COVID-19
STATUS REPORT

January 13, 2022 | Joshua Sharfstein, MD

State of the Virus: **Global**

JOHNS HOPKINS UNIVERSITY & MEDICINE **CORONAVIRUS RESOURCE CENTER**

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

Last Updated at (M/D/YYYY)
1/13/2022, 7:21 AM

Total Cases	Total Deaths	Total Vaccine Doses Administered
317,308,612	5,515,258	9,544,356,317
28-Day Cases	**28-Day Deaths**	**28-Day Vaccine Doses Administered**
44,936,589	182,285	924,114,664

Cases | Deaths by Country/Region/Sovereignty

US
28-Day: 12,809,099 | 40,417
Totals: 63,203,866 | 844,562

France
28-Day: 4,538,591 | 5,326
Totals: 13,042,665 | 127,294

United Kingdom
28-Day: 3,884,741 | 4,247
Totals: 14,958,196 | 151,496

Italy
28-Day: 2,688,992 | 4,694
Totals: 7,971,068 | 139,872

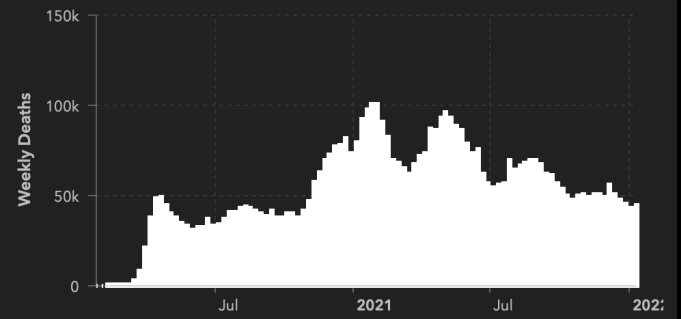
Spain
28-Day: 2,378,099 | 1,889
Totals: 7,771,367 | 90,508

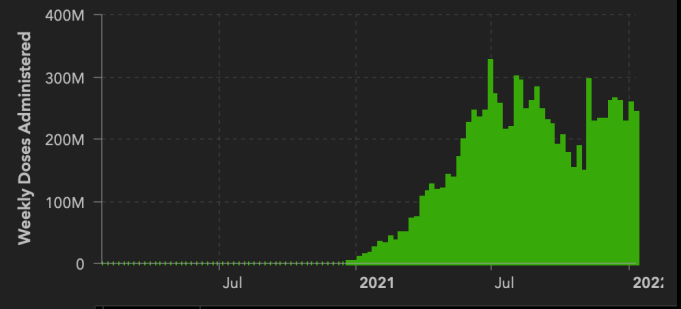
India
28-Day: 1,599,325 | 8,557
Totals: 36,317,927 | 485,035

Argentina
28-Day: 1,293,376 | 813
Totals: 6,664,717 | 117,670

Australia
28-Day: 1,159,806 | 396
Totals: 1,402,591 | 2,522

Turkey
28-Day: 1,095,312 | 4,429





Admin0 | Admin1 | Admin2

28-Day | Totals | Incidence | Case-Fatality Ratio | Global Vaccinations | US Vaccinations | Terms of Use

Weekly | 28-Day

State of the Virus: **U.S.**

COVID-19 United States Cases by County Johns Hopkins University

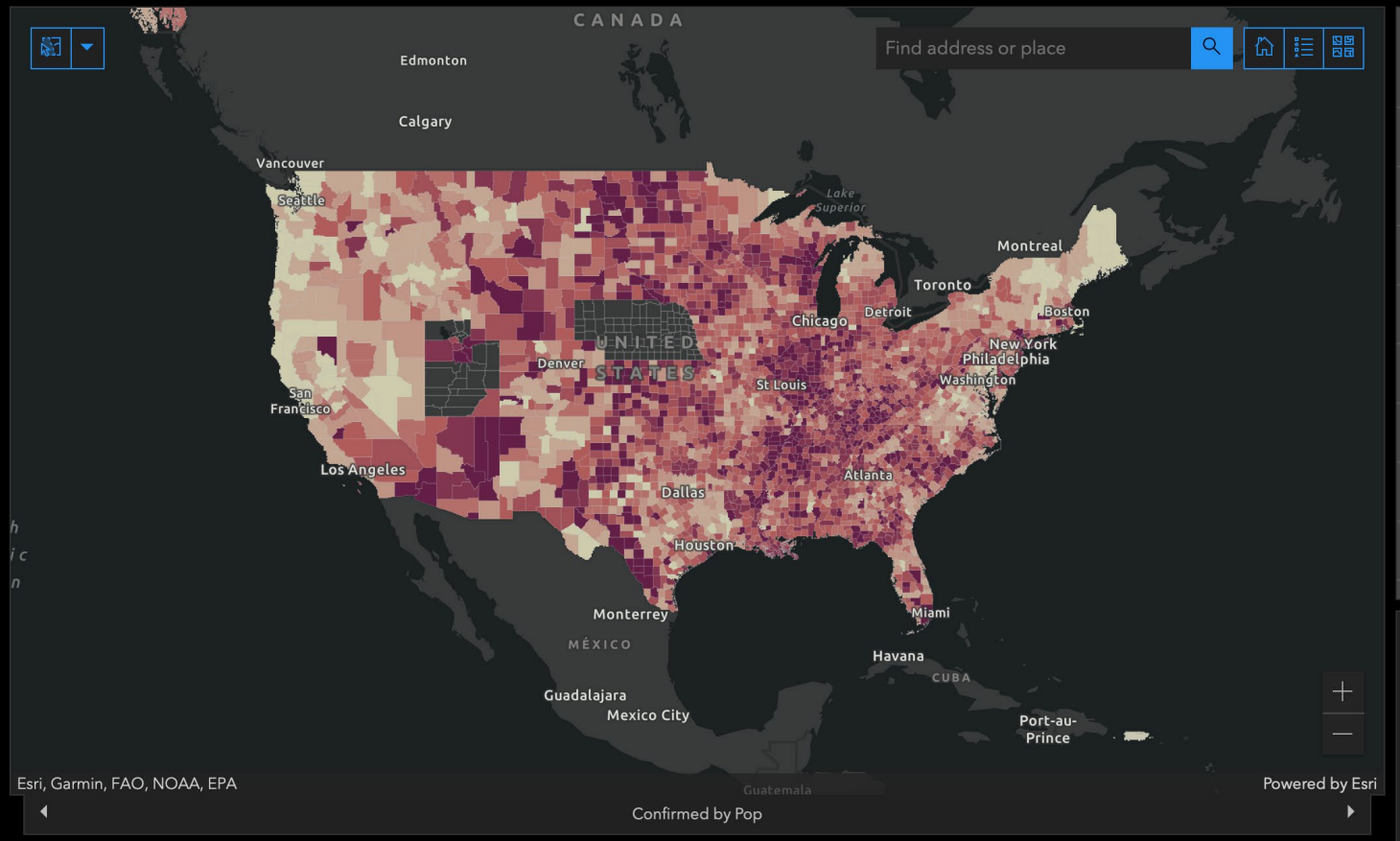
States/Territories: Please select from list

County (or Equivalent): Please select from list

Top 25 Confirmed Cases by County

2,086,581 confirmed	Los Angeles
969,741 confirmed	Maricopa
966,133 confirmed	Cook
965,111 confirmed	Miami-Dade
775,079 confirmed	Harris
600,905 confirmed	Kings
563,065 confirmed	San Diego
557,789 confirmed	Queens
493,676 confirmed	Dallas
493,231 confirmed	Broward
472,262 confirmed	Riverside
456,355 confirmed	San Bernardino
439,765 confirmed	Orange
435,237 confirmed	Tarrant

Last Updated on: 2022-01-12

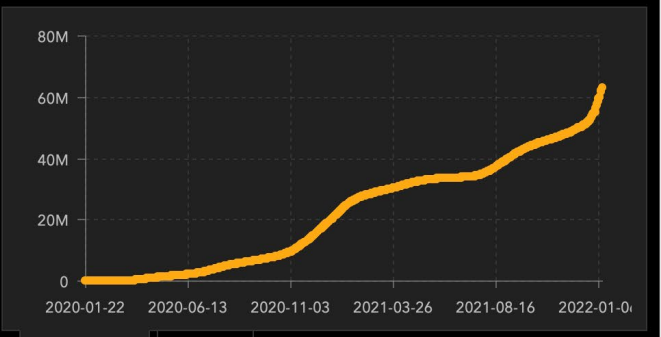


Data is updated once per day to allow the system to pull county-level data. For the most up-to-date confirmed cases and deaths, please see the COVID-19 Global Map. New York City borough deaths data does not include Probable COVID-19 deaths, as this data is not reported.

Map Visualization: Centers for Civic Impact. Automation Support: Esri Living Atlas team, JHU APL, and JHU Sheridan Libraries. Contact Us. FAQ.

Top 20 Counties by Number of Deaths

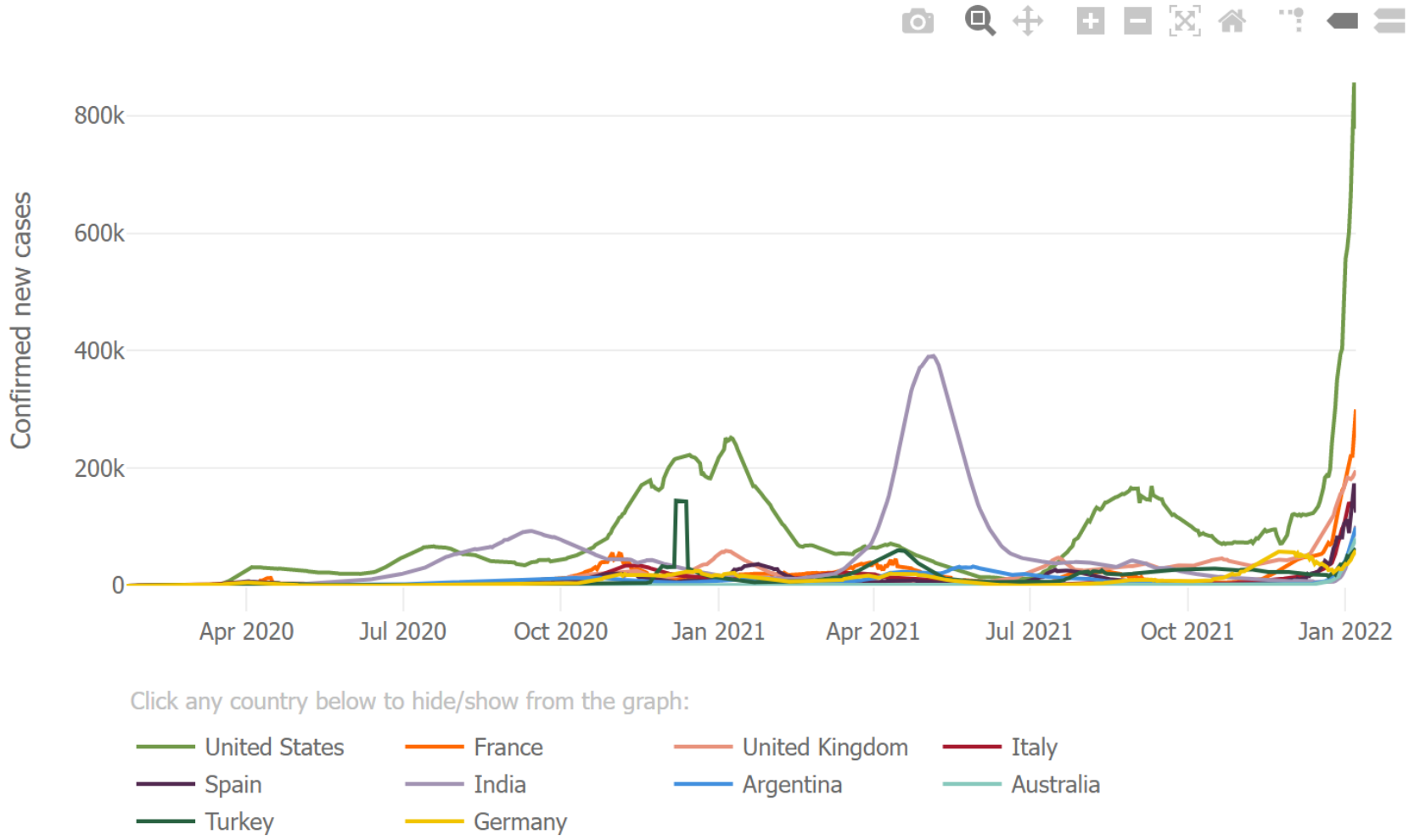
27,850 deaths	Los Angeles
14,064 deaths	Maricopa
12,406 deaths	Cook
11,465 deaths	Kings
10,798 deaths	Queens
9,850 deaths	Harris
9,278 deaths	Miami-Dade
7,060 deaths	Bronx
6,732 deaths	Wayne



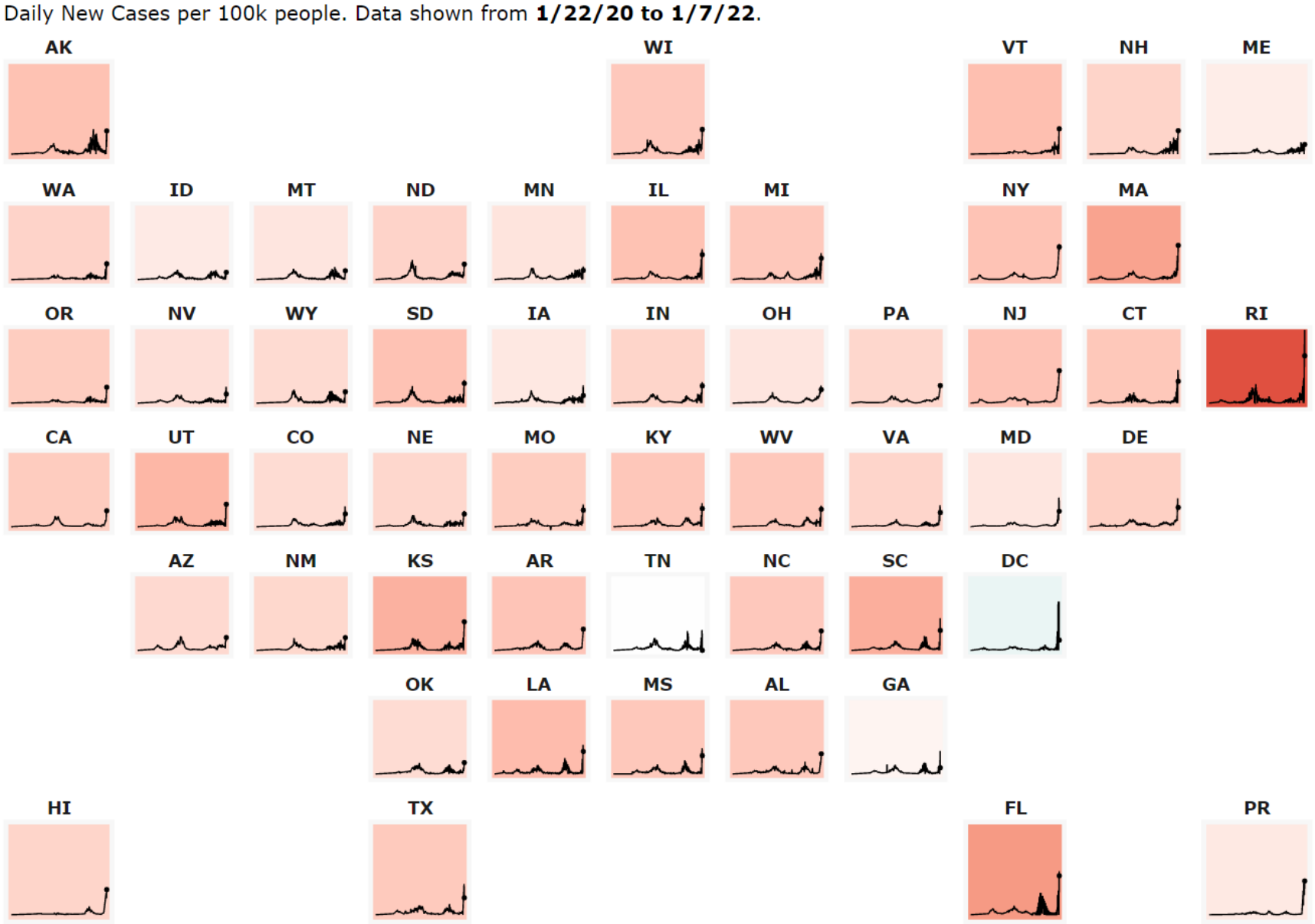
U.S. has the **Most Cases**

DAILY CONFIRMED NEW CASES (7-DAY MOVING AVERAGE)

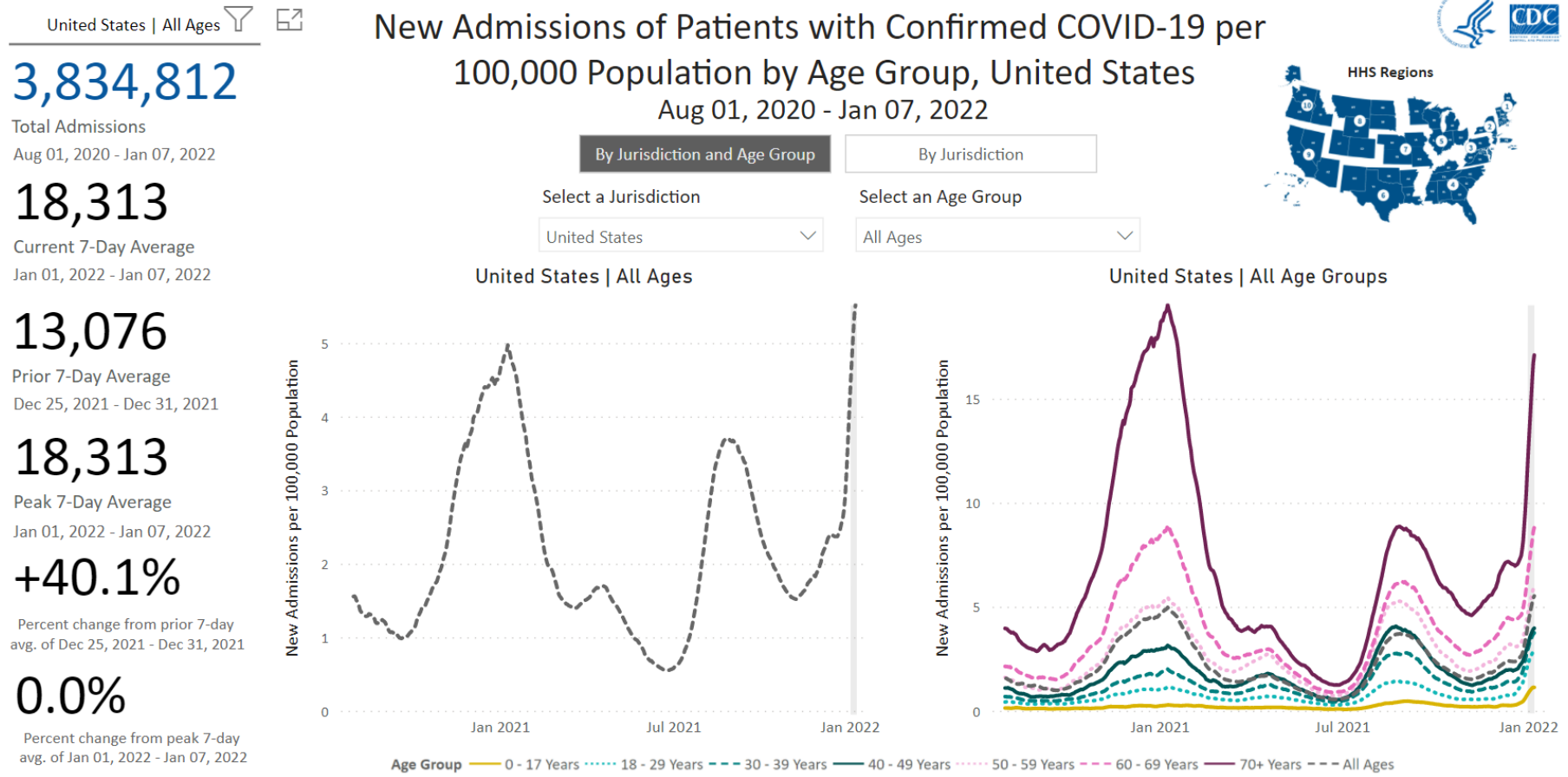
Outbreak evolution for the current most affected countries



Trends by **State**



New **Hospital Admissions**



Based on reporting from all hospitals (N=5,263). Due to potential reporting delays, data reported in the most recent 7 days (as represented by the shaded bar) should be interpreted with caution.
Small shifts in historic data may occur due to changes in the CMS Provider of Services file, which is used to identify the cohort of included hospitals. Data since December 1, 2020 have had error correction methodology applied. Data prior to this date may have anomalies that are still being resolved. Note that the above graphs are often shown on different scales. Data prior to August 1, 2020 are unavailable.

Last Updated: Jan 09, 2022

Unified Hospital Dataset, White House COVID-19 Team, Data Strategy and Execution Workgroup

Hospital Admissions **Age 0-17**

United States | 0 - 17 Years

84,582
Total Admissions
Aug 01, 2020 - Jan 07, 2022

824
Current 7-Day Average
Jan 01, 2022 - Jan 07, 2022

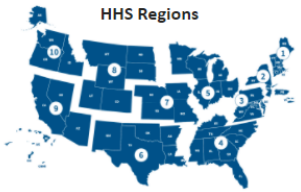
563
Prior 7-Day Average
Dec 25, 2021 - Dec 31, 2021

824
Peak 7-Day Average
Jan 01, 2022 - Jan 07, 2022

+46.2%
Percent change from prior 7-day avg. of Dec 25, 2021 - Dec 31, 2021

0.0%
Percent change from peak 7-day avg. of Jan 01, 2022 - Jan 07, 2022

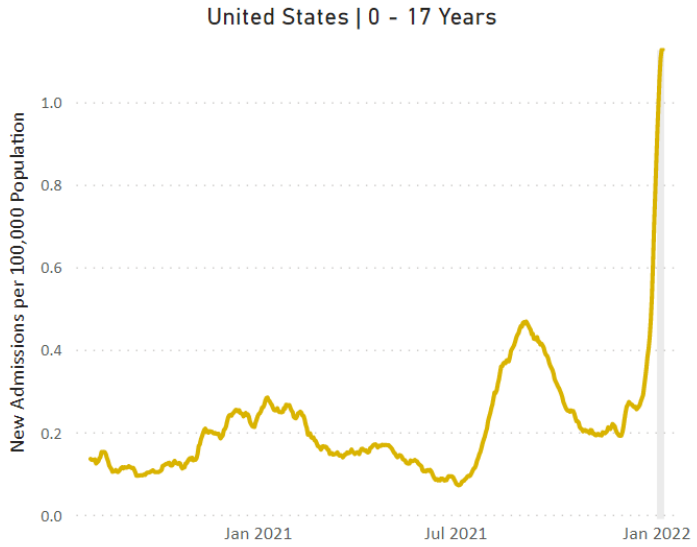
New Admissions of Patients with Confirmed COVID-19 per 100,000 Population by Age Group, United States
Aug 01, 2020 - Jan 07, 2022

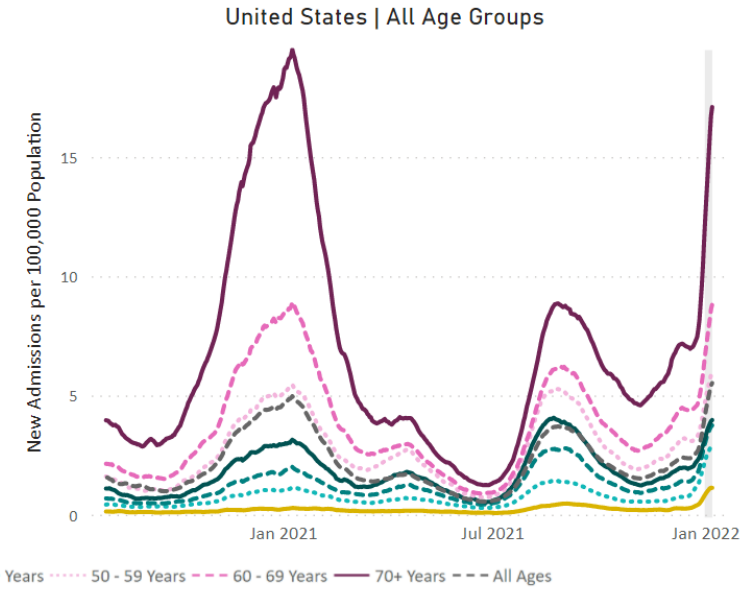


By Jurisdiction and Age Group | By Jurisdiction

Select a Jurisdiction: United States

Select an Age Group: 0 - 17 Years





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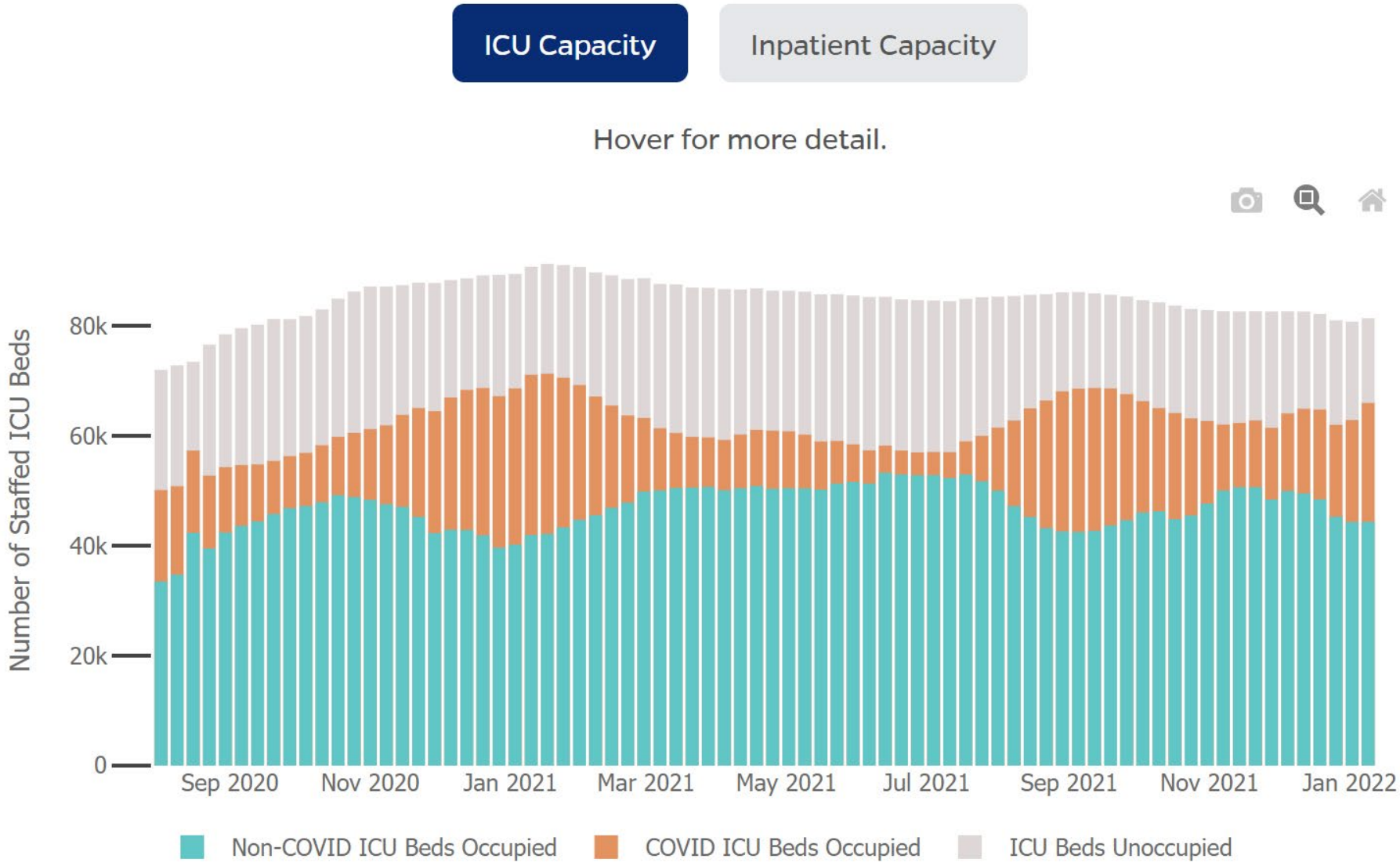
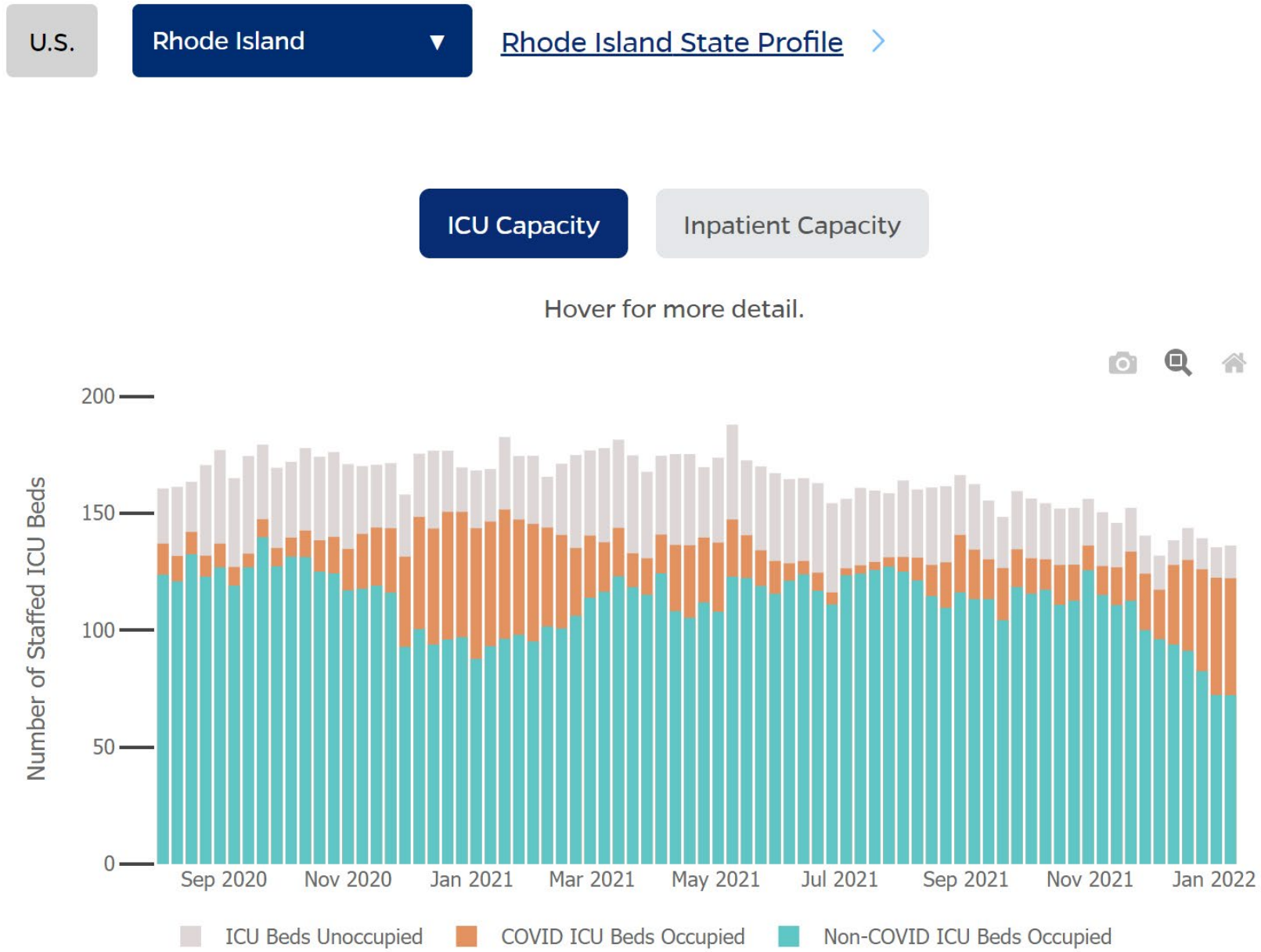
Unified Hospital Dataset, White House COVID-19 Team, Data Strategy and Execution Workgroup

ICU **Capacity** (U.S.)



ICU **Capacity** (Rhode Island)



What's New This Week

New Antivirals

FDA has authorized two pills, with the **Pfizer pill** appearing more effective without the potential risk to pregnancy compared to the **Merck pill**.

Both need to be given within
5 days of symptoms.

For Mayors

Major risk of inequity in access to treatment for COVID. **Cities should directly link rapid testing to treatment for those at high risk of serious illness.**

What's New This Week

Rapid Tests

Rapid antigen tests are not as sensitive as PCR tests, but they still can detect high levels of virus.

For Mayors

Using rapid antigen tests during the omicron surge:

If positive → very likely true
If negative and no symptoms → likely true
If negative but seems like COVID → caution

What's New This Week

Falsehoods on Vaccines

Recent survey shows 80% of Americans believe or unsure of at least one common false statement about COVID-19 or the vaccine.

For Mayors

Ensure a steady flow of accurate information about the vaccine is shared with the public. Dispel myths about the vaccines with trusted messengers.

1 in 5 newly vaccinated cite employer mandate as reason.

JOHNS HOPKINS
BLOOMBERG SCHOOL
of PUBLIC HEALTH

COVID-19/Omicron Update

January 13, 2022 | David Dowdy, MD PhD

Background: Brief Omicron Timeline

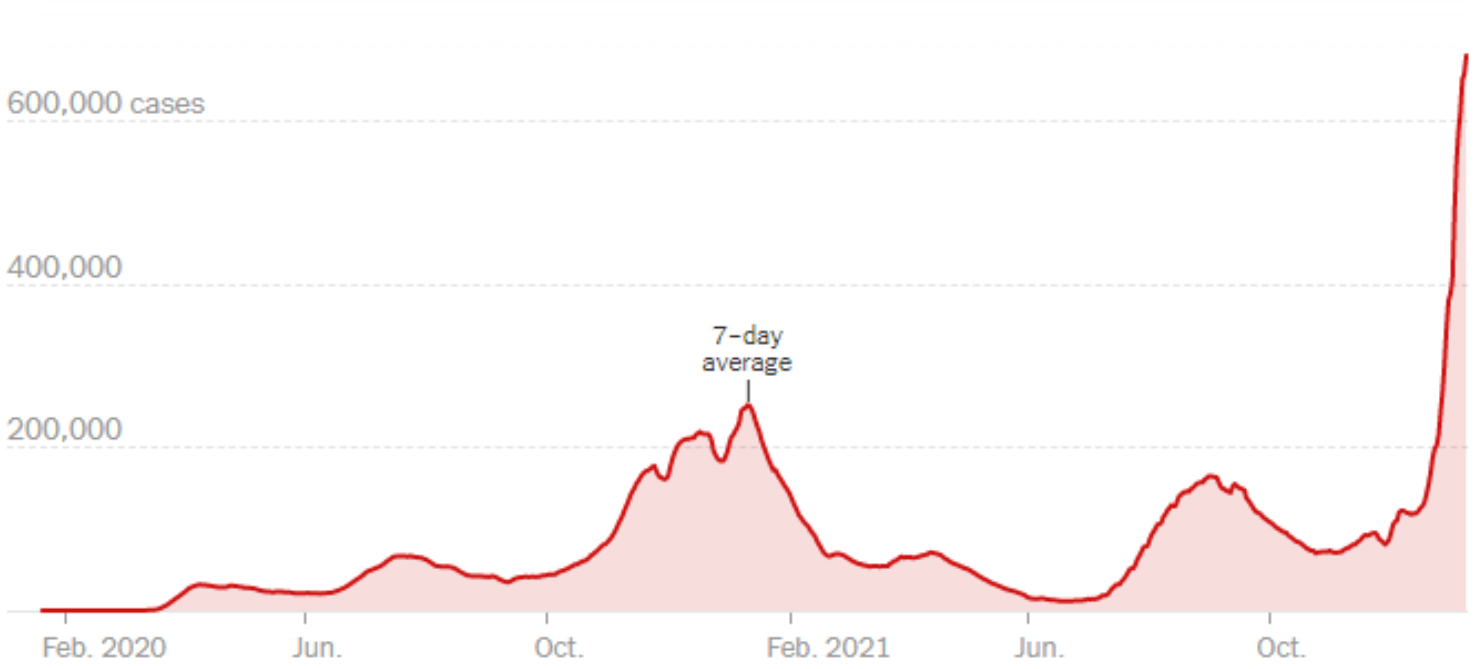
- **Nov. 11 & 14:** Omicron variant (B.1.1.529) detected in Botswana and South Africa

- **Dec. 1:** First case in U.S. detected
  - *>50 cases from Nov 15-29 later found to be Omicron*

- **Jan. 1:** ~400,000 cases per day
  - *Omicron accounts for an estimated 80-95% of new cases in the USA.*

- **Today:** >700,000 cases per day
  - *Omicron accounts for an estimated >80% of new cases*

New Reported Cases
(United States)



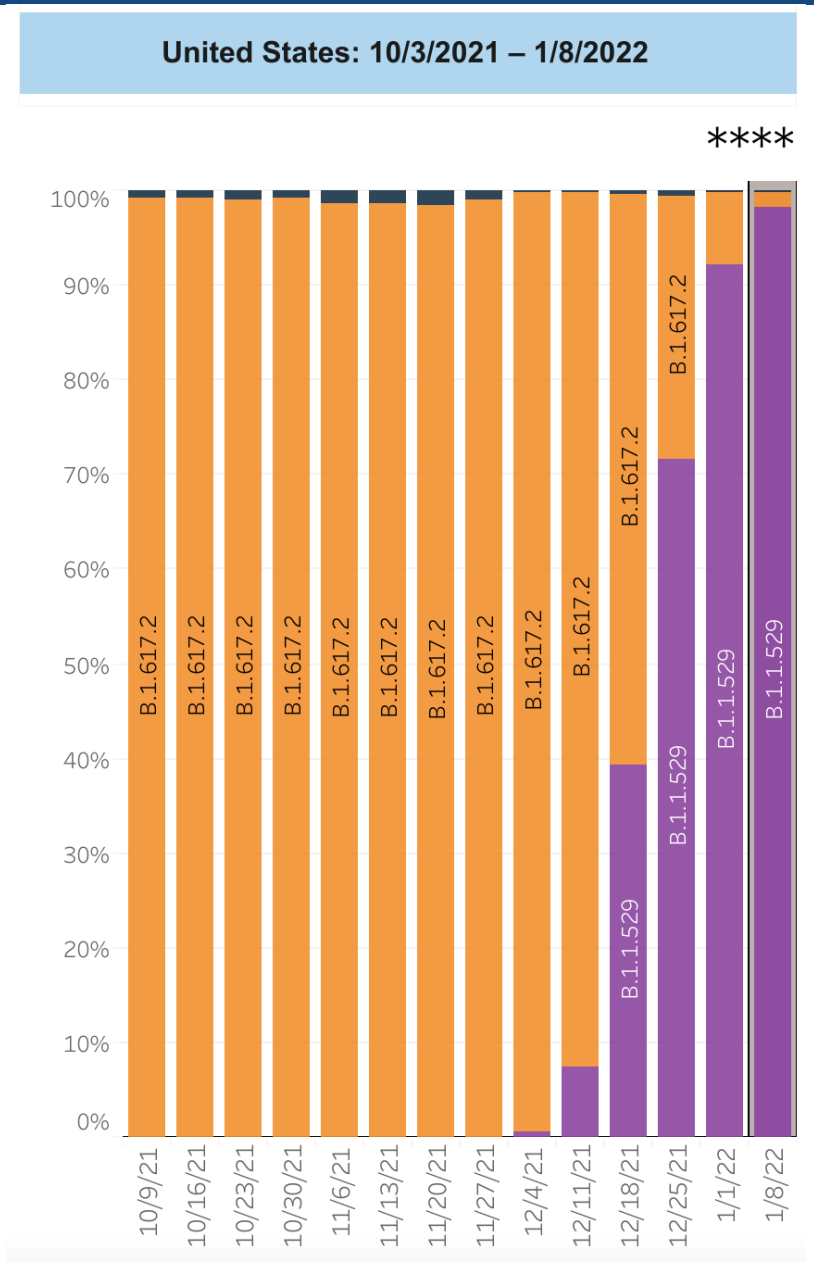
What's Different About Omicron?

- In animal studies, Omicron appears **less likely to infect deeper into the lungs**

- Omicron may be more transmissible than Delta, and it **may evade prior immunity**

- The **incubation period** of Omicron may be shorter than Delta, at **~3 days**.

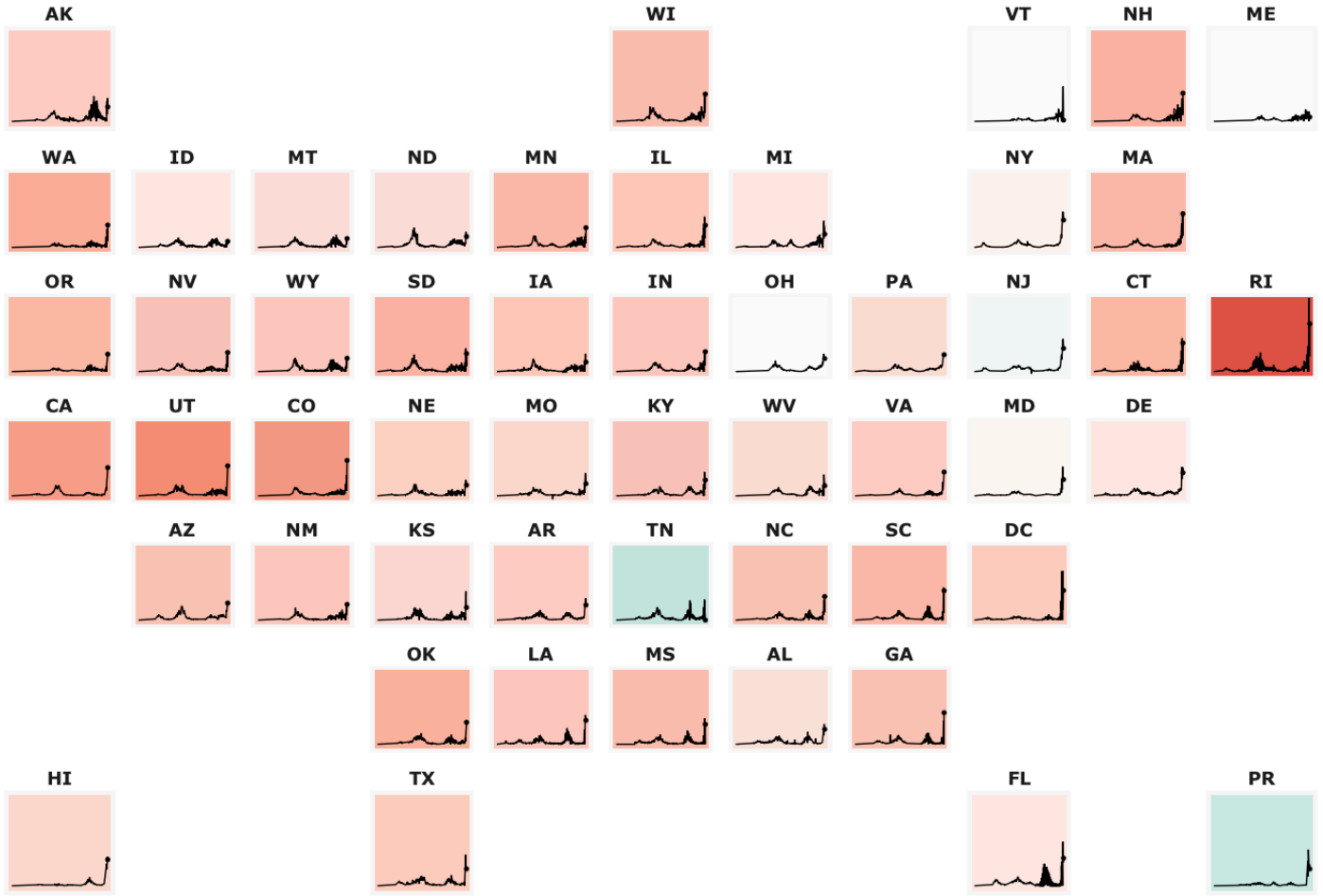
- **Bottom line:** Omicron can spread rapidly, but may cause milder symptoms.



United States: Cases in the Last Two Weeks

- COVID-19 cases have tripled nationwide
- Increased by >50% in all states, except Maine
- Highest rates (per 100k population) in Rhode Island, New York, New Jersey, and Massachusetts
- Flattening in D.C., Maryland, Delaware, Ohio, New York, New Jersey
- Sharp increases in the South and West

Daily New Cases per 100k people
(Data shown from 1/22/20 to 1/11/22)



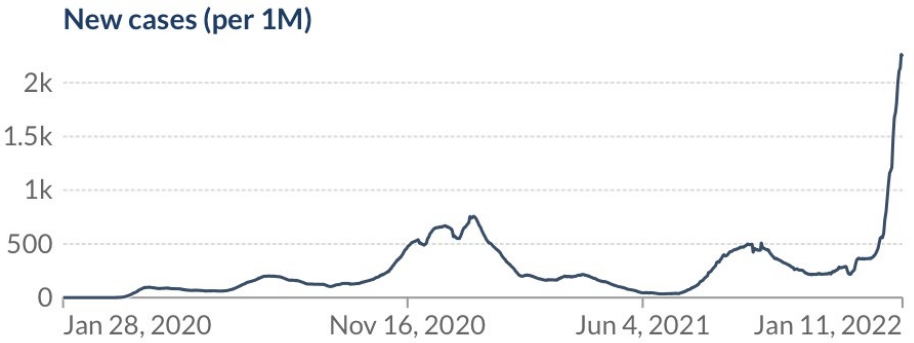
United States: Hospitalizations

- Some evidence that cases are milder:
  - Cases ~3x higher than ever before
  - Hospitalizations only now rising above last winter's peak
  - Fewer people in ICU than last two waves (though rising)

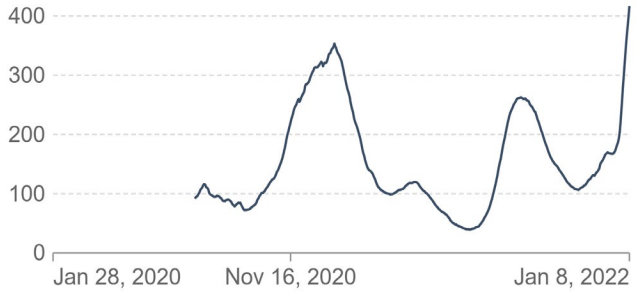
- But hospitalizations for COVID-19 are still at an all-time high

- And regional differences are striking
  - Example: Hospitalizations in D.C. are 3x higher than last winter's peak

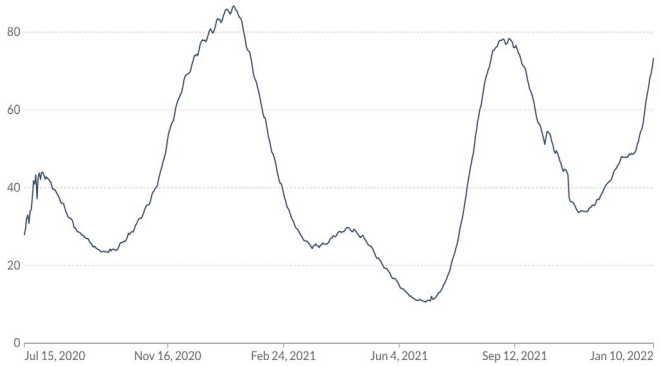
New COVID-19 Cases per 1M (United States)



Hospital Admissions per 1M (United States)



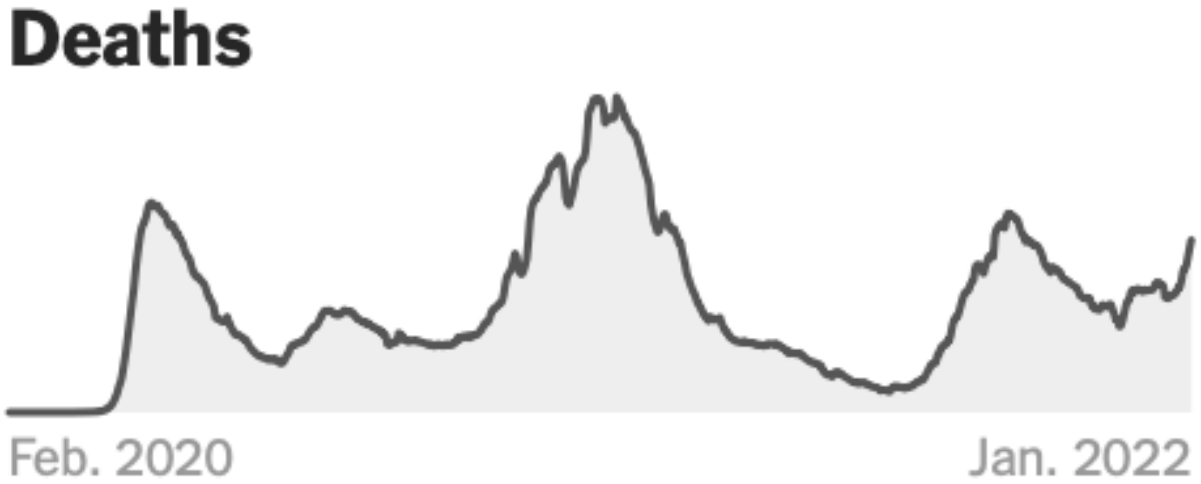
Patients in the ICU per 1M (United States)



Deaths: A Lagging Indicator

- Death data is difficult to interpret
  - *3-week delay from diagnosis and hospitalization to death*
- Deaths are at 1,700 per day nationally, and rising
  - *Highest mortality rate in the world, outside of Eastern Europe*
- But only reflect where we were before Christmas (3 weeks ago)
  - *Cases have increased >4x since then*
- Will likely see some further increase, though perhaps not to levels of last winter

COVID-19 Deaths per 1M
(United States)

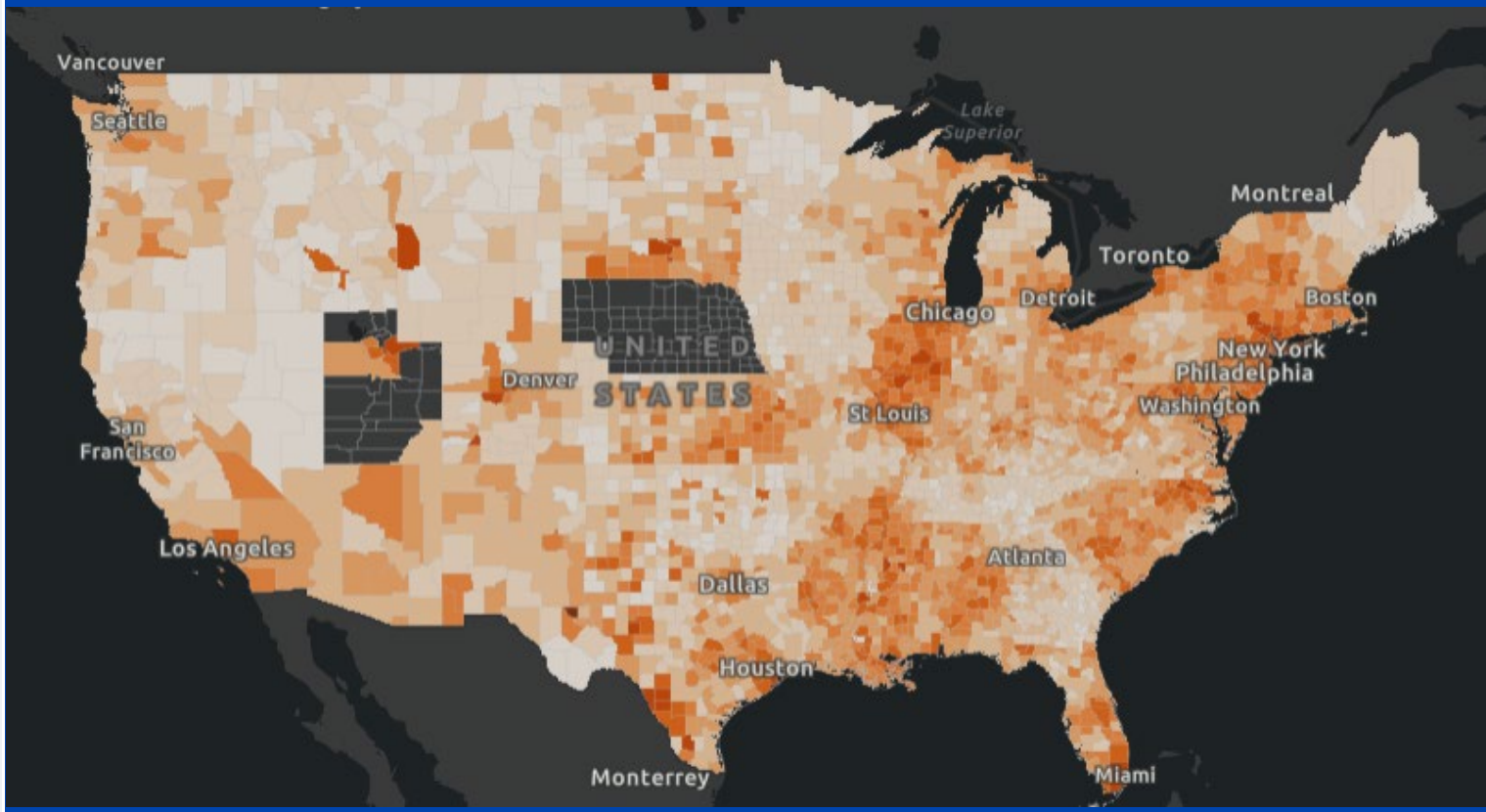


Cities are Being Hit Hardest

- Case rates (per 100K population) are 70% higher in metro areas
  - *Whereas mortality rates are 35% lower*

- This wave is largely “jumping” across cities and then spreading from cities outward

- Meaning that cities are having to respond rapidly without cues from nearby jurisdictions



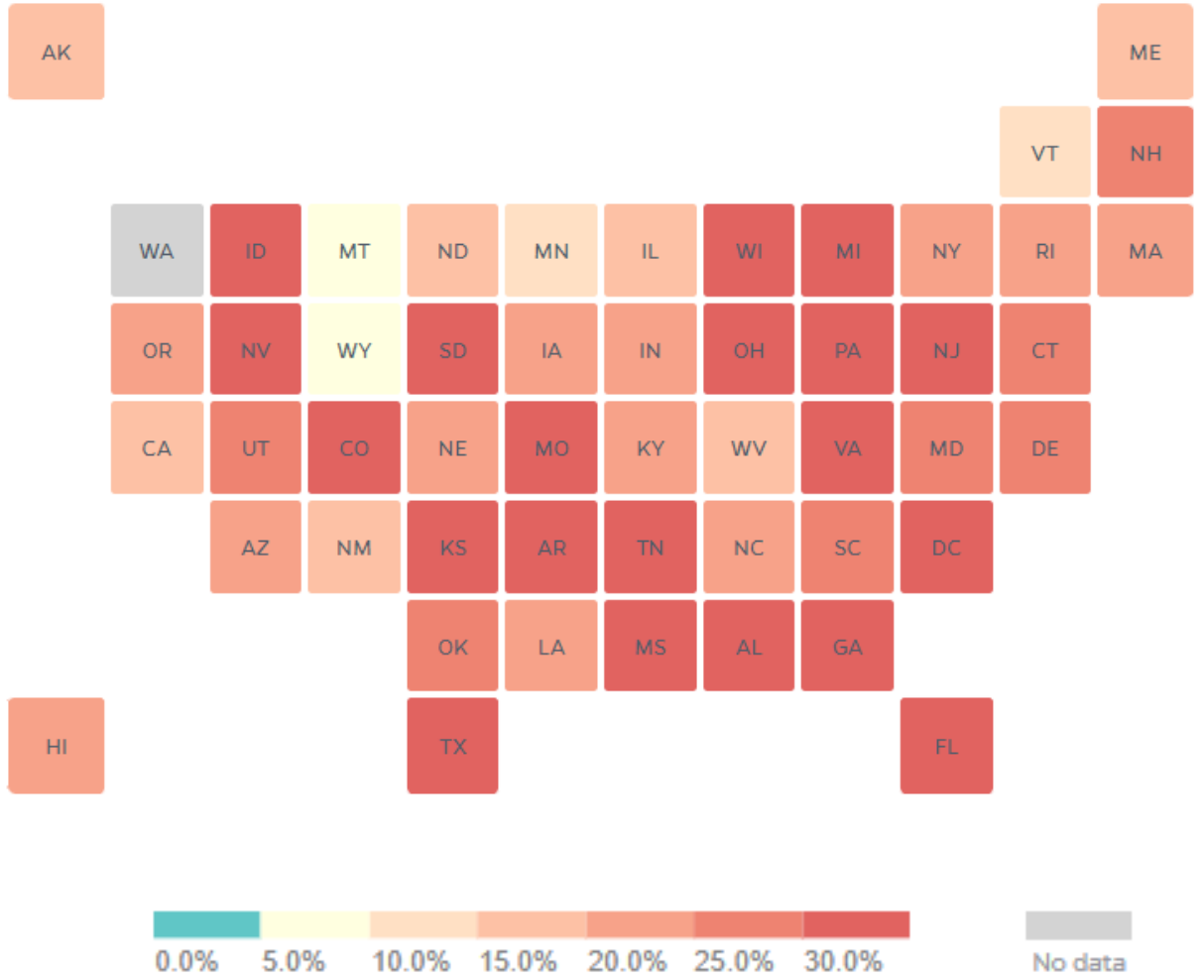
Major Concerns with the Omicron Wave

- **Emergency Departments** and urgent care centers will see increased volumes
  - *Staffing shortages may be profound in some locations*

- Testing capacity will be insufficient and should be allocated responsibly
  - *Consider prioritizing essential personnel, schools, and people with symptoms*

- **Schools** will need policies in place:
  - *How frequently to test?*
  - *What to do for students who test positive?*
  - *Closures should be a short-term last resort*

Percent of new tests that are positive

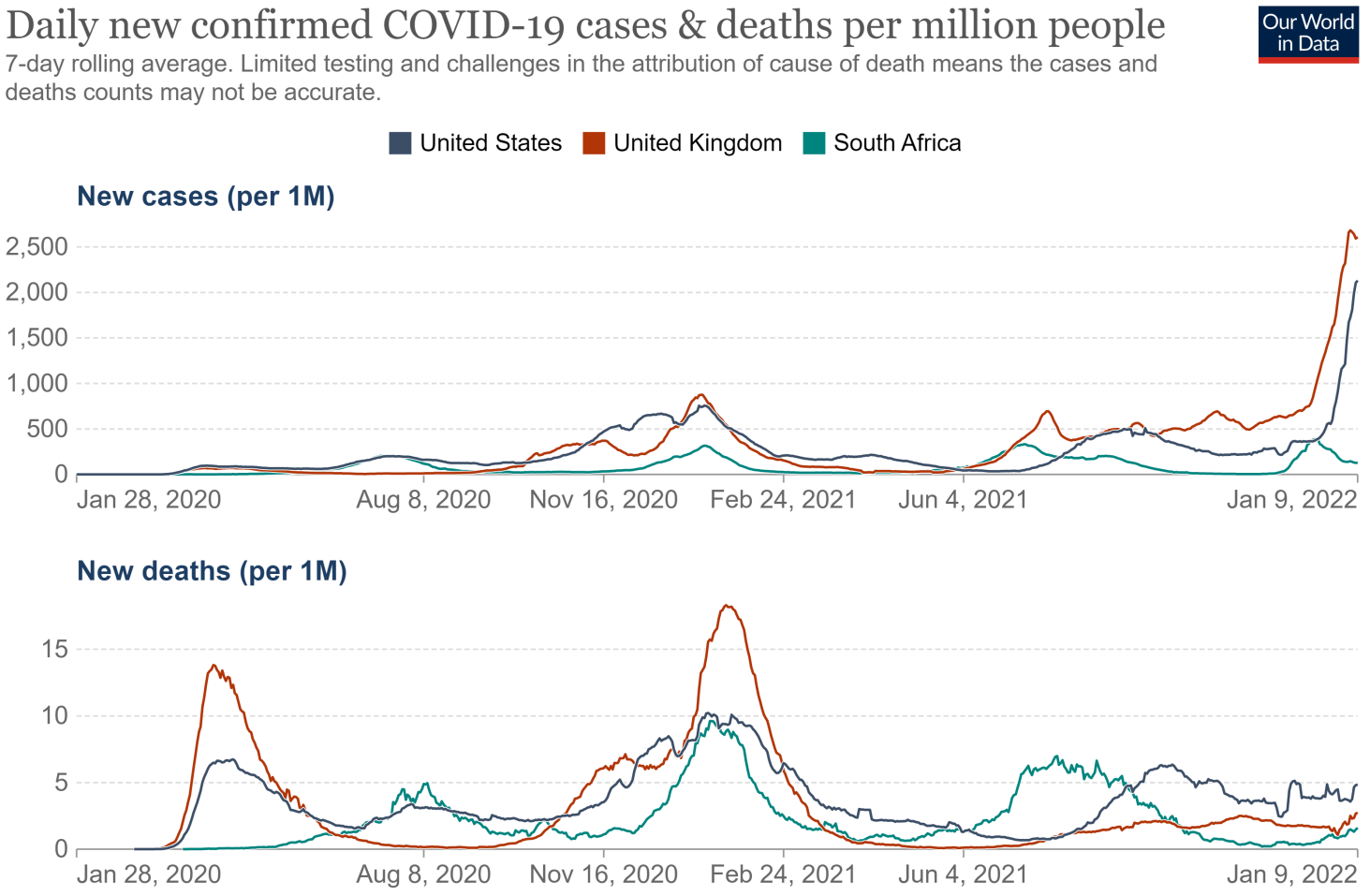


What to Expect Next? Lessons from Other Countries

- South Africa (Gauteng Province):
  - *Wave took ~3 weeks to peak, ~3 weeks to fall*
  - *Deaths much lower than last 3 waves*

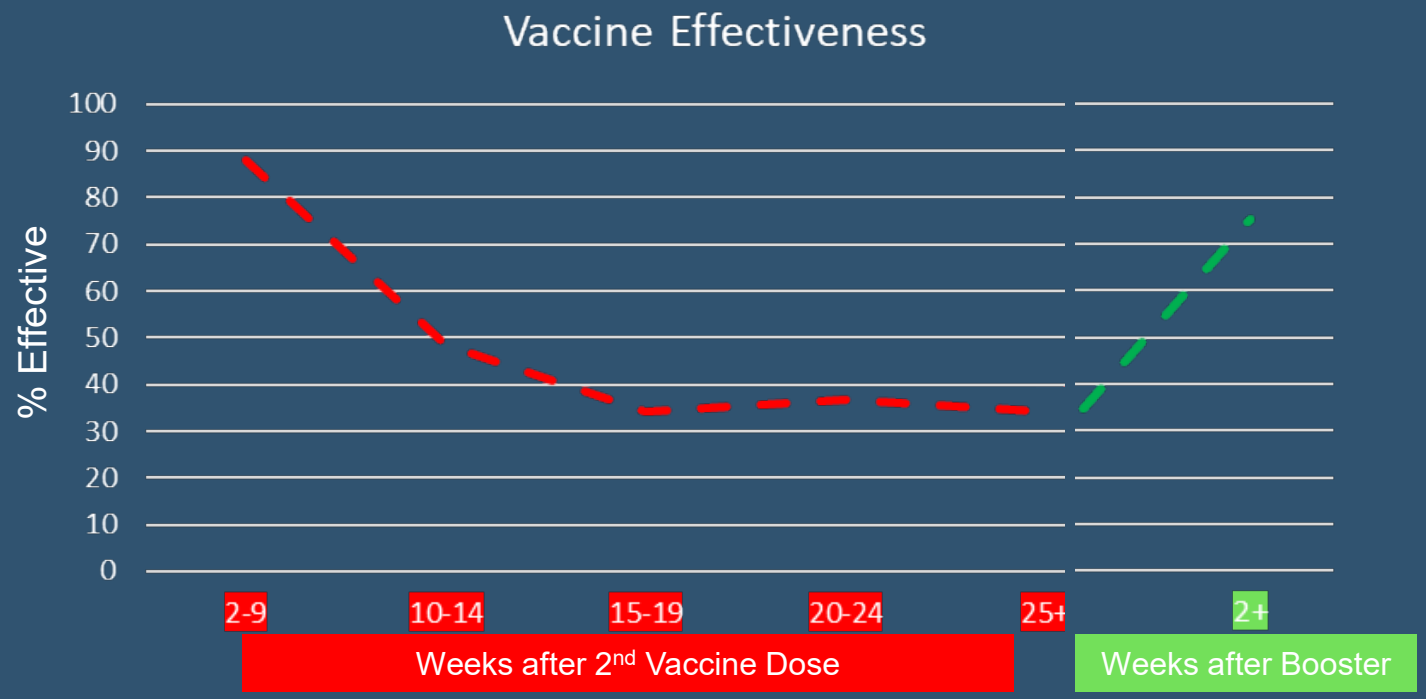
- United Kingdom:
  - *Cases in London starting to peak, ~4 weeks after initial surge*
  - *Country-wide case numbers still high, deaths lower*

- **Bottom line:** Epidemics on the city level likely to last 3-4 weeks
  - *But U.S. death numbers have been consistently higher – harder to predict*



Vaccines Still Work – Especially Against Severe Disease

- Data from England suggest:
  - *75-90% effectiveness for 2 months (2nd dose or booster – Pfizer/BioNTech)*
  - *35-50% after 2 months*
- Sustained protection (70+%) against severe disease (hospitalization) in South Africa
- Much of the reason that Omicron appears “milder” is that more people are vaccinated or previously infected



Boosters will prevent people from getting sick, at least in the short term

Recommendations

- Allocate limited **testing stocks to those who need it most**, including:

  People with symptoms, essential personnel, schools (not general asymptomatic population)

- **Prioritize adequate health care staffing**, especially to Emergency Departments

- If cases are going up in your jurisdiction, **consider short-term measures to blunt the peak**. Measures with known effectiveness include:
  - *Vaccines (and boosters)*
  - *Limiting large gatherings, especially indoors*
  - *Masking indoors (N95/KN95 > surgical > cloth)*
  - *Isolation after a positive test or quarantine after a known contact*

- Based on experience from other countries, most cities should **expect 3-4 weeks from initial surge in cases to epidemic peak**

- **Plan for a wave that will arrive and expand very rapidly**, but may only last a few weeks by:
  - *Mobilizing any surge capacity in healthcare personnel and essential workers*
  - *Organizing communication campaigns to promote short-term behavior change*
  - *Utilizing emergency stockpiles of COVID-related supplies (e.g. PPE, testing kits, etc.)*
  - *Purchasing higher quality masks (e.g. N95/KN95) for people in high risk settings*