%	
Lansing, MI (550,391)	26 (30%)	67 (79%)	-2%	-8%	

Population 50k - 250k

CBSA (population)	Last 7 days (weekly avg.)		Last 7 days (weekly avg.)		Daily COVID ICU utilization trend - last 8 weeks
	ICU beds occupied by COVID (%)	ICU beds occupied (%)	Abs. change in % ICU beds occupied by COVID	Abs change in % ICU beds occupied	
Muskegon, MI (173,566)	19 (52%)	37 (100%)	+17%	+5%	
Jackson, MI (158,510)	29 (34%)	81 (95%)	+6%	+1%	
St. Cloud, MN (201,964)	18 (53%)	32 (94%)	+6%	-4%	
Traverse City, MI (150,653)	31 (34%)	80 (89%)	+7%	+3%	
Cleveland, TN (124,942)	10 (40%)	23 (98%)	+16%	-1%	
Saginaw, MI (190,539)	22 (27%)	77 (92%)	-3%	-1%	
DuBois, PA (79,255)	8 (31%)	26 (96%)	+2%	-3%	
Bay City, MI (103,126)	11 (36%)	27 (85%)	-12%	-7%	
Niles, MI (153,401)	7 (43%)	15 (96%)	+0%	-4%	
Lewiston, ME (108,277)	18 (36%)	39 (80%)	+3%	-0%	

All ICU bed counts refer to staffed adult ICU beds. Within each population bin, CBSAs are ranked by the sum of 3 individual attribute rankings: 7-day weekly average number of adult ICU COVID-19 patients, 7-day weekly average percentage of staffed adult ICU beds occupied by COVID-19 patients, and 7-day weekly average percentage of staffed adult ICU beds occupied by any patient.

Data Source: Unified Hospital Dataset. Last 7 days indicates ICU data from 04/17-04/23.

DATA SOURCES AND METHODS

DATA NOTES

- Some dates may have incomplete data due to delays in reporting. Data may be backfilled over time, resulting in changes from day to day.
- **Population/Demographics:** Population and demographic data is from US Census Vintage 2019 Demographic Estimates.

- **Cases and Deaths:** COVID-19 case and death metrics at the state and county level are generated using a dataset managed by the CDC which is compiled from state and local health departments. Most states and localities report both confirmed and suspected cases and deaths, although some report just confirmed cases and deaths. To ensure data quality, daily data alerts are monitored for deviations in the data (e.g., decreases in cumulative values, no change in values, abnormal increases in values). These alerts are manually reviewed every day by checking the data against local government websites, state websites, and news sources, and the raw values are corrected as needed to reflect local government reports. Cases are based on date of report and not on date of symptom onset. This may cause artificial spikes in any given day of data. Changes in reporting may also cause temporary spikes or dips (e.g. shifts from reporting confirmed and probable cases to reporting just confirmed cases). Case data are presented as 7-day totals or averages to adjust for these anomalies as well as weekly variations in reporting. CBSA-level data are calculated by aggregating county/municipio-level data. Regional and national values are calculated by aggregating state-level data.

- **Testing:** CELR (COVID-19 Electronic Lab Reporting) state health department-reported data are used to describe state-level totals when able to be disaggregated from serology test results and to describe county-level totals when information is available on patients' county of residence or healthcare providers' practice location. HHS Protect laboratory data (provided directly to Federal Government from public health labs, hospital labs, and six commercial labs) are used otherwise. Some states did not report on certain days, which may affect the total number of tests resulted and positivity rate values. Total diagnostic tests are the number of tests performed, not the number of individuals tested. Viral (RT-PCR) lab test positivity rate is the number of positive tests divided by the number of tests performed and resulted. See https://www.cdc.gov/coronavirus/2019-ncov/lab/resources/calculating-percent-positivity.html for more information on this method. Testing data may be backfilled over time, resulting in changes week-to-week in testing data.

- **Hospital Data**: Unified Hospital Dataset, including federal facilities (VA, DHA, and IHS hospitals) and excluding psychiatric, rehabilitation, and religious non-medical hospitals.
  - Hospital data are reported to HHS either directly from facilities or via a state submission. Data for hospitals with the same CMS Certification Number (CCN) are aggregated. Three percent of CCNs contain multiple facilities that map to different counties and some of these may also map to different CBSAs. These data are reported daily by more than 6,000 facilities across the country. While these data are reviewed for errors and corrected, some reporting errors may still exist within the data. To minimize errors in data reported here, extreme outliers are removed from the data before the metrics are calculated.
  - Total inpatient bed, ICU bed, and ventilator counts are calculated as an average among reports from each hospital in the given timeframe. Unless otherwise noted, "inpatient beds" indicates staffed adult and pediatric inpatient beds, while "ICU beds" indicates staffed adult ICU beds. Utilization metrics calculate the average utilization in the geography for the week. Due to inconsistent reporting and impacts of staffing on the total number of beds at each hospital, variations may occur over time and the number shown may not be a full representation of the true number of resources in the area.
  - Total number of admissions is calculated as a sum of confirmed and suspected admissions, both adult and pediatric, reported by all hospitals reporting in the given timeframe. Due to inconsistent reporting and data errors, the number shown may not be a full representation of the true number of admissions in the area.

DATA SOURCES AND METHODS – COLOR THRESHOLDS

Color Thresholds for Indicators

The green-to-red color thresholds convey information on levels of transmission severity. There are not specific labels associated with each color threshold.

Colors are determined by first rounding a raw number to the nearest integer or tenth, and then selecting the associated color. If there is no data or a metric cannot be computed, a cell is colored gray.

Color thresholds were set based on a variety of factors and analyses, including assessing historical correlations in test positivity and case counts.

Additional shades of red are used for certain visualizations to provide greater context.

NOTE: Colors are applied after rounding to the displayed digits of precision

CASES/DEATHS

	DARK GREEN	LIGHT GREEN	YELLOW	ORANGE	LIGHT RED	RED
Confirmed cases - 7-day total	*colored by per capita thresholds*					
Cases per 100k - 7-day total	4 or less	5 – 9	10 – 49	50 – 99	100 – 199	200 or more
Confirmed deaths - 7-day total	*colored by per capita thresholds*					
Confirmed deaths per 100k - 7-day total	not used	0.0	0.1 – 0.9	1.0 – 1.9	2.0 – 4.9	5.0 or more
Confirmed cases - % change Confirmed deaths - % change	-26% or less	-25% – -11%	-10% – +0%	+1% – +10%	+11% – +25%	+26% or more

VIRAL (RT-PCR) LAB TESTING

	DARK GREEN	LIGHT GREEN	YELLOW	ORANGE	LIGHT RED	RED
Viral (RT-PCR) lab test positivity rate - 7 day average	2.9% or less	3.0% – 4.9%	5.0% – 7.9%	8.0% – 9.9%	10.0% – 14.9%	15.0% or more
Total RT-PCR diagnostic tests - 7-day total	*colored by per capita thresholds*					
RT-PCR tests per 100k - 7-day total	5,000 or more	3,000 – 4,999	2,000 – 2,999	1,000 – 1,999	500 – 999	499 or less
Viral (RT-PCR) lab test positivity rate - absolute change	-2.1% or less	-2.0% – -0.6%	-0.5% – +0.0%	+0.1% – +0.5%	+0.6% – +2.0%	+2.1% or more
Total RT-PCR diagnostic tests - percent change	+26% or more	+25% – +11%	+10% – +1%	+0% – -10%	-11% – -25%	-26% or less

HOSPITAL UTILIZATION

	DARK GREEN	LIGHT GREEN	YELLOW	ORANGE	LIGHT RED	RED
Confirmed COVID-19 admissions - 7-day total Suspected COVID-19 admissions - 7-day total Total COVID-19 admissions - 7-day total	*colored by per 100 bed thresholds*					
Confirmed COVID-19 admissions per 100 inpatient beds - 7-day total	1 or less	2 – 3	4 – 5	6 – 10	11 – 15	16 or more
Suspected COVID-19 admissions per 100 inpatient beds - 7-day total						
Total COVID-19 admissions per 100 inpatient beds - 7-day total	2 or less	3 – 5	6 – 10	11 – 15	16 – 20	21 or more
% inpatient beds occupied % ICU beds occupied % ventilators in use	GRAY 0% – 80%				81% – 90%	91% or more
% inpatient beds occupied by COVID-19 patient % ICU beds occupied by COVID-19 patient % ventilators in use by COVID-19 patient	3% or less	4% – 7%	8% – 12%	13% – 15%	16% – 20%	21% or more
Confirmed COVID-19 admissions per 100 inpatient beds - percent change Suspected COVID-19 admissions per 100 inpatient beds - percent change	-26% or less	-25% – -11%	-10% – +0%	+1% – +10%	+11% – +25%	+26% or more
% inpatient beds occupied - absolute change % inpatient beds occupied by COVID-19 patient - absolute change % ICU beds occupied - absolute change % ICU beds occupied by COVID-19 patient - absolute change % ventilators in use - absolute change % ventilators in use by COVID-19 patient - absolute change	-2% or less	-1%	0%	+1%	+2%	+3% or more
Monoclonal antibody courses administered by hospitals - percent change	100% or more	99% – 20%	19% – 0%	-1% – -19%	-20% – -99%	-100% or less

DATA SOURCES AND METHODS

States that have provided no county testing data for the most recent days of reporting:

- MH provided no testing data after 10/09: MH's testing numbers may therefore be a significant underestimate of the true value.
- MP provided no testing data after 04/10: MP's testing numbers may therefore be a significant underestimate of the true value.
- CA provided no testing data after 04/19: CA's testing numbers may therefore be a significant underestimate of the true value.
- CT provided no testing data after 04/21: CT's testing numbers may therefore be a significant underestimate of the true value.
- WA provided no testing data after 04/21: WA's testing numbers may therefore be a significant underestimate of the true value.

States that have provided no state testing data for the most recent days of reporting

- MH provided no testing data after 10/09: MH's testing numbers may therefore be a significant underestimate of the true value.
- MP provided no testing data after 04/10: MP's testing numbers may therefore be a significant underestimate of the true value.
- CA provided no testing data after 04/19: CA's testing numbers may therefore be a significant underestimate of the true value.
- CT provided no testing data after 04/21: CT's testing numbers may therefore be a significant underestimate of the true value.
- WA provided no testing data after 04/21: WA's testing numbers may therefore be a significant underestimate of the true value.

Cases and Deaths

- County-level case and death data are inclusive of all updates as of 12PM 4/25/2021.
- State-level case and death data are inclusive of all updates as of 12PM 4/25/2021.

County Test Data Source by State

- **CELR data from states provided in line level format**: AK, AL, AR, AZ, CA, CO, CT, DC, DE, FL, GA, GU, HI, IA, ID, IL, IN, KS, KY, LA, MA, MD, ME, MI, MN, MO, MP, MS, MT, NC, ND, NE, NH, NJ, NM, NV, NY, OH, OK, OR, PA, PR, RI, SC, SD, TN, TX, UT, VA, VI, VT, WA, WI, WV, WY

State Test Data Source by State

- **CELR data from states provided in line level format**: AK, AL, AR, AZ, CA, CO, CT, DC, DE, FL, GA, GU, HI, IA, ID, IL, IN, KS, KY, LA, MA, MD, ME, MI, MN, MO, MP, MS, MT, NC, ND, NE, NH, NJ, NM, NV, NY, OH, OK, OR, PA, PR, RI, SC, SD, TN, TX, UT, VA, VI, VT, WA, WI, WV, WY

DATA SOURCES AND METHODS – AOC CONTINUUM

The **Areas of Concern Continuum** is used to describe communities as they progress through stages of the epidemic.
There are 7 possible AOC classifications based on current and recent history of case and testing data for the location:

Low Burden Community

Purpose: Identify communities with minimal activity.

Definition:

- <10 new cases per 100k population in the last week

Moderate Burden Community

Purpose: Identify communities with moderate disease activity.

Definition:

- Has **NOT** been identified as a Hotspot, Sustained Hotspot, or High Burden—Resolving within the last 2 weeks

  AND
- Does not meet the definition for an Emerging Hotspot, Hotspot, Sustained Hotspot, or High Burden—Resolving

  AND
- Does not meet the definition for being a Low Burden Community

Emerging Hotspot

Purpose: Generate early and reliable signals of communities with emerging increases in disease burden that have a high likelihood for becoming a hotspot in the next 1-7 days.

Method:

Decision tree model that leverages the following features, trained based on prior data:

Cases

- Total cases in the last week
- Total cases per 100k population in the last week
- New cases in the last week minus new cases the previous week
- Ratio of total cases in last 7 days to total cases in last 30 days

Testing

- Number of tests last week
- Difference in percent positive tests in last 7 days from last 21 days

Hotspot

Purpose: Identify communities that have reached a threshold of disease activity considered as being of high burden.

Definition:

- >100 new cases per 100k population OR >500 new cases in the past week

  AND
- Number of days in downward case trajectory* ≤ 7 days

  AND
- >50 cases during past week

  AND
- Conditions must hold for at least 3 of the previous 5 days

Sustained Hotspot

Purpose: Identify communities that have had a high sustained case burden and are at potentially higher risk for experiencing healthcare resource limitations.

Definition:

- Either Hotspot for at least 7 preceding days or already a Sustained Hotspot on previous day

  AND
- >200 new cases per 100k population OR >1,000 new cases in the past two weeks

  AND
- Daily incidence rate >15 new cases per 100k population for 8 or more of the last 14 days OR test positivity >10% over last 14 days

  AND
- >100 cases during the last two weeks

  AND
- Conditions must hold for at least 3 of the previous 5 days

Data Sources: CDC Aggregate County Data; Unified Testing Dataset; US Census 2019

High Burden - Resolving

Purpose: Identify communities that were recently identified as hotspots and are now improving.

Definition:

- Identified as a Hotspot or Sustained Hotspot within the last 2 weeks

  AND
- Not currently a Emerging Hotspot, Hotspot, or Sustained Hotspot

  AND
- >100 new cases per 100k population OR >500 new cases in last week

  AND
- Number of days in downward trajectory* ≥ 7

  AND
- >50 cases during last week OR both ≥ 10 cases in last week and >10% test positivity in last week

Moderate Burden - Resolving

Purpose: Identify communities that have a moderate level of burden, but are demonstrating improvement.

Definition:

- Identified as a Hotspot, Sustained Hotspot, or High Burden—Resolving within the last 2 weeks

  AND
- Does not meet the definition for an Emerging Hotspot, Hotspot, Sustained Hotspot, or High Burden—Resolving

  AND
- Does not meet the definition for being a Low Burden Community

***Number of Days in Downward Case Trajectory**: This field is calculated using a CDC algorithm that first fits a smooth spline curve to daily case counts, and then counts the number of days that curve has been decreasing or at a low level. More specifically, the computation is based on a cubic spline fit of the 7-day rolling average of cases. The number of days decreasing (in downward trajectory) is calculated by summing the number of consecutive days of decline or near-zero incidence. A day is considered part of a downward trajectory if it (i) was previously at elevated incidence (had a two-week incidence greater than 10 cases per 100k population), and (ii) meets one of the following three conditions: (a) had a negative slope, OR (b) was in a low-incidence plateau (two-week incidence ≤ 10 cases per 100k population and a slope ≥ 0 to < 0.1 new cases per 100k population based on a 7-day moving average), OR (c) had less than 5 cases in the past 2 weeks.