Tracking the Media Tracking the Coronavirus: Numbers

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Numbers, Numbers, Numbers

- Positivity rate

- Infection rate

- Recovered and Active
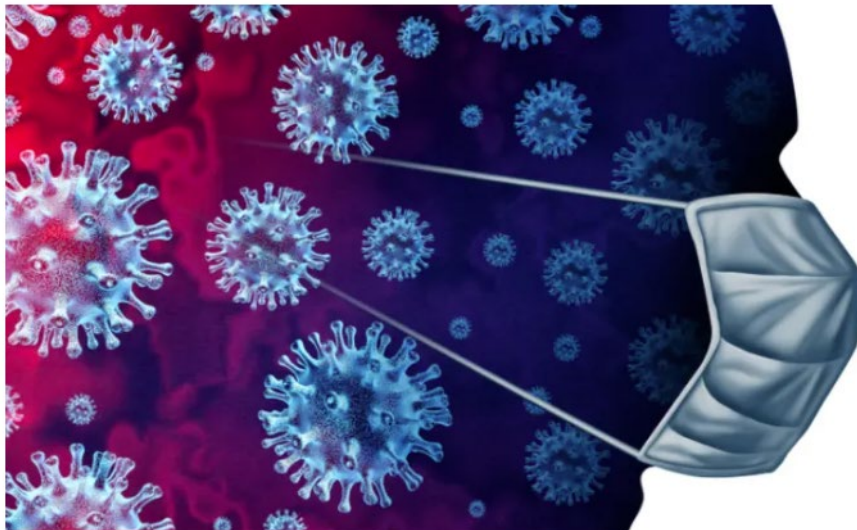
- Testing

The Illinois glitch

State Fixes Glitch That Led To Backlog In COVID Reporting

Springfield, IL, USA / WMAY | Stay Informed. Stay Connected.

WMAY Newsroom
Sep 4, 2020 2:42 PM

(Shutterstock)

The state of Illinois says it has resolved a problem with its data processing systems that slowed the reporting of COVID-19 test results earlier in the week.
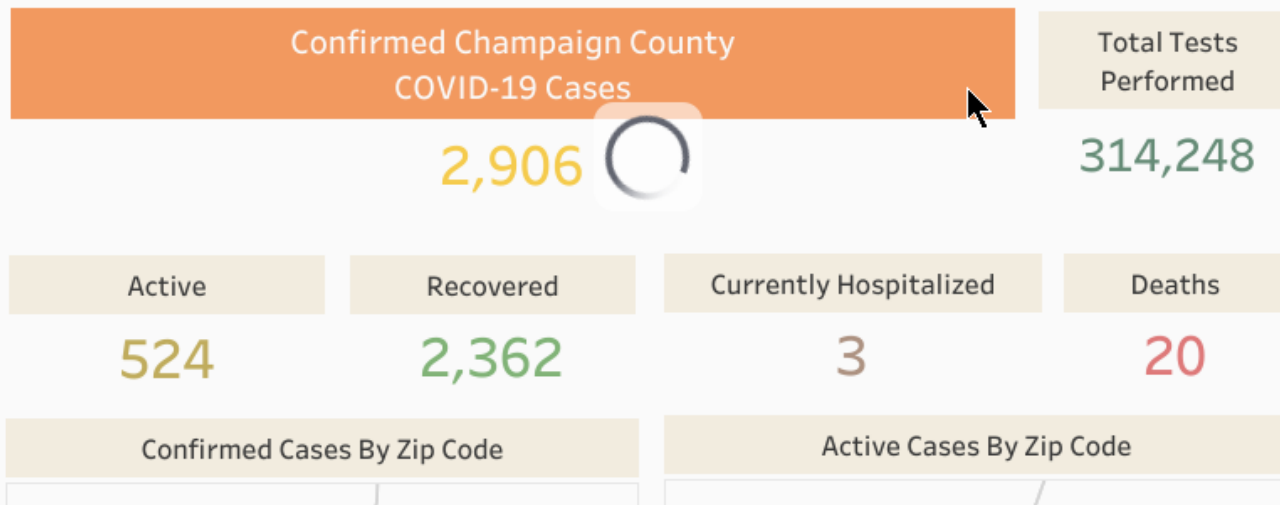
Illinois glitch – Sept 4

The state saw a significant drop off in the total number of tests being reported in its daily roundups… and says it's because of the huge overall increase in testing being done around the state, including the introduction of new rapid tests through the University of Illinois. State public health officials say the problem did not impact the reporting of individual results to people who got COVID tests, but did slow the collection of aggregate numbers.
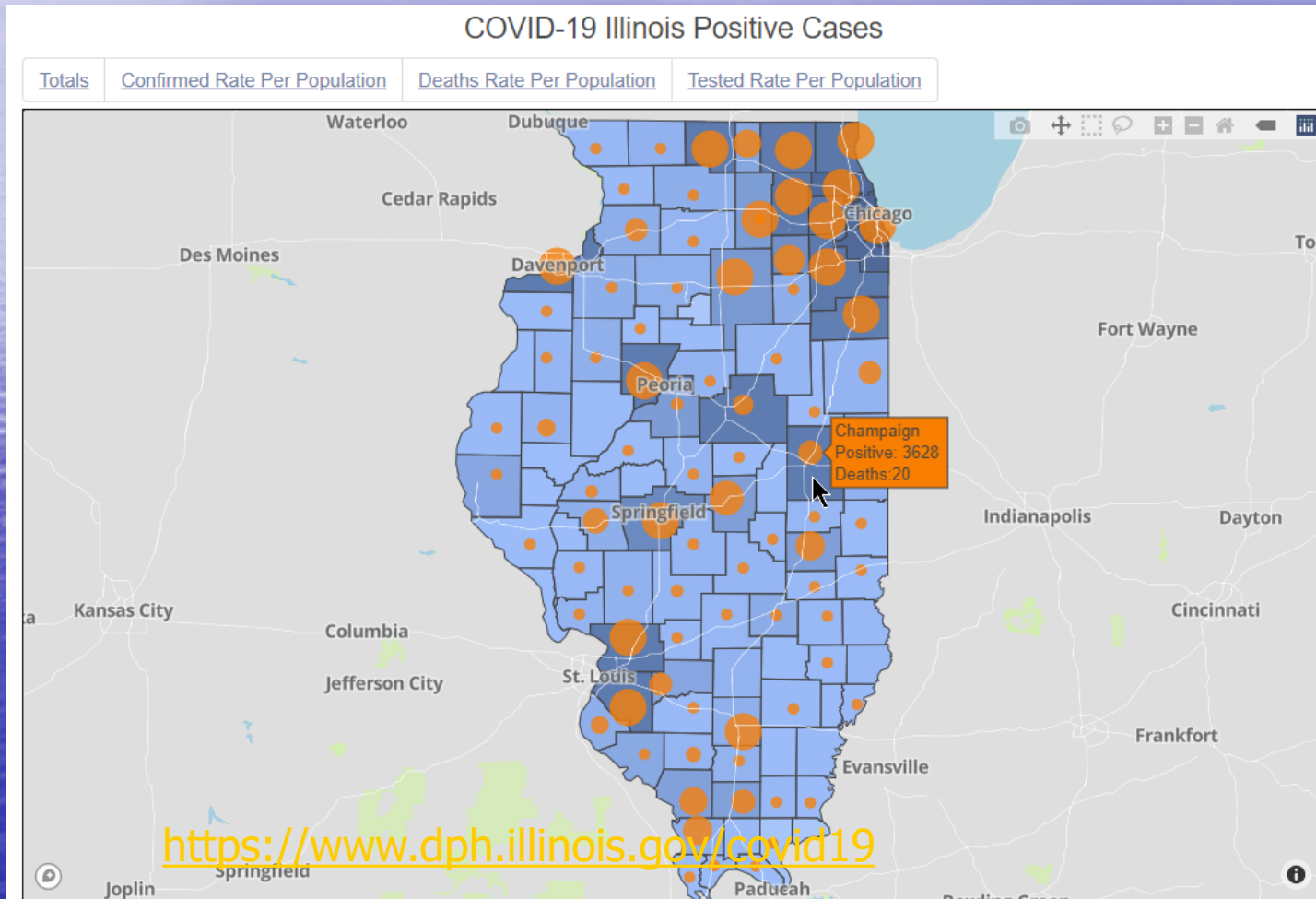
County report September 8

NEW August 14

COVID-19 Face Coverings and Gathering Restrictions Ordinance

Updated on: 9/8/2020

Confirmed Champaign County COVID-19 Cases	Total Tests Performed
2,906	314,248

Active	Recovered	Currently Hospitalized	Deaths
524	2,362	3	20

Confirmed Cases By Zip Code

Active Cases By Zip Code

https://www.c-uphd.org/champaign-urbana-illinois-coronavirus-information.html

Illinois Public Health: 3,628

COVID-19 Illinois Positive Cases

Totals | Confirmed Rate Per Population | Deaths Rate Per Population | Tested Rate Per Population

Champaign
Positive: 3628
Deaths:20

https://www.dph.illinois.gov/covid19

Champaign County numbers

With an additional 160 cases, the state reports a total of 3,628 Covid-19 cases in Champaign County as of Sept. 8 while county health department reports 2,906 on Sept 8, 722 fewer cases than the state because of lag time in county investigation of cases, county officials say. County and state report a total of 20 deaths. County reports 3 hospitalized and estimates as of Sept. 8 that 314,248 tests have been done. Positivity rate by ZIP code in county ranges from 0 percent to 6.39 percent with overall rate a little over 1 percent. For fourth week of August, state has a case alert for Champaign County, which has 189 new cases per 100,000, more than triple the state target of 50 cases per 100,000.

University Dashboard
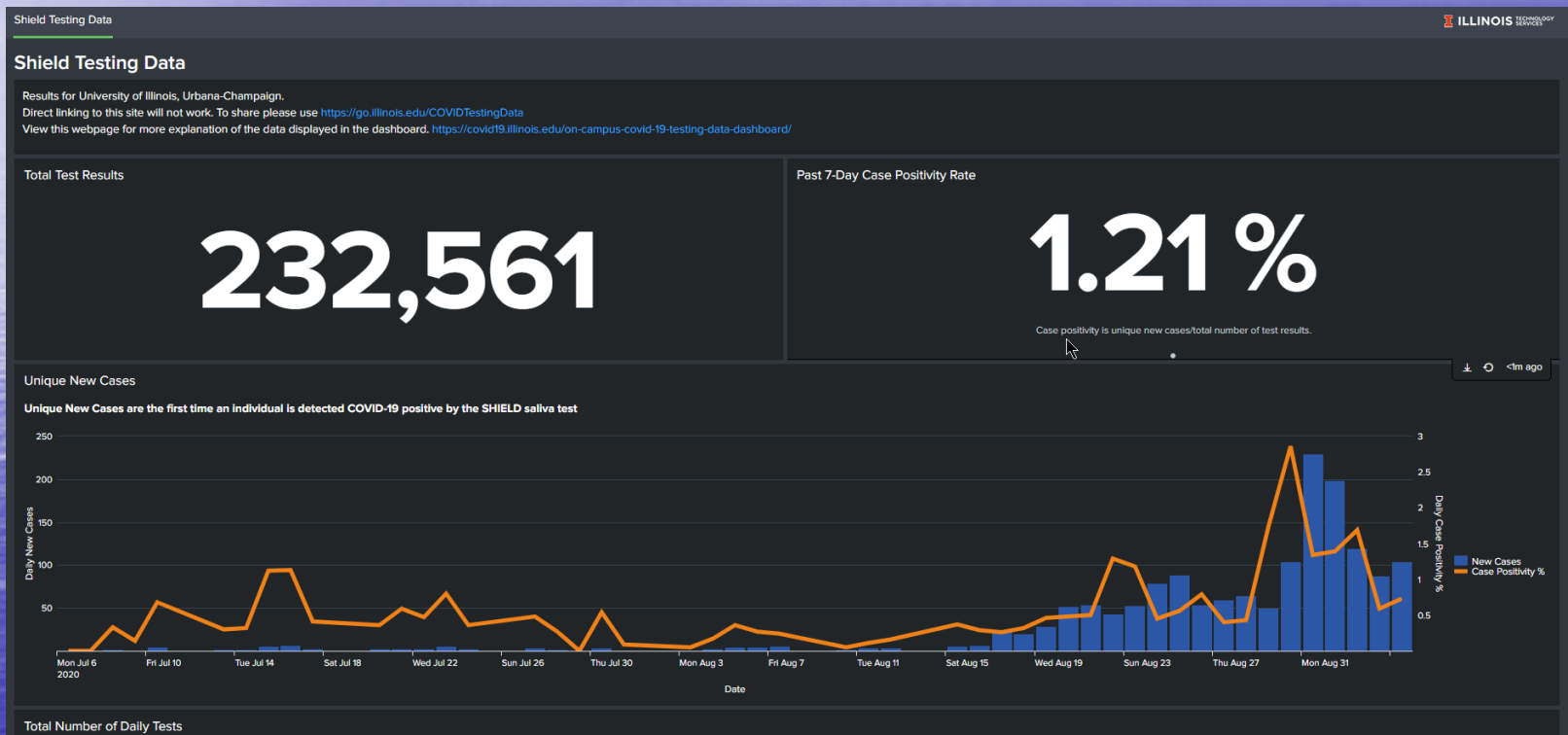
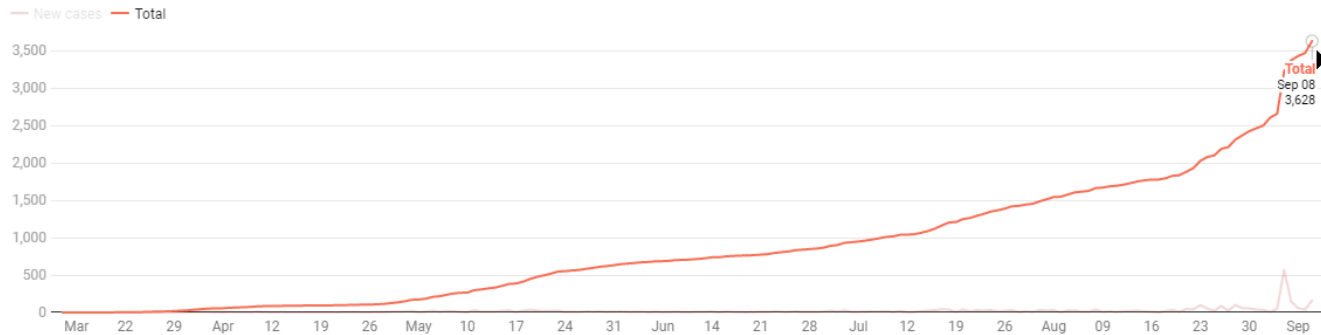https://splunk-public.machinedata.illinois.edu:8000/en-US/app/uofi_shield_public_APP/home

CU-CitizenAccess.org Chart

https://www.cu-citizenaccess.org/

CDC Tracker

https://covid.cdc.gov/covid-data-tracker/#cases

Covid Tracking Project

https://coronavirus.jhu.edu/testing/individual-states/illinois

Covid Tracking Project

Illinois

Current data quality grade: Ⓐ

Cases — Historical data

Total cases	251,508
Definition	
New cases today (Calculated)	1,403
Change over 7 days (Calculated)	6.2%+

Viral (PCR) tests — Historical data

Total tests (in test encounters)	Not Reported
Definition	
Total tests (in specimens)	4,418,372
Definition	
Total tests (in people)	Not Reported
Definition	

Antibody tests — Historical data

Total tests	Not Reported
Definition	

Hospitalization — Historical data

Ever hospitalized	Not Reported
Definition	
└ Now hospitalized	1,504
Definition	
Ever in ICU	Not Reported
Definition	
└ Now in ICU	356
Definition	
Ever on ventilator	Not Reported
Definition	
└ Now on ventilator	134
Definition	

Outcomes — Historical data

Recovered	Not Reported
Definition	
Total deaths	8,390
Definition	
└ Probable deaths	219
Definition	
└ Confirmed deaths	8,171
Definition	

Where this data comes from ↓ State's dataset was last updated at Sep 5, 2020 8:00 pm ET

https://covidtracking.com/data

A 'cuckoo' graph with no sense of time or place shows how Georgia bungled coronavirus data as it reopens

Morgan McFall-Johnsen May 17, 2020, 4:37 PM

- A recent graph from Georgia's Department of Public Health mixed up times and locations and appeared to show a consistent decline in COVID-19 case counts in the state's hardest-hit counties.

A 'cuckoo' graph with no sense of time or place shows how Georgia bungled coronavirus data as it reopens

Morgan McFall-Johnsen   May 17, 2020, 4:37 PM

• **The department later updated the graph to show case counts in chronological order after criticism that included a state representative's letter to the governor's office.**

'It's just cuckoo': state's latest data mishap causes critics to cry foul

Where does Sunday take place twice a week? And May 2 come before April 26?

The state of Georgia, as it provides up-to-date data on the COVID-19 pandemic.

In the latest bungling of tracking data for the novel coronavirus, a recently posted bar chart on the Georgia Department of Public Health's website appeared to show good news: new confirmed cases in the counties with the most infections had dropped every single day for the past two weeks.

In fact, there was no clear downward trend. The data is still preliminary, and cases have held steady or dropped slightly in the past two weeks. Experts agree that cases in those five counties were flat when Georgia began to reopen late last month.

Out of order Georgia graphic

At first glance, the graph appears to show a steady decline in cases for the counties. However, looking closely, the dates are not in chronological order. Instead, it is organized by the highest number of cases on the left to the lowest number of cases on the right, despite the date.
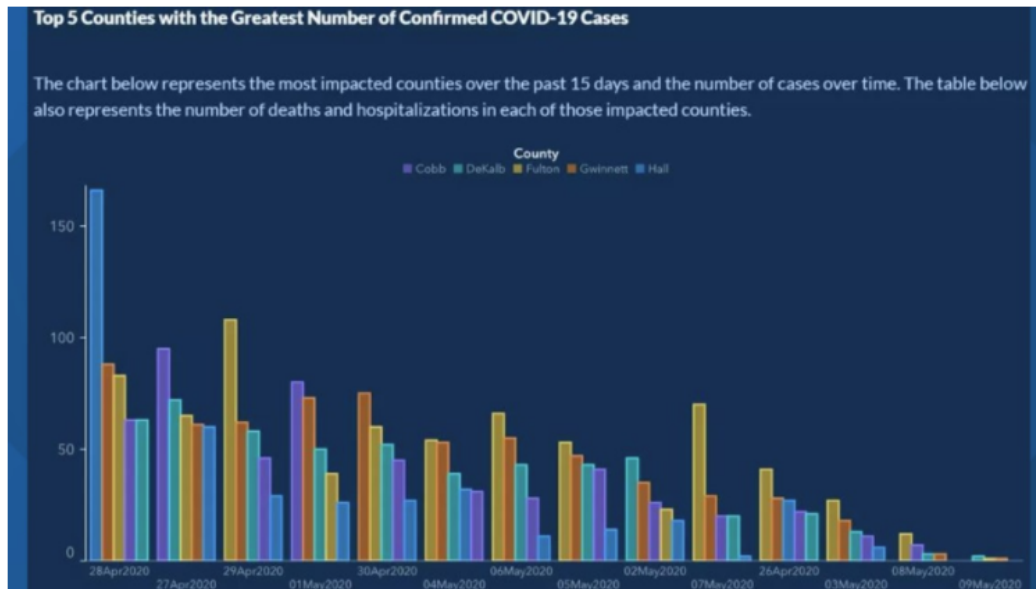
Credit: Georgia Department of Health

The Georgia Department of Health had to recorrect this graph after it misrepresented the number of COVID-19 cases by not putting it in chronological order.

- April 28
- April 27
- April 29
- May 1

A 'cuckoo' graph with no sense of time or place shows how Georgia bungled coronavirus data as it reopens

Morgan McFall-Johnsen   May 17, 2020, 4:37 PM

- **The graph, which the representative described as "misleading," is just one of Georgia's data failures as it reopens businesses during its coronavirus outbreak, the Atlanta Journal-Constitution reported on Wednesday.**

Faulty data obscures virus' impact on Georgia

Georgia's public health agency counts just one confirmed diagnosis of the novel coronavirus — and only one death — at an Augusta nursing home.

Windermere Health and Rehabilitation Center, however, acknowledges a much grimmer toll. The facility says 74 residents and 20 staff members have tested positive for the virus — and four residents have died.

The state says the coronavirus has killed no residents of Arbor Terrace at Cascade, an assisted living center in Atlanta. In fact, the Fulton County Board of Health said, deaths at the facility rose Tuesday to 15.

https://www.ajc.com/news/faulty-data-obscures-virus-impact-georgia/LhCiI0bVKXOQW9VuEF9OrN/

Georgia

Two major discrepancies appear to be around April 22 to April 24 (day of reopening) where the department initially reported a drop in new cases from nearly 900 to around 600 cases, and back up to about 700 cases.

In reality, the state saw a significant drop from about 900 cases to around 400 cases, then a spike back to nearly 1,000 cases before another significant drop, according to the numbers documented by the Department of Health's website.
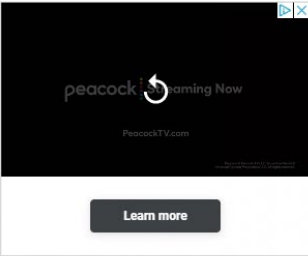
Result: The Georgia Experiment

Better numbers

Florida

firstcoastnews.com

FACTS
NOT FEAR
CORONAVIRUS (COVID 19)

"As a word of caution, I would not expect the new team to continue the same level of accessibility and transparency that I made central to the process during the first two months. After all, my commitment to both is largely (arguably entirely) the reason I am no longer managing it."

Rebekah Jones | Creator, former manager of Florida's COVID-19 dashboard

01:00 / 01:16

Florida

n p r

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HEALTH

Florida Scientist Says She Was Fired For Not Manipulating COVID-19 Data

June 29, 2020 · 5:02 AM ET

Heard on Morning Edition

▮▮ **7-Minute Listen**   + PLAYLIST

NPR's Rachel Martin talks to Rebekah Jones, a scientist who was fired from Florida's health department, who is now publishing a coronavirus dashboard of her own to track the state's COVID-19 cases.

≡ Transcript

https://www.npr.org/2020/06/29/884551391/florida-scientist-says-she-was-fired-for-not-manipulating-covid-19-data

Florida

Florida's hidden data skews COVID-19 test results

By MARIO ARIZA and ANGIE DIMICHELE
SOUTH FLORIDA SUN SENTINEL | JUL 15, 2020 AT 5:32 PM

Florida might be minimizing the depth of its COVID-19 problem by underreporting its rate of positive tests, experts say.

The method used to calculate the "positivity rate" — a critical measure of **the pandemic's progression** — puts more emphasis on negative tests, skewing the results in that direction.

https://www.sun-sentinel.com/coronavirus/fl-ne-positivity-rate-florida-paints-rosy-pandemic-picture-20200715-cpwwngaefzdnpitbs7buh7zsei-story.html

Florida

"There is a peculiar odor around the data in Florida and there has been for some time," said Dr. William Hanage, associate professor of epidemiology at Harvard's T.H. Chan School of Public Health.

Olivier Lacan, a volunteer for the COVID Tracking Project, which has followed data across the country, said Florida's lack of transparency is fueling distrust.

"The right wing is saying the numbers can't be trusted; the left is saying the numbers might be higher. Just show the math!" he said.

Florida

A person who tests positive is counted only once, but negative tests can be counted repeatedly if the same person got more than one test.

In addition, just as the pandemic raced out of control this month, the state changed the formula. It now mixes two different types of tests, including one that produces more false negative results.

Florida

Governor Ron DeSantis frequently cites the positivity rate to justify reopening schools and businesses. He tweeted the statistic 12 times between late April and the end of May. He last tweeted the figure on May 26, but he has highlighted it during several news conferences

Iowa

The Gazette

STAFF COLUMNIST >

Iowa was reporting false COVID-19 information for months, until this nurse blew the whistle

State epidemiologist knew about the problem since July

Iowa

Nothing is adding up.
She began by handwriting her notes usually in the morning before work, or in the evening right after. She works full-time as an essential worker and is the mother of three. Her days are busy. Keeping track of the numbers helped her feel like she had a handle on the pandemic tearing through America, killing nearly 200,000 so far.

On May 26, she decided to download the COVID-19 data from Iowa's Department of Health website. The next day, she went to add in the new numbers and saw the problem: Positive case numbers were being added to earlier days and not reported in the current days' totals.

Iowa

The next day, it happened again. And again. So she did what many frustrated Americans do, she tweeted. On May 29, she tweeted, "Fun fact: on March 20th I was told there were 49 cases of COVID-19 in Iowa on the @IAPublicHealth site. Today that total on that date is 80. Yesterday that total was 79. The day before that it was 78 … WHAT GIVES?"

The next day it happened again. This wasn't an accident, this was how the system was designed.

Iowa

Shouting into the void
On May 30, Jones tweeted at the news site Iowa Starting Line, "@IAStartingLine did you know that the total daily cases you were reporting in March are now being reported by @IAPublicHealth as double that number now?"

Iowa

The state knew

On Aug. 19, in an interview with The Gazette, state epidemiologist Caitlin Pedati said that IDPH had known about the data problem since July but didn't fix it. In fact, the problem still isn't fixed.

Pedati tried to downplay the severity of the issue, but the reality remains: While the governor was pushing to send kids and teachers back to school, the state was actively hiding positive tests and refusing to answer questions from the press about it.

Iowa

And it wasn't just the "glitch." At a news conference on Aug. 27, Reynolds admitted that antigen tests, which are a different type of COVID-19 tests, were not being added to the positive case totals. The tests were added to the overall tests performed, but if they came back positive, were not added to the states positive totals. That's changing, but the fact that for months Iowans were misled about the reality of the virus in the state, that's a truth the state can't shuffle around on an Excel sheet.

Iowa

Meanwhile, Gov. Kim Reynolds was reopening the state using Iowa's low positivity numbers as justification for lifting bans on gatherings of 10 or more people, bars, restaurants, water parks.

Political numbers - ads and lawsuits
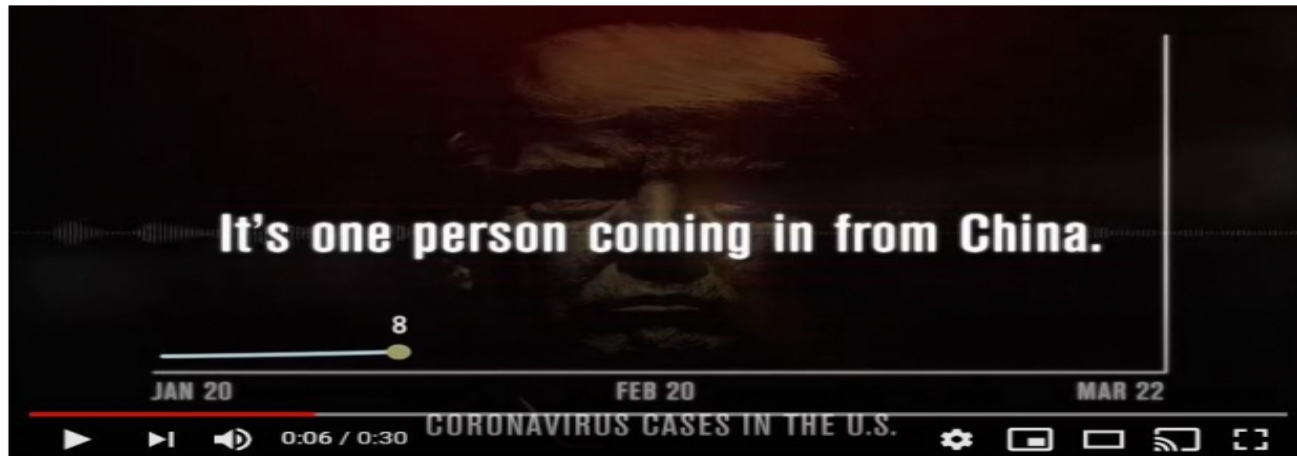
A screenshot of the ad "Exponential Growth" by Priorities USA. The Trump campaign announced Monday, April 13, 2020 its is suing Northwoods TV station WJFW-NBC for airing the ad.

Trump Campaign Sues Northwoods TV Station For Airing COVID-19 Attack Ad

Ads and lawsuits

One day, it's like a miracle, it will disappear.

10

JAN 20   FEB 20   MAR 22

CORONAVIRUS CASES IN THE U.S.

Wall Street Journal

U.S. | THE NUMBERS

Covid-19 Positivity Rate Might Not Mean What You Think It Does

Measure is important for tracking virus's spread and helping guide policy, but country lacks data standardization

POSITIVITY RATE
LAB CONFIRMED COVID-19 PATIENTS
7-DAY ROLLING AVERAGE

E	POSITIVE		DATE	POSITIVE

Wall Street Journal

But in the U.S., there are no standards for how states report the figure; it's sometimes calculated using duplicative or irrelevant data; and the meaning of the result is often misconstrued.

"It is not a measure of the percentage of the population that is infected or even a measure of the incidence of new cases," said Jennifer Nuzzo, an associate professor at the Johns Hopkins Bloomberg School of Public Health. "It's a measure of whether we're doing enough testing."

https://www.wsj.com/articles/covid-19-positivity-rate-might-not-mean-what-you-think-it-does-11599211800

Wall Street Journal

A low percentage is a sign that enough tests have been administered to ensure most infections have been detected and contained, interrupting the chain of transmission.

"It's a management tool," said Ron Fricker, a professor of statistics at Virginia Tech. "The idea is to try to test as widely as possible so that you're reasonably assured of catching most cases."

He compared it to netting fish.

"So long as you bring back fish, there are fish to catch," he said. "If you bring back a lot of fish, there are a lot to catch. If you bring back a few, you can be sure there are not many out there."

Wall Street Journal

Ideally, the rates would be calculated by dividing the number of people who test positive for Covid-19 in each state by the total number of people who have been tested there.

But because many states don't track the number of individuals tested, Johns Hopkins instead divides the number of cases by the sum of negative tests and cases.

The problem with basing positivity rates on tests rather than people is that some individuals are tested more than once, and duplicative results from successive tests can skew the result.

Wall Street Journal

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Wall Street Journal

"The direction of the numbers is more important than the absolute numbers," Dr. Nuzzo said. "If they're stable or declining, you feel confident. If they're rising, even if they're low, that tells you something."

The message?

Do more testing.

Johns Hopkins

If a community's positivity is high, it suggests that that community may largely be testing the sickest patients and possibly missing milder or asymptomatic cases. A lower positivity may indicate that a community is including in its testing patients with milder or no symptoms. The WHO has said that in countries that have conducted extensive testing for COVID-19, should remain at 5% or lower for at least 14 days.

Johns Hopkins

When states report the number of COVID-19 tests performed, this should include the number of viral tests performed and the number of patients for which these tests were performed. Currently, states may not be distinguishing overall tests administered from the number of individuals who have been tested. This is an important limitation to the data that is available to track testing in the U.S., and states should work to address it.

https://coronavirus.jhu.edu/testing/individual-states/illinois

Johns Hopkins

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Johns Hopkins

When states report testing numbers for COVID-19 infection, they should not include serology or antibody tests. Antibody tests are not used to diagnose active COVID-19 infection and they do not provide insights into the number of cases of COVID-19 diagnosed or whether viral testing is sufficient to find infections that are occurring within each state
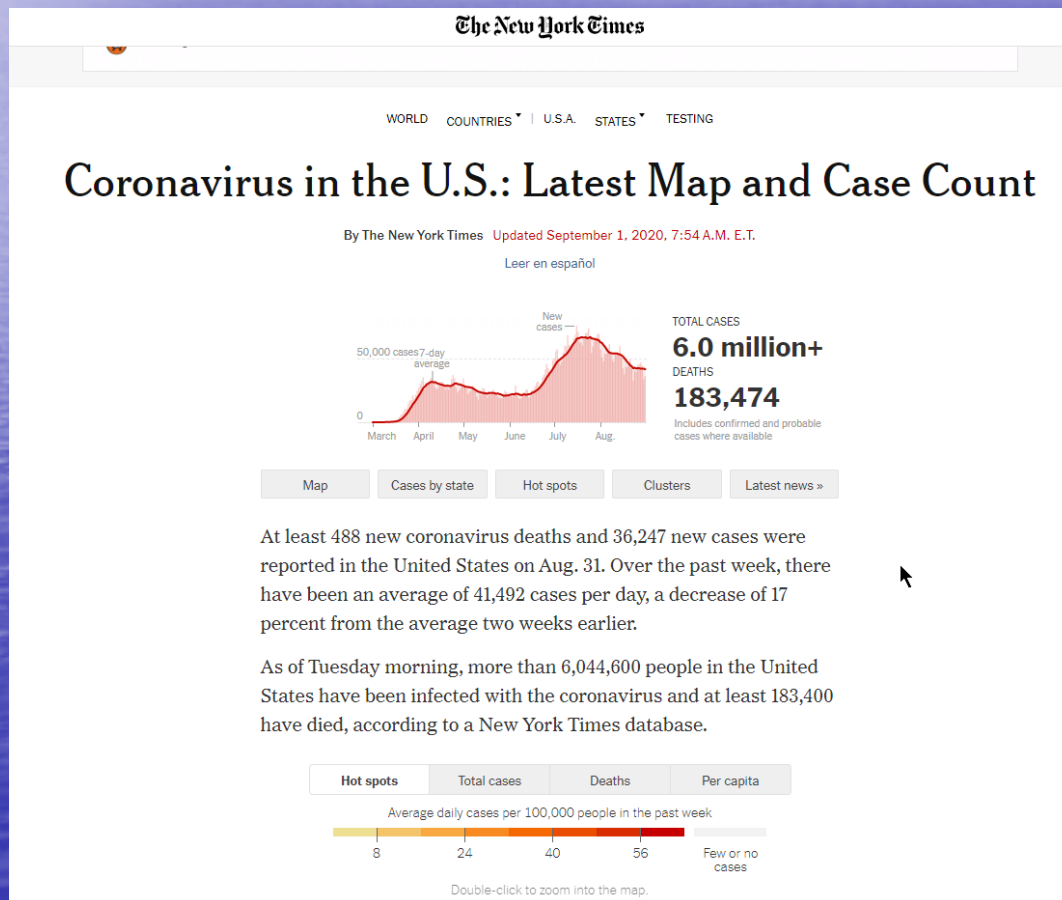
https://coronavirus.jhu.edu/testing/individual-states/illinois

Johns Hopkins

States that include serology tests within their overall COVID-19 testing numbers are misrepresenting their testing capacity and the extent to which they are working to identify COVID-19 infections within their communities. States that wish to track the number of serology tests being performed should report those numbers separately from viral tests performed to diagnose COVID-19.

Another data Source – New York Times

https://www.nytimes.com/interactive/2020/us/coronavirus-us-cases.html

Testing inaccuracy