Decision Point
Louisiana shows favorable trendlines for COVID-19 but much data still concealed or inconsistent

Several key trendlines tracking COVID-19's impact in Louisiana are showing favorable directions, just as the state is reaching the next decision point about whether to reopen social interactions and business operations further.

The numbers are on an improving path for people reporting symptoms, testing positive, being hospitalized and dying from the disease in the past two weeks in Louisiana, an analysis by the Public Affairs Research Council (PAR) shows. After several weeks when Louisiana deaths attributed to the coronavirus well outpaced the seasonal average for other causes of death, such as cancer or heart attacks, COVID-19 has fallen to third place in that gruesome ranking.

But not all is positive. The Monroe area continues to be afflicted with increasing cases and other unfavorable indicators. The Louisiana Department of Health continues to hold back critical data, particularly on the leading indicator of COVID-like illness reports. Some data is difficult to interpret due to reporting problems, creating pockets of doubt about the real situation.

The governor is preparing an announcement about whether the state is ready for a Phase 2 reopening. His team will use an analysis similar to PAR’s to aid the decision. His announcement three weeks ago launched a Phase 1 reopening that began May 15 and will last until at least June 5, based on guidance from the federal Centers for Disease Control and Prevention (CDC).

Statewide COVID Cases- DECREASING

(Cases per 100,000 residents, 3 day moving average)
The number of cases that tested positive decreased statewide for the 14-day trendline that ended May 28. The data for May 29 were delayed. These two-week look-backs are a key measure of the progress or decline of the disease. A statistical model determines whether the numbers show an increase, decrease or plateau for each of the nine designated health care regions and statewide. In the trendline up to May 28, all but two of the state’s regions either have decreasing cases or are holding steady. (See the regional charts at the end of this report.) By itself, this would be good news. Unfortunately, reporting issues have partially clouded the picture that can be drawn from the data. (See Endnote 1.)

![Region 8 Monroe- INCREASING](image)

(Cases per 100,000 residents, 3 day moving average)

**COVID-like illness report**

Symptom data comes from the CDC by way of local health care centers. The federal agency collects information from emergency rooms and other treatment centers on patients and their symptoms. Those exhibiting signs of COVID — such as fever, chills, trouble breathing, sore throat and loss of taste or smell — are counted as having COVID-like symptoms in the CDC database.

COVID-like symptoms are the closest thing the state has to an early warning system. Fortunately, the Louisiana Department of Health (LDH) says the reported numbers for people with these symptoms has been declining recently. But the agency has not routinely shared the data with the public. The department has made snapshots of this information available at the times when the governor has made decisions on whether to further open the state.

Louisiana citizens should be able to see this critical data on a more regular basis. Reporting this data is difficult, understandably, because the CDC rather than LDH manages the information. The raw data is subject to misinterpretation, but that is true of many kinds of government reporting. Somehow, Mississippi has figured out a way to make it work, as can be seen on the website of our neighboring state’s health department. (See slide 14 at Mississippi State Department of Health.)
Favorable trends
Hospitalizations due to COVID-19 have been steadily declining. (See PAR’s COVID portal on our website.) The number of patients on ventilators has been decreasing since early April. Also, the state has been following through with a multipronged approach to expand testing of cases.

Deaths from COVID have dropped, particularly in relation to other causes of death. PAR previously reported that Louisiana deaths from COVID had outnumbered other causes of death that could be expected based on data from similar weeks in the past. Whereas COVID, by this measure, was the leading cause of death in Louisiana for several weeks, recently COVID deaths have fallen below the typical number of heart disease and cancer deaths. (See Endnote 2.)

![COVID-19 vs. the historic causes of death in Louisiana](chart.png)

The novel coronavirus was the leading cause of death in Louisiana for seven weeks straight up through May 16, based on averages from past years derived from CDC data and analysis by PAR. From April 12-18, the number of COVID-19 deaths in Louisiana reached 461, more than the average number of deaths from heart disease, cancer and strokes combined in a typical week in April. (Weekly chart available on PAR’s portal.) COVID-19’s new status is a positive trend, although it remains a leading killer in Louisiana and far surpasses normal levels of influenza deaths for this time of year.

Conclusion
Louisiana as a whole and most of its regions are showing strong signs of improvement, and for that we should be relieved. However, executive decisions about further reopening the state might be based on more criteria than the trendlines covered in this PAR report. This crisis is far from over and if we are to prevent or at least minimize potential flareups, the public should be able to see accurate trendlines and early warning signs based on reliable data. This information should be shared with citizens because, ultimately, they are the ones who will determine the success of our social distancing and safety efforts.
Endnote 1: Data problems. Over a recent 16-day period, six days had one issue or another that led to data reporting problems in Louisiana. These are mostly due to reporting issues with labs or computer server problems. These hiccups are understandable given the scope of the data and the speed by which LDH set up its COVID-19 information portal.

A good example of the difficulty in drawing conclusions from the data can be found by looking at LDH Region 7 centered on Shreveport and Bossier City. While technically the data show an increasing trend, that result is mostly from a large spike of positive cases in the middle. That spike reflects a backlog of cases that were reported on May 21 which was then averaged over three days. This makes the Shreveport region seem worse maybe than it is. Looking ahead, as the bulge shifts to the left over time, the data likely will show cases in the region to be decreasing unless a dramatic flareup or more data problems occur. As a result of this reporting spike, if a second wave of cases hits, it will be less evident on the trendline.

The obvious solution is to improve the data reporting and network systems, but that is easier said than done. The other solution would be to lean more heavily on other data that is available, such as the tests that come back positive as a percentage of all tests (which PAR also tracks on its website). In short, the trendlines are useful but not infallible, and their quality might improve over time.

Endnote 2: Methodology for charting deaths. The non-COVID-19 deaths are averages based on deaths in April or May in past years. Data on COVID-19 mortality are from the Louisiana Department of Health. This chart illustrates the comparison of documented COVID-19 deaths to what would be expected by other leading causes of death in Louisiana during the same period, according to data from the Centers for Disease Control. The CDC’s actual figures for non-COVID deaths during this period will be reported at a later time and could differ substantially from these numbers, which are based on averages in April from past years. Actual deaths during this period from other causes could increase or decrease from the norm depending on the effects of stay-at-home orders, lack of usual health care and other factors. Also, some causes of death such as heart failure or strokes during this period might be attributed officially to COVID-19 if the victim suffered from the disease. Data is drawn from monthly averages from 2014-2018 and converted to weeks. Very similar results can be found by using yearly averages. The causes of death included here are the largest categories and are not a full list.
New COVID-19 Cases per 100,000 residents
May 15 - May 28

Region 1: Orleans - Plateau

Region 2: Capital - Decreasing

Region 3: Bayou - Decreasing

Region 4: Lafayette - Decreasing

Region 5: Lake Charles - Plateau

Region 6: Central - Plateau

Region 7: Shreveport - Increasing

Region 8: Monroe - Increasing

Region 9: Northshore - Plateau

Statewide - Decreasing

Source: LDH & CDC