



**BLOOMBERG  
HARVARD**

| City  
Leadership  
Initiative



# COVID-19

## SITUATION REPORT

January 28, 2021 | Joshua Sharfstein, MD

COVID-19 Dashboard by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University (JHU)

Global Cases

25,599,961

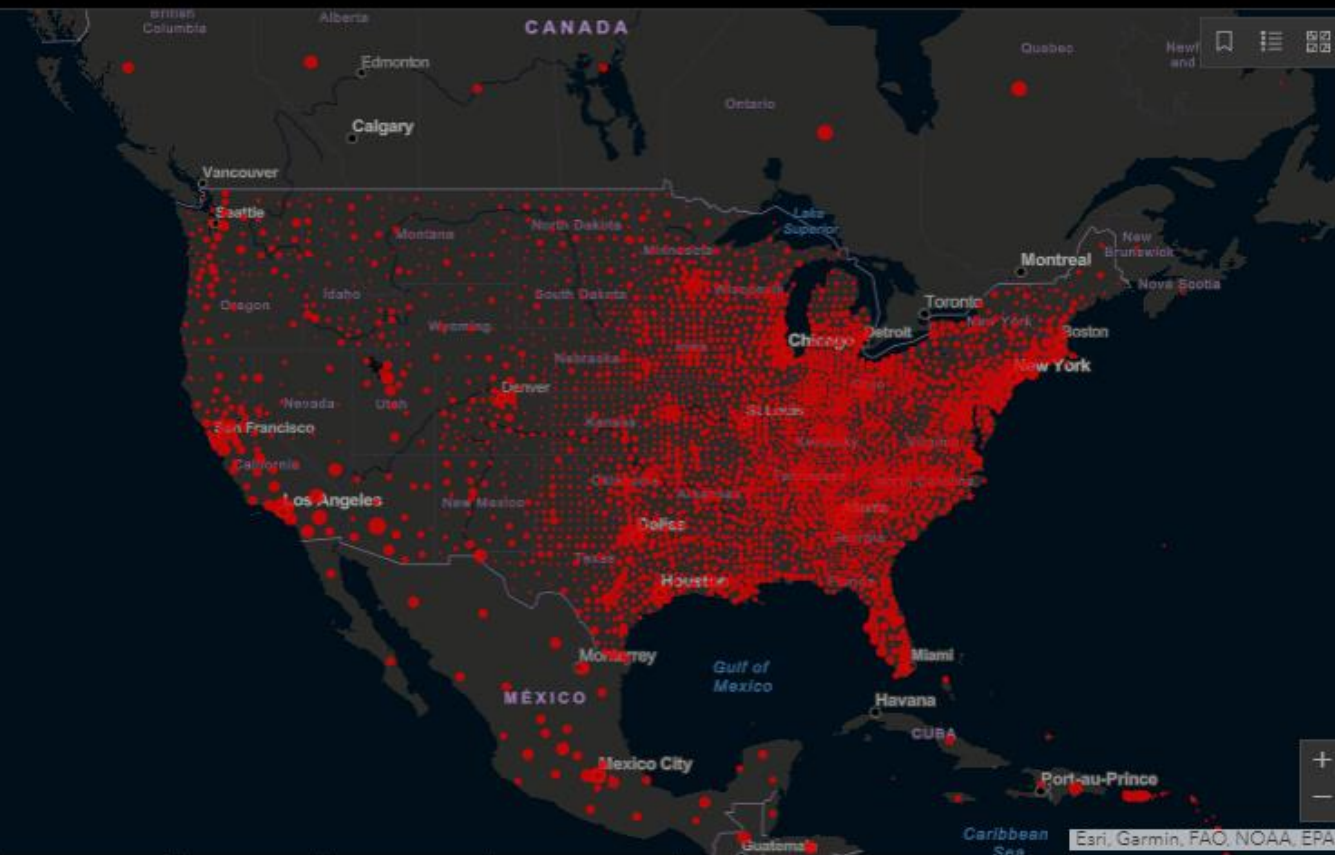
Cases by Country/Region/Sovereignty

25,599,961 US
10,701,193 India
8,996,876 Brazil
3,752,548 Russia
3,725,713 United Kingdom
3,165,604 France
2,670,102 Spain
2,501,147 Italy
2,449,839 Turkey
2,185,501 Germany
2,055,305 Colombia
1,896,053 Argentina
1,806,849 Mexico
1,496,665 Poland
1,430,648 South Africa

Admin0 Admin1 Admin2

Last Updated at (M/D/YYYY)

1/28/2021, 8:22 AM



Cumulative Cases Active Cases Incidence Rate Case-Fatality Ratio Testing Rate

192

countries/regions

Lancet Inf Dis Article: [Here](#). Mobile Version: [Here](#). Data sources: [Full list](#). Downloadable database: [GitHub](#), [Feature Layer](#). Lead by JHU CSSE. Technical Support: [Eri Living Atlas team](#) and [JHU APL](#). Financial Support: JHU, NSF, Bloomberg Philanthropies and Stavros Niarchos Foundation. Resource support: [Slack](#), [Github](#) and [AWS](#). Click [here](#) to donate to the CSSE dashboard team, and other JHU COVID-19 Research Efforts. [FAQ](#). Read more in this [blog](#). [Contact Us](#)

Global Deaths

429,214

429,214 deaths US

Global Deaths

US State Level Deaths, Recovered

42,887 deaths, 124,003 recovered New York US

38,817 deaths, recovered California US

35,877 deaths, 1,867,289 recovered Texas US

25,833 deaths, recovered Florida US

21,220 deaths, 66,173 recovered New Jersey US

21,032 deaths, 654,695 recovered

US Deaths, Recovered

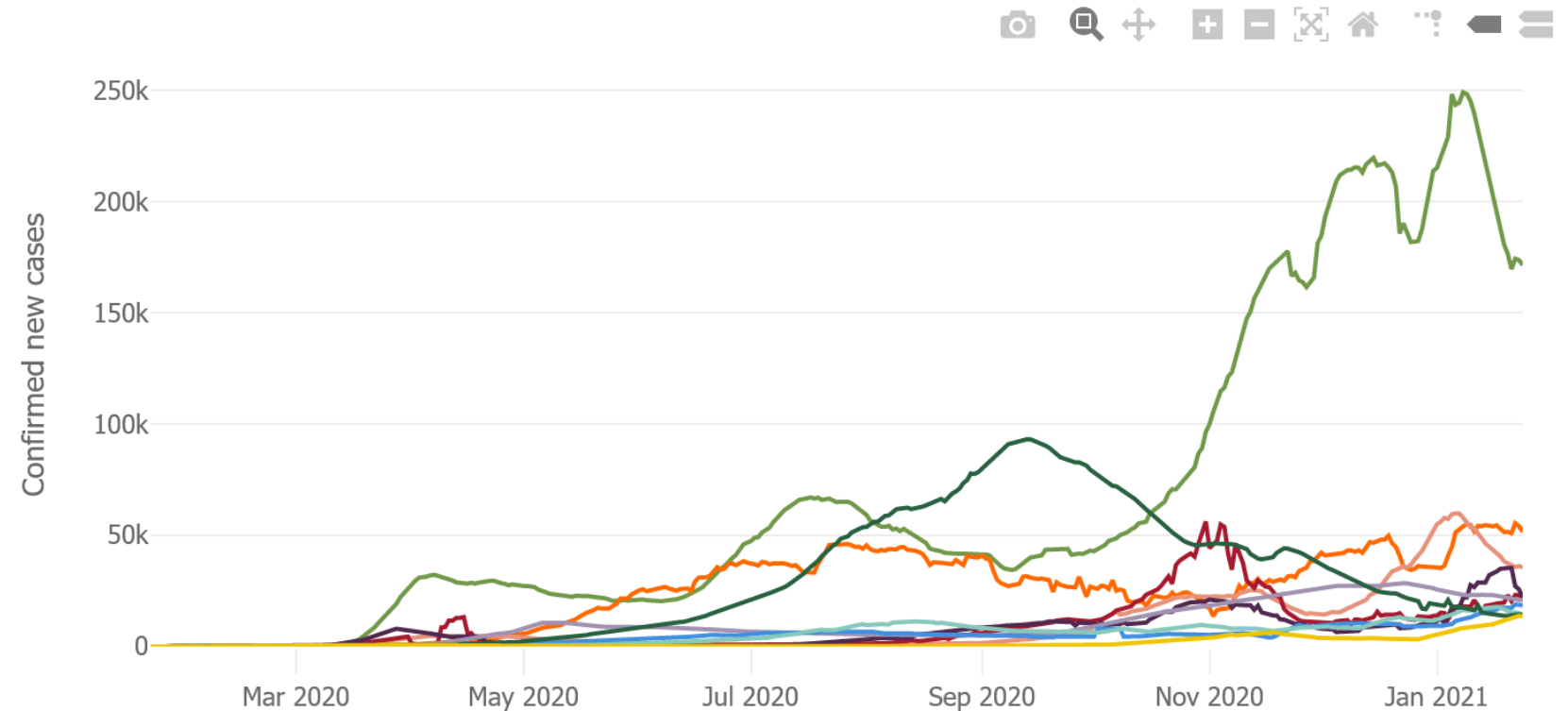


Daily Cases



# DAILY CONFIRMED NEW CASES (7-DAY MOVING AVERAGE)

Outbreak evolution for the current 10 most affected countries



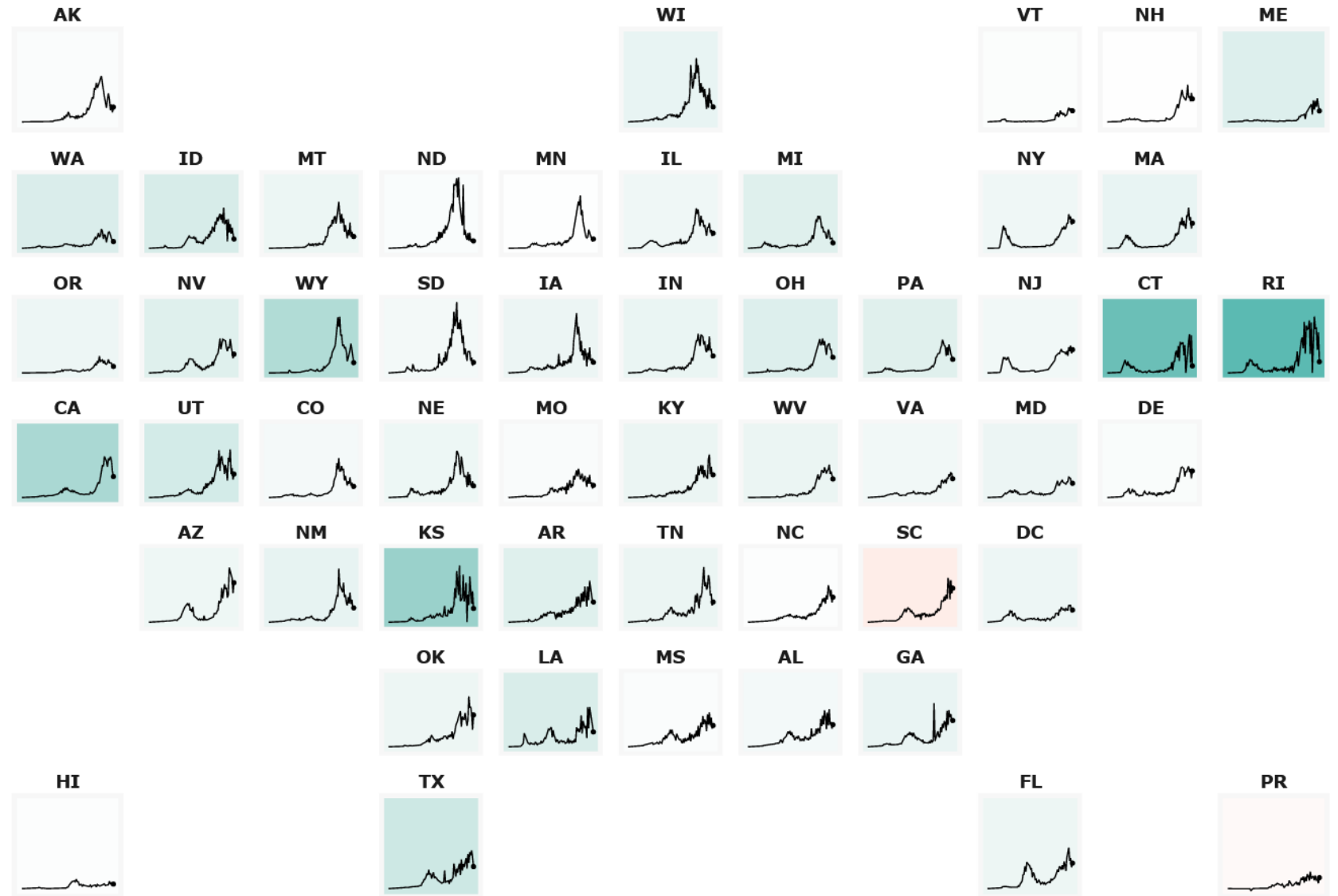
Click any country below to hide/show from the graph:

- |               |          |                |          |
|---------------|----------|----------------|----------|
| United States | Brazil   | United Kingdom | France   |
| Spain         | Russia   | Mexico         | Colombia |
| India         | Portugal |                |          |

Post-holiday peak subsiding



Daily New Cases per 100k people. Data shown from 1/22/20 to 1/24/21.



Many states stable or declining



# What's New This Week



## Vaccine Confusion

How many doses? Where will they be distributed? Who qualifies? How can I advise someone eager to be vaccinated?



## For Mayors

Be an advocate for your city, asking the state, hospitals, pharmacies and others to make eligibility guidelines and opportunities for vaccination clear.



# What's New This Week



## Equity & Vaccines

When demand is greater than supply, the most connected win the race to get vaccines. Those who lack internet, still have questions, or can't get to vaccine centers fall behind.



## For Mayors

Advocate for neighborhoods and communities hit hard by the pandemic to have vaccine access. Consider working with partners to launch mobile vaccine teams, bringing answers and vaccines to people at highest risk.





# COVID-19 Variant Viruses

Andrew Pekosz, PhD

PROFESSOR, MOLECULAR MICROBIOLOGY AND  
IMMUNOLOGY | JOHNS HOPKINS UNIVERSITY  
BLOOMBERG SCHOOL OF PUBLIC HEALTH



# What is a virus variant?

Viruses are always mutating and taking on new forms, and some COVID-19 variants are highly transmissible

---

## UK VARIANT

---

- Emerged in September 2020 in Kent, England
- Contains an unusually high number of mutations compared to most other COVID viruses

---

## BRAZIL AND SOUTH AFRICAN VARIANT

---

- Have mutations that may reduce antibody binding
- Unclear whether they transmit at a faster rate

---

## OTHER VARIANTS – *EXAMPLE: 484*

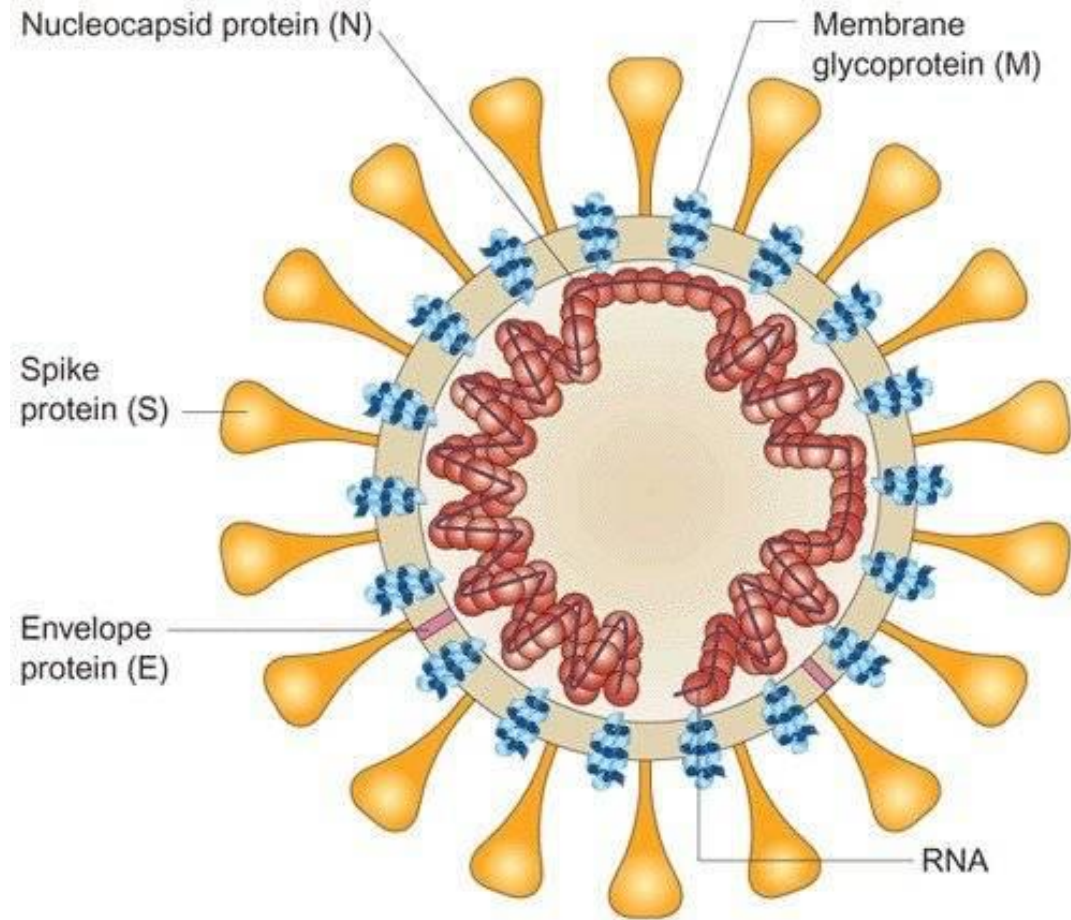
---

- Have mutations that may reduce antibody binding
- Are not related to the above variants and appear to be new



All viruses mutate at a particular rate, and COVID-19 appears to mutate every week or so

How did this virus variant happen?



Do virus variants mean COVID-19 is more contagious and/or harmful?

---

## VARIANTS AND SPREAD

---

Some COVID-19 variants seem to spread more easily than older COVID-19 viruses

---

## MUTATIONS AND TRANSMISSION

---

While mutations are making the virus more transmissible and therefore cases are increasing, **it does not appear to be more fatal**

---

## BUT MORE CASES MEAN PROPORTIONALLY MORE SEVERE CASES

---

**More cases will result in more hospitalizations** and deaths, even if the virus isn't causing more severe disease



Masks, physical distancing, avoiding crowds, etc. need to be strengthened to help stop the spread of COVID-19



# Will the vaccine still protect against the COVID-19 variants?


 The New York Times

## Is the Covid-19 Vaccine Effective Against New South African Variant?

As the coronavirus assumes contagious new forms around the world, two drug makers reported on Monday that their vaccines, while still ...

1 day ago

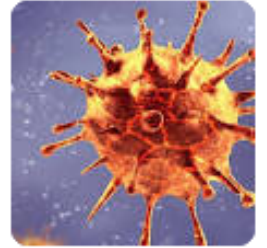


 BBC News

## Moderna vaccine appears to work against variants

Moderna's Covid vaccine appears to work against new, more infectious variants of the pandemic virus found in the UK and South Africa, say ...

1 day ago



Current vaccines will still work against the new variants, but might not work as efficiently

Need to continue to track the new variants to determine whether changes to the vaccine are necessary



If you've already had COVID-19, are you still **susceptible** to the new virus variants?



Immunity from COVID-19 infection recognizes new variants



**BUT,**

being vaccinated provides a person with more protection than immunity from being infected with COVID-19

**Getting a vaccination even after being infected is recommended**



# What Can Mayors Do Now?

## Much of the Same.



Continue to **promote social distancing** measures

---



Direct constituents to **sign up for vaccines**

---



**Communicate clearly** with nervous and exhausted public that current vaccines still work against the new variants



Continue to **coordinate** with your state/county about vaccine distribution so you are ready in case new vaccine guidance comes out regarding the new variants

---



**Check with public health authorities** to see whether they are testing and sequencing enough samples to detect new variant spread

---



**Stronger public health interventions** may be needed if new variants are spreading more rapidly