COVID-19 Update
The Kiwanis Club of Atlanta

CARLOS DEL RIO, MD

EMORY UNIVERSITY

@CARLOSDELRIO7

The Numbers

- ✓Globally > 55 Million cases & > 1.3 M deaths
  - ✓ 50% of deaths in: US (19%); Brazil (13%); India (10%) & Mexico (8%)
- ✓US > 11.5 Million cases & > 252,000 deaths
  - ✓> Hospitalizations > 70,000 and deaths > 1,000/day
  - ✓Two states (CA &TX) have > 1,000,000 cases.
  - ✓ GA is #6 with 426,236 cases (40,145 per million) and 8,967 deaths
- ✓ India # 2 with > 8.8 M cases & Brazil #3 with > 5.8 M cases
- ✓France, Russia, Spain , UK, Argentina, Italy, Colombia and Mexico have > 1 million cases.

krupali and Ali Khan, MD, MPP liked

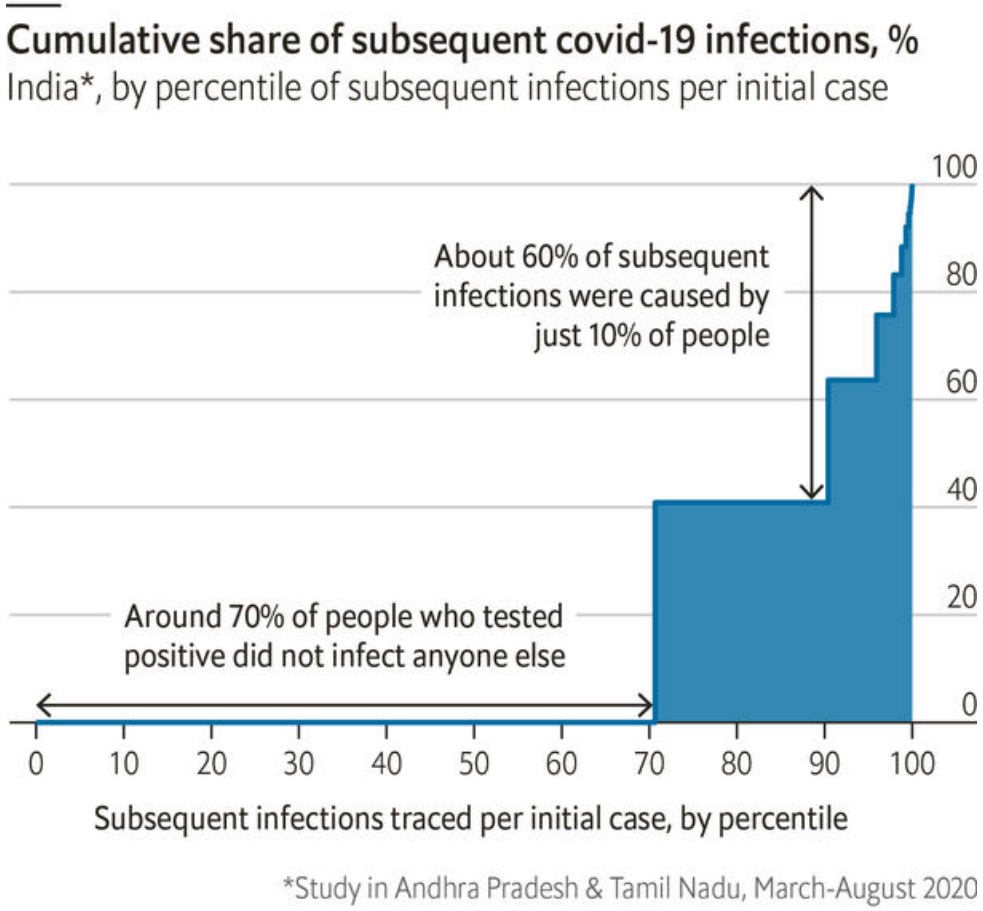
Eric Topol @EricTopol · 13h

It took only 8 days to the next million US confirmed covid cases. The 1st million took > 100 d

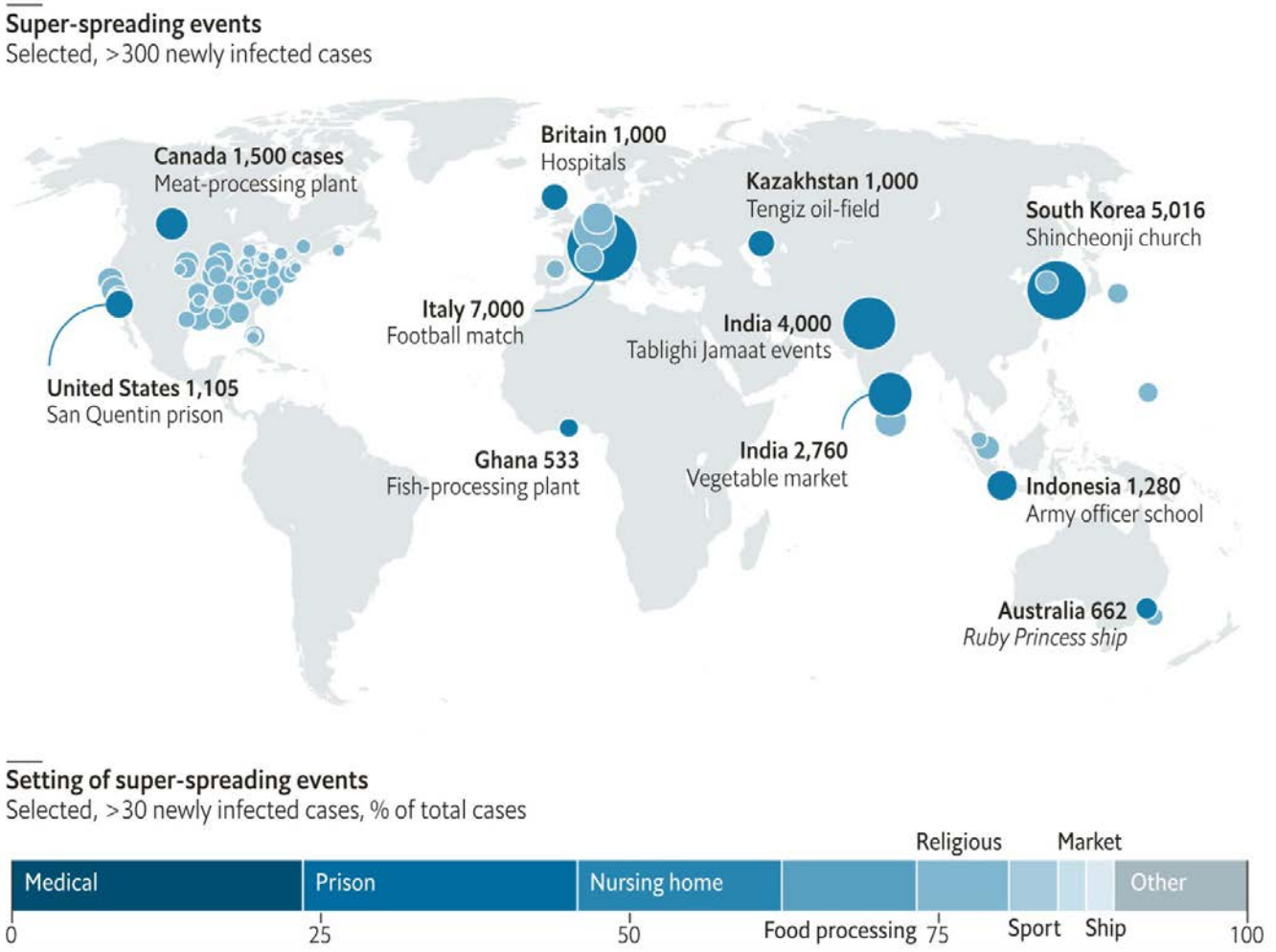
April 29 1 million
June 11 2 million
July 8 3 million
July 24 4 million
Aug 9 5 million
Aug 31 6 million
Sept 26 7 million
Oct 17 8 million
Oct 31 9 million
Nov 8 10 million

75 1,361 2,177

→ A small share of the population is responsible for a majority of infections



→ A large share of covid infections are caused by "super-spreading" events



A minority of people with covid-19 account for the bulk of transmission

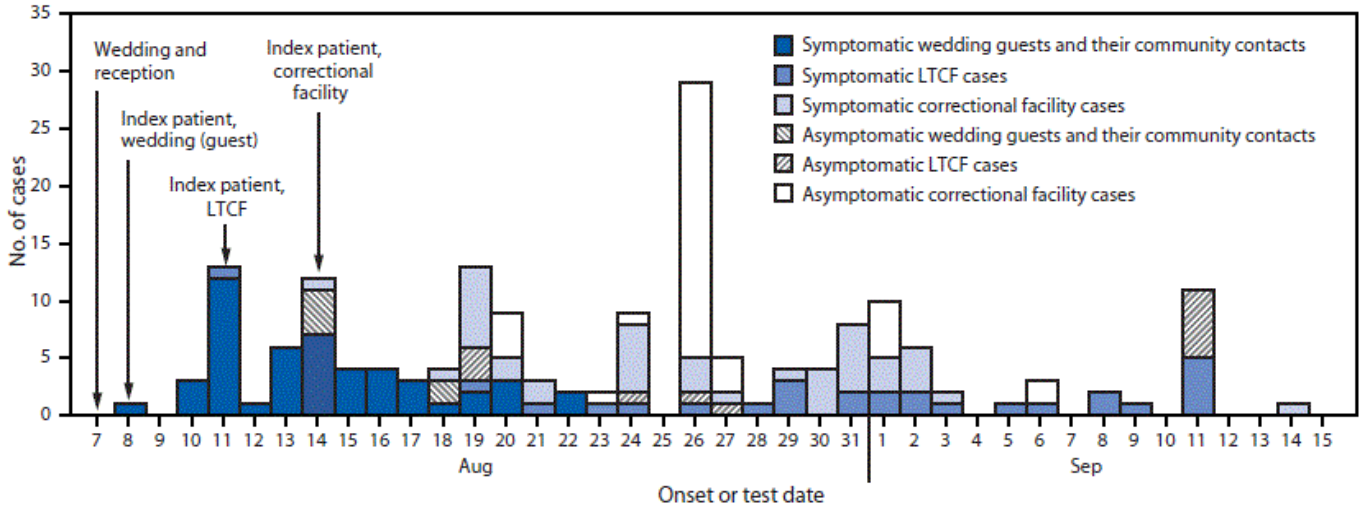
https://www.economist.com/graphic-detail/2020/11/07/a-minority-of-people-with-covid-19-account-for-the-bulk-of-transmission

Morbidity and Mortality Weekly Report

MMWR / November 13, 2020 / Vol. 69 / No. 45

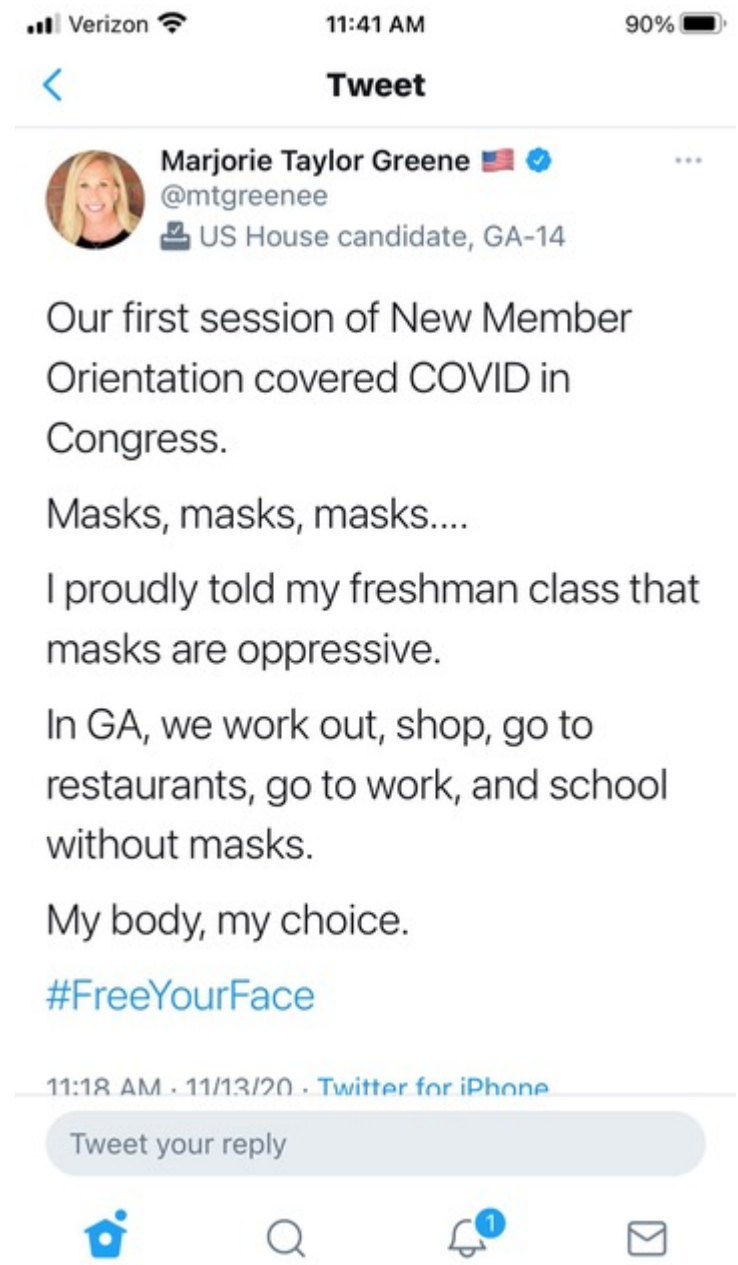
Multiple COVID-19 Outbreaks Linked to a Wedding Reception in Rural Maine — August 7–September 14, 2020

Parag Mahale, MBBS, PhD[1,2]; Craig Rothfuss, MPA, MPH[1,3]; Sarah Bly[1,3]; Megan Kelley[1,3]; Siiri Bennett, MD[1]; Sara L. Huston, PhD[1,3]; Sara Robinson, MPH[1]



MORE RESOURCES

Scientific Brief: Community Use of Cloth Masks to Control the Spread of SARS-CoV-2


Verizon
11:41 AM
90%
Tweet
Marjorie Taylor Greene
@mtgreenee
US House candidate, GA-14
Our first session of New Member Orientation covered COVID in Congress.
Masks, masks, masks....
I proudly told my freshman class that masks are oppressive.
In GA, we work out, shop, go to restaurants, go to work, and school without masks.
My body, my choice.
#FreeYourFace
11:18 AM · 11/13/20 · Twitter for iPhone
Tweet your reply

2. Mask mandates help control the rise in hospitalizations

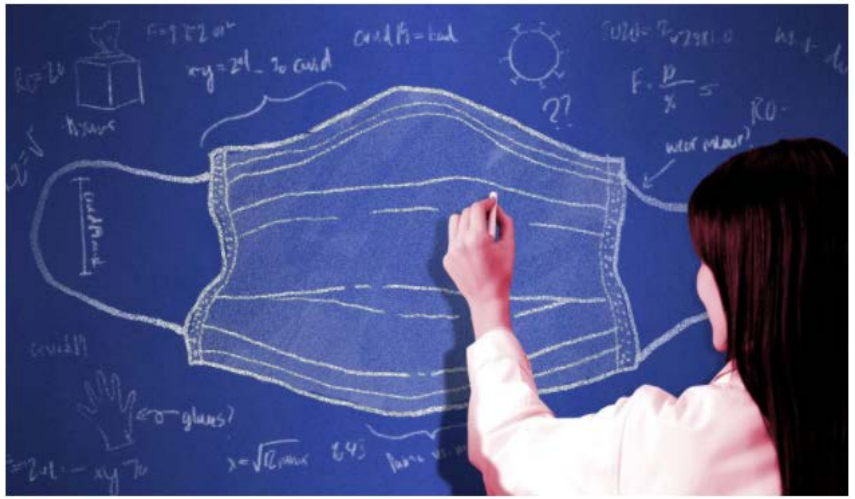


Illustration: Sarah Grillo/Axios

Coronavirus hospitalizations are rising much more dramatically in places that don't require people to wear a face mask, Axios health care editor Sam Baker writes from a Vanderbilt analysis.

- **Why it matters:** The findings reinforce what experts have been saying for months: Masks — and mask mandates — work. They will not vanquish the coronavirus on their own, but they help. A lot.

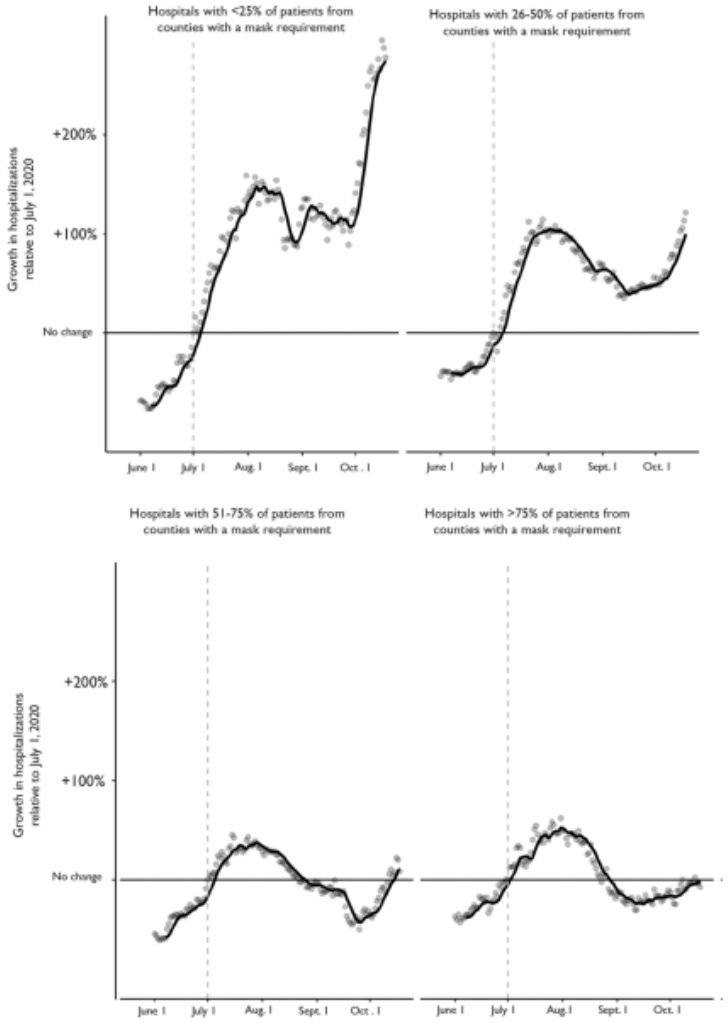
The Vanderbilt analysis compares Tennessee hospitals based on how many of their patients come from counties with mask requirements.

- **In hospitals** where at least 75% of patients are subject to a local mask requirement, COVID hospitalizations are at about the same level now as they were July 1.

Figure 1

Hospitalizations & Mask Requirements

The chart below shows the growth in hospitalizations by hospital type, based on the percentage of patients they treat from counties with mask requirements. Data is through Oct. 20, 2020.



https://www.axios.com/newsletters/axios-am-5c5d6b17-9b35-43d6-b30c-b15049616e30.html?chunk=1&utm_term=twsocialshare#story1

Yale School of Public Health
@YaleSPH

Dr. Anthony Fauci lays out three ways future scientific communicators can build trust:

1) Always go by the data
2) Admit when you don't know something
3) The goal is not to show how smart you are. It's to get people to understand what you're talking about.

#FauciAtYale

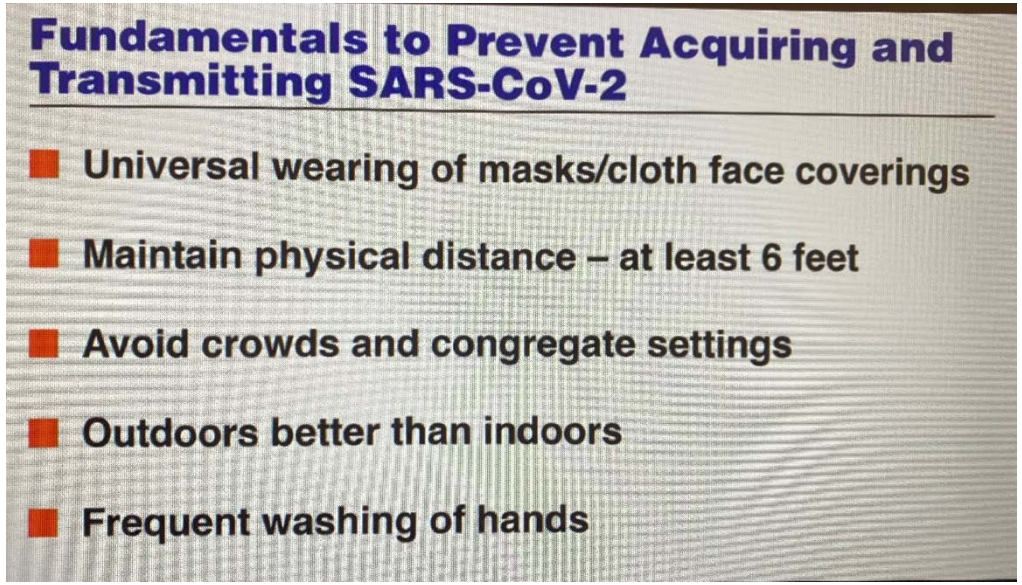
Global Health @ Yale and 3 others

4:38 PM · Oct 26, 2020 · Twitter Web App

VIEWPOINT

Preventing the Spread of SARS-CoV-2 With Masks and Other "Low-tech" Interventions

Return to normalcy will require the widespread acceptance and adoption of mask wearing and other inexpensive and effective interventions as part of the COVID-19 prevention toolbox.

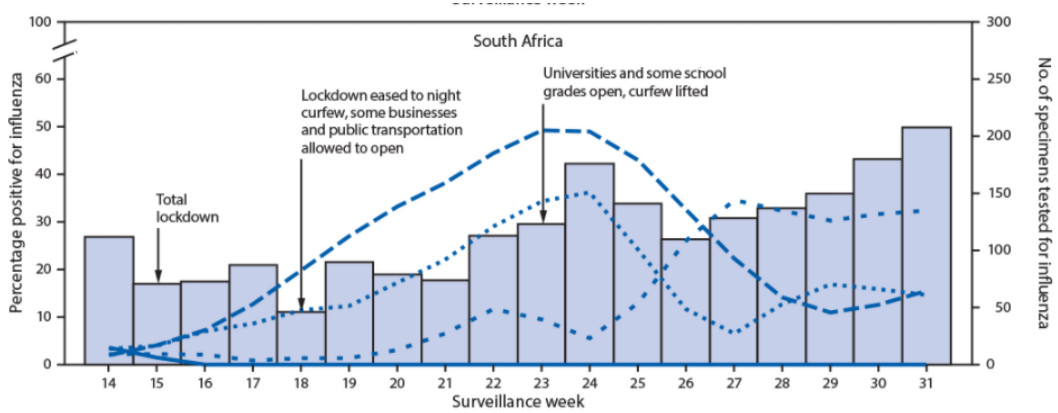


Decreased Influenza Activity During the COVID-19 Pandemic — United States, Australia, Chile, and South Africa, 2020

Weekly / September 18, 2020 / 69(37);1305–1309

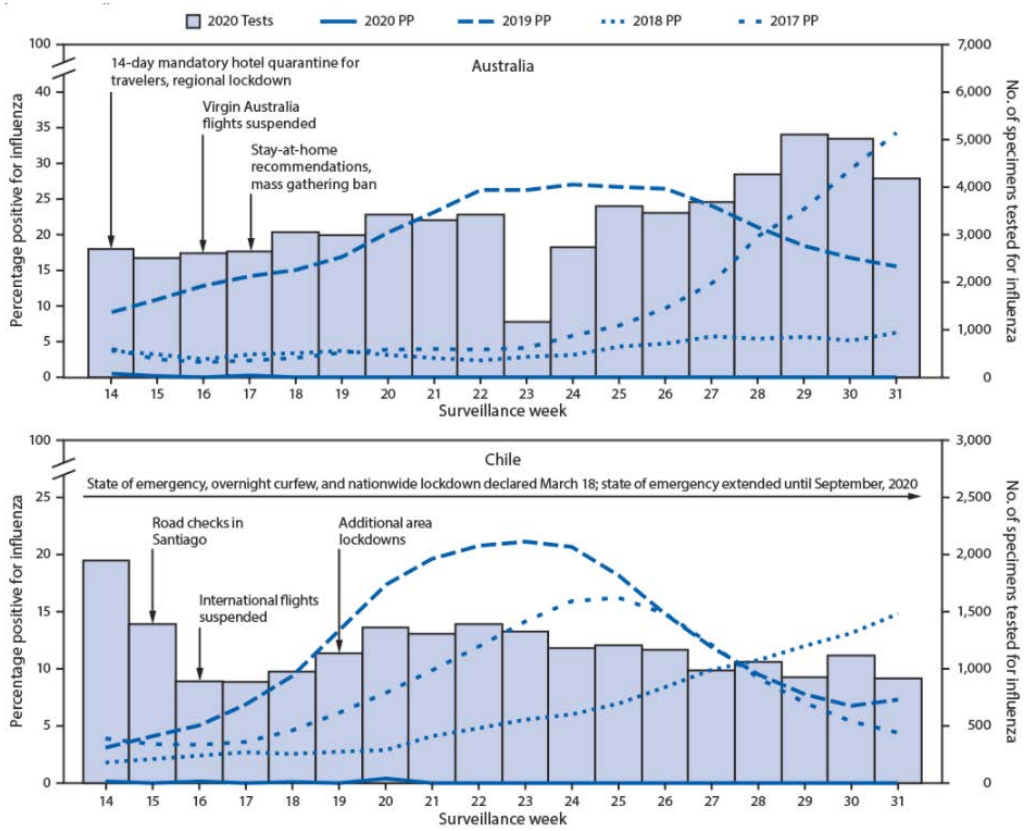
Sonja J. Olsen, PhD[1]; Eduardo Azziz-Baumgartner, MD[1]; Alicia P. Budd, MPH[1]; Lynnette Brammer, MPH[1]; Sheena Sullivan, PhD[2]; Rodrigo Fasce Pineda, MS[3]; Cheryl Cohen, MD[4,5]; Alicia M. Fry, MD[1] (View author affiliations)

Very little influenza activity in Australia, Chile and S. Africa during the 2020 flu season



Source: FluNet. https://www.who.int/influenza/gisrs_laboratory/flunet/en/ .

Abbreviation: PP = percentage positive.



https://www.cdc.gov/mmwr/volumes/69/wr/mm6937a6.htm

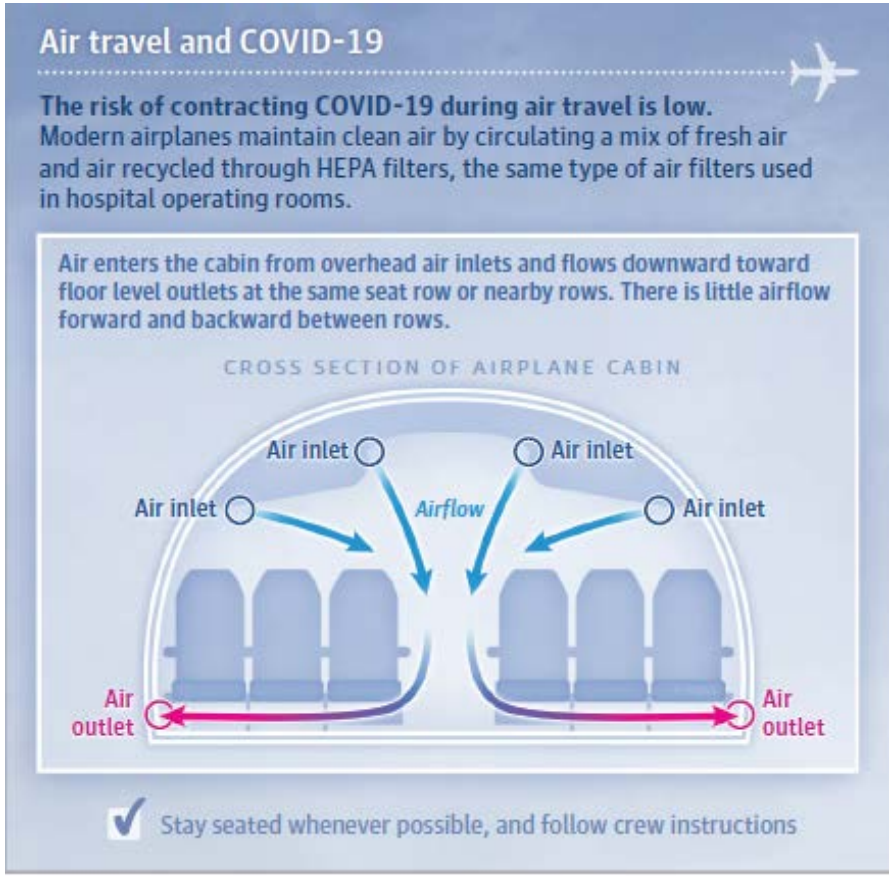
JAMA PATIENT PAGE

Risk of COVID-19 During Air Travel

JAMA November 3, 2020 Volume 324, Number 17

Decreasing risk during air travel:

- Wear a mask
- Don’t travel if you feel unwell
- Keep distance from others
- Wash or sanitize hands frequently



Thirty-four states – plus the District of Columbia and Puerto Rico – now require people to wear a face mask in public

On Friday, the governors of Oregon, Washington and California issued travel advisories urging people to avoid all nonessential out-of-state travel and urging visitors entering their states or returning home to self-quarantine for 14 days.

Last month, Hawaii started allowing all travelers to useproof of a negative COVID-19 test in lieu of having to quarantine.

In New York bars and restaurants as well as gyms will have to close at 10 PM and indoor gatherings at private homes will be limited to no more than 10 people. To avoid quarantine travelers to the state must test for COVID-19, 72 hrs before arriving and 4 days after.

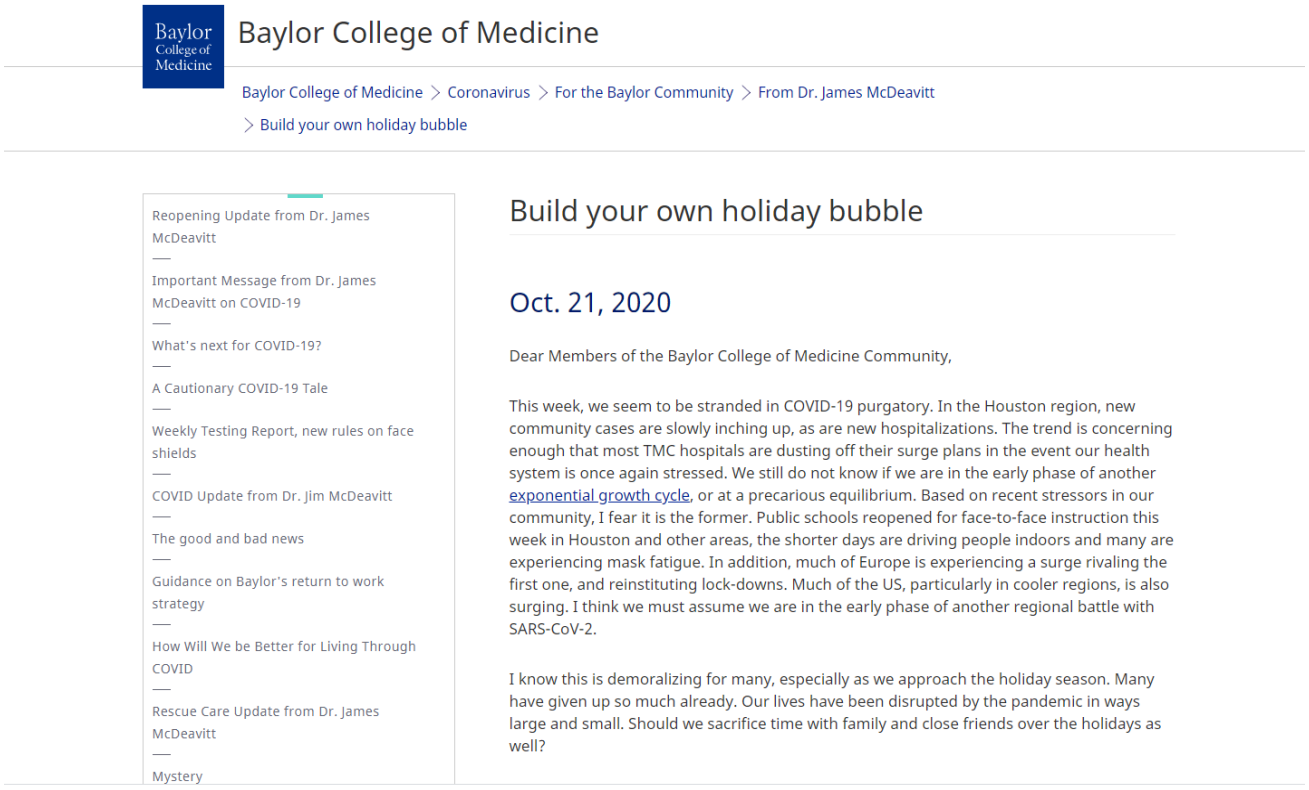
Georgia

Gov. Brian Kemp tweeted this week that **"it is now more important than ever for all Georgians to double down on prevention measures to stop the spread of COVID-19."**

In a video message, **Dr. Kathleen Toomey**, commissioner of the state Department of Public Health, **urged everyone to wear masks, social distance and get a flu shot**.

Georgia does not have a statewide mask mandate.

The Holiday Bubble



Baylor College of Medicine

Baylor College of Medicine > Coronavirus > For the Baylor Community > From Dr. James McDeavitt > Build your own holiday bubble

Reopening Update from Dr. James McDeavitt
—
Important Message from Dr. James McDeavitt on COVID-19
—
What's next for COVID-19?
—
A Cautionary COVID-19 Tale
—
Weekly Testing Report, new rules on face shields
—
COVID Update from Dr. Jim McDeavitt
—
The good and bad news
—
Guidance on Baylor's return to work strategy
—
How Will We be Better for Living Through COVID
—
Rescue Care Update from Dr. James McDeavitt
—
Mystery

Build your own holiday bubble

Oct. 21, 2020

Dear Members of the Baylor College of Medicine Community,

This week, we seem to be stranded in COVID-19 purgatory. In the Houston region, new community cases are slowly inching up, as are new hospitalizations. The trend is concerning enough that most TMC hospitals are dusting off their surge plans in the event our health system is once again stressed. We still do not know if we are in the early phase of another exponential growth cycle, or at a precarious equilibrium. Based on recent stressors in our community, I fear it is the former. Public schools reopened for face-to-face instruction this week in Houston and other areas, the shorter days are driving people indoors and many are experiencing mask fatigue. In addition, much of Europe is experiencing a surge rivaling the first one, and reinstituting lock-downs. Much of the US, particularly in cooler regions, is also surging. I think we must assume we are in the early phase of another regional battle with SARS-CoV-2.

I know this is demoralizing for many, especially as we approach the holiday season. Many have given up so much already. Our lives have been disrupted by the pandemic in ways large and small. Should we sacrifice time with family and close friends over the holidays as well?

Today:

- Get your Flu Shot
- Have a serious family conversation and obtain a REAL COMMITMENT to form a bubble
- Agree on a location

2 weeks prior:

- Limit contact with others
- Work from home
- Scrupulous attention to social distancing and masking

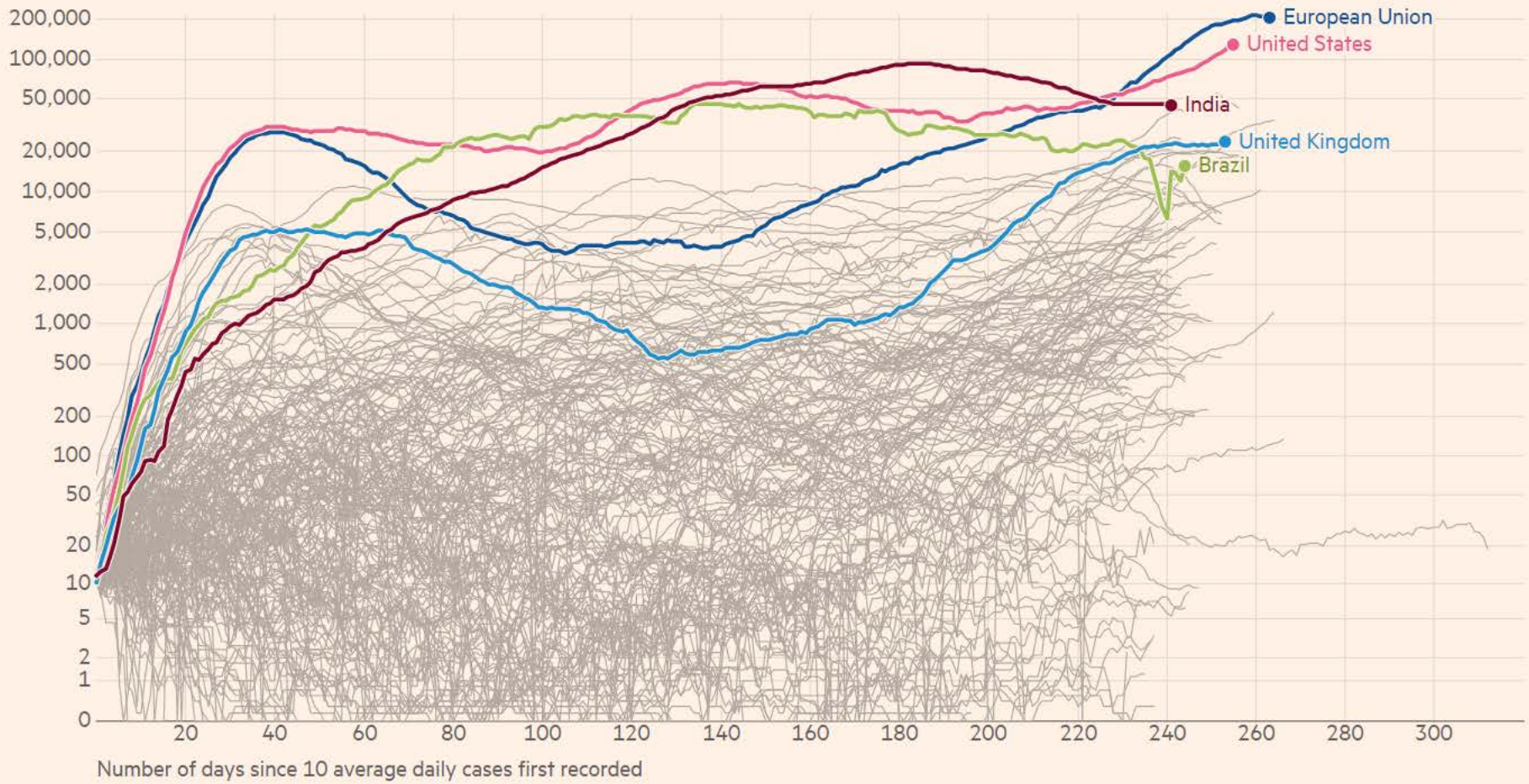
5 – 7 days prior:

- Get a PCR test
- Stock up on hand sanitizer and wipes
- Complete grocery shopping (remember you are quarantined)

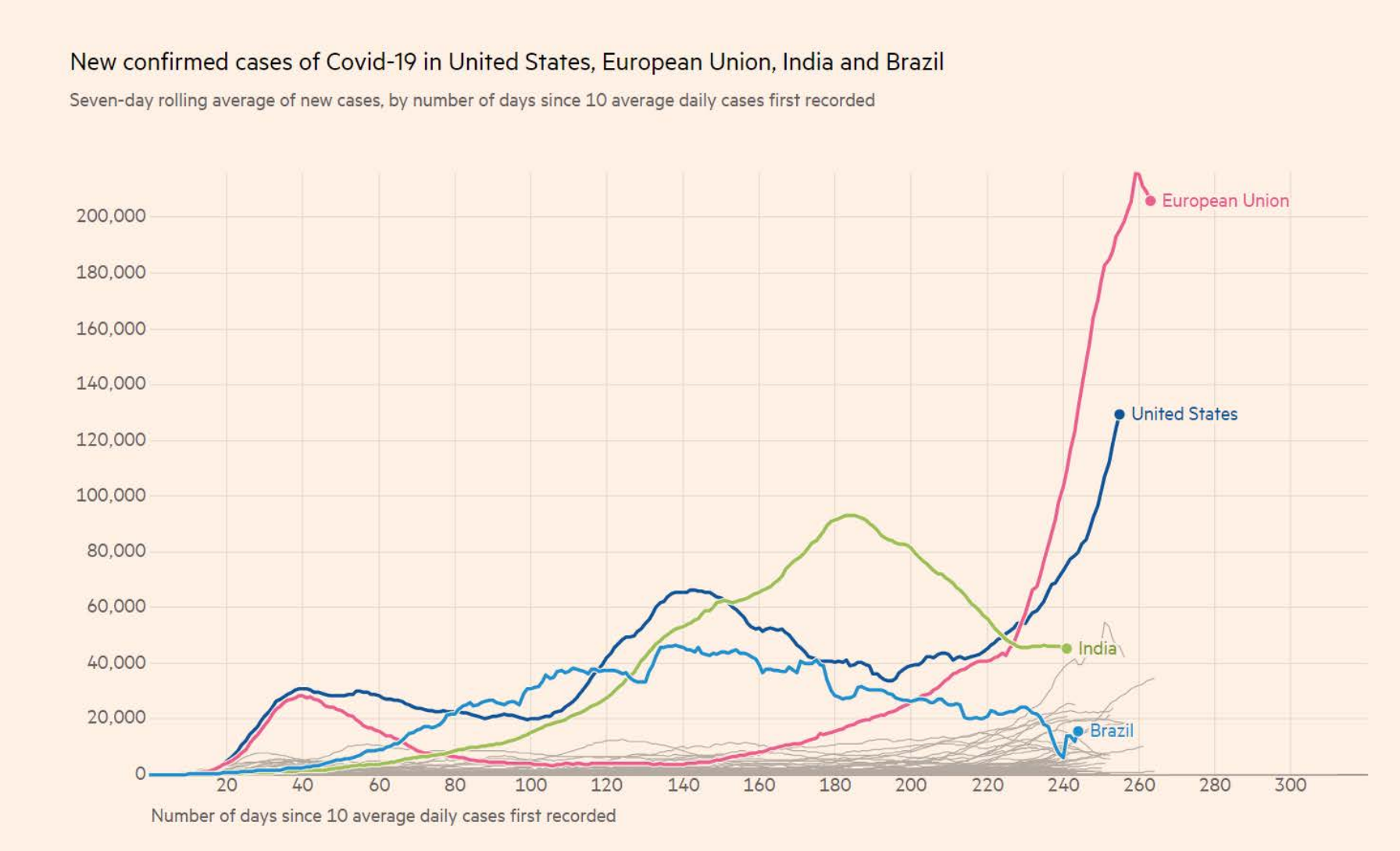
https://www.bcm.edu/coronavirus/for-the-baylor-community/from-dr-james-mcdeavitt/build-your-own-holiday-bubble

New confirmed cases of Covid-19 in European Union, United States, Brazil, United Kingdom and India

Seven-day rolling average of new cases, by number of days since 10 average daily cases first recorded



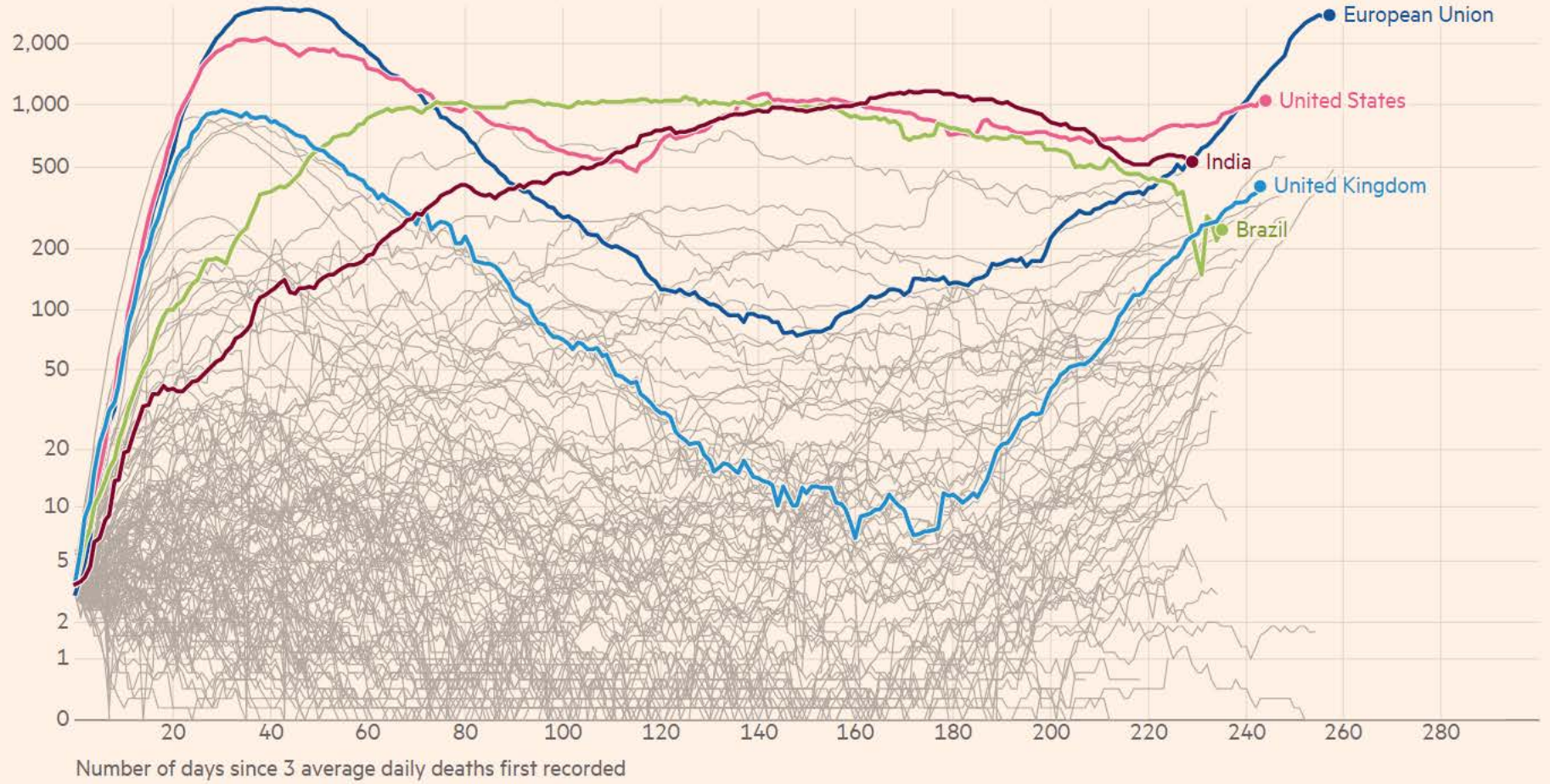
7 day rolling average



https://ig.ft.com/coronavirus-chart/?areas=usa&areas=eur&areas=ind&areas=bra&areasRegional=usny&areasRegional=usca&areasRegional=usfl&areasRegional=ustx&cumulative=0&logScale=0&perMillion=0&values=cases

New deaths attributed to Covid-19 in European Union, United States, Brazil, United Kingdom and India

Seven-day rolling average of new deaths, by number of days since 3 average daily deaths first recorded



New Lockdown Rules in Europe

Belgium – New restrictions began 11/2

- Non-essential shops/businesses closed
- Sale of alcohol prohibited after 8 PM
- Bars/cafes/restaurants closed except for take-out
- Cultural and leisure facilities, gyms and pools closed
- Some regional curfews and limited gathering size

Germany – New restrictions began 11/2

- Restaurants (except take out), bars, gyms, theaters, pools closed
- Social contact limited to 2 households with max of 10 people
- Large events cancelled; no crowds at sporting events
- Leisure stays in hotels banned
- Schools an church open
- Shops and hairdressers open with strict hygiene rules

https://www.bbc.com/news/explainers-53640249

New Lockdown Rules in Europe

France – New national lockdown started 10/30 and in place until 12/1 at least
- Can leave home only to go to work, buy essential goods, seek medical help or exercise 1 hour/day
- Bars/restaurants closed; schools and churches open
- Social gatherings banned

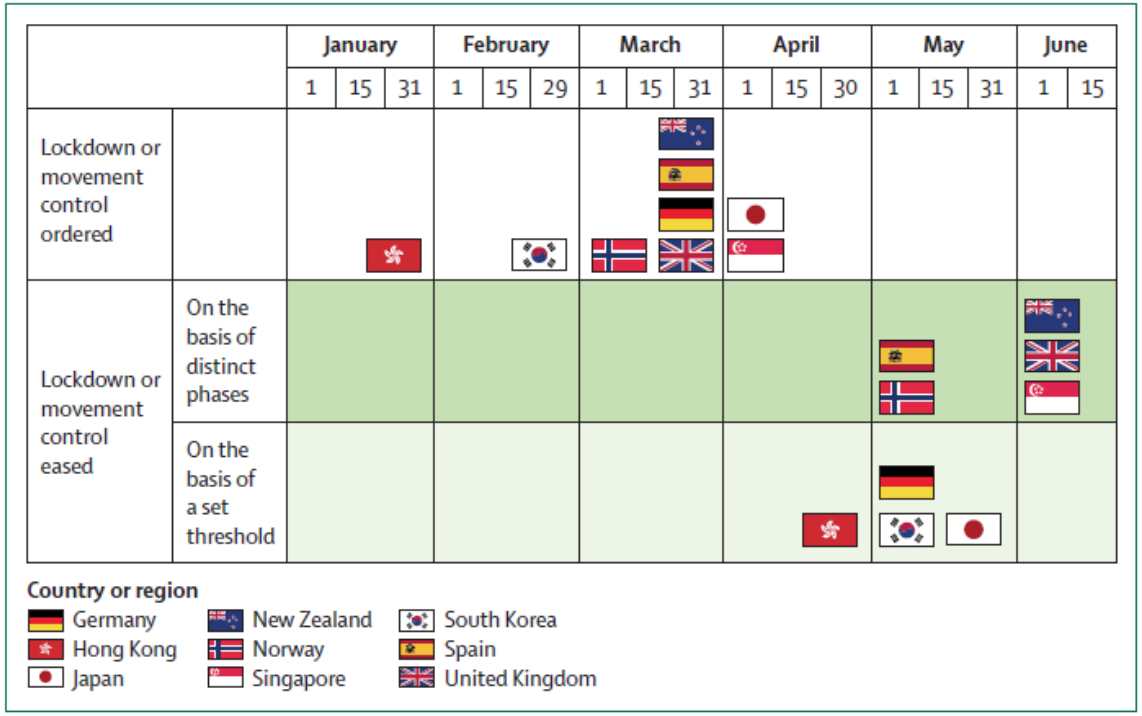
Italy – 3 tier framework began 11/4
- Museums closed
- Schools open but older students switch to remote learning
- Universal masking continues
- Capacity on public transportation limited
- Restaurants and bars closed in red/orange zones

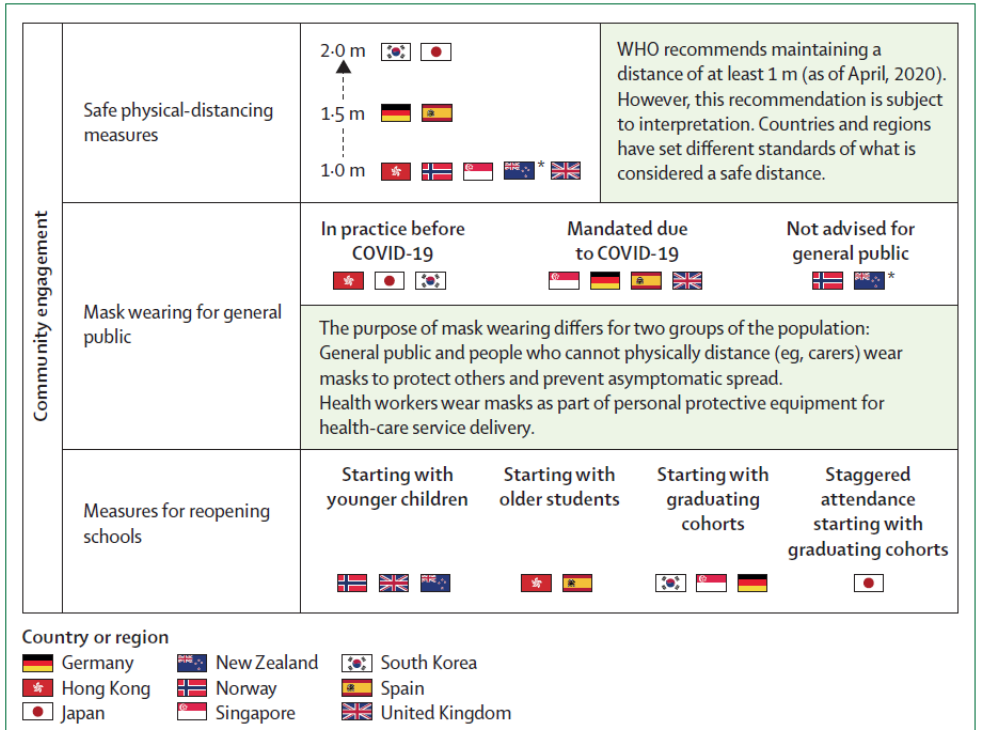
Spain – Nationwide curfew began 10/25
- Stay at home 11 PM-6 AM
- Private gatherings limited to 6 people

https://www.bbc.com/news/explainers-53640249

Lessons learnt from easing COVID-19 restrictions: an analysis of countries and regions in Asia Pacific and Europe

Emeline Han, Melisa Mei Jin Tan*, Eva Turk, Devi Sridhar, Gabriel M Leung, Kenji Shibuya, Nima Asgari, Juhwan Oh, Alberto L García-Basteiro, Johanna Hanefeld, Alex R Cook, Li Yang Hsu, Yik Ying Teo, David Heymann, Helen Clark, Martin McKee, Helena Legido-Quigley*





https://www.thelancet.com/action/showPdf?pii=S0140-6736%2820%2932007-9

Lessons Learned from Covid-19 Restrictions

- Can learn lessons from divergent practices
  - More extensive test/tracing/isolating in Asia including isolating in institutions and not at home in some countries
  - More extensive use of face coverings in Asia (which had prior experience)
  - Having more robust public health infrastructure and populations that are more compliant with strict rules and guidelines makes a difference
- Recognition that removing COVID-19 restrictions should be a cautious return to a new normal and not back to pre-COVID state

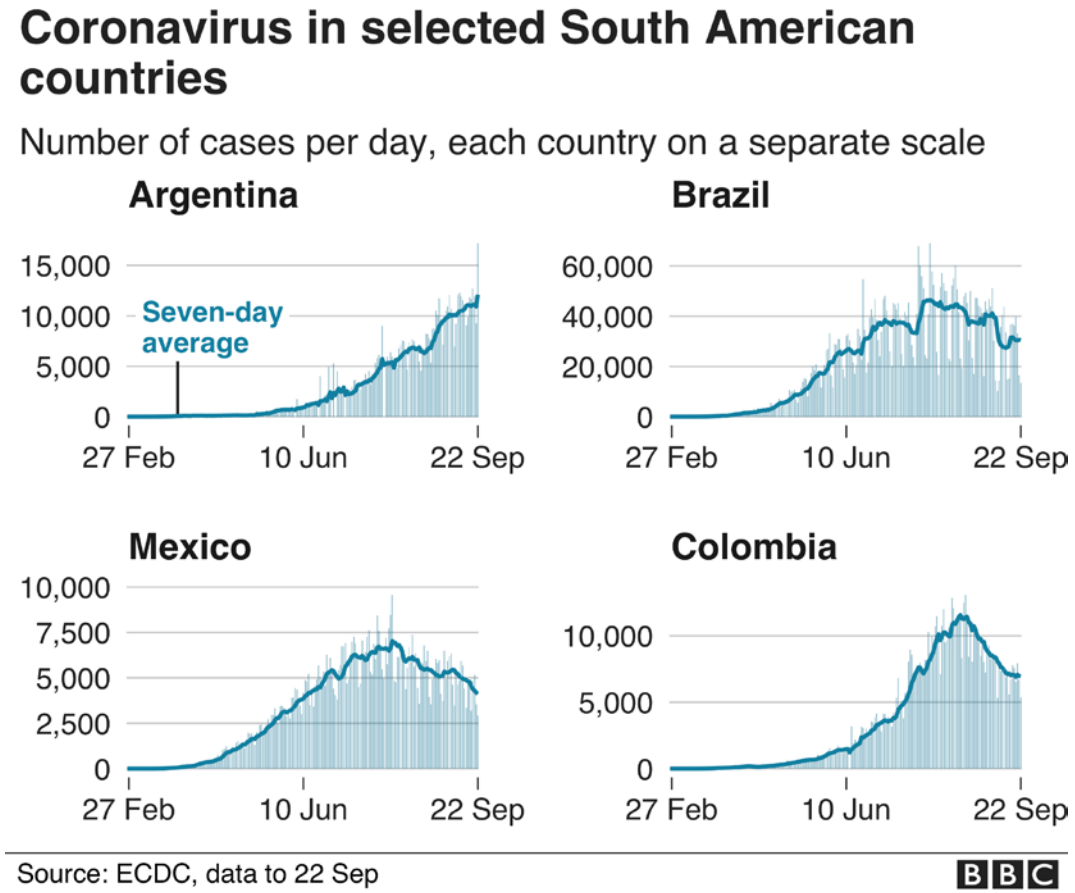
https://www.thelancet.com/action/showPdf?pii=S0140-6736%2820%2932007-9

Lessons Learned from Covid-19 Restrictions

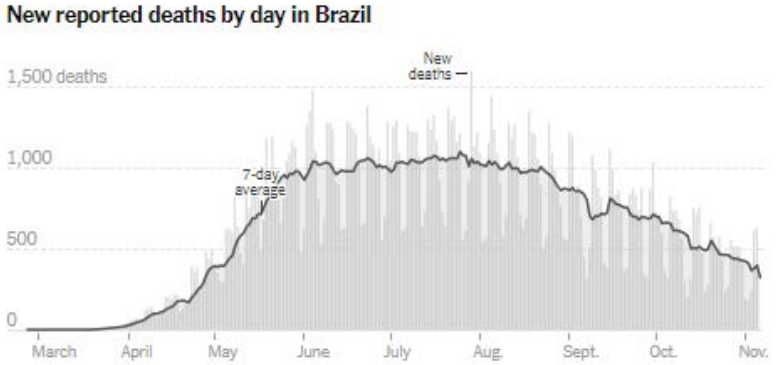
- Need a clear phased plans for moving to different levels of controls
- Countries should not ease restrictions until there are robust systems in place to monitor the infection situation
- Continued measures to reduce transmission will be needed for some time (such as face masks, decreased social interactions)
- Each country should have and effective test/trace/isolate support system
- Need investment in public health capacity

https://www.thelancet.com/action/showPdf?pii=S0140-6736%2820%2932007-9

South America – Argentina, Brazil, Mexico and Colombia

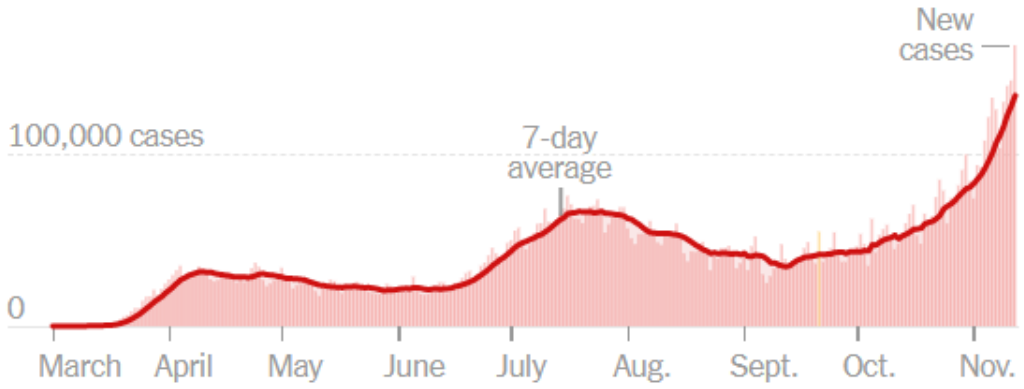


Note: The seven-day average is the average of a day and the previous six days of data.



Note: Scale for deaths chart is adjusted from cases chart to display trend.

By The New York Times Updated November 13, 2020, 8:05 A.M. E.T.

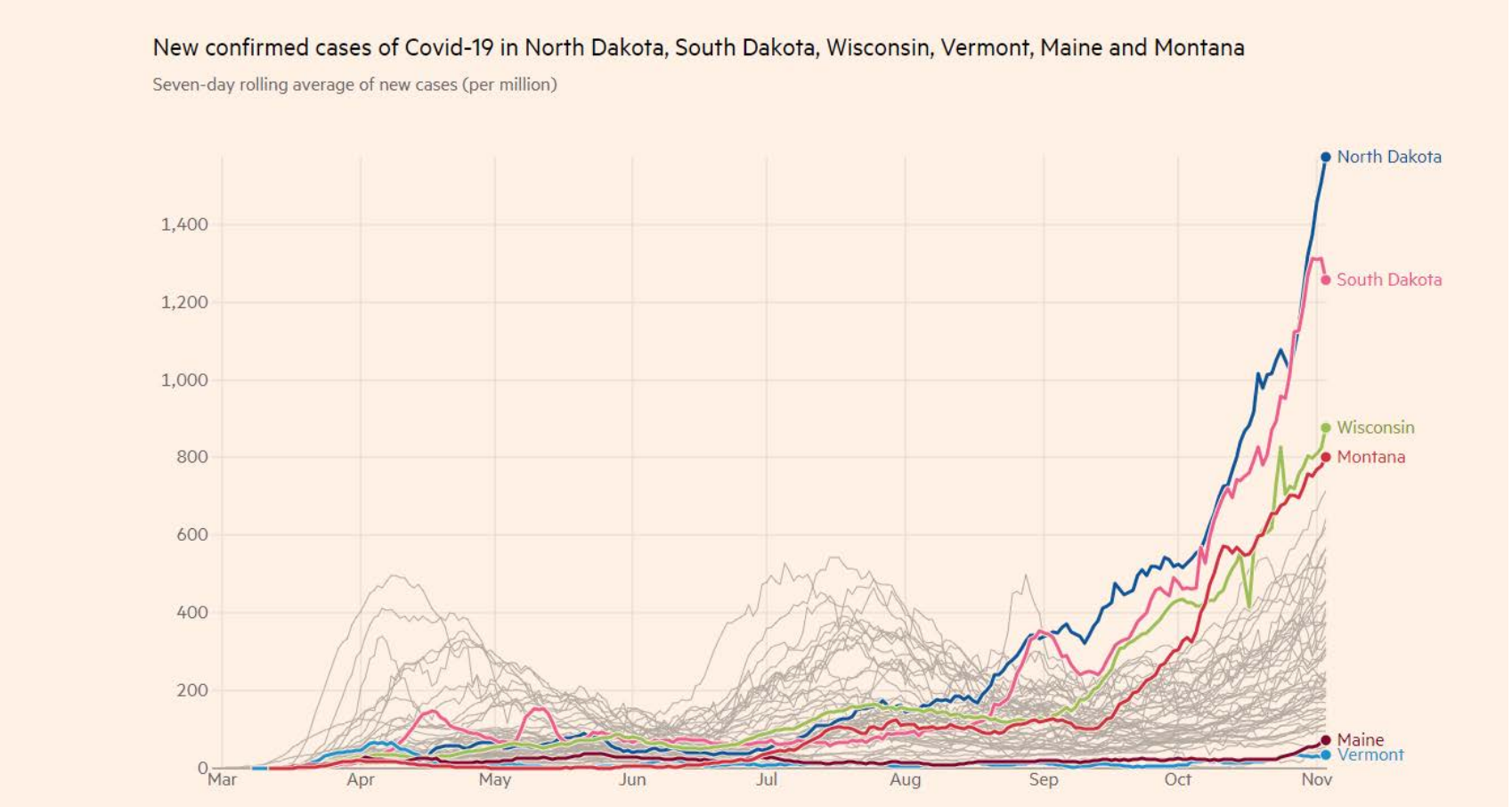


	TOTAL REPORTED	ON NOV. 12	14-DAY CHANGE
Cases	10.6 million+	163,402	+72% ↗
Deaths	242,861	1,172	+33% →
Hospitalized		67,096	+39% →

Day with data reporting anomaly.

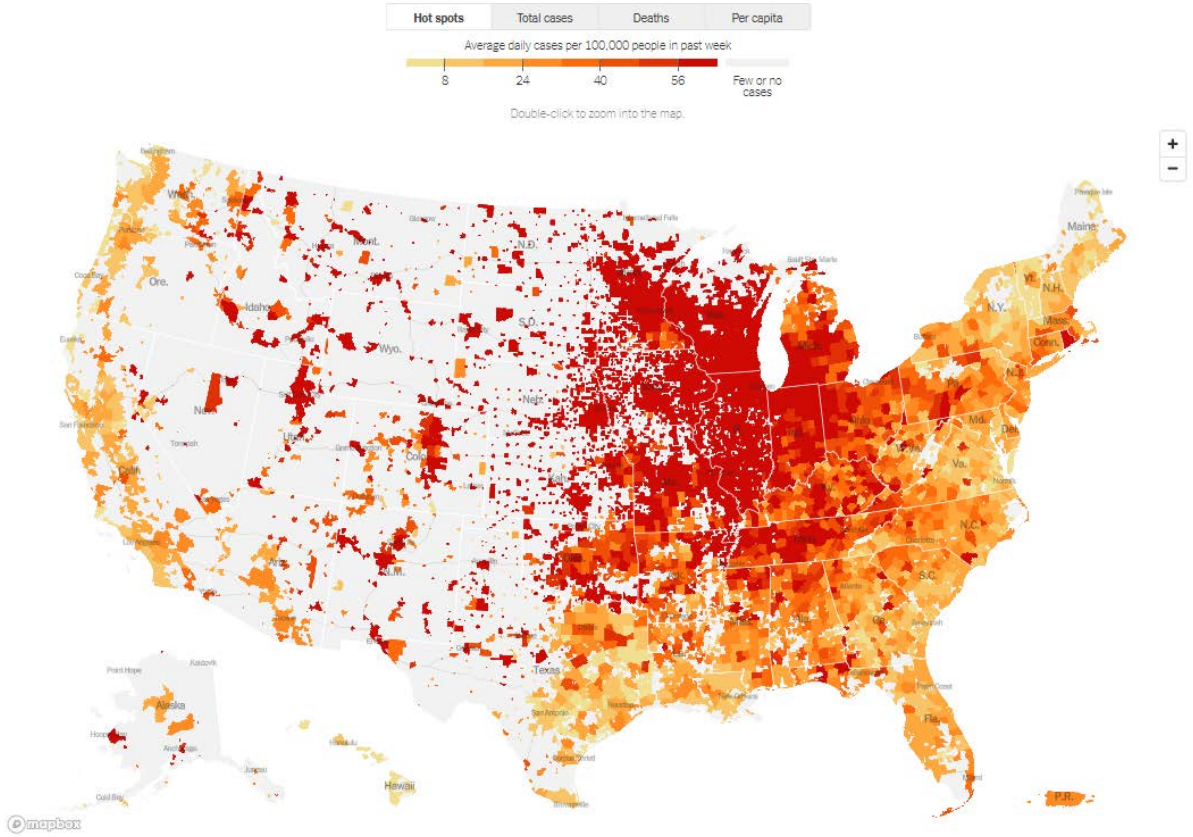
Hospitalization data from the Covid Tracking Project. 14-day change trends use 7-day averages.

It’s not just colder weather causing high rates

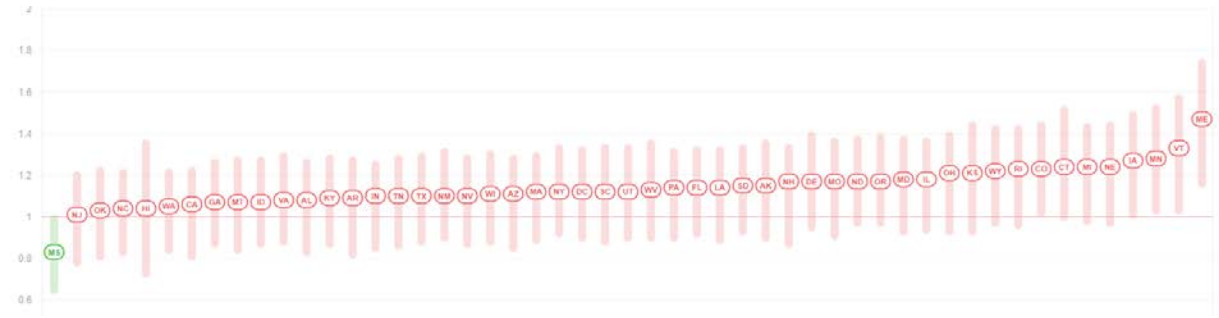


https://ig.ft.com/coronavirus-chart/?areas=usa&areasRegional=usnd&areasRegional=ussd&areasRegional=uswi&areasRegional=usvt&areasRegional=usme&areasRegional=usmt&byDate=1&cumulative=0&logScale=0&perMillion=1&values=cases

Hot Spots in US

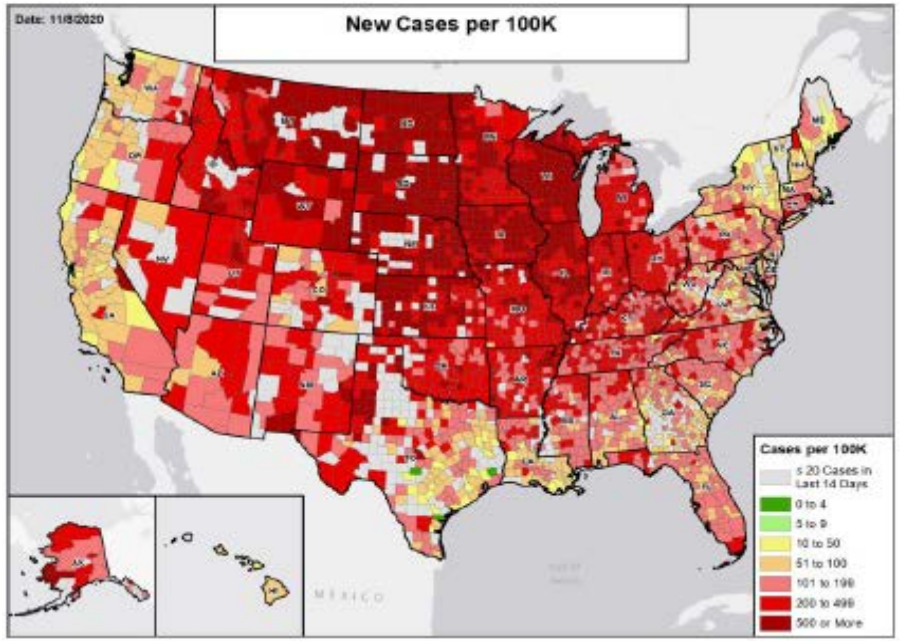


Almost all states have R_t >1



National Picture

NEW CASES PER 100,000

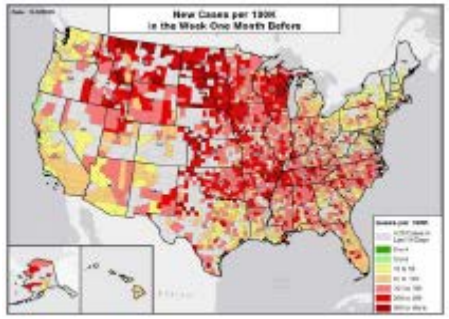


NATIONAL RANKING OF NEW CASES PER 100,000

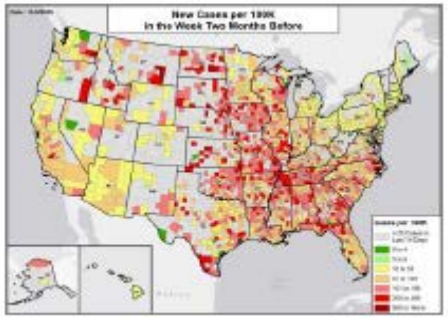
National Rank	State	National Rank	State
1	ND	27	MS
2	SD	28	TX
3	WI	29	WV
4	IA	30	NC
5	WY	31	FL
6	NE	32	AZ
7	MT	33	AL
8	IL	34	NJ
9	UT	35	PA
10	MN	36	MA
11	KS	37	SC
12	ID	38	DE
13	AK	39	MD
14	IN	40	GA
15	CO	41	VA
16	MO	42	WA
17	RI	43	OR
18	NM	44	LA
19	MI	45	DC
20	AR	46	CA
21	KY	47	NY
22	OK	48	NH
23	OH	49	ME
24	NV	50	HI
25	TN	51	VT
26	CT		

NEW CASES PER 100,000 IN THE WEEK:

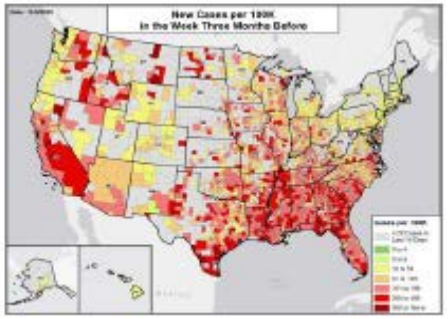
ONE MONTH BEFORE



TWO MONTHS BEFORE

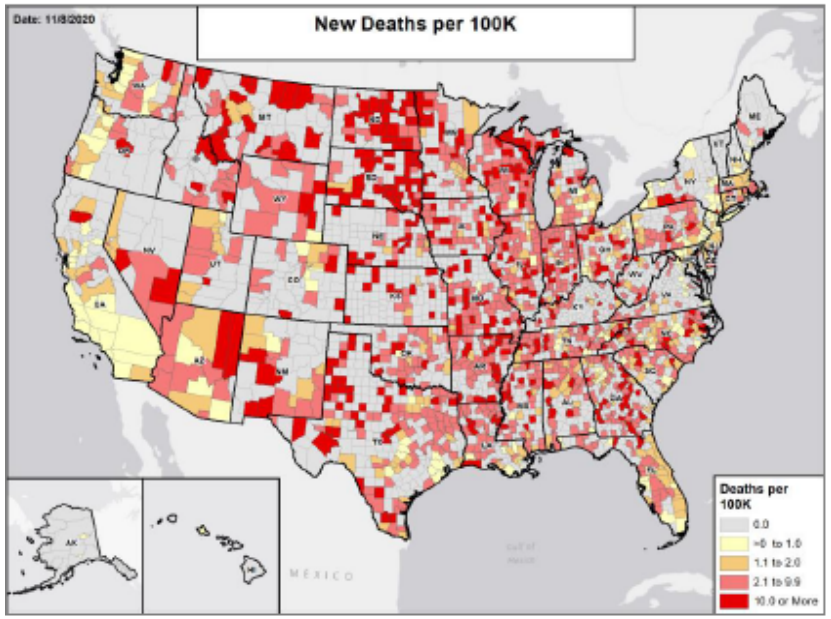


THREE MONTHS BEFORE



National Picture

NEW DEATHS PER 100,000

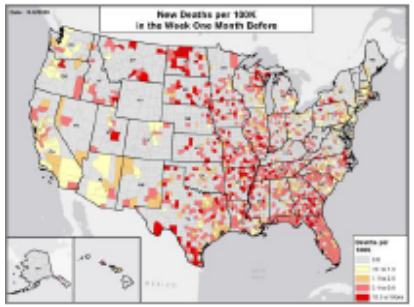


NATIONAL RANKING OF NEW DEATHS PER 100,000

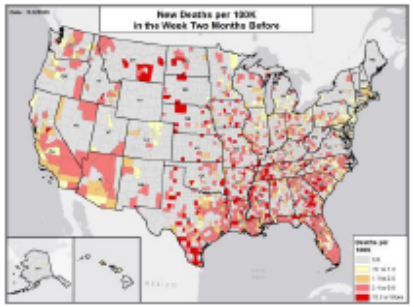
National Rank	State
1	ND
2	SD
3	AR
4	MT
5	WI
6	KS
7	IN
8	NM
9	IA
10	MO
11	WY
12	MS
13	ID
14	TN
15	IL
16	NE
17	MN
18	OK
19	AZ
20	AL
21	NC
22	TX
23	WV
24	NV
25	MI
26	RI
27	SC
28	GA
29	MA
30	LA
31	OH
32	CO
33	NY
34	CT
35	KY
36	UT
37	PA
38	FL
39	DE
40	OR
41	WA
42	MD
43	NJ
44	DC
45	CA
46	VA
47	NH
48	AK
49	ME
50	HI
51	VT

NEW DEATHS PER 100,000 IN THE WEEK:

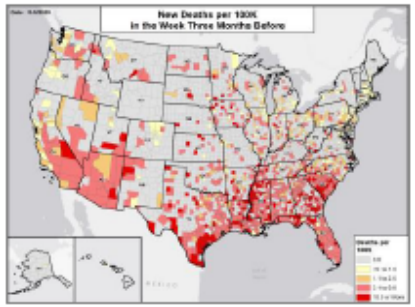
ONE MONTH BEFORE

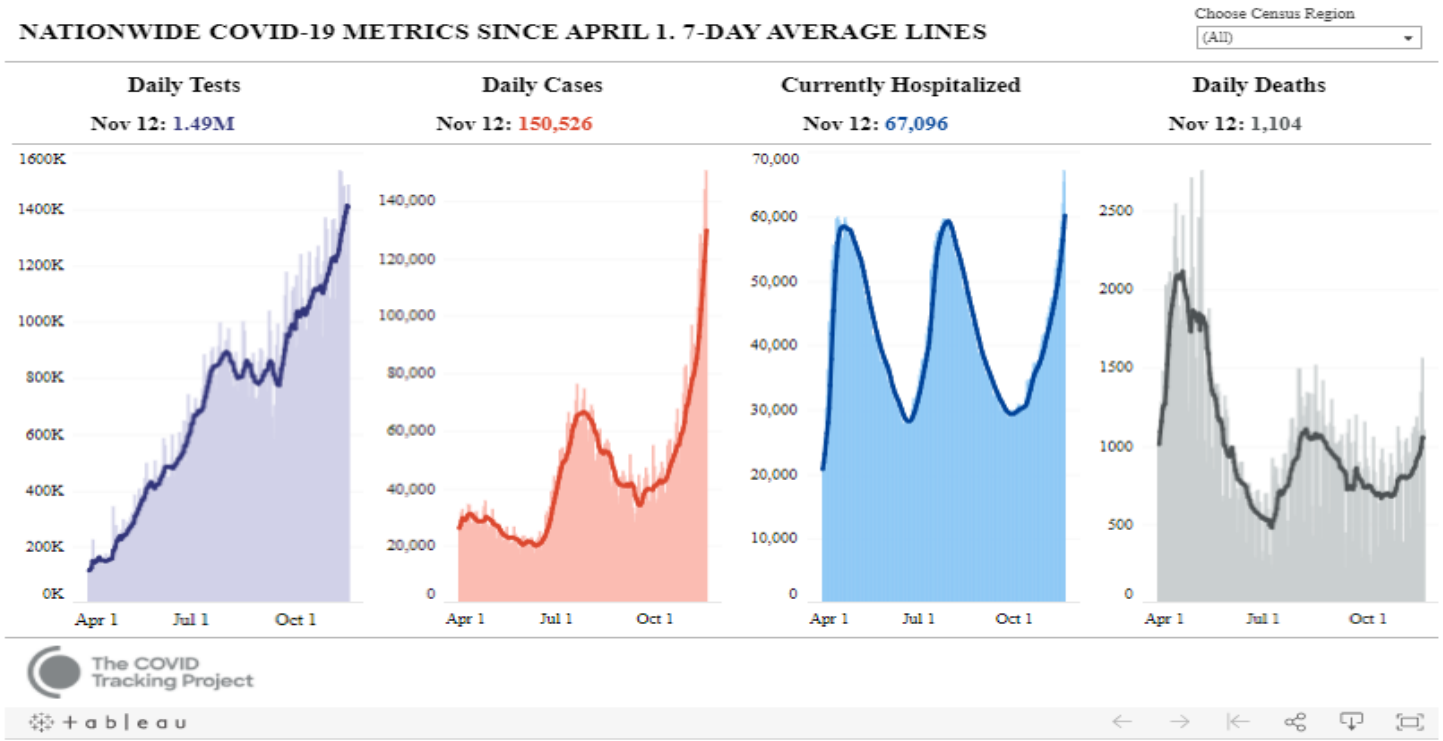


TWO MONTHS BEFORE



THREE MONTHS BEFORE



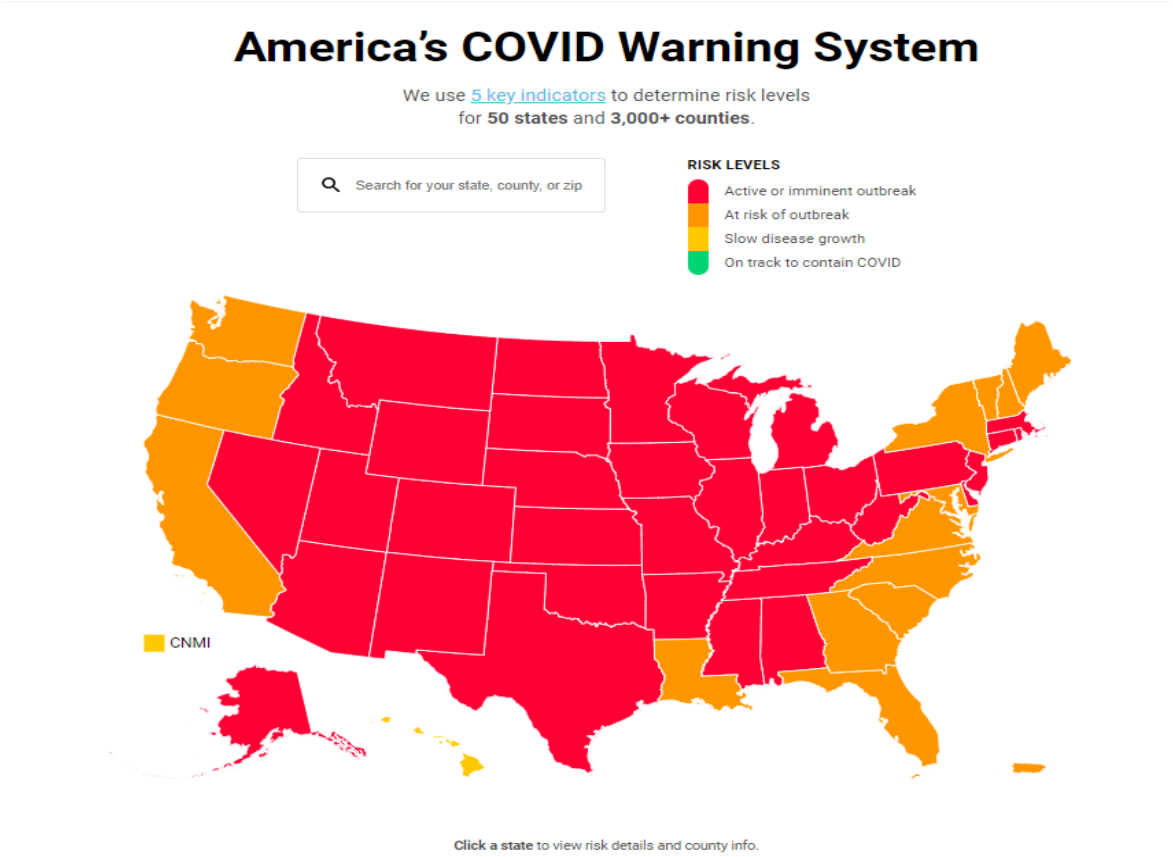


Oct 15	1,017,871 tests	56,797 cases	47,308 hospitalized	680 deaths
Nov 12	1,490,426 tests	150,526 cases	67,096 hospitalized	1,104 deaths

https://covidtracking.com/data/charts/us-all-key-metrics

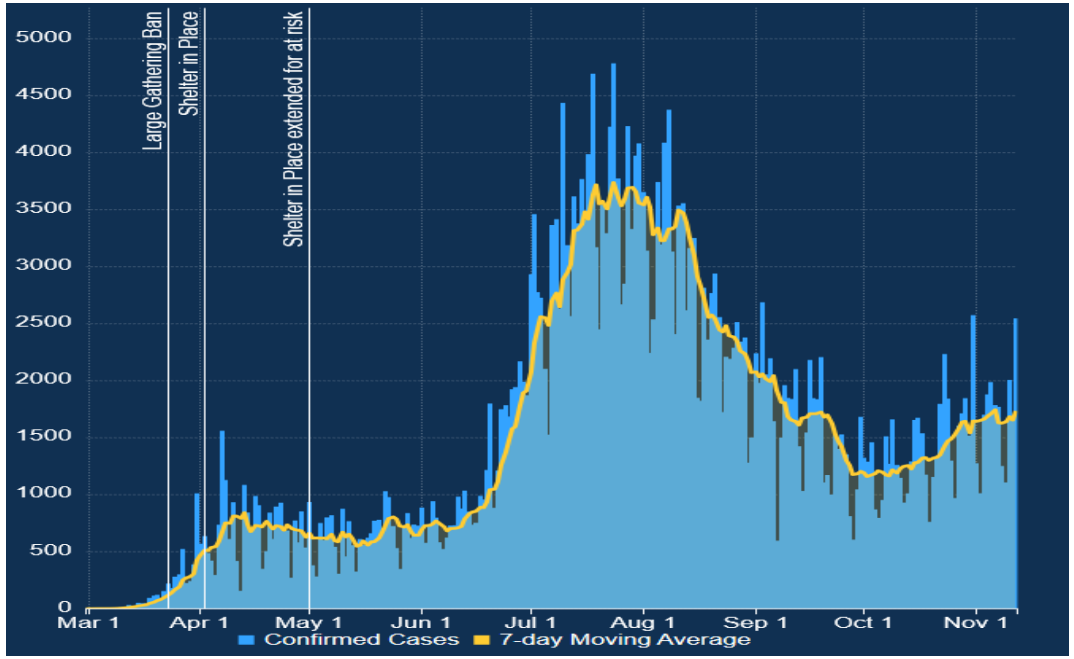
Oct 2

Nov 12

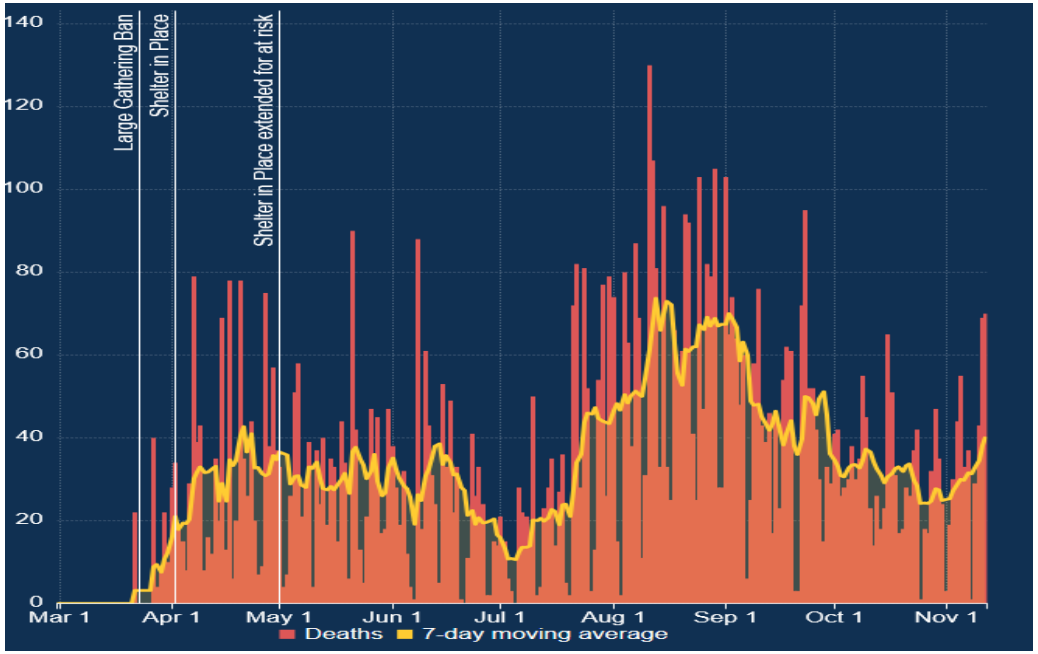

America's COVID Warning System
We use 5 key indicators to determine risk levels
for 50 states and 3,000+ counties.
Search for your state, county, or zip
RISK LEVELS
Active or imminent outbreak
At risk of outbreak
Slow disease growth
On track to contain COVID
CNMI
Click a state to view risk details and county info.

COVID-19 Cases and Deaths in Georgia

Cases = 416,876

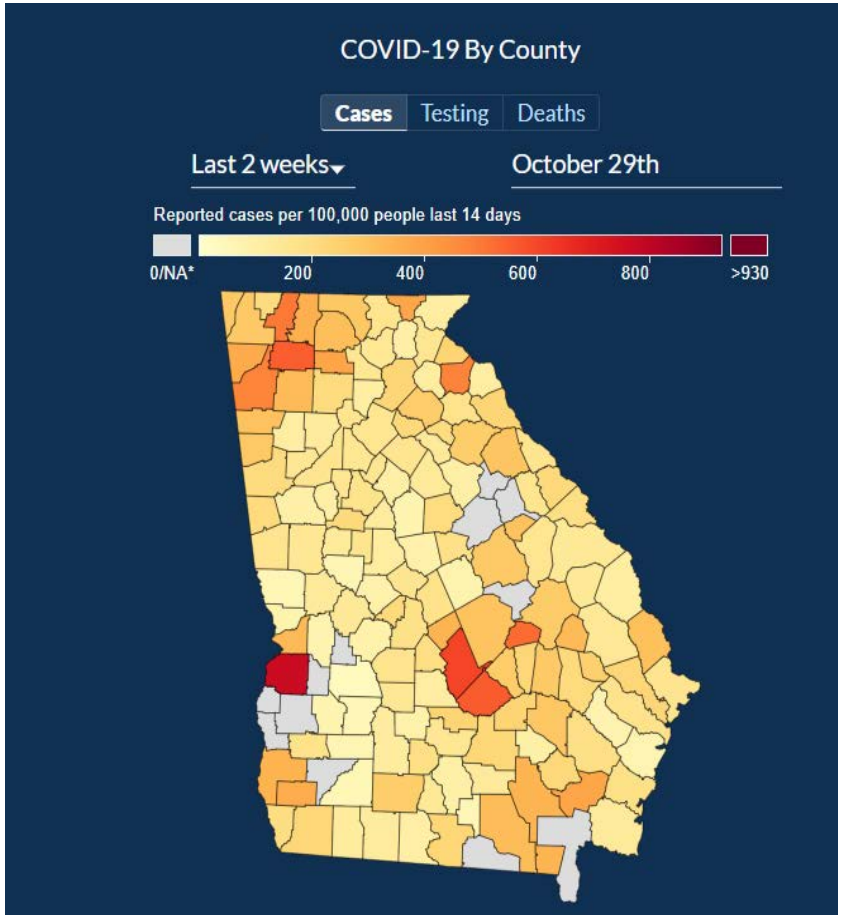


Deaths = 8,403



https://dph.georgia.gov/covid-19-daily-status-report

COVID-19 cases in Georgia
October 16 vs 29



White House Coronavirus Task Force Reports

GEORGIA

STATE REPORT | 10.25.2020

	STATE, LAST WEEK	STATE, % CHANGE FROM PREVIOUS WEEK	FEMA/HHS REGION, LAST WEEK	UNITED STATES, LAST WEEK
NEW COVID-19 CASES (RATE PER 100,000)	9,923 (93)	+13%	90,091 (135)	436,442 (133)
VIRAL (RT-PCR) LAB TEST POSITIVITY RATE	6.4%	+0.5%*	6.9%	5.8%
TOTAL VIRAL (RT-PCR) LAB TESTS (TESTS PER 100,000)	117,816** (1,110**)	-12%**	1,017,322** (1,520**)	6,706,546** (2,043**)
COVID-19 DEATHS (RATE PER 100,000)	215 (2.0)	+3%	1,543 (2.3)	5,484 (1.7)
SNFs WITH ≥1 NEW RESIDENT COVID-19 CASE	8%	+0%*	15%	12%
SNFs WITH ≥1 NEW STAFF COVID-19 CASE	20%	+0%*	29%	24%
SNFs WITH ≥1 NEW RESIDENT COVID-19 DEATH	3%	-2%*	5%	4%

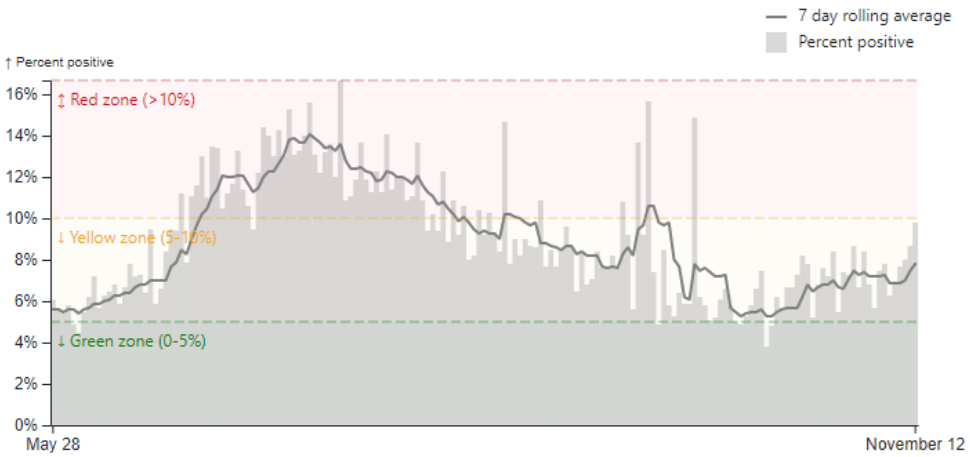
GEORGIA

STATE REPORT | 11.08.2020

	STATE	STATE, % CHANGE FROM PREVIOUS WEEK	FEMA/HHS REGION	UNITED STATES
NEW COVID-19 CASES (RATE PER 100,000)	11,901 (112)	+14%	106,660 (159)	687,656 (209)
VIRAL (RT-PCR) LAB TEST POSITIVITY RATE	7.4%	+0.2%*	7.8%	8.4%
TOTAL VIRAL (RT-PCR) LAB TESTS (TESTS PER 100,000)	119,081** (1,122**)	-16%**	1,149,018** (1,717**)	7,362,570** (2,243**)
COVID-19 DEATHS (RATE PER 100,000)	208 (2.0)	+8%	1,343 (2.0)	6,542 (2.0)
SNFs WITH ≥1 NEW RESIDENT COVID-19 CASE	10%	-1%*	15%	15%
SNFs WITH ≥1 NEW STAFF COVID-19 CASE	19%	-1%*	29%	29%
SNFs WITH ≥1 NEW RESIDENT COVID-19 DEATH	4%	-3%*	6%	5%

Testing and positivity trends

Percent testing positive for Coronavirus in Georgia



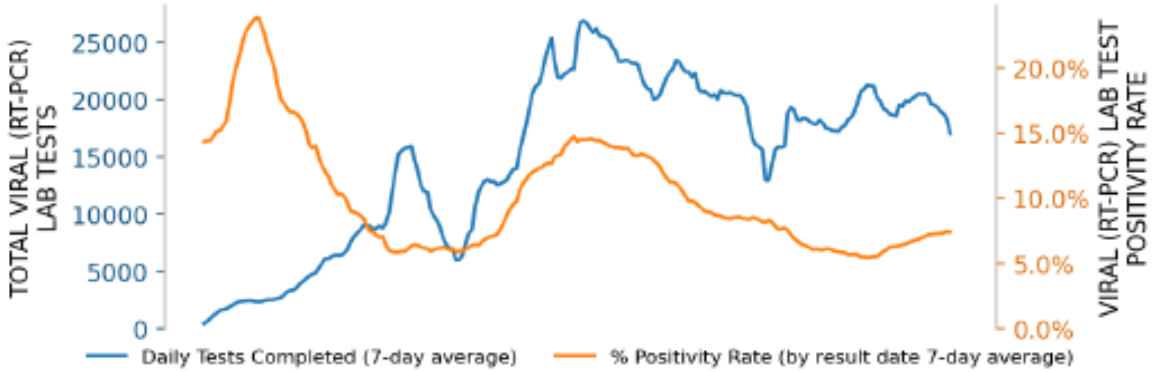
Note: Data on current infections is from electronic laboratory reporting to the state, which does not include all tests performed in Georgia. DPH excludes other testing sources because they do not consistently provide negative results, which must be factored in to arrive at positivity percentage. DPH also notes that, "People with a positive test often get retested and may test positive multiple times. These repeat positive tests will be counted as new positive tests."

Data: Georgia Department of Public Health

Zones: White House Coronavirus Task Force

Updated November 12

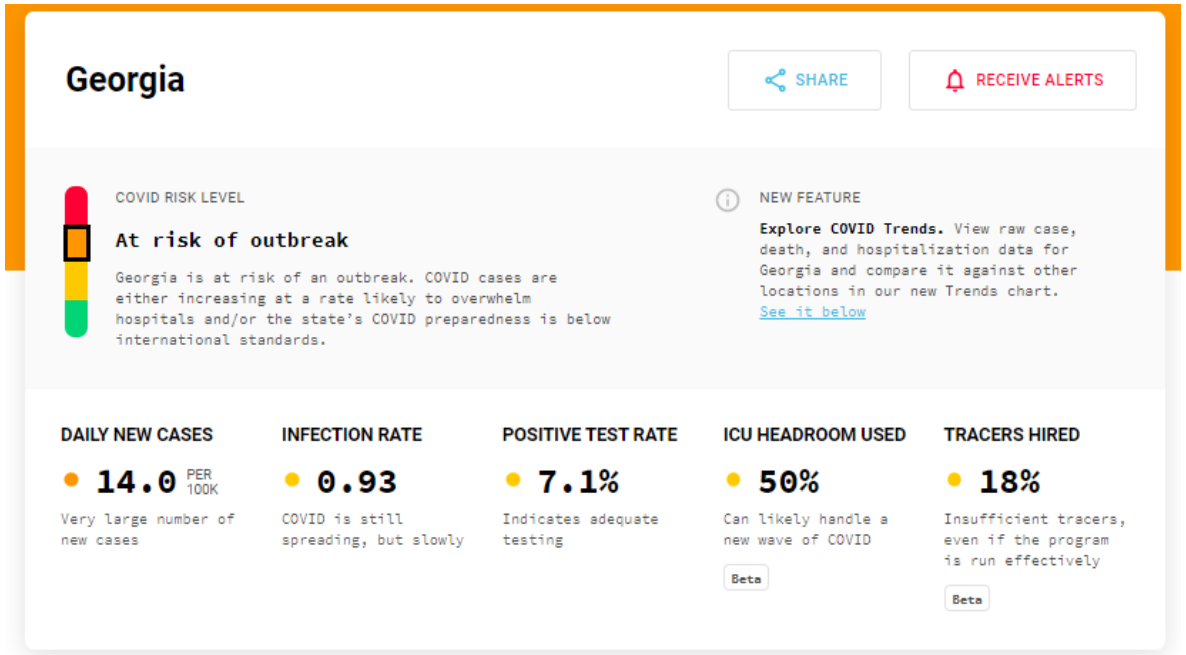
TESTING ▶



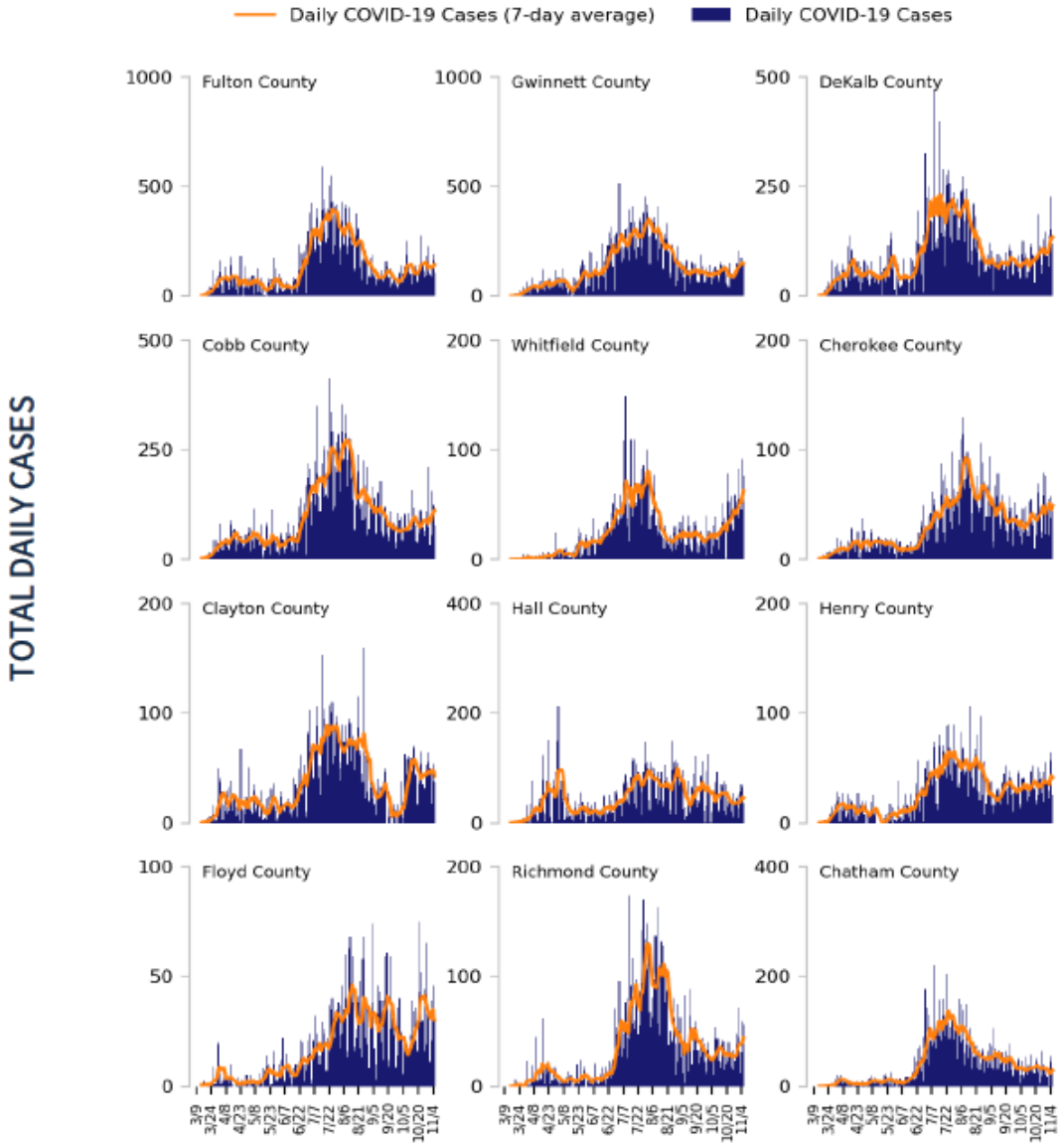
COVID Act Now
GA losing ground but still ORANGE

Sept 24

Oct 30



Top 12 counties based on number of new cases in the last 3 weeks



COVID Act Now
Fulton Co. Oct 2 vs Nov 12

Oct 2

Nov 12

COVID Act Now
DeKalb Co. Oct 16 vs Nov 12

Oct 16

Nov 12

COVID-19 Atlanta Reopening Dashboard – November 5, 2020

#ATLSTRONG

Current Status: **Phase 2**

Metrics are reported to public weekly. Next update is on 11/12.

Guidance Phase 2

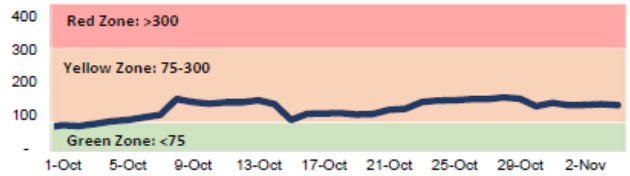
- Social distancing
- To-go and curbside pickups from restaurants and retail establishments
- All persons are required to wear a mask or face covering over their nose and mouth
- Small, private gatherings of no more than 10 people, with social distancing

Focus areas for next seven days

- Monitoring current Yellow Zone trends in new cases, hospitalizations, and hospital capacity.

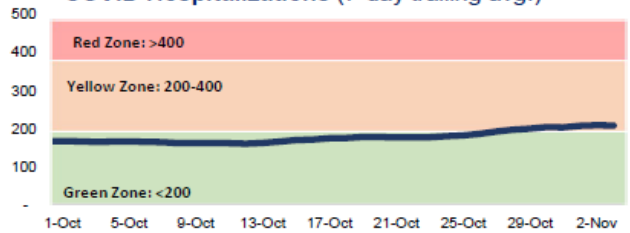
Disease Spread Indicators

New COVID Cases (7-day trailing avg.)



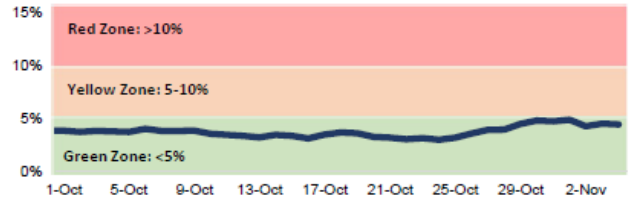
Current Trend	Phase 3 Target
Days	
32	14
Trending in the Yellow Zone since 10/4	*14-day Green Zone trend*

COVID Hospitalizations (7-day trailing avg.)



Days	
7	14
Trending in the Yellow Zone since 10/28	*14-day Green Zone trend*

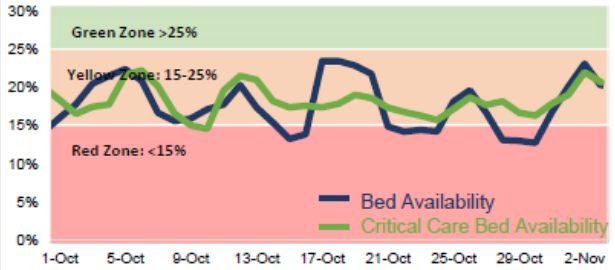
Avg. % Positive Test Results (7-day trailing avg.)



Days	
49	14
Trending in the Green Zone since 9/17	*14-day Green Zone trend*

Hospital Capacity Indicators

Hospital Bed Availability (Daily) [1]



Testing Indicators

Testing Capacity (Daily)

Current Capability	County Standards
8,800	>2,857
Tests per day	Tests per day

Testing Demand (Daily)

Current Demand
4,732
Tests per day

1 Hospital Bed Availability has reduced due to the decreased demand for COVID beds.

Disclaimer: *All data used herein is not owned or maintained by the City of Atlanta. Data has been sourced from Fulton County Board of Public Health (FCBOH) & Atlanta-Fulton County Emergency Management Agency (AFCEMA). Fulton County-wide data is used as a proxy for severity in the City of Atlanta jurisdiction. Data will be updated based on changes made by FCBOH and AFCEMA. The City of Atlanta does not claim responsibility for the accuracy of the source data.*

Tracking the Coronavirus at U.S. Colleges and Universities

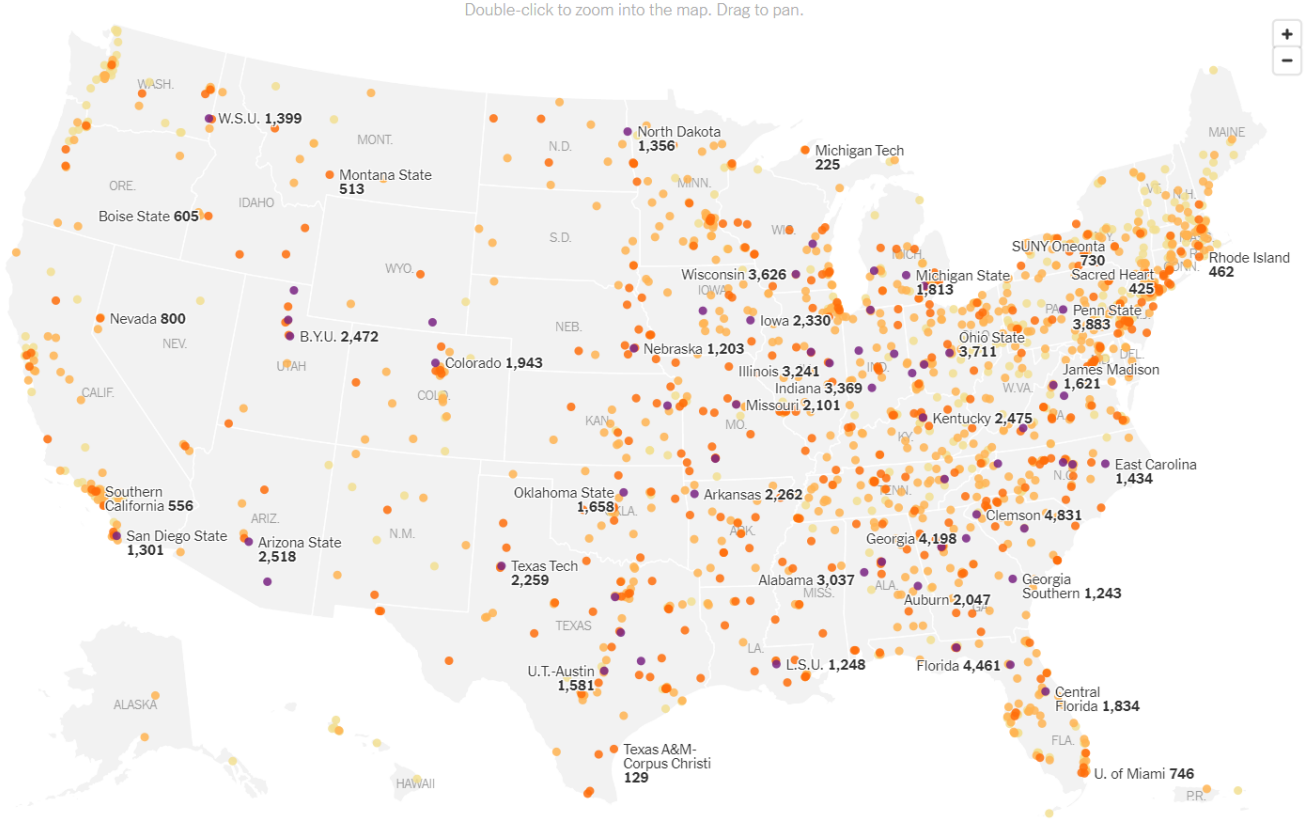
By The New York Times Updated Nov. 5, 2020

252,000+ Cases | **1,600+** Colleges

Colleges with coronavirus cases since the pandemic began

● 1,000 or more cases ● 100-999 cases ● 10-99 cases ● Fewer than 10 cases

Double-click to zoom into the map. Drag to pan.

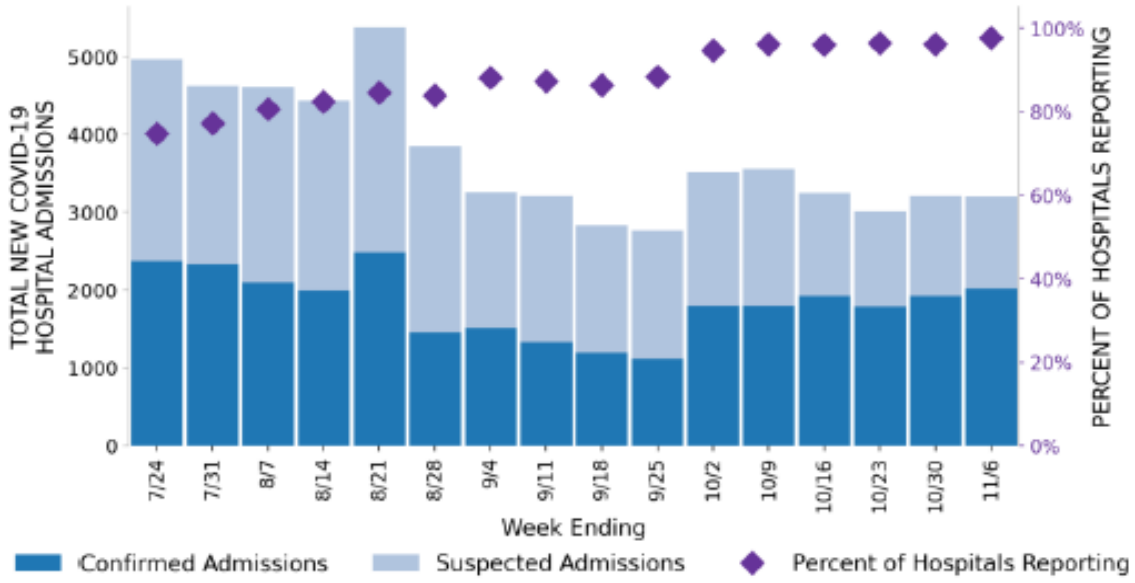


GEORGIA

STATE REPORT | 11.08.2020

137 hospitals are expected to report in Georgia

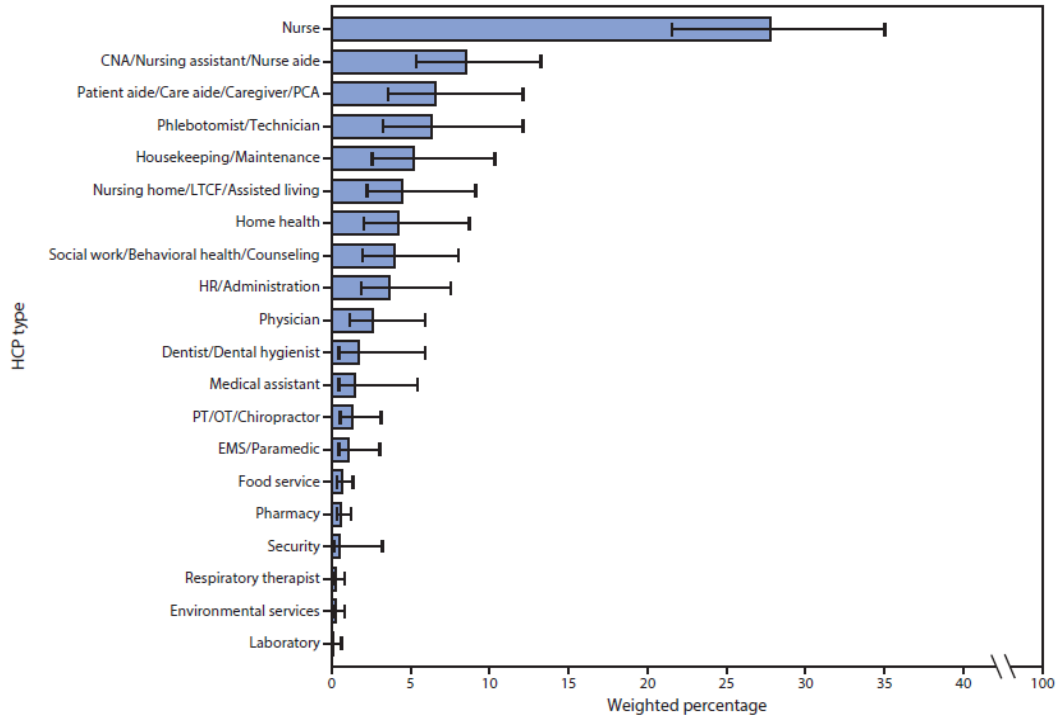
HOSPITAL ADMISSIONS



COVID-19–Associated Hospitalizations Among Health Care Personnel — COVID-NET, 13 States, March 1–May 31, 2020

Anita K. Kambhampati, MPH[1]; Alissa C. O'Halloran, MSPH[1]; Michael Whitaker, MPH[1,2]; Shelley S. Magill, MD, PhD[3]; Nora Chea, MD[3]; Shua J. Chai, MD[4,5]; Pam Daily Kirley, MPH[4]; Rachel K. Herlihy, MD[6]; Breanna Kawasaki, MPH[6]; James Meek, MPH[7]; Kimberly Yousey-Hindes, MPH[7]; Evan J. Anderson, MD[8,9]; Kyle P. Openo, DrPH[8,9,10]; Maya L. Monroe, MPH[11]; Patricia A. Ryan, MS[11]; Sue Kim, MPH[12]; Libby Reeg[12]; Kathryn Como-Sabetti, MPH[13]; Richard Danila, PhD[13]; Sarah Shrum Davis, MPH[14]; Salina Torres, PhD[15]; Grant Barney, MPH[16]; Nancy L. Spina, MPH[16]; Nancy M. Bennett, MD[17]; Christina B. Felsen, MPH[17]; Laurie M. Billing, MPH[18]; Jessica Shiltz, MPH[18]; Melissa Sutton, MD[19]; Nicole West, MPH[19]; William Schaffner, MD[20]; H. Keipp Talbot, MD[20]; Ryan Chatelain, MPH[21]; Mary Hill, MPH[21]; Lynnette Brammer, MPH[1]; Alicia M. Fry, MD[1]; Aron J. Hall, DVM[1]; Jonathan M. Wortham, MD[1]; Shikha Garg, MD[1]; Lindsay Kim, MD[1]; COVID-NET Surveillance Team

FIGURE 2. Weighted percentage of personnel types*,† among reported health care personnel (HCP) with COVID-19–associated hospitalizations (N = 438) — COVID-NET, 13 states,§ March 1–May 31, 2020



Summary

What is already known about this topic?

Data on characteristics and outcomes of U.S. health care personnel (HCP) hospitalized with COVID-19 are limited.

What is added by this report?

Analysis of COVID-19 hospitalization data from 13 sites indicated that 6% of adults hospitalized with COVID-19 were HCP. Among HCP hospitalized with COVID-19, 36% were in nursing-related occupations, and 73% had obesity. Approximately 28% of these patients were admitted to an intensive care unit, 16% required invasive mechanical ventilation, and 4% died.

What are the implications for public health practice?

HCP can have severe COVID-19–associated illness, highlighting the need for continued infection prevention and control in health care settings as well as community mitigation efforts to reduce SARS-CoV-2 transmission.

Update: Characteristics of Symptomatic Women of Reproductive Age with Laboratory-Confirmed SARS-CoV-2 Infection by Pregnancy Status — United States, January 22–October 3, 2020

Weekly / November 6, 2020 / 69(44);1641–1647

On November 2, 2020, this report was posted online as an MMWR *Early Release.*

Compared with non-pregnant women, pregnant women more frequently were:

- Admitted to an ICU (10.5 versus 3.9 per 1,000 cases; aRR = 3.0; 95% CI = 2.6–3.4)
- Received invasive ventilation (2.9 versus 1.1 per 1,000 cases; aRR = 2.9; 95% CI = 2.2–3.8)
- Received ECMO (0.7 versus 0.3 per 1,000 cases; aRR = 2.4; 95% CI = 1.5–4.0)

Operation Warp Speed

Overseen by the Dept Health and Human Services and Dept of Defense

- Diagnostics, therapeutics and vaccines

Goal to produce 300 million doses of COVID vaccine with first doses by January 2021

Done with investment and coordination

Many partners—public and private

Protocols are overseen by federal government

No steps eliminated—steps proceed simultaneously

- Manufacturing and filling before completion of phase 3 trials and licensure
- Financial risk but not product risk

Vaccine Update: Phase III clinical trials in the U.S.

- AZD1222 vaccine (AstraZeneca) announced removal of FDA hold 10/23, resuming Phase III trials
- Ad26.COV2.S vaccine (Janssen) announced lifting of safety pause 10/23, resuming Phase III trials
- BNT162b2 vaccine (Pfizer/BioNtech)
  - **42,133** participants enrolled as of 10/26/2020
  - 35,771 participants have received their second vaccination
  - 30% of U.S. participants enrolled have "diverse backgrounds"
- mRNA-1273 vaccine (Moderna): ***Enrollment Complete***
  - **30,000** participants enrolled as of 10/22/2020
  - 25,654 participants have received their second vaccination

Sources: https://www.modernatx.com/cove-study; https://www.pfizer.com/science/coronavirus/vaccine, https://connect.trialscope.com/studies/34986a8a-b779-4169-a35c-5d929149d426; https://www.reuters.com/article/us-health-coronavirus-pfizer/pfizer-says-coronavirus-vaccine-study-shows-mostly-mild-to-moderate-side-effects-idUSKBN26631T

https://www.cdc.gov/vaccines/acip/meetings/downloads/slides-2020-10/COVID-Bell.pdf

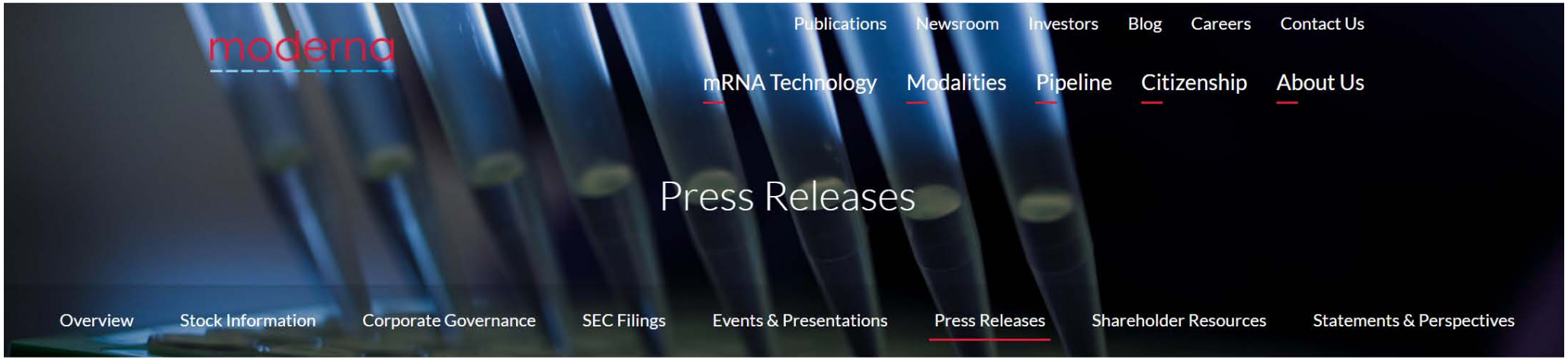
PFIZER AND BIONTECH ANNOUNCE VACCINE CANDIDATE AGAINST COVID-19 ACHIEVED SUCCESS IN FIRST INTERIM ANALYSIS FROM PHASE 3 STUDY

Monday, November 09, 2020 - 06:45am

- *Vaccine candidate was found to be more than 90% effective in preventing COVID-19 in participants without evidence of prior SARS-CoV-2 infection in the first interim efficacy analysis*
- *Analysis evaluated 94 confirmed cases of COVID-19 in trial participants*
- *Study enrolled 43,538 participants, with 42% having diverse backgrounds, and no serious safety concerns have been observed; Safety and additional efficacy data continue to be collected*
- *Submission for Emergency Use Authorization (EUA) to the U.S. Food and Drug Administration (FDA) planned for soon after the required safety milestone is achieved, which is currently expected to occur in the third week of November*
- *Clinical trial to continue through to final analysis at 164 confirmed cases in order to collect further data and characterize the vaccine candidate's performance against other study endpoints*

This press release features multimedia. View the full release here: https://www.businesswire.com/news/home/20201109005539/en/

94 events:
85 in placebo and 9 in vaccine arm (90.4% efficacy)



Moderna's COVID-19 Vaccine Candidate Meets its Primary Efficacy Endpoint in the First Interim Analysis of the Phase 3 COVE Study

November 16, 2020 at 6:56 AM EST

PDF Version

First interim analysis included 95 participants with confirmed cases of COVID-19

Phase 3 study met statistical criteria with a vaccine efficacy of 94.5% (p <0.0001)

Moderna intends to submit for an Emergency Use Authorization (EUA) with U.S. FDA in the coming weeks and expects the EUA to be based on the final analysis of 151 cases and a median follow-up of more than 2 months

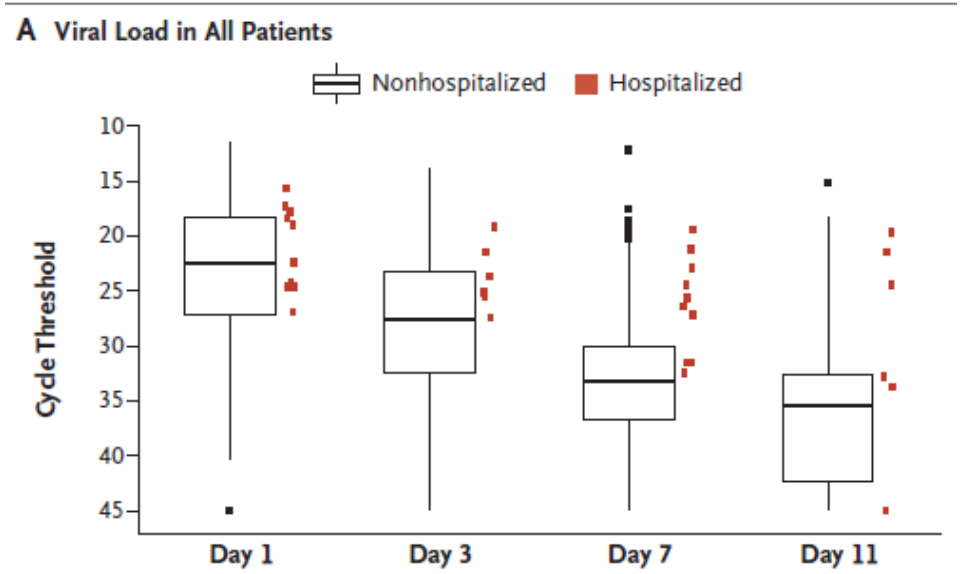
The NEW ENGLAND JOURNAL of MEDICINE

DOI: 10.1056/NEJMoa2029849

ORIGINAL ARTICLE

SARS-CoV-2 Neutralizing Antibody LY-CoV555 in Outpatients with Covid-19

Peter Chen, M.D., Ajay Nirula, M.D., Ph.D., Barry Heller, M.D., Robert L. Gottlieb, M.D., Ph.D., Joseph Boscia, M.D., Jason Morris, M.D., Gregory Huhn, M.D., M.P.H.T.M., Jose Cardona, M.D., Bharat Mocherla, M.D., Valentina Stosor, M.D., Imad Shawa, M.D., Andrew C. Adams, Ph.D., Jacob Van Naarden, B.S., Kenneth L. Custer, Ph.D., Lei Shen, Ph.D., Michael Durante, M.S., Gerard Oakley, M.D., Andrew E. Schade, M.D., Ph.D., Janelle Sabo, Pharm.D., Dipak R. Patel, M.D., Ph.D., Paul Klekotka, M.D., Ph.D., and Daniel M. Skovronsky, M.D., Ph.D., for the BLAZE-1 Investigators*



LY-CoV555 is a potent antispike neutralizing monoclonal antibody that binds with high affinity to the receptor-binding domain of SARS-CoV2

CONCLUSIONS

In this interim analysis of a phase 2 trial, one of three doses of neutralizing antibody LY-CoV555 appeared to accelerate the natural decline in viral load over time, whereas the other doses had not by day 11. (Funded by Eli Lilly; BLAZE-1 ClinicalTrials.gov number, NCT04427501.)

Authorized by FDA EUA

BAMLANIVIMAB

Allocation & Distribution of Bamlanivimab

STEP 1

HHS/ASPR determines allocation amounts for states and territories

STEP 2

HHS/ASPR notifies health departments regarding allocation amounts

STEP 3

Health departments determine allocations for facilities in their jurisdictions

STEP 4

Distributor coordinates shipping details with receiving facilities

STEP 5

Receiving facilities administer drug to eligible patients based on Emergency Use Authorization


Happy
Thanksgiving

Questions?

@CARLOSDELRIO7