

COVID-19 New Cases and Deaths Per Day

Interactive Maps and Data For Download

Produced by Joseph Elfelt, [@mappingsupport](#)
[MappingSupport.com](#) [Contact](#)

November 16, 2020 update: Added a description and link for the map that shows 7 day averages instead of daily counts.

This report will show you two things. **First**, there are links for two interactive maps that both show recent trends over the prior 14 days. One map is based on daily counts and the other map is based on 7 day average counts. Both maps have overlay layers that can display that data by county, by state or totals for the USA. **Second**, download links are provided for csv files. These files have the number of new COVID-19 cases or deaths per day for all USA counties beginning on March 24, 2020 and continuing through the prior day.

The data source is Johns Hopkins University. They curate a timeseries cumulative count of COVID-19 cases and deaths. This Johns Hopkins data is widely regarded as authoritative and is hosted on GitHub at <https://github.com/CSSEGISandData/COVID-19>. I developed code that converts the timeseries **cumulative counts** into **daily counts** and then converts the daily counts into **7 day average counts** for the prior two weeks. This code automatically runs each night shortly after midnight Pacific time.

The maps and csv files are made available as a public service and are free for all to use. The only limitation is that your use must be non-commercial. This daily count data will be updated each night as the pandemic continues. If you use this daily count data, please **credit** both the COVID-19 Data Repository by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University and Joseph Elfelt, MappingSupport.com (linked to <https://mappingsupport.com>)

I am hoping that this information finds its way to teachers at the middle school and high school level. Students can use this daily count data to make their own charts and graphs showing what the pandemic is doing per day in their county and state. And just maybe students can help 'move the needle' by convincing their parents to wear a face covering and practice social distancing.

COVID-19 Interactive Maps

Below are links to the two interactive maps. Each map has a number of overlay layers that you can turn on/off/restack. Click any symbol to see a display with details going back 14 days. The symbols on the map summarize the recent trends as follows:

Circle	Prior 14 days
Triangle	Prior 7 days
Green	Good - numbers are trending down
Red	Bad - numbers are trending up

Open the map based on **7 day averages**:

https://mappingsupport.com/p2/gissurfer.php?center=36.738635,-98.173828&zoom=4&basemap=USA_basemap&overlay=County_boundaries,State_boundary,State_7_day_average_cases&txtfile=https://mappingsupport.com/p2/disaster/coronavirus/covid_14_day_average.txt

Open the map based on **daily counts**:

https://mappingsupport.com/p2/gissurfer.php?center=36.738635,-98.173828&zoom=4&basemap=USA_basemap&overlay=County_boundaries,State_boundary,State_recent_COVID_cases&txtfile=https://mappingsupport.com/p2/disaster/coronavirus/covid_14_day.txt

To turn other overlays on, click the basemap button (next to the “Menu” button) and look under the “Overlay” heading. Mobile users scroll down. Click an overlay to turn it on and again to turn it off.

An overlay with a number in front is ‘on’. **The highest numbered overlay is ‘on top’ and can be clicked to display a popup.**

Want to make your own custom map link? Start by making the map look on your screen the way you want it to look when it opens. Pay attention to which layer is ‘on top’. Click **Menu ==> Link to this map**. The link that is displayed will replicate the map on your screen.

For more help using the map please click “**Map tips**” in the upper left corner of the map.

The map is displayed by **GISSurfer** which is a general purpose web map I produce as a public service and part of my way to “pay it forward”. For more information you can visit the homepage at <https://gissurfer.com> (you will be redirected).

COVID-19 Daily Count Data For Download

The data you can download is in one file per month. Cases and deaths are in different files. Each night each of these monthly data files is rebuilt. The reason for re-making these monthly files each night is because Johns Hopkins periodically updates older information in their timeseries file as better data becomes available. By re-making all the monthly data files each night, the data in these files will always be in synch with the Johns Hopkins timeseries data.

Each monthly data file contains the number of new COVID-19 cases or deaths **per day** for all counties in the USA. These are csv files and also include coordinates for each county centroid. This means the files are easy to **import into spreadsheet or GIS software**. Also the files include the county FIPS code to help merge this data with other county data. The files have the standard unix-type line ending (line feed \n).

Example links to these monthly csv files with the daily count data are shown below. To download data for other months, replace the 2 digit month. This daily count data starts March

24th. I intend to keep producing and maintaining these monthly data files as long as the pandemic continues.

COVID **cases** per day:

https://mappingsupport.com/p2/disaster/coronavirus/JHU_count_per_day/cases_2020_10.csv

COVID **deaths** per day:

https://mappingsupport.com/p2/disaster/coronavirus/JHU_count_per_day/deaths_2020_10.csv

Yes, the number of new COVID19 cases and deaths in these csv files might be different than the numbers reported by county health departments. There are various reasons for any differences. For example, Hopkins counts both confirmed and probable cases. Also Hopkins ‘scrapes’ data from state health department websites and that data might lag a day or two behind data on county websites.

You also will sometimes see **negative numbers** in these csv files. That might indicate a person who was counted as probable but then removed from the count when a negative test result was returned in a few days. Or maybe a state or county changed its definition of what constitutes a case or a death.