ID ECHO
COVID-19 Update
June 15, 2023

Jorge Mera, MD, FACP

Outline

COVID-19 USA STATS

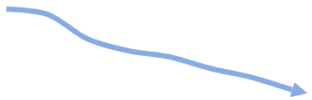
Daily Update for the United States

Cases

New Cases (Weekly Total)

101,437

Case Trends



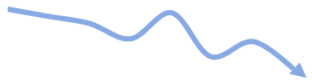
Feb 2023 Apr 2023

Deaths

New Deaths (Weekly Total)

1,327

Death Trends



Feb 2023 Apr 2023

Hospitalizations

New Admissions (Daily Avg)

1,850

Admission Trends

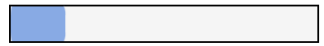
Mar 2023 Apr 2023

Vaccinations

% with Updated Booster Dose

16.7%

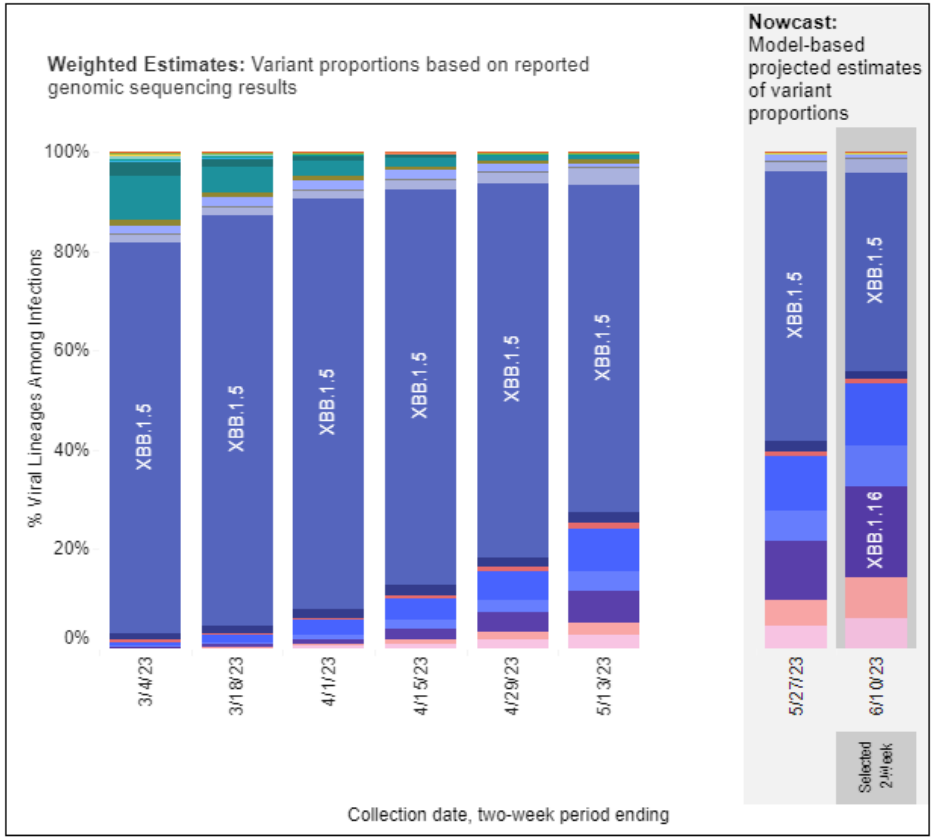
Total Population



Total Cases	Total Deaths	Current Hospitalizations	Total Updated Booster Doses
104,348,746	1,128,404	11,279	55,577,285

CDC | Data as of: April 14, 2023 4:02 PM ET. Posted: April 14, 2023 5:00 PM ET

Weighted and Nowcast Estimates in United States for 2-Week Periods in 2/19/2023 – 6/10/2023



Nowcast Estimates in United States for 5/28/2023 – 6/10/2023

USA

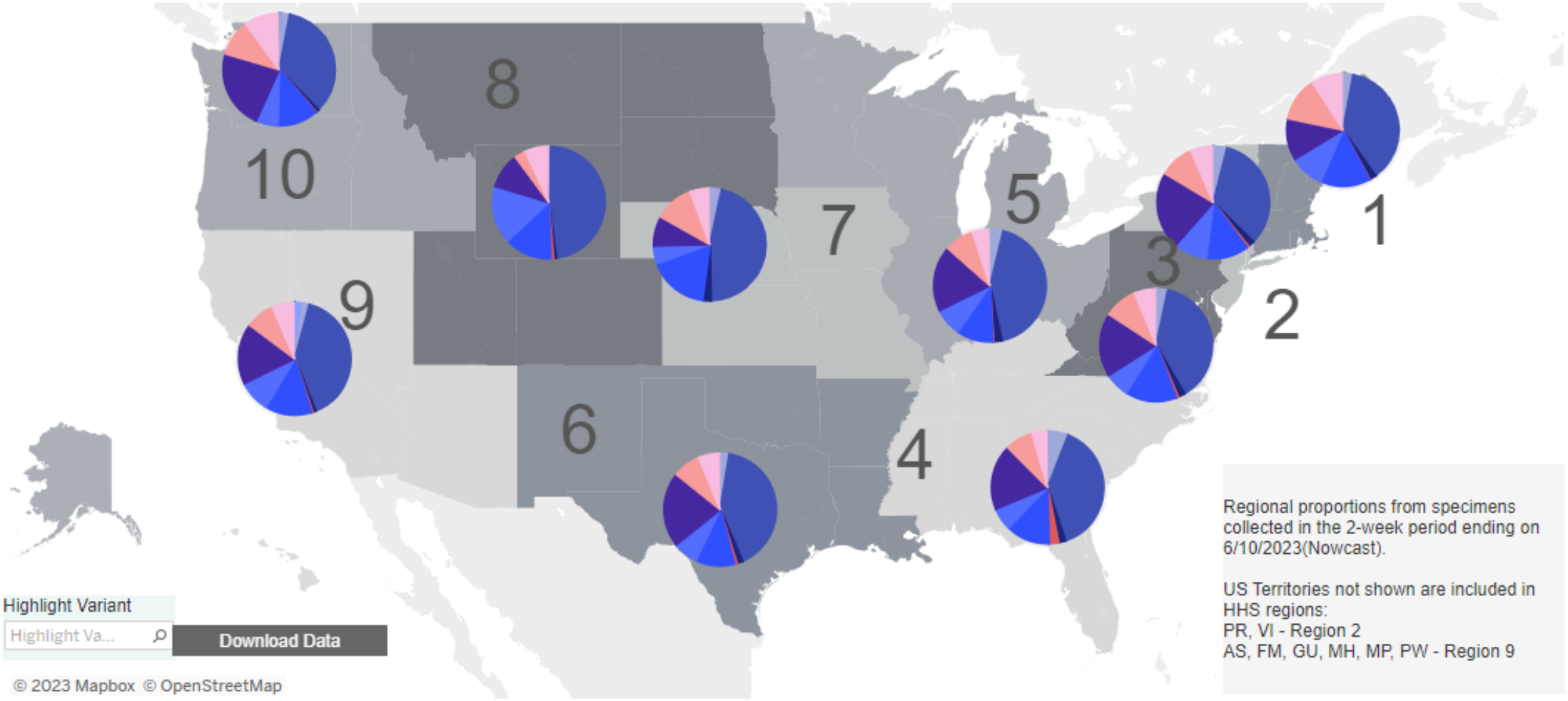
WHO label	Lineage #	US Class	%Total	95%PI
Omicron	XBB.1.5	VOC	39.9%	36.7-43.2%
	XBB.1.16	VOC	18.2%	15.5-21.2%
	XBB.1.9.1	VOC	12.5%	11.0-14.3%
	XBB.1.16.1	VOC	8.4%	6.1-11.5%
	XBB.1.9.2	VOC	8.4%	6.3-11.1%
	XBB.2.3	VOC	6.0%	4.4-8.1%
	XBB	VOC	3.0%	2.0-4.7%
	XBB.1.5.1	VOC	1.6%	1.2-2.1%
	FD.2	VOC	0.9%	0.3-2.1%
	XBB.1.5.10	VOC	0.8%	0.5-1.3%
	CH.1.1	VOC	0.2%	0.1-0.2%
	BQ.1.1	VOC	0.1%	0.0-0.1%
	BQ.1	VOC	0.0%	0.0-0.0%
	BA.2	VOC	0.0%	0.0-0.0%
	BA.5	VOC	0.0%	0.0-0.0%
	BA.2.75	VOC	0.0%	0.0-0.0%
	BN.1	VOC	0.0%	0.0-0.0%
	BF.7	VOC	0.0%	0.0-0.0%
Other	Other*		0.0%	0.0-0.0%

* Enumerated lineages are US VOC and lineages circulating above 1% nationally in at least one 2-week period. "Other" represents the aggregation of lineages which are circulating <1% nationally during all 2-week periods displayed.

BA.1, BA.3 and their sublineages (except BA.1.1 and its sublineages) are aggregated with B.1.1.529. Except BA.2.12.1, BA.2.75, XBB and their sublineages, BA.2 sublineages are aggregated with BA.2. Except BA.2.75.2, CH.1.1 and BN.1, BA.2.75 sublineages are aggregated with BA.2.75. Except BA.4.6, sublineages of BA.4 are aggregated to BA.4. Except BF.7, BF.11, BA.5.2.6, BQ.1 and BQ.1.1, sublineages of BA.5 are aggregated to BA.5. Except the lineages shown and their sublineages, sublineages of XBB are aggregated to XBB. Except XBB.1.5.1, XBB.1.5.10 and FD.2, sublineages of XBB.1.5 are aggregated to XBB.1.5. Except XBB.1.16.1, sublineages of XBB.1.16 are aggregated to XBB.1.16. For all the other lineages listed, their sublineages are aggregated to the listed parental lineages respectively. Previously, XBB.1.5.10 was aggregated to XBB.1.5. Lineages BA.2.75.2, XBB, XBB.1.5, XBB.1.5.1, FD.2, XBB.1.9.1, XBB.1.9.2, XBB.1.16, XBB.1.16.1, XBB.2.3, BN.1, BA.4.6, BF.7, BF.11, BA.5.2.6, BQ.1.1 and XBB.1.5.10 contain the spike substitution R346T.

COVID Data Tracker: https://covid.cdc.gov/covid-data-tracker/#variant-proportions

Nowcast Estimates in for 5/28/2023 – 6/10/2023 by HHS Region



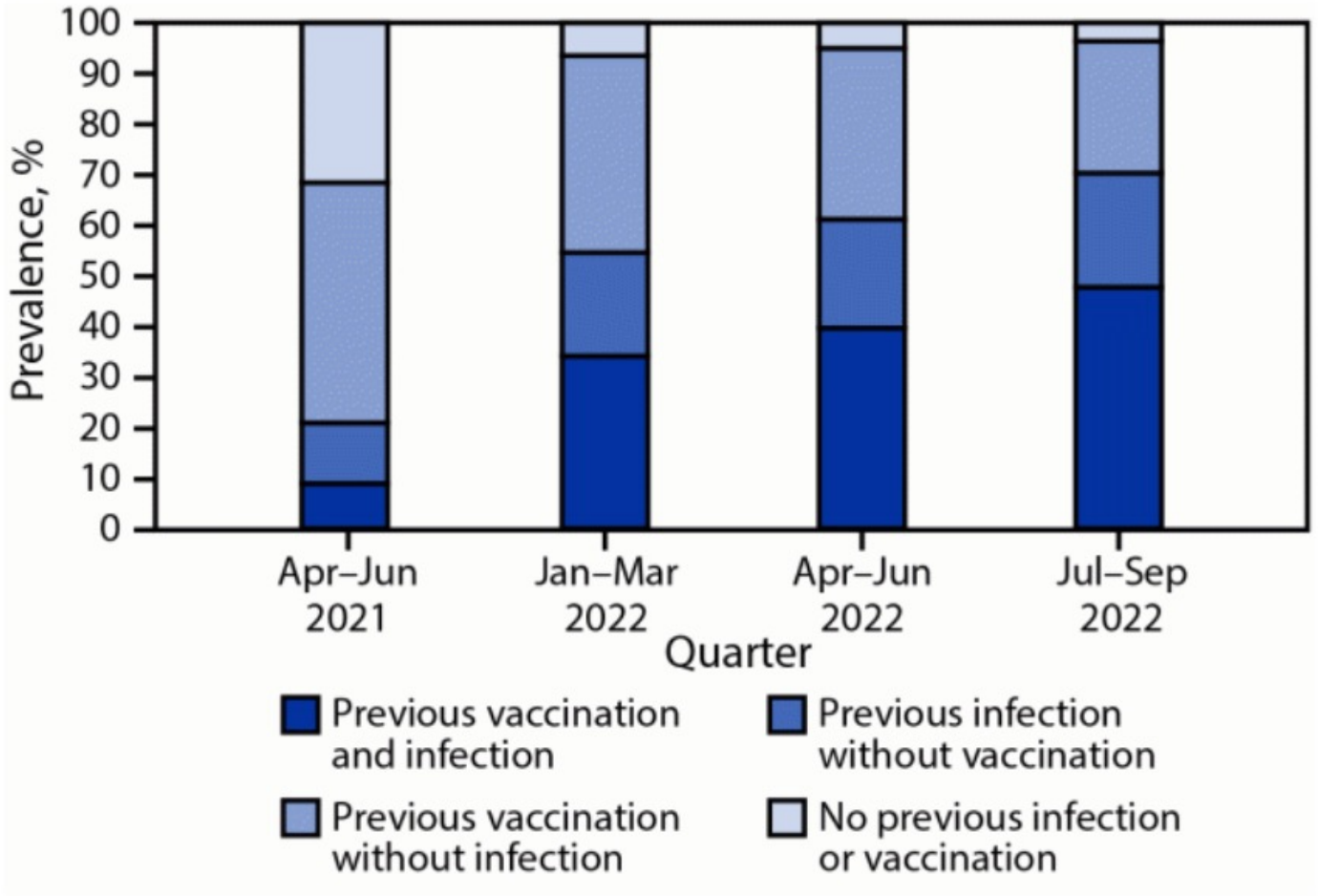
Regional proportions from specimens collected in the 2-week period ending on 6/10/2023(Nowcast).

US Territories not shown are included in HHS regions:
PR, VI - Region 2
AS, FM, GU, MH, MP, PW - Region 9

Lineages called using pangolin v4.3, pangolin-data v1.20 and usher v0.6.2.

Updated June 9, 2023

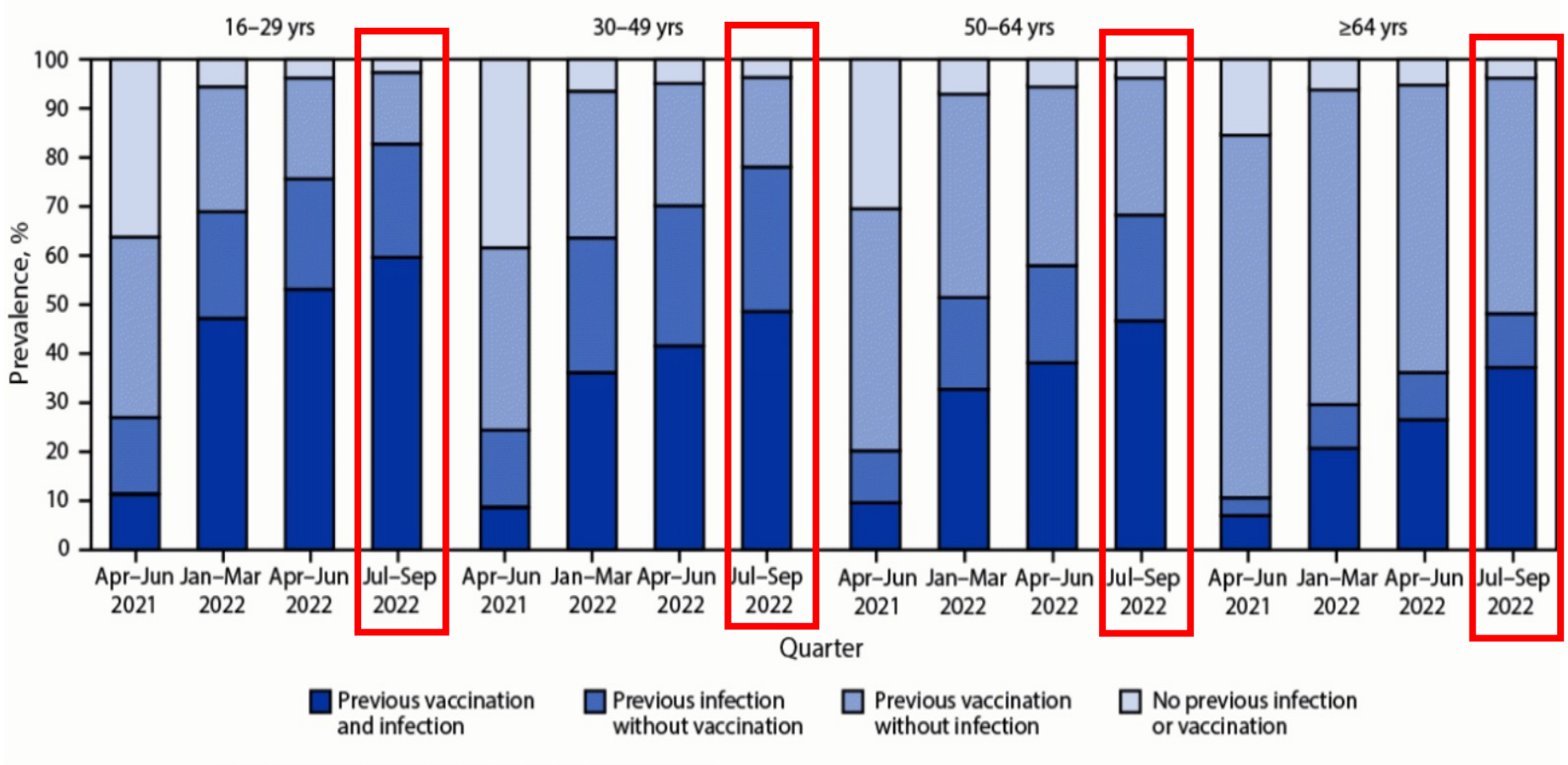
Prevalences of vaccine-induced, infection-induced, and hybrid* immunity† against SARS-CoV-2 among blood donors aged ≥16 years — United States, April 2021–September 2022



- * Immunity derived from a combination of vaccination and infection.
- † Ascertained by the presence of anti-spike antibodies (present in both COVID-19–vaccinated and SARS-CoV-2–infected persons) and anti-nucleocapsid antibodies (present only in previously infected persons) and self-reported history of vaccination.

MMWR Morb Mortal Wkly Rep. 2023 Jun 2;72(22):601-605.

Prevalences of vaccine-induced, infection-induced, and hybrid* immunity† against SARS-CoV-2 among blood donors aged ≥16 years, by age group — United States, April 2021–September 2022



* Immunity derived from a combination of vaccination and infection.

† Ascertained by the presence of anti-spike antibodies (present in both COVID-19–vaccinated and SARS-CoV-2–infected persons) and anti-nucleocapsid antibodies (present only in previously infected persons) and self-reported history of vaccination.

MMWR Morb Mortal Wkly Rep. 2023 Jun 2;72(22):601-605.

Estimates of SARS-CoV-2 Seroprevalence and Incidence of Primary SARS-CoV-2 Infections Among Blood Donors, by COVID-19 Vaccination Status — United States, April 2021–September 2022

What is already known about this topic?

- SARS-CoV-2 hybrid immunity (immunity derived from both previous infection and vaccination) has been reported to provide better protection than that from infection or vaccination alone.

What is added by this report?

Changing Severity and Epidemiology of Adults Hospitalized With Coronavirus Disease 2019 (COVID-19) in the United States After Introduction of COVID-19 Vaccines, March 2021–August 2022

Posted on 18 May, 2023 - 12:58PM

Changing Severity and Epidemiology of Adults Hospitalized with COVID-19 in the United States After Introduction of COVID-19 Vaccines, March 2021–August 2022

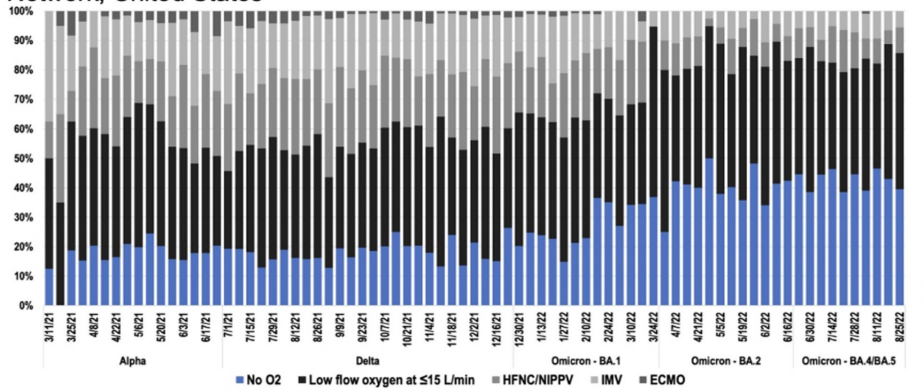
Kojima et al., 2023 | *Clinical Infectious Diseases*

Background: Understanding the changing epidemiology of adults hospitalized with COVID-19 informs research priorities and public health policies.

Methods: We assessed changes in clinical characteristics and outcomes of hospitalized patients with COVID-19 during the Alpha-, Delta-, and Omicron-predominant periods of the pandemic in a multi-state sentinel surveillance network.

Results: Compared to adults hospitalized during early COVID-19 variant periods, those hospitalized during Omicron-variant COVID-19 were older, had multiple co-morbidities, were more likely to be vaccinated, and less likely to experience severe respiratory disease, systemic inflammation, coagulopathy, and death.

Highest level of supplemental oxygen received among hospitalized adults with acute COVID-19 by week and predominant SARS-CoV-2 variant period—IVY Network, United States



Abbreviations: ECMO=extracorporeal membrane oxygenation; HFNC=high flow nasal cannula; IMV=invasive mechanical ventilation; NIPPV=non-invasive positive pressure ventilation; O2=oxygen.

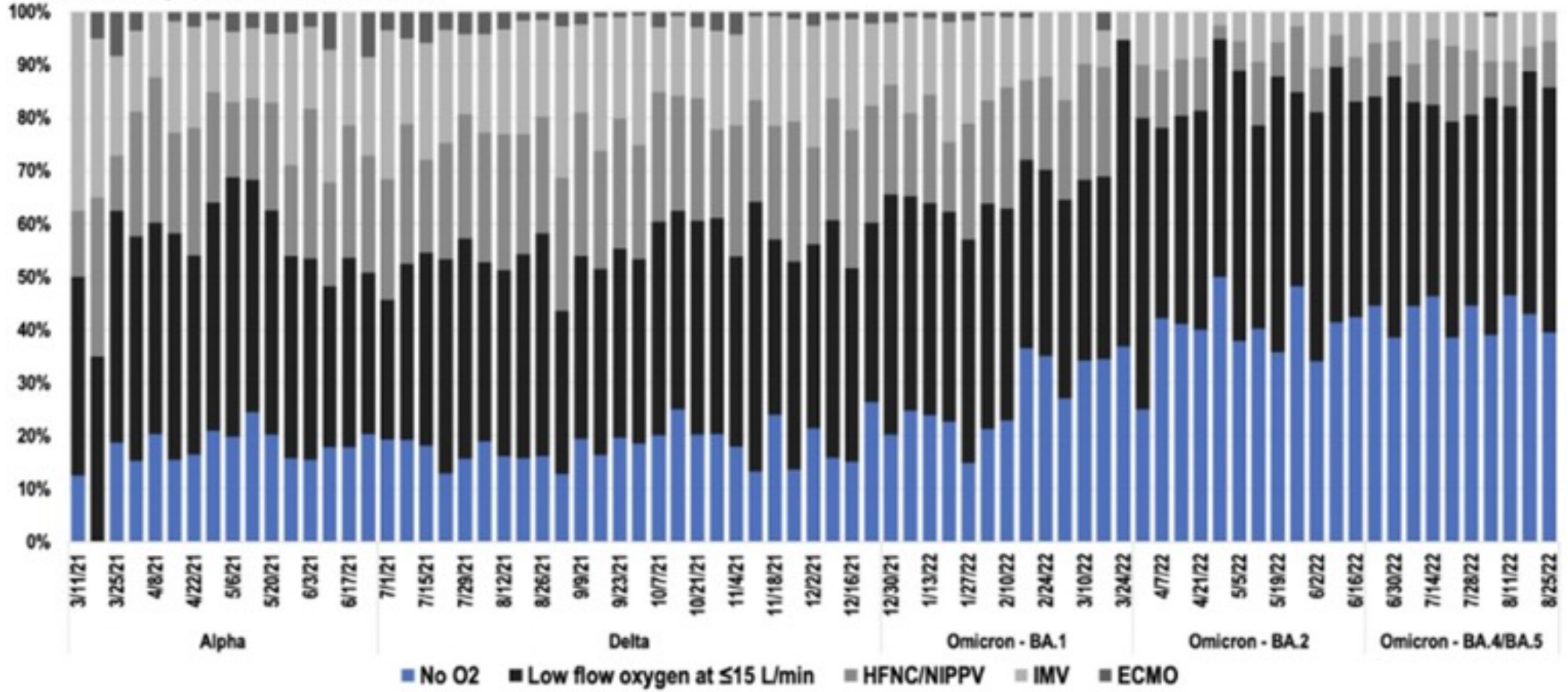
Conclusion: Over time, the epidemiology of adults hospitalized with COVID-19 changed substantially. Prevention and treatment strategies must continue to be optimized to target those at risk of severe COVID-19-associated disease and death.

Tidbit

Full text not published yet, reference pending

Clin Infect Dis, ciad276, https://doi.org/10.1093/cid/ciad276

Highest level of supplemental oxygen received among hospitalized adults with acute COVID-19 by week and predominant SARS-CoV-2 variant period—IVY Network, United States



Abbreviations: ECMO=extracorporeal membrane oxygenation; HFNC=high flow nasal cannula; IMV=invasive mechanical ventilation; NIPPV=non-invasive positive pressure ventilation; O2=oxygen.

Effectiveness of COVID-19 Treatment With Nirmatrelvir–Ritonavir or Molnupiravir Among U.S. Veterans: Target Trial Emulation Studies With One-Month and Six-Month Outcomes

DEPARTMENT OF HEALTH AND HUMAN SERVICES Centers for Medicare & Medicaid Services

- The rule that made it mandatory for COVID-19 vaccination of employees working in Facilities serving Medicare or Medicaid patients is removed

- The rule also finalizes requirements for these facilities to provide education about COVID-19 vaccines and to offer COVID-19 vaccines to residents, clients, and staff.

The NEW ENGLAND JOURNAL of MEDICINE

Perspective

Strategic Masking to Protect Patients from All Respiratory Viral Infections

Michael Klompas, M.D., M.P.H., Meghan A. Baker, M.D., Sc.D., Chanu Rhee, M.D., M.P.H., and Lindsey R. Baden, M.D.

questions