Federal Judicial Center
COVID-19 Data and Trends for Federal Judicial Districts
Information and Instructions

The Federal Judicial Center (FJC) has created a dashboard showing COVID-19 data and trends for the nation and for each of the ninety-four federal judicial districts. The dashboard shows the number of total cases and daily new cases both as absolute numbers and per 100,000 residents. It also shows the weekly rate of change and rolling seven-day averages for new cases. It includes data since the COVID-19 pandemic began in January 2020 and is updated weekly.

This document contains a description of the metrics displayed on the dashboard and the underlying data, instructions on how to use the dashboard, and tips on interpreting the displayed information.

The Data and Metrics

County-level data from the Johns Hopkins COVID-19 Data Repository by the Center for Systems Science and Engineering (CSSE) and population estimates from the U.S. Census Bureau and CIA World Factbook[1] were aggregated to the judicial district and national levels.

The dashboard includes the following metrics for the nation and for each of the ninety-four judicial districts for each day beginning with January 22, 2020:

Metric	Description
Total Cases	Total COVID-19 cases reported since January 22, 2020.
Total Cases per 100,000 Residents	Total COVID-19 cases reported per 100,000 residents since January 22, 2020.
Daily New Cases	New COVID-19 cases reported for that day.
Daily New Cases per 100,000 Residents	New COVID-19 cases reported for that day per 100,000 residents.
Weekly Rate of Change in New Cases	Rate of change, calculated by comparing the number of new COVID-19 cases reported in the last week to the number of new COVID-19 cases reported in the previous week.
Rolling Seven-Day Average of New Cases	Number of new COVID-19 cases reported daily, averaged over the last seven days.

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1. See the data sources section at the end of this document.

Using the Dashboard

Interpreting the Color Scale. The dashboard contains a map of the ninety-four federal judicial districts. This map uses a continuous diverging color scale to color-code districts by their relative metric scores. The colors increase in warmth as the numbers increase: dark blue indicates a district has lower numbers relative to other districts, while dark orange indicates a district has higher numbers relative to other districts. When negative numbers are present, blue represents numbers less than zero, and orange represents numbers greater than zero.

This color scheme draws attention to extremes among districts. This can be particularly helpful when comparing rates of change as in the example below.
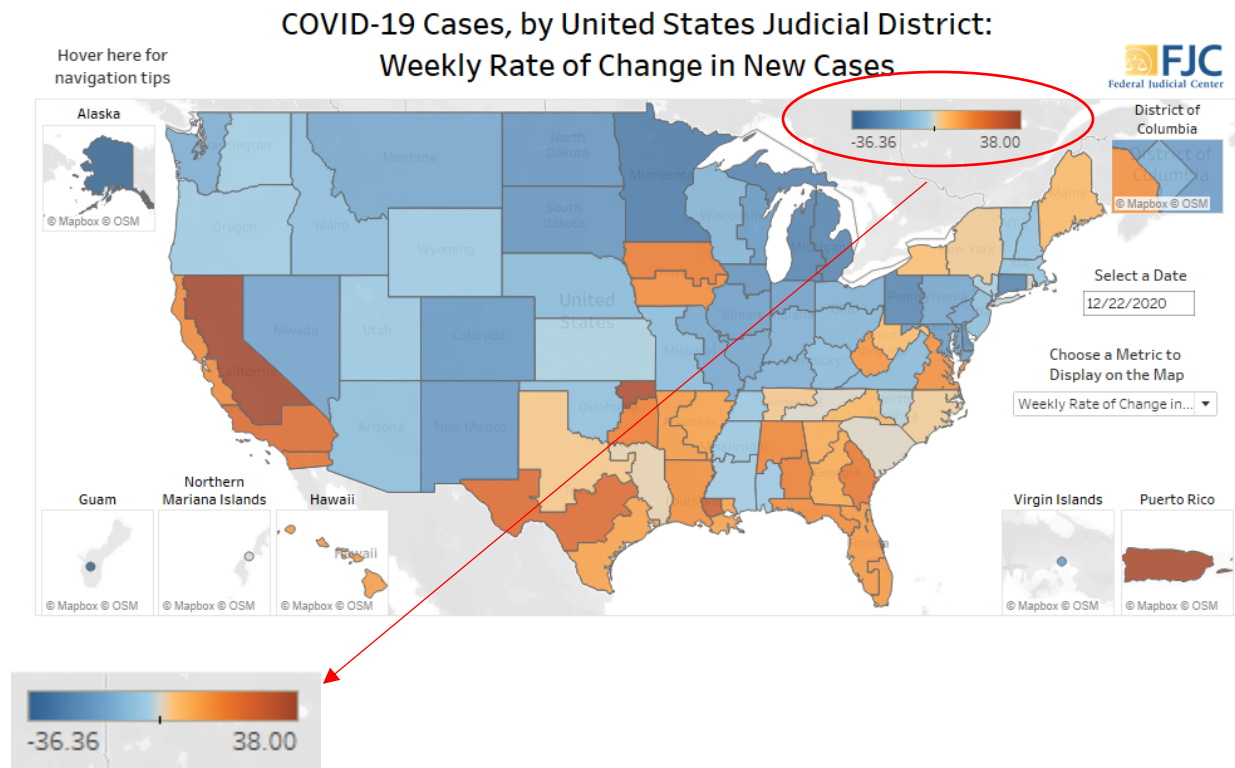
Using Filters to Change the Date and Metric Displayed on the Map. The filters to the right of the map (shown below) change the data presented on the map. To populate the map with data from any date between January 22, 2020, and the date of the most recent update (found at the bottom right of the map), click on a date on the calendar. To display a different metric, use the drop-down menu to select the metric of interest. The colors on the map and the numbers on the map's scale will update to reflect the data for the chosen date and metric.

Select a Date

12/22/2020

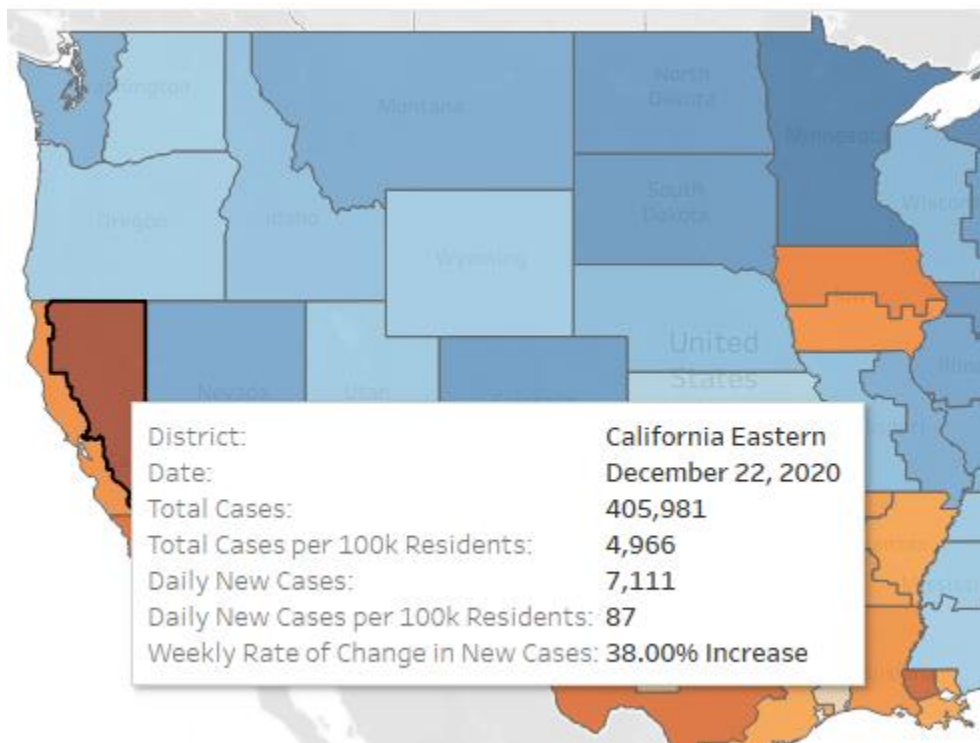| <	January 2021	>
S	M	T	W	T	F	S
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

Today: **1/15/2021**

Choose a Metric to
Display on the Map

Weekly Rate of Change in... ▼

Total Cases
Total Cases per 100,000 Residents
Daily New Cases
Daily New Cases per 100,000 Residents
Weekly Rate of Change in New Cases

Displaying all Metrics for a Specific District. Hover the cursor over a district on the map to see all the
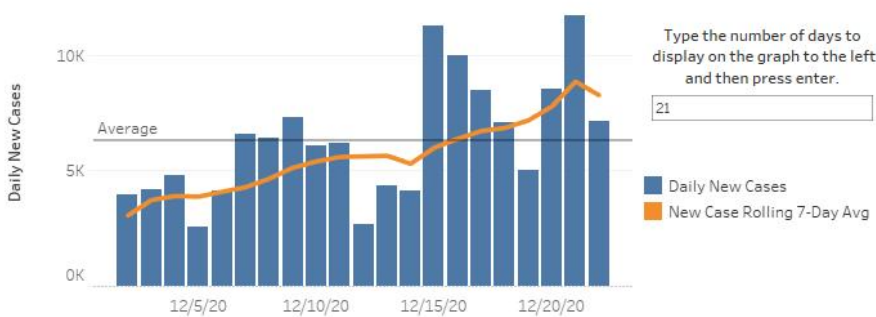metrics for that district on the selected date.

District:	California Eastern
Date:	December 22, 2020
Total Cases:	405,981
Total Cases per 100k Residents:	4,966
Daily New Cases:	7,111
Daily New Cases per 100k Residents:	87
Weekly Rate of Change in New Cases:	38.00% Increase

Displaying Detailed District-Specific Information Below the Map. Selecting a district on the map will filter the graph and text boxes in the "District Information" box below the map to show detailed information for that specific district. Clicking once on a district will select it; clicking again on the selected district will de-select it. When no district is selected, nationwide data are shown.
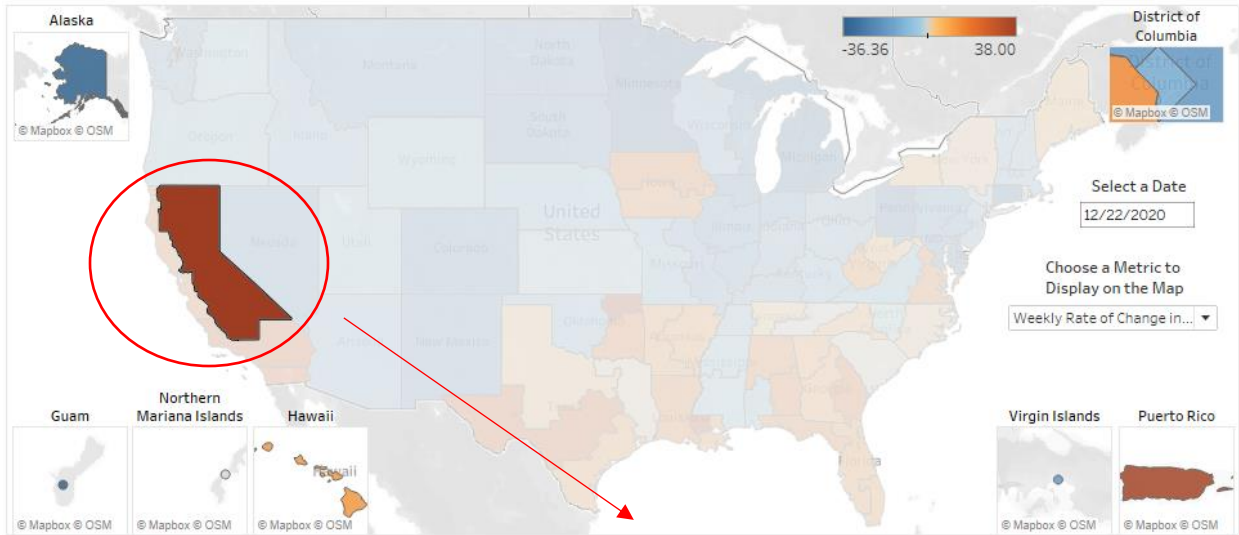
District Information: California Eastern

Daily New Cases and Rolling Seven-Day Average for New Cases

Type the number of days to display on the graph to the left and then press enter.

21

■ Daily New Cases
■ New Case Rolling 7-Day Avg

New Cases
On 12/22/2020, there were 7,111 new cases (87 per 100,000 residents) reported in this district.

Weekly Rate of Change in New Cases
For the week ending 12/22/2020, the number of new reported cases in this district increased 38% from the previous week.

Total Cases
As of 12/22/2020, there have been 405,981 cases (4,966 per 100,000 residents) reported in this district since the beginning of the pandemic.

Data available through 2/15/2021.

The box to the right of the graph, *Daily New Cases and Rolling Seven-Day Average for New Cases*, can be used to change the number of days displayed on the graph. Type the number of days in the box and then press enter. To revert to the previous number of days, click on the return icon within the box.
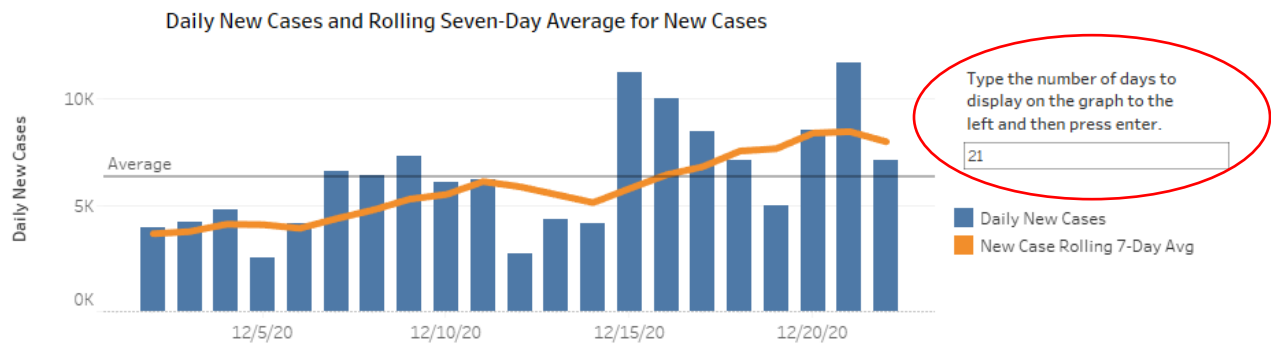
Understanding the Data

Total Cases. The map provides the quickest way to see the concentration and distribution of COVID-19 cases across the federal judicial districts. Looking at *Total Cases* as of the most recently available date, districts shaded dark blue have had the fewest number of total COVID-19 cases since the start of the pandemic, while districts in dark orange have had the most cases.
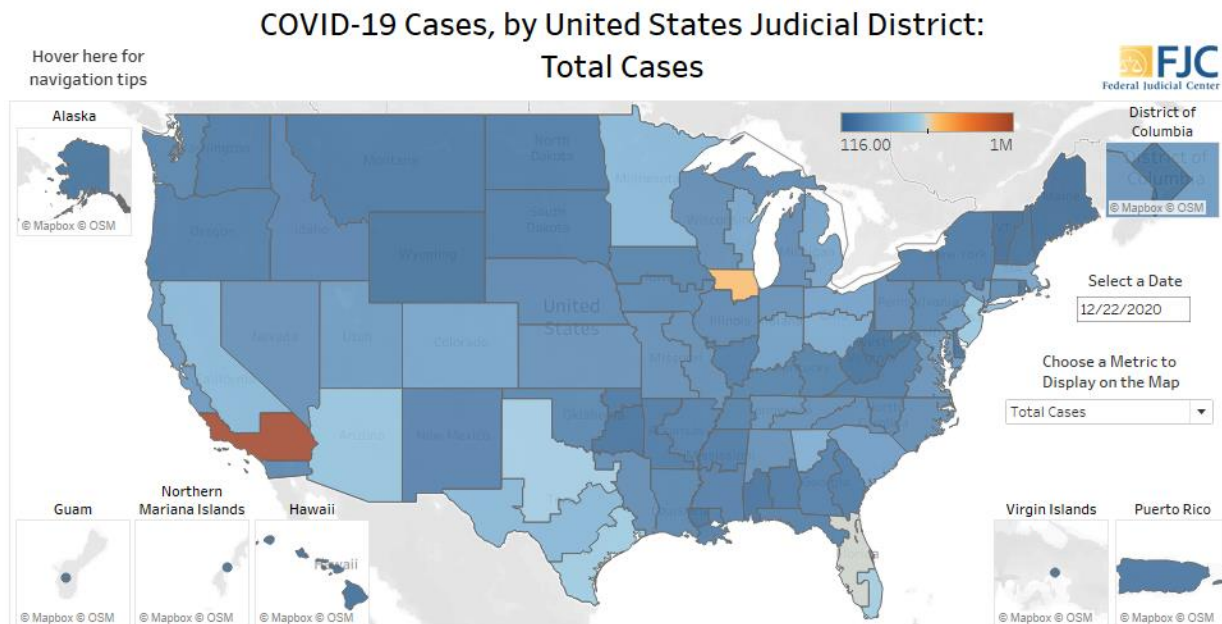
Total Cases per 100,000 Residents. This metric accounts for the variation in population size across districts and facilitates more equivalent comparisons in the number of cases among them. It is calculated by dividing the population by 100,000 and then dividing the total number of cases by that result.

Some of the less populated districts change from dark blue when *Total Cases* is depicted (see above) to dark orange when *Total Cases per 100,000 Residents* is depicted (see below), indicating a higher per-capita rate of total cases.
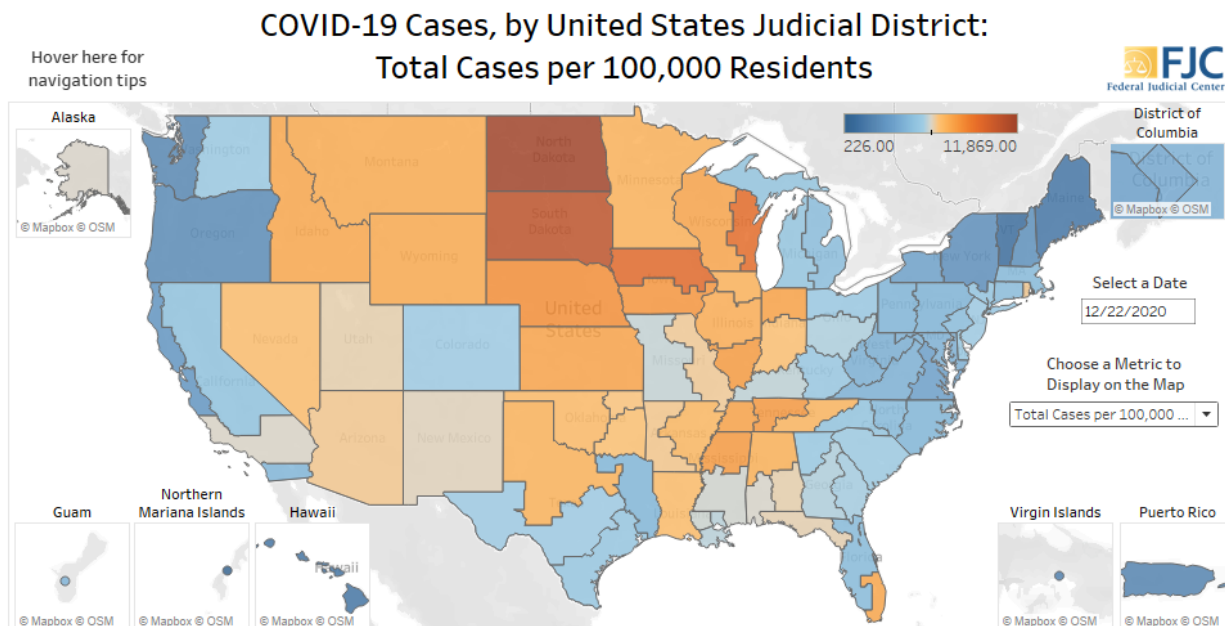
Daily New Cases and Daily New Cases per 100, 000 Residents. These metrics indicate the number of new COVID-19 cases reported on a specific day in absolute numbers and per capita. Mapping these metrics makes geographic concentrations of new cases, also known as hot spots, quickly evident.

Daily New Cases and Rolling Seven-Day Average of New Cases. The graph underneath the map also shows *Daily New Cases*, as well as the *Rolling Seven-Day Average of New Cases*. The blue bars represent the number of new cases reported on each day, and the orange line represents the rolling seven-day average of new cases. It is called a rolling average because it is computed for each day by averaging the number of new cases reported on that day and each of the preceding six days. The line labeled "Average" represents the average number of daily new cases for all of the days displayed on the graph.

This graph helps to uncover trends in the number of new cases reported per day, while anchoring those data in a historical context. This method helps to "smooth" sudden changes that appear due to data reporting differences and other factors that are not associated with an actual change in the number of cases.

As shown below, in early January 2021, the number of new cases reported each day nationally appear to be trending slightly downward through the beginning of the 21-day period, with a small uptick the last few days. The large decrease in reported cases on 12/25/2020 and 1/1/2021 are most likely not due to an actual decrease in the number of COVID-19 cases, but rather a decrease in reporting due to holiday closures. The subsequent large increases on 12/26/2020 and 1/2/2021 can similarly be ascribed to the corrective reporting of cases from previous days, and not a stunning increase in actual new cases.
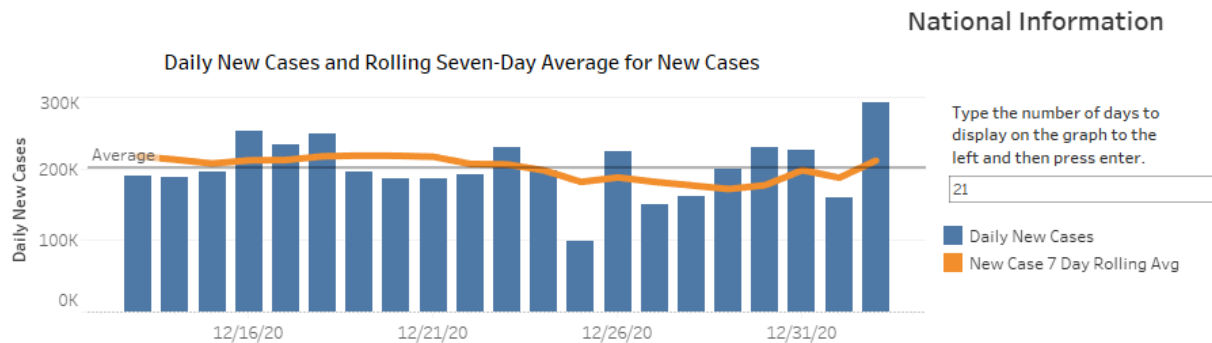
Weekly Rate of Change in New Cases. This metric shows the magnitude and direction (increasing or decreasing) of the change in new cases in the selected week, as compared to the number of cases in the previous week.

When displayed on the map, this metric indicates geographic concentrations of significant increases or decreases in new cases reported within the last week. Districts identified as having the most significant increase in reported cases are displayed in dark orange, while districts with the most significant decrease are displayed in dark blue. For districts on either extreme, it may be helpful to check the graph, *Daily New Cases and Rolling Seven-Day Average of New Cases*. That graph can help determine whether the weekly rate of change is due to spikes on specific days, which may be caused by local reporting schedules, or sustained changes, which could indicate emerging trends.

In the example below, the Middle District of Georgia experienced almost a 50% change in new cases from the previous week; the graph shows this change is attributable to substantially more new cases reported for the last five days—a trend deserving of continuing attention.
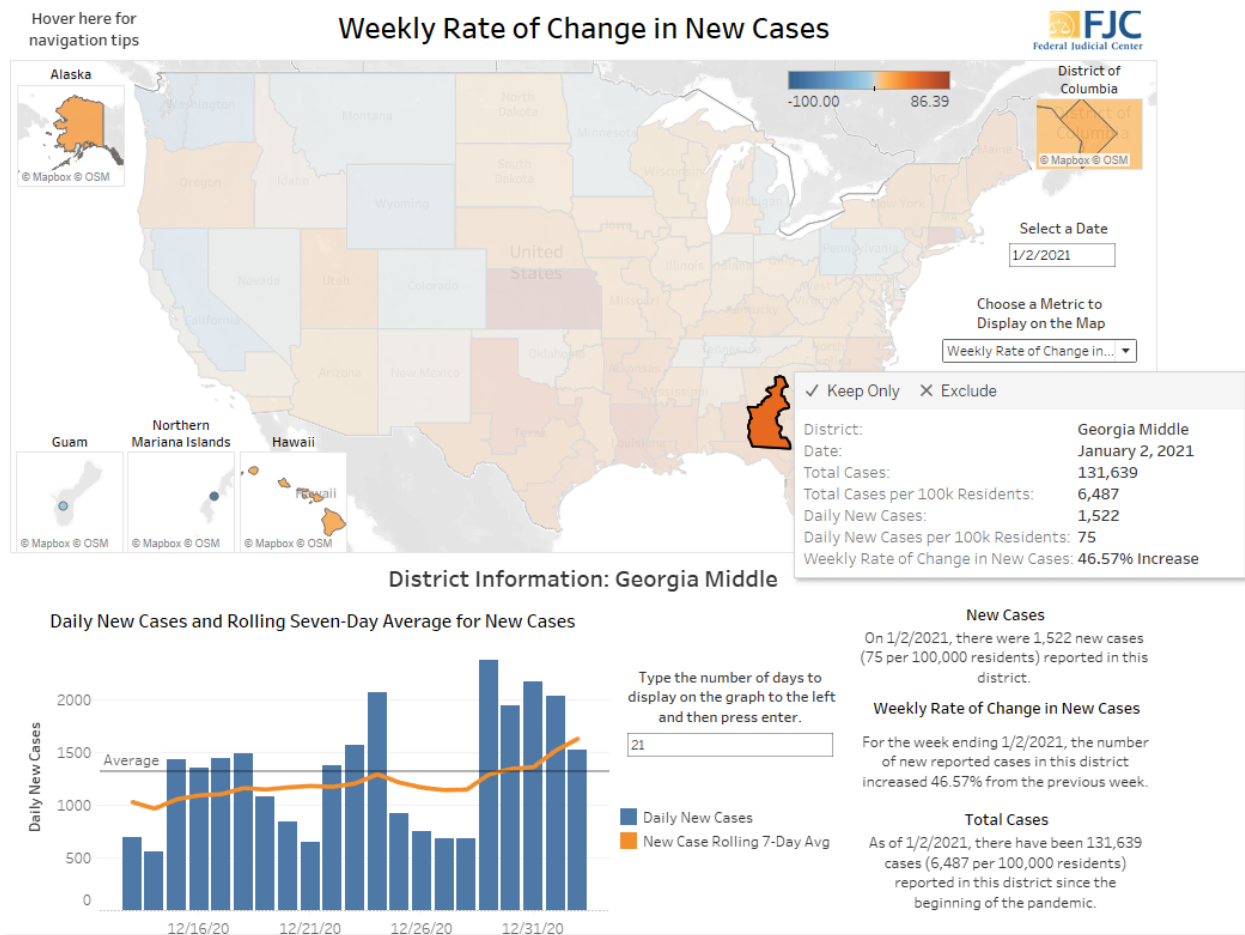
Text boxes. The text boxes at the bottom of the dashboard are textual summaries of the number of daily new cases and daily new cases per 100,000 residents; the weekly rate of change; and the total cases and total cases per 100,000 residents as of the date selected. If no district is selected, the boxes will display national data.

Data Limitations. The frequency with which states report data on COVID-19 cases varies. Schedules range from daily reporting, to three times a week, to once a week. Most states do not report data during the weekends. Both the frequency and consistency of reporting have been reduced over the course of the pandemic. This impacts the reliability of the data depending upon the day of the week selected on a district by district basis, particularly the metrics daily new cases, daily new cases per 100,000, and weekly rate of change. Values of zero in these metrics do not necessarily mean no new cases but may be indicative of a day data were not reported. For the most up to date reporting schedules by state, click here.

The Nebraska state Department of Health and Human Services ceased reporting data to the public at the end of May 2021 then began reporting data in the aggregate several weeks later. Data in the dashboard were not updated for Nebraska between May 26, 2021 and August 3, 2021. Weekly data for Nebraska were captured manually from the Nebraska state Department of Health and Human Services website between August 3, 2021 and September 26, 2021. On September 27, 2021, Nebraska resumed reporting county-level data.

Whom to Contact

If you have questions or need more information, please contact Jana Laks, Research Assistant at the Federal Judicial Center (jlaks@fjc.gov or (202) 502-4252), or Kristin Garri, Senior Research Associate/Data Resource Specialist at the Federal Judicial Center (kgarri@fjc.gov or (202) 502-4027).

Data Sources

COVID-19 Data Repository by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University, https://github.com/CSSEGISandData/COVID-19

For Guam, Northern Mariana Islands, and Virgin islands: CIA World Factbook Population Estimates, https://www.cia.gov/the-world-factbook/references/one-page-country-summaries/

For all other districts: U.S. Census Bureau 2019 County Population Estimates, https://www.census.gov/data/datasets/time-series/demo/popest/2010s-counties-total.html