



# *The Current State of Pandemic Unreality*

Dr. James Dobbins  
*OLLI, 17 June 2021*

# Outline for Today's Discussion

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- The current state of the pandemic – is it really over?
- Vaccine-induced immunity – will boosters be necessary?  
Annual shots?
- Vaccine-induced paranoia – would free beer help as an inducement?
- The origin of the SARS-2\* virus – natural emergence or created in a lab?

\*SARS-CoV-2 virus

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The Current State of the Pandemic – is it Really Over?

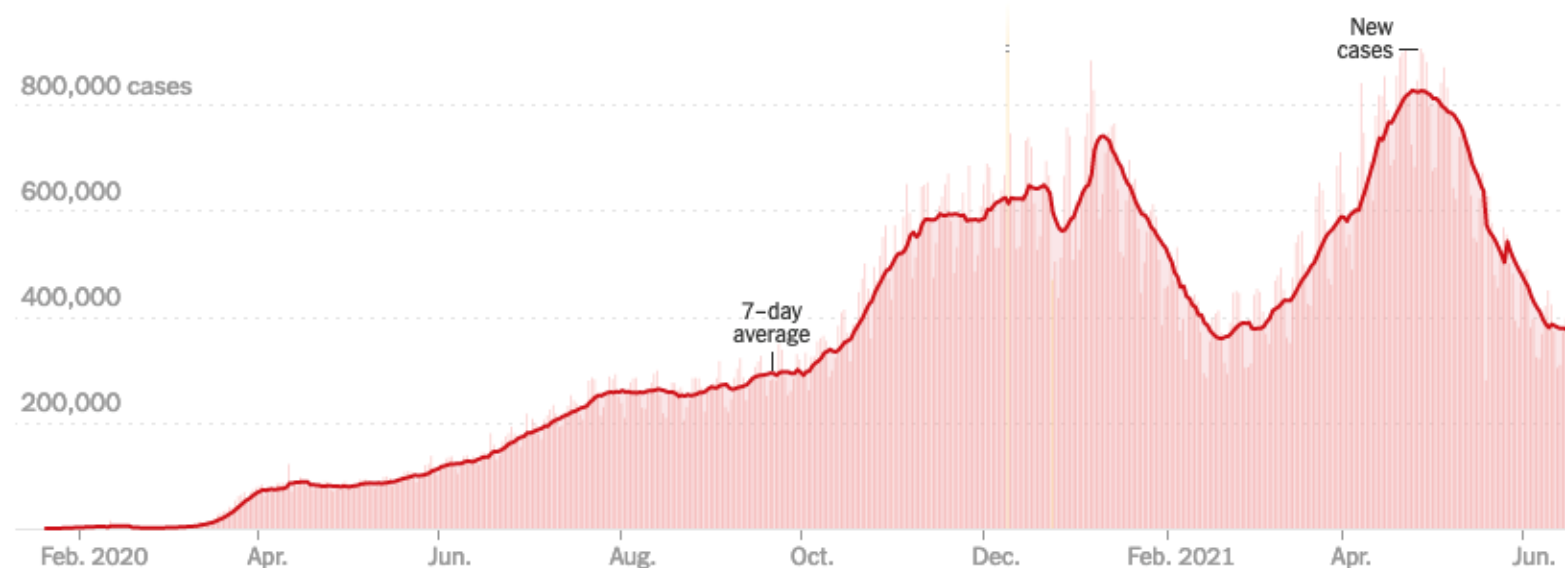
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*IT'S NOT OVER YET!!!*

# Coronavirus World Map: Tracking the Global Outbreak

Updated June 17, 2021

## New reported cases



■ These are days with a reporting anomaly. Read more [here](#).

	AVG. ON JUN. 16	14-DAY CHANGE	TOTAL REPORTED
Cases	374,707	-19%	177,022,372
Deaths	10,797	-5%	3,832,652

[About this data](#)

## State of the virus

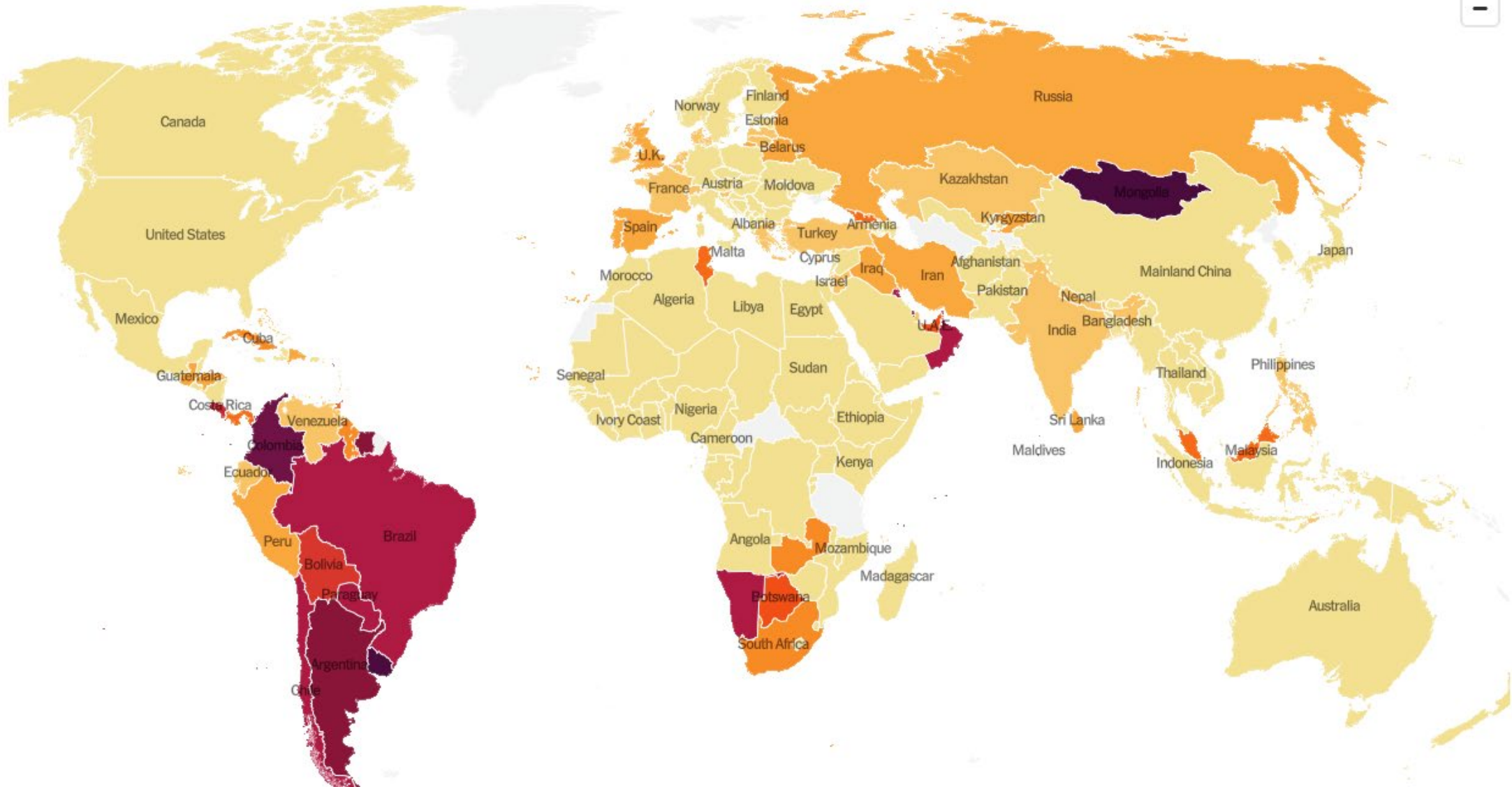
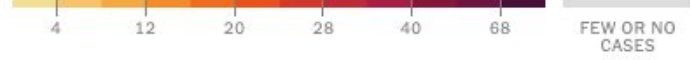
Update for June 10

- South America is being hit harder than any other continent, with nearly all of its countries having among the highest rates of new infections and deaths.
- The European Union has joined the United States in demanding [an investigation into the origins of the pandemic](#), heightening tensions with China, as experts become steadily more open to the theory that the virus could have escaped from a lab in Wuhan.
- The United States says it will buy [500 million doses of the Pfizer-BioNTech vaccine](#) for distribution to 100 low- and middle-income countries - the biggest commitment any country has made so far, but still only enough to fully vaccinate 3 percent of the world's population.

[Read more](#)

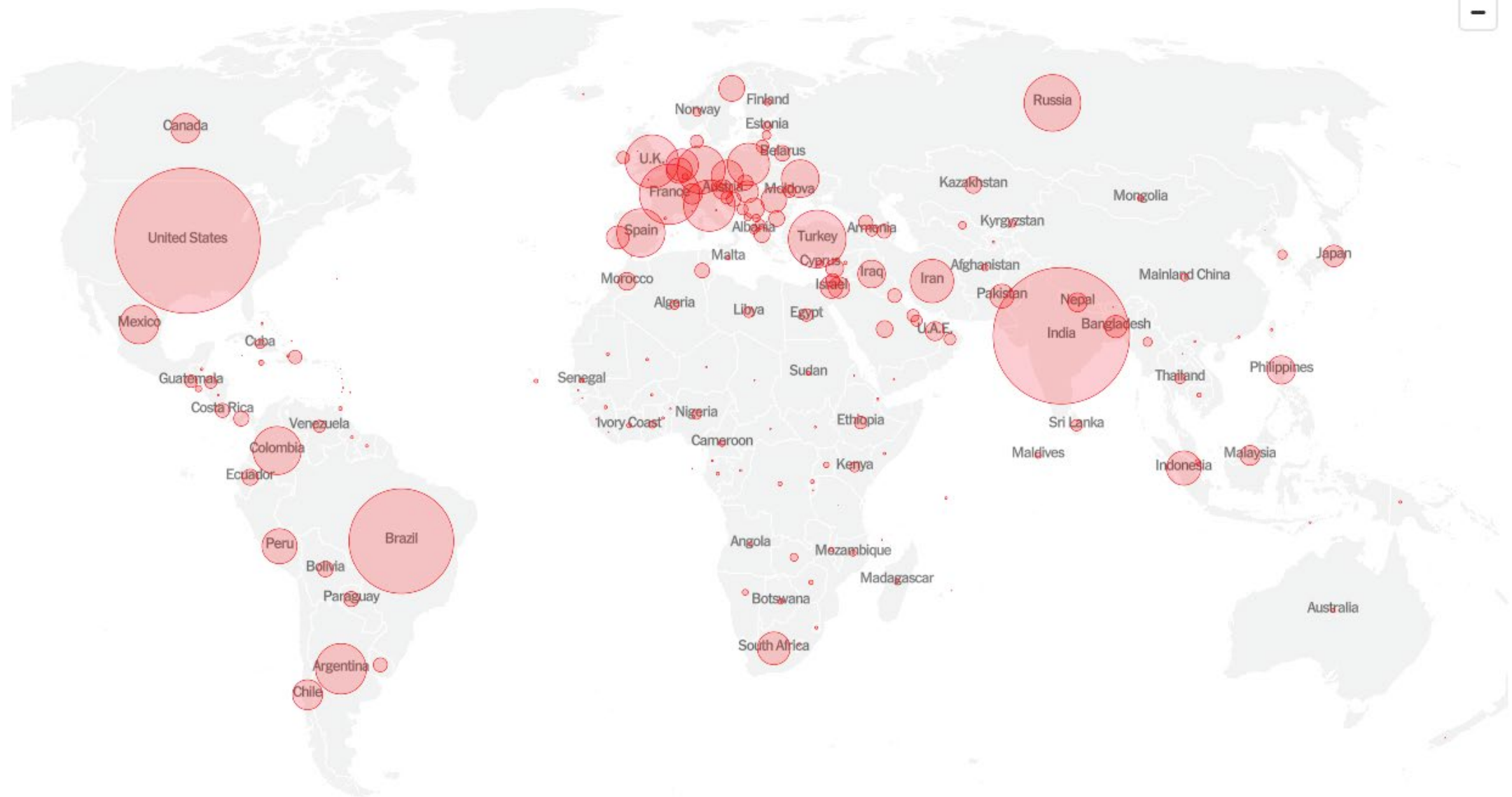
# Hot spots

AVERAGE DAILY CASES PER 100,000 PEOPLE IN PAST WEEK



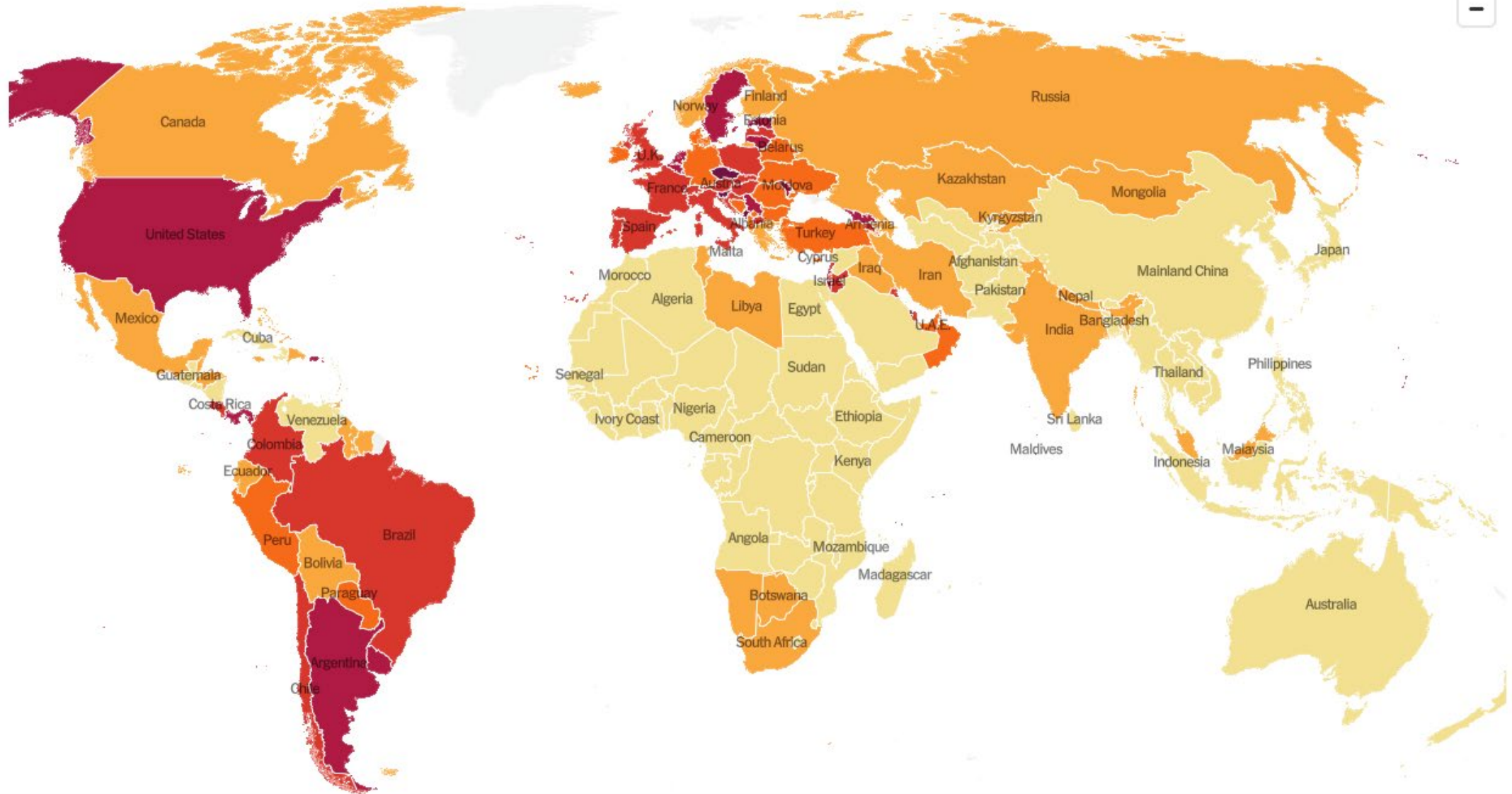


# Total cases



# Cases per capita

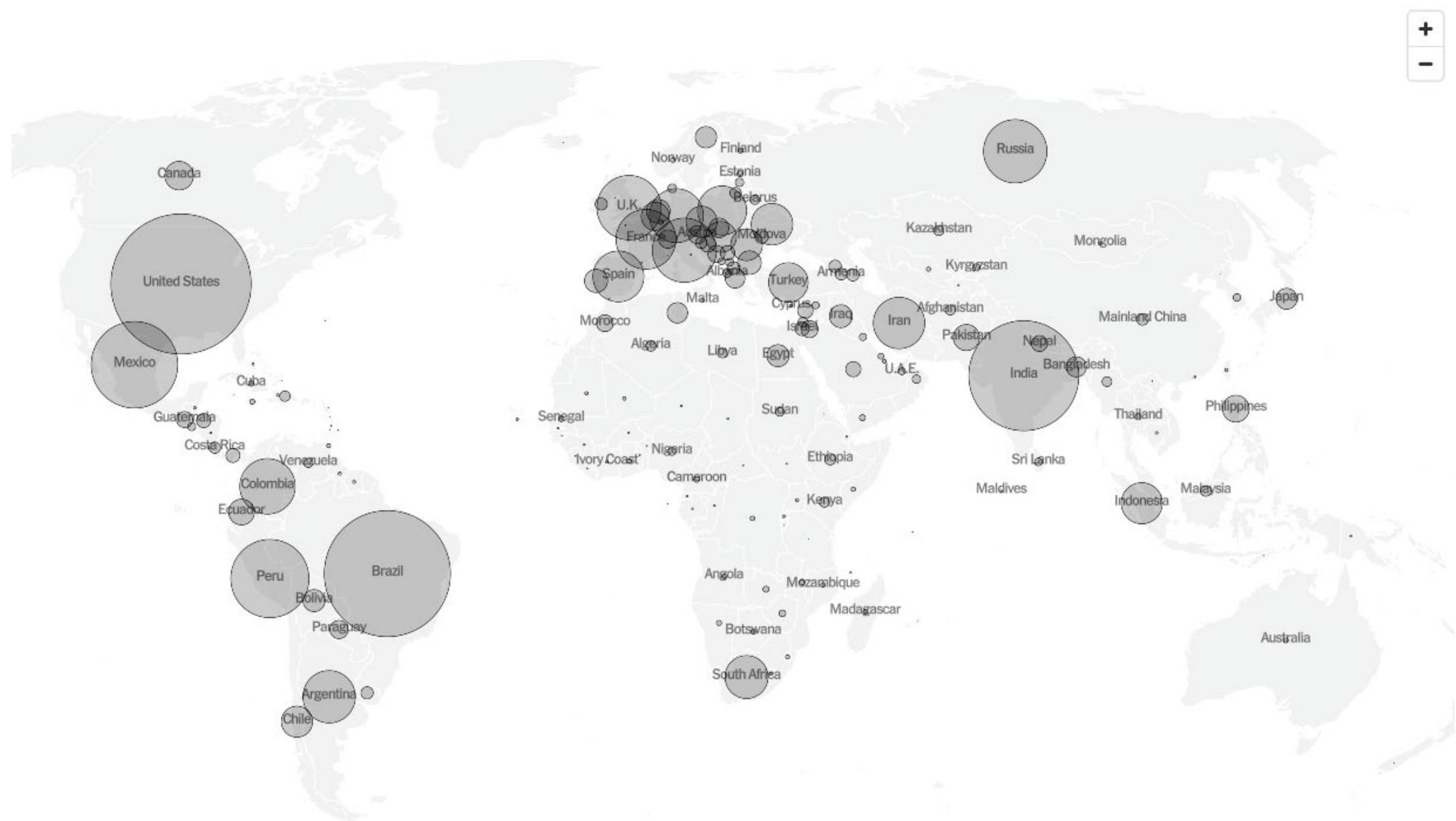
SHARE OF POPULATION WITH A REPORTED CASE





# Total deaths

100 • • • ○ 100,000



# Coronavirus in the U.S.: Latest Map and Case Count

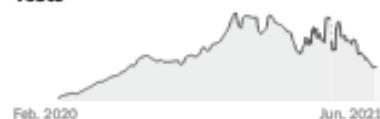
Updated June 17, 2021

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## Tests



## Hospitalized



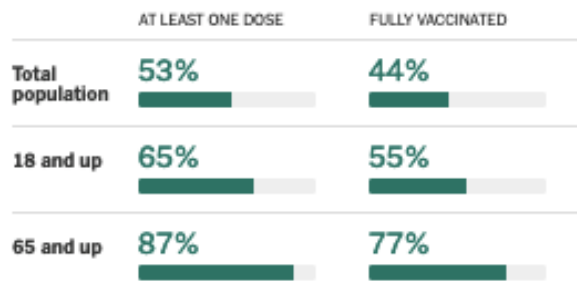
## Deaths



	AVG. ON JUN. 16	14-DAY CHANGE	TOTAL REPORTED
Cases	12,819	-21%	33,465,570
Tests	718,776	-22%	—
Hospitalized	18,873	-23%	—
Deaths	332	-20%	600,244

[About this data](#)

## Vaccinations



[See more details >](#)

[About this data](#)

## State of the virus

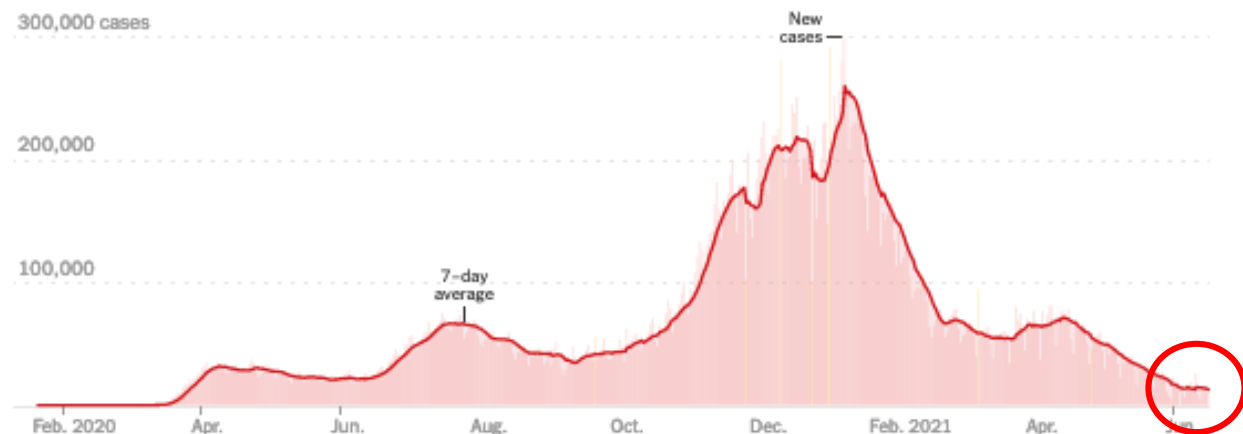
Update for June 16

- The United States has been averaging fewer than 15,000 cases a day since early June, the lowest totals since testing became widely available.
- The United States surpassed 600,000 known coronavirus deaths on Wednesday. Around 350 deaths are being reported each day, the fewest since March 2020.
- The pace of [vaccination](#) has slowed considerably, to around a million doses a day, down from a peak of more than 3.3 million doses a day in mid-April.

# Coronavirus in the U.S.: Latest Map and Case Count

Updated June 17, 2021

## New reported cases



These are days with a reporting anomaly. Read more [here](#).

## Tests



## Hospitalized



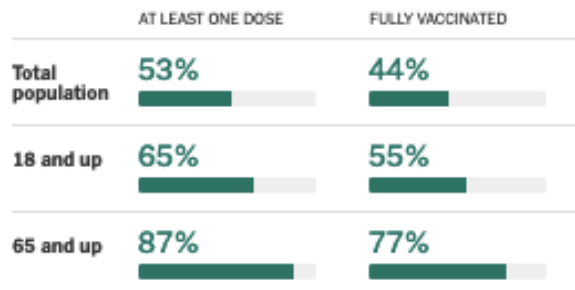
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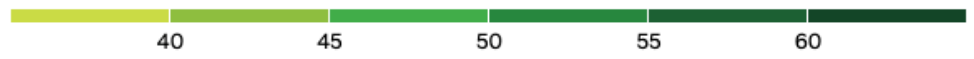
[About this data](#)

## State of the virus

Update for June 16

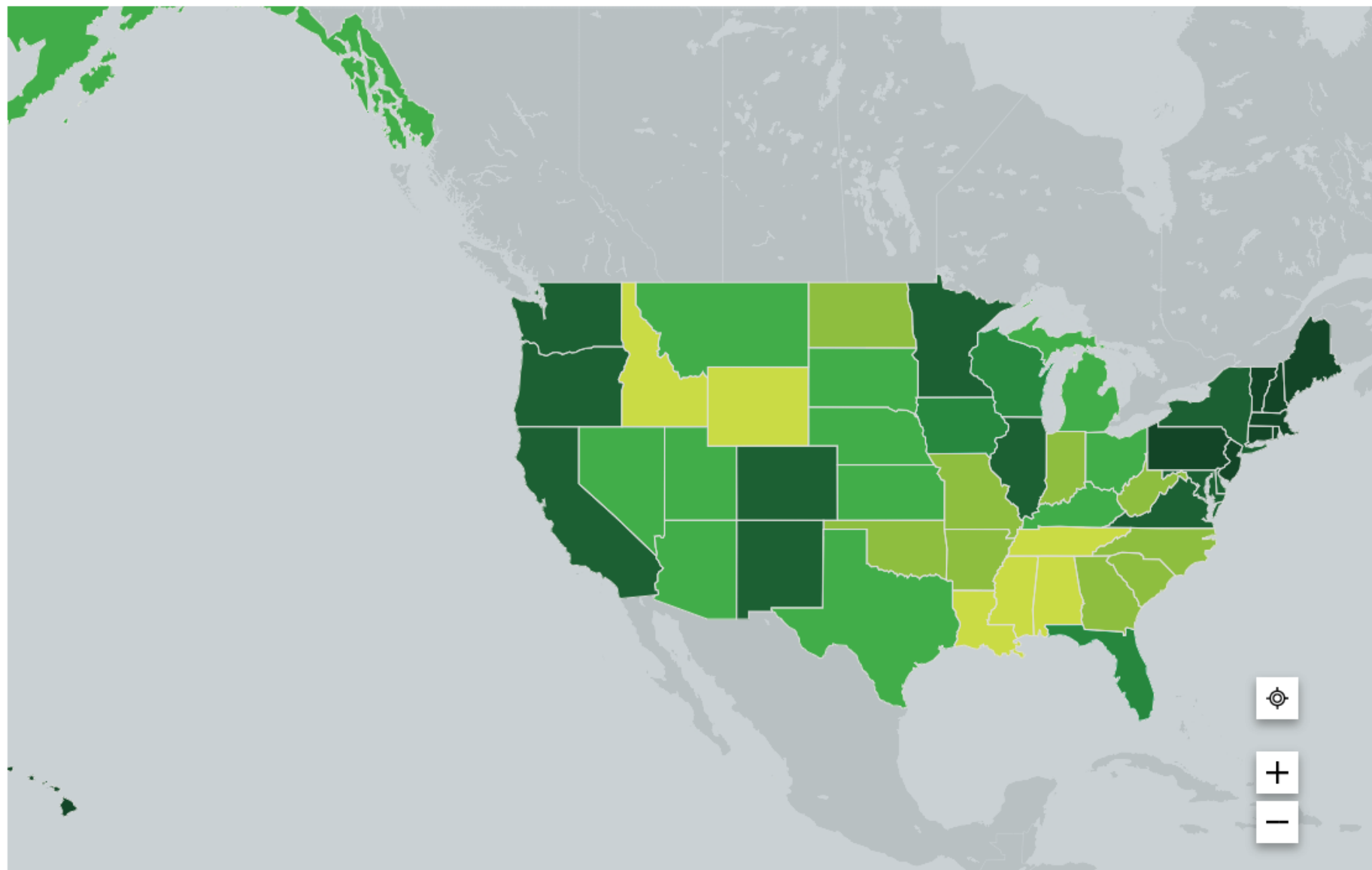
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Percentage of state population vaccinated



● At least 1 dose

○ Fully vaccinated

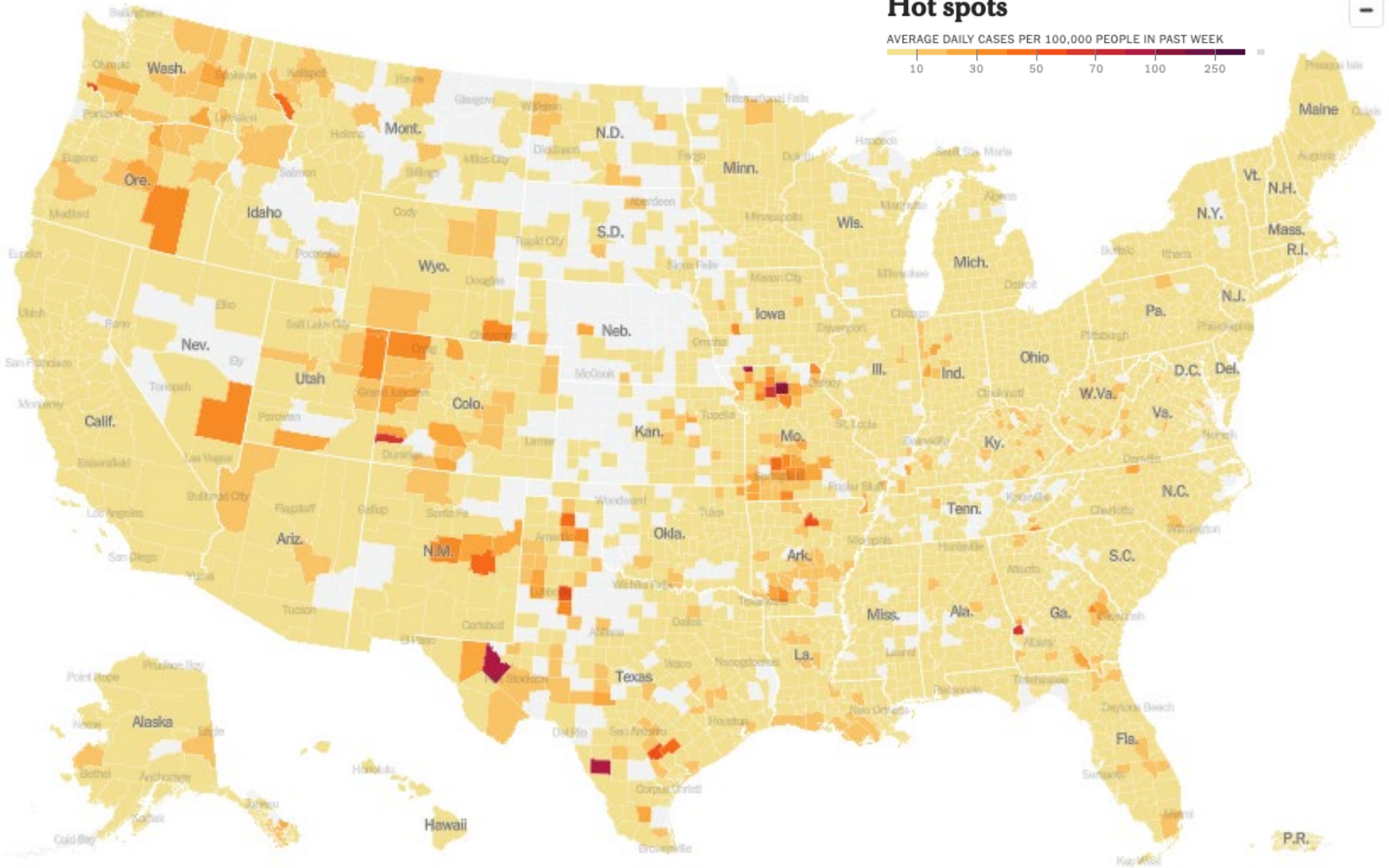






# Hot spots

AVERAGE DAILY CASES PER 100,000 PEOPLE IN PAST WEEK





# What Stopped the Outbreak?

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- I believe that social distancing and masking were highly effective in reducing the number of cases of Covid-19
  - This would include both local social distancing and reduced domestic and international travel
  - I also think that natural immunity from repeated earlier infections with mild coronaviruses played a part in this reduction, contributing to herd immunity
- Now, high vaccine coverage and continued testing should prevent any major outbreaks after social distancing has ended

# Tracking Coronavirus in Illinois: Latest Map and Case Count

Updated June 17, 2021

## New reported cases



These are days with a reporting anomaly. Read more [here](#).

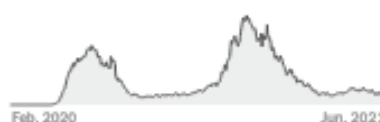
## Tests



## Hospitalized



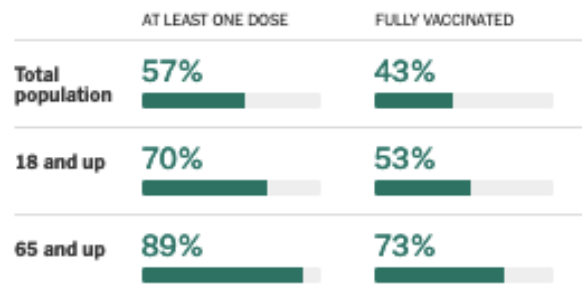
## Deaths



	AVG. ON JUN. 16	14-DAY CHANGE	TOTAL REPORTED
Cases	294	-57%	1,392,390
Tests	31,557	-21%	—
Hospitalized	716	-38%	—
Deaths	17	-36%	25,531

[About this data](#)

## Vaccinations



[See more details >](#)

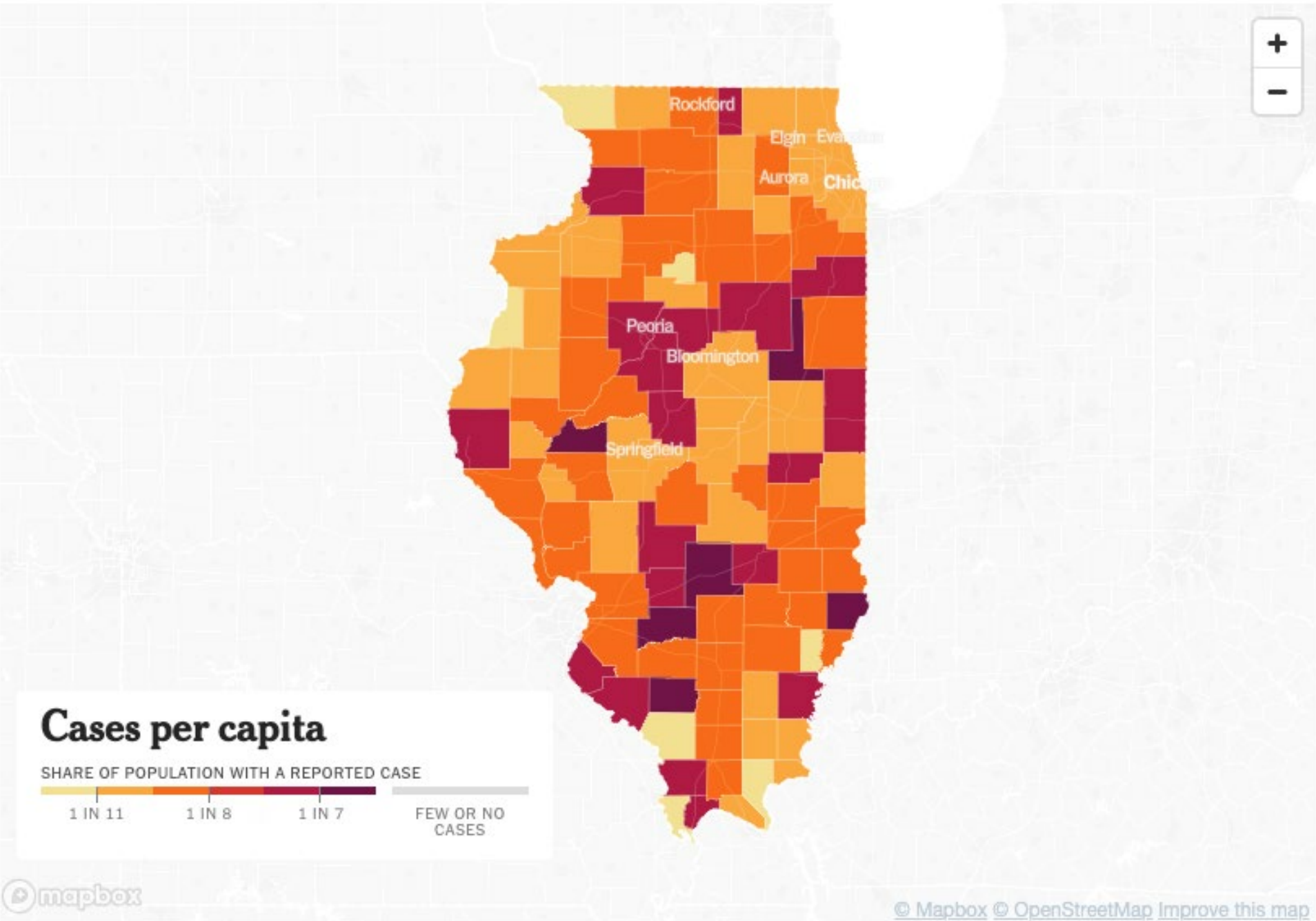
[About this data](#)

## Restrictions >

### Reopened

Masks required indoors for the unvaccinated

Gov. J.B. Pritzker, a Democrat, moved the state into Phase 5 of reopening, which removed capacity limits, on June 11. [More details >](#)



# New cases and deaths

From [The New York Times](#) · Last updated: 13 hours ago

New cases ▾

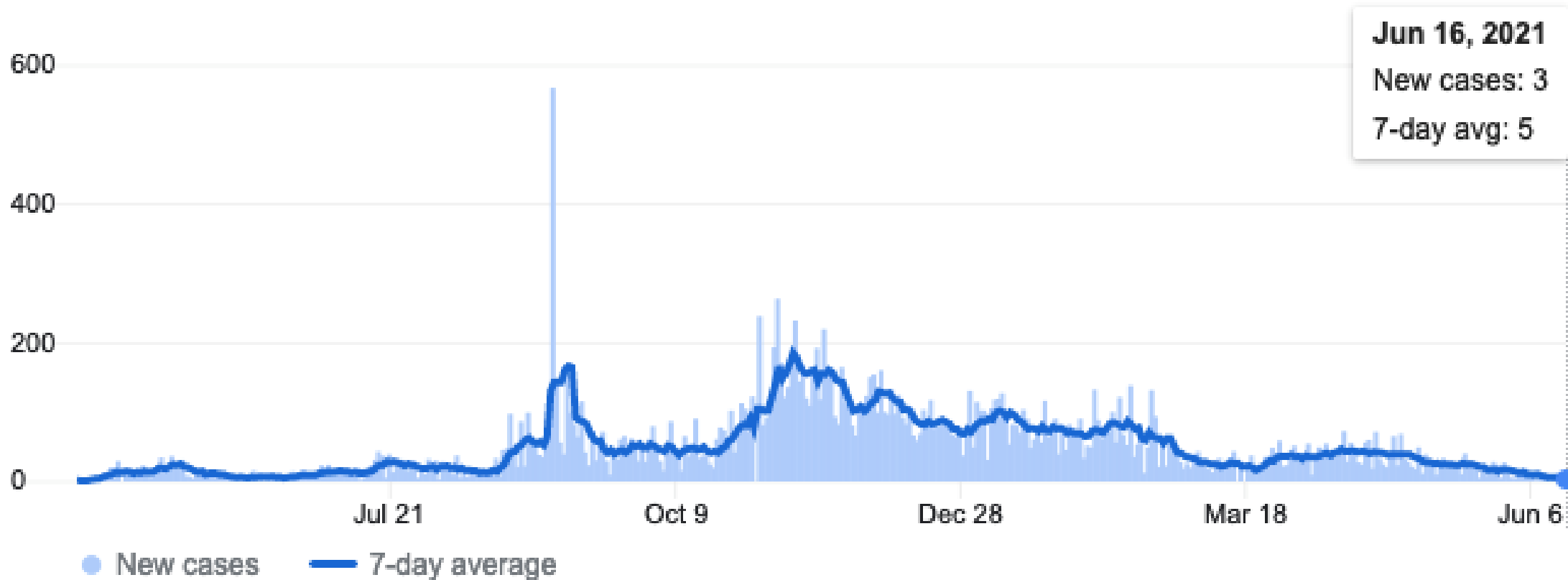


United States ▾

Illinois ▾

Champaign County ▾

All time ▾



● New cases    — 7-day average

Each day shows new cases reported since the previous day · [About this data](#)

# Tracking Coronavirus in Champaign County, Ill.



Because of high Covid-19 transmission in Champaign County, unvaccinated people are at a **high risk**. Vaccinated people are at minimal risk.

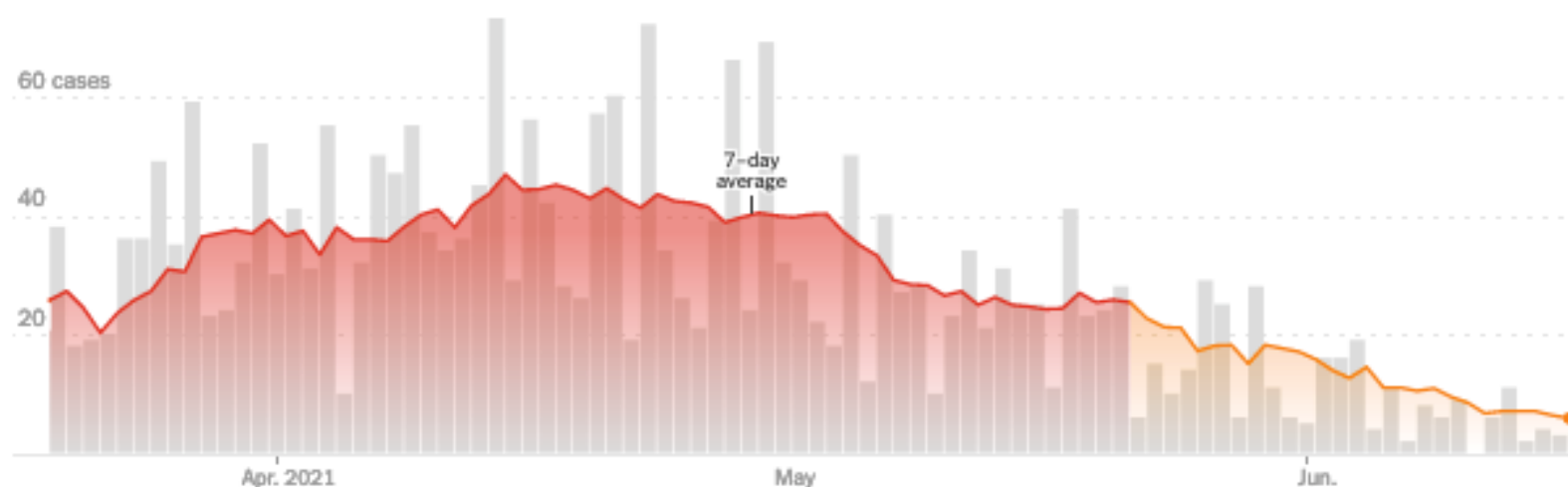
[See what's safe to do](#) [Full national map](#) >

The risk for unvaccinated people is based on cases per capita and test positivity.



## New reported cases by day

TOTAL ON JUN. 16 **3** 14-DAY CHANGE **-58%**



### Hospitalized

14-DAY CHANGE

-29%

### Deaths

LAST TWO WEEKS

6

### Test positivity

14-DAY AVG.

1%



# The Future for Champaign County

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- We will probably continue to see sporadic cases throughout the summer and into the fall
- The virus will continue to come into the county because of high national and international travel, especially to the university
- High vaccine coverage and rapid testing should prevent any major outbreaks
- Minor clusters of disease could occur because of the lack of precautions in restaurants, bars, and venues

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Vaccine-Induced Immunity – Will Boosters be Necessary?

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# Vaccine-Induced Immunity – Will Boosters be Necessary?

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- We currently do not know if boosters will be necessary
- We currently do not know if a different vaccine will be necessary because of future variants
- We currently do not know if annual vaccination will be necessary because the virus might become seasonal
- We currently do not know how long natural immunity will last

# What we Know so Far

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- No evidence of waning immunity among participants in the early vaccine trials
- The present vaccines appear to be working extremely well against the currently circulating variants
- There is absolutely no reason that I know of to assume that SARS-2 will circulate seasonally
- No evidence of waning immunity among people who developed Covid-19

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Vaccine-Induced Paranoia – Would Free Beer Help?

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# Vaccine-Induced Paranoia – Would Free Beer Help?

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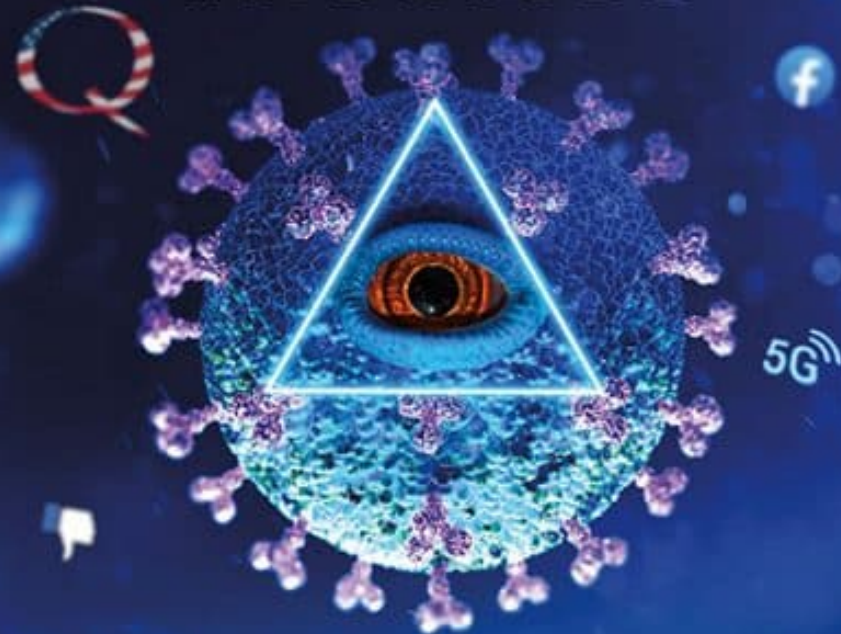
- Many of the remaining unvaccinated individuals simply have not been convinced that the vaccine is both safe and effective
- No amount of educating and reasoning with these people will have a great effect on vaccine coverage
- Other unvaccinated people simply don't see the vaccine as being necessary or worth the effort
- Lotteries and give-aways have been highly effective as inducements to those who are simply unmotivated
- So yes, free beer would help

# Some Popular Paranoid Delusions

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- The vaccines will change people's DNA
- The vaccines contain a chip from Bill Gates that will link to the 5G telephone network to track people
- The vaccines can cause the body to become magnetic
- Plus the usual suspects – the Illuminati, Knights Templar, Jewish bankers, the Clintons, Comet Ping Pong Pizza, *etc.*

# Covid-19 Conspiracy Theories



**QAnon, 5G, the New World Order  
and Other Viral Ideas**

**John Bodner, Wendy Welch, Ian Brodie,  
Anna Muldoon, Donald Leech and Ashley Marshall**

*Foreword by Anna Merlan*

# Vaccine-induced Magnetism



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# The Origin of the SARS-2 Virus – Natural Emergence or Created in a Lab?

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# The Origin of the SARS-2 Virus – Natural Emergence or Created in a Lab?

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- Two competing hypotheses:
  - Natural evolution from a bat virus to another animal species and then to humans
  - Deliberately created in a laboratory as part of “gain-of-function” research on potential emerging viruses

# Spoiler Alert!

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- All of the evidence both for and against these two hypotheses is circumstantial
- There is no smoking gun
- You will have to consider the facts that I will present today and then decide for yourselves as to what might have taken place



# First, a Clarification...

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- The so-called “lab-leak” hypothesis actually refers to two separate actions:
  1. The creation of a new SARS virus in the lab
  2. The escape (“leak”) of this new virus from the lab
- Note, however, that naturally occurring specimens taken from earlier cases of an unknown respiratory illness could also produce the same result

# Second, Some Important Terms...

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- Gain-of-Function research
- Chimeric viruses
- Furin cleavage site
- Geography of China
- BSL-1, -2, -3, -4

# Gain of Function Research

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- “Gain of Function” is a euphemism for the process of creating a new virus that is either more lethal or more infectious, or both
- This process was made possible by the development of gene-editing tools such as CRISPR –
- Genes for more dangerous functions of a virus are spliced into an existing viral genome to accomplish this goal
- This type of research has been carried out during the last twenty years under the pretext of identifying new viruses that *might* emerge in nature, and then being able to develop vaccines against them (note that no vaccines have actually been developed)

# Chimeric Viruses

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- These new viruses are called “chimeric” viruses
- Chimeric viruses are created by combining portions of the genome from two or more viruses
- The phenomenon happens in the laboratory as well as in nature
- The new, chimeric virus may be more or less virulent than the progenitor viruses

# The Chimera in Mythology



# Furin Cleavage Site (FCS)

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- The spike protein, S, on SARS-2 consists of two subunits, S1 and S2
- S1 binds the virus to the target cell, while S2 fuses the virus to the cell membrane, allowing viral RNA to enter the cell
- The S1 and S2 subunits need to be separated (“cleaved”) in order to carry out these two separate functions
- The presence of an FCS between the two subunits increases the efficiency of the cleavage
- The SARS-CoV-2 virus has an FCS; no other SARS-like coronaviruses have an FCS



# The Geography of China





# Intermediate Horseshoe Bat



# Biosafety Levels in Laboratory Practices

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- BSL-1: For non-hazardous agents; no special equipment
- BSL-2: For moderately hazardous agents; need biological safety cabinet only if generating aerosols
- BSL-3: For known hazardous agents; all work conducted in a biological safety cabinet
- BSL-4: For dangerous or exotic agents; all work is done in an enclosed safety cabinet or in a sealed room working in full-body suits with air supply

# Biosafety Level 1



## Biosafety Level 2



# Biosafety Level 3



1089636134

# Biosafety Level 4





# Biosafety Level 4



GETTY IMAGES

Chinese virologist Shi Zhengli is seen here inside the laboratory in Wuhan



# Important Discussion Points in Understanding the Debate on the Origin of SARS-2

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- The nature of the SARS-2 virus
- Past work conducted at the Wuhan Institute of Virology (WIV)
- Present work at WIV on GoF
- The role of NIH and NIAID in GoF studies at WIV
- The role of EcoHealth Alliance in GoF studies at WIV
- The arguments for and against the two competing hypotheses
- Why was the lab-leak hypothesis immediately dismissed?

# The Nature of the SARS-2 Virus

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- SARS-2 is a beta coronavirus that is most closely related...96.2%...to a bat virus, RaTG13, reportedly found by Dr. Shi in the Yunnan caves
- Both SARS-2 and RaTG13 viruses can directly and readily infect human cells but are not as efficient in bat cells
- SARS-2 genome contains the coding for a furin cleavage site, but the genetic code is written using codons normally used in human viruses, not bat viruses
- No other beta coronavirus contains a furin cleavage site

# Past Work Conducted at WIV

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- Dr. Shi has worked on coronaviruses for the past 20 years
- She was the one who discovered that SARS-1 was a bat virus
- Over the years, she and her colleagues continued to visit the Yunnan caves, collecting over 100 species of bat coronaviruses
- In 2015, Dr. Shi visited the lab of Dr. Ralph Baric at the University of North Carolina, where she learned how to create chimeric viruses that could attack human cells

# Recent Work on GoF at WIV

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- Beginning in 2015, Dr. Shi received an NIH research grant through the EcoHealth Alliance to conduct research on chimeric coronaviruses
- According to her grant proposal, she intended to create new viruses and then see which ones were most capable of infecting human lung cells
- An early chimeric virus was a combination of SARS-1 with the addition of the genome for the spike protein from a bat coronavirus – SHC014-CoV/SARS-1

# The Role of NIH and NIAID in Funding GoF Research

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- NIAID began funding GoF research over 20 years ago
- The funds went to virology labs all over the U.S. and to a number of labs in foreign countries, including WIV
- Funding was “paused” in 2014 over safety concerns, although most grants continued under exemptions
- Funding was resumed in 2017 and an additional \$87 million was allocated to the grantees, including WIV
- When asked repeatedly during congressional testimony on May 11, 2021, Dr. Fauci, the head of NIAID, denied that GoF research was being funded



# The Fall of St. Anthony?



# The Role of EcoHealth in Funding GoF Research

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- The primary contractor for the NIH GoF contracts
- The funds were then distributed to virology labs
- EcoHealth Alliance is run by Dr. Peter Dazak, a strong supporter of GoF research



# Evidence for the Natural Emergence Hypothesis

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- Two other recently-emerged beta coronaviruses, SARS-1 and MERS, evolved from bat viruses that passed through other animal species and then to humans
- At first, the Covid-19 outbreak appeared to have begun at a wet market where wild animals were being sold, just as was the case for SARS-1

*[Note that subsequent surveillance identified numerous early Covid-19 cases in people who had never been to the wet market in Wuhan]*

# Evidence Against the Natural Selection Hypothesis

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- No evidence has been found of prior infection with SARS-2 virus in bats, other animals, or humans
- There was no evolution of the virus as the pandemic continued – it was already perfectly adapted to infect human cells from the beginning
- The outbreak began in Wuhan, a thousand miles from the caves in Yunnan Province
- No logical explanation for the presence of the furin cleavage site

# Argument for the Lab Leak Hypothesis - 1

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- GoF research at WIV was conducted to produce viruses exactly like SARS-2 *[according to NIH grant proposals]*
- This would explain the presence of the FCS in SARS-2, which had been inserted into other viruses by Dr. Shi *[as described in her publications]*
- It would also explain the presence of genetic code that is usually seen in human viruses, not bat viruses

# Argument for the Lab Leak Hypothesis - 2

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- The WIV chimeric viruses were tested on human lung cells and on mice with “humanized” lung cells
- The SARS-2 virus was fully evolved to infect human lung cells from the outset of the epidemic in Wuhan; it did not change
- SARS-1 evolved as it passed from bats to civets to humans, and then as it circulated among human populations

# Argument for the Lab Leak Hypothesis - 3

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- Work with these new, chimeric viruses used only BSL-2 and BSL-3 precautions *[according to publications by Dr. Shi]*
- Three laboratory workers from the lab became ill in early November 2019 and were hospitalized with serious respiratory infections *[according to newly released intelligence reports]*
- If these were early cases of Covid-19, these workers would have been infectious for 3 or 4 days before they began to show symptoms and could have spread the infection in Wuhan

# Why was the Lab-Leak Hypothesis Immediately Dismissed by Most Scientists

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- Almost immediately after the outbreak began, two letters by leading virologists were sent to scientific journals
- The first letter, published in the *Lancet* on February 3<sup>rd</sup>, described the lab-leak hypothesis as a “conspiracy theory” and stated that scientists overwhelmingly supported the idea of natural emergence
- The second letter, published in *Nature Medicine* on March 17<sup>th</sup>, claimed that there was no evidence of genetic manipulation of the SARS-2 virus, and that its spike protein was not the best possible fit so therefore it must not have been man made



# About Those Two Letters...

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- The first letter turns out to have been organized by Peter Dazak from EcoHealth, the source of funding for the gain-of-function research at WIV (*and a member of the WHO team sent to China to find the origin of SARS-2*)
- The second letter has been thoroughly rebutted as containing unscientific arguments
- None the less, these two letters convinced most people that the lab-leak hypothesis was nothing more than a conspiracy theory that should be ignored

# Opinions of the Lead Author of the Second Letter

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- The lead author of the second letter, the second letter, which was published on March 17, 2020, was Dr. Kristian Andersen
- That letter stated that: *“Our analyses clearly show that SARS-CoV-2 is not a laboratory construct or a purposefully manipulated virus”*.
- However, six weeks earlier, Dr. Andersen had written an email to Dr. Fauci saying that some of the genetic sequences in the virus were unusual and looked as though they had been engineered

# Support for the Lab-Leak Hypothesis

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- The source of the SARS-2 virus rapidly became part of the political divide in the U.S.
- President Trump was a strong supporter, even without any evidence
- Fox News continued to support the hypothesis
- Tucker Carlson interviewed a Chinese virologist, Dr. Yan Li-Meng, about the origin of the SARS-2 virus



**CHINESE VIROLOGIST: THIS VIRUS CAME FROM**

• **TUCKER CARLSON** tonight •

**#Tucker**

# Claims Made by Dr. Yan

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- “I can present solid scientific evidence...that this virus...SARS-Cov-2...is actually not from nature, it is a man-made virus created in the lab.”

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- The Chinese government created the coronavirus in a Wuhan lab and released it intentionally



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- The Chinese government created the coronavirus in a Wuhan lab and released it intentionally



# Argument Against the Lab Leak Hypothesis

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- Strenuous denials by Dr. Shi
- No documents proving that SARS-2 was one of the chimeric viruses produced at WIV

# The Final Word

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- “It is clear that this work never should have been funded and never should have been performed”

*[Note that this is true even if the lab leak hypothesis turns out to be false]*

Richard H. Ebright, a Rutgers University molecular biologist and biosafety expert, quoted in:  
*The Origin of COVID-19: Did people or nature open Pandora's box at Wuhan*, by Nicholas Wade,  
The Bulletin Atomic Scientists, May 5, 2021. <https://thebulletin.org/2021/05/the-origin-of-covid-did-people-or-nature-open-pandoras-box-at-wuhan/>

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# The origin of COVID: Did people or nature open Pandora's box at Wuhan?

By [Nicholas Wade](#) | May 5, 2021



Members of the World Health Organization (WHO) team investigating the origins of the COVID-19 coronavirus arrive by car at the Wuhan Institute of Virology on February 3. (Photo by HECTOR RETAMAL/AFP via Getty Images)