



The COVID-19 Crisis

Update October 28, 2021



CAVEAT!

**I am not THAT kind of doctor.
I study rocks.**

Ariel D. Anbar

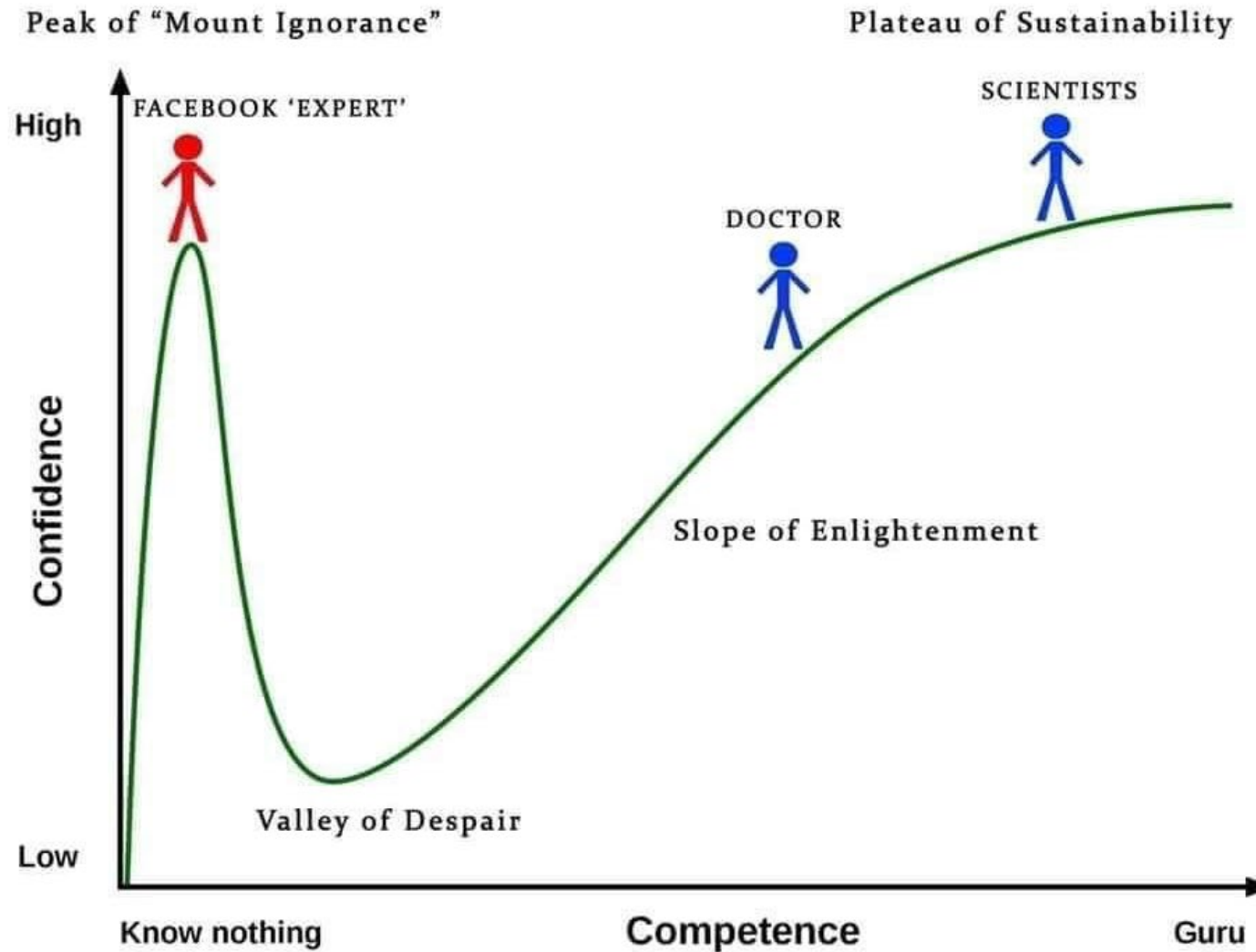
Professor

School of Earth and Space Exploration

School of Molecular Sciences

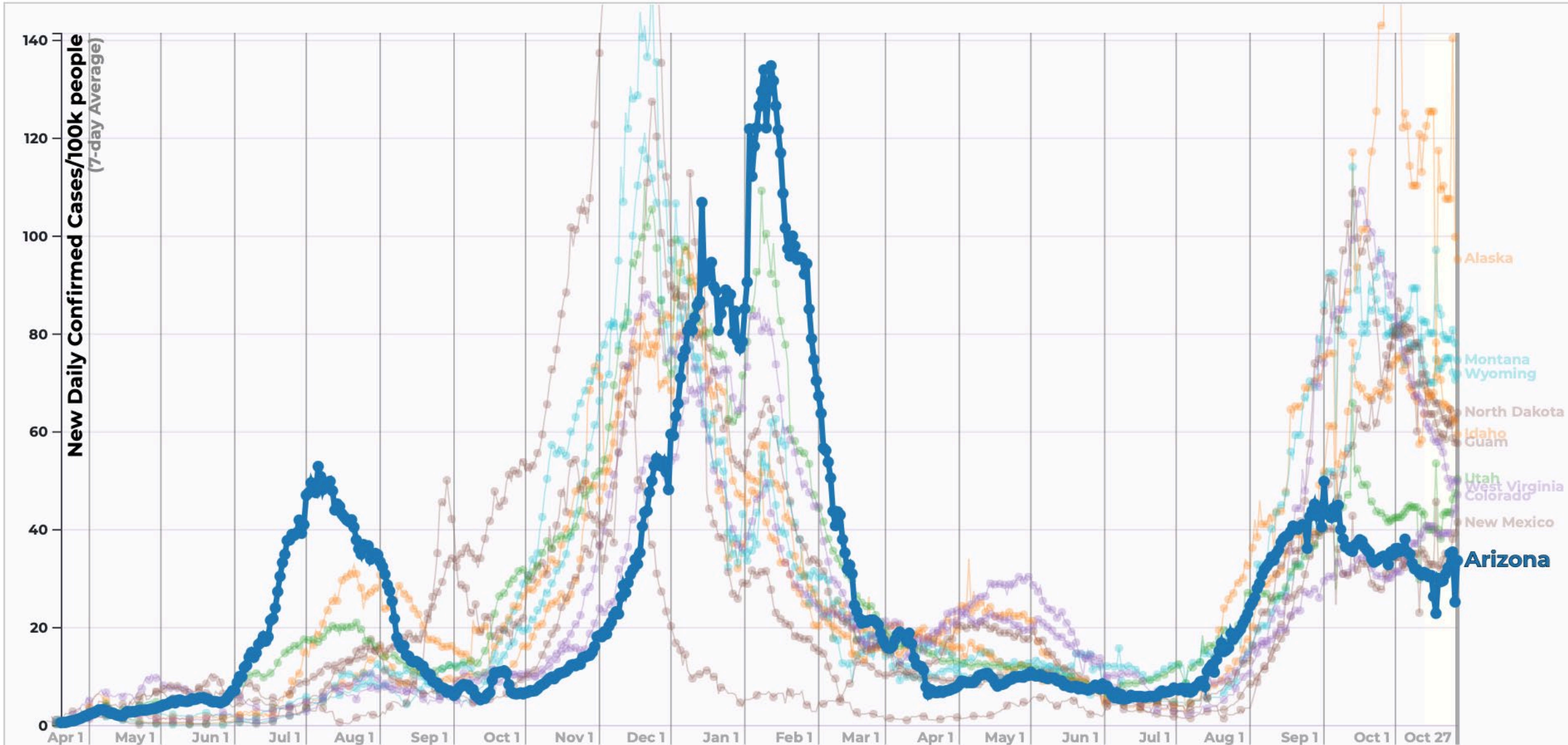
Arizona State University

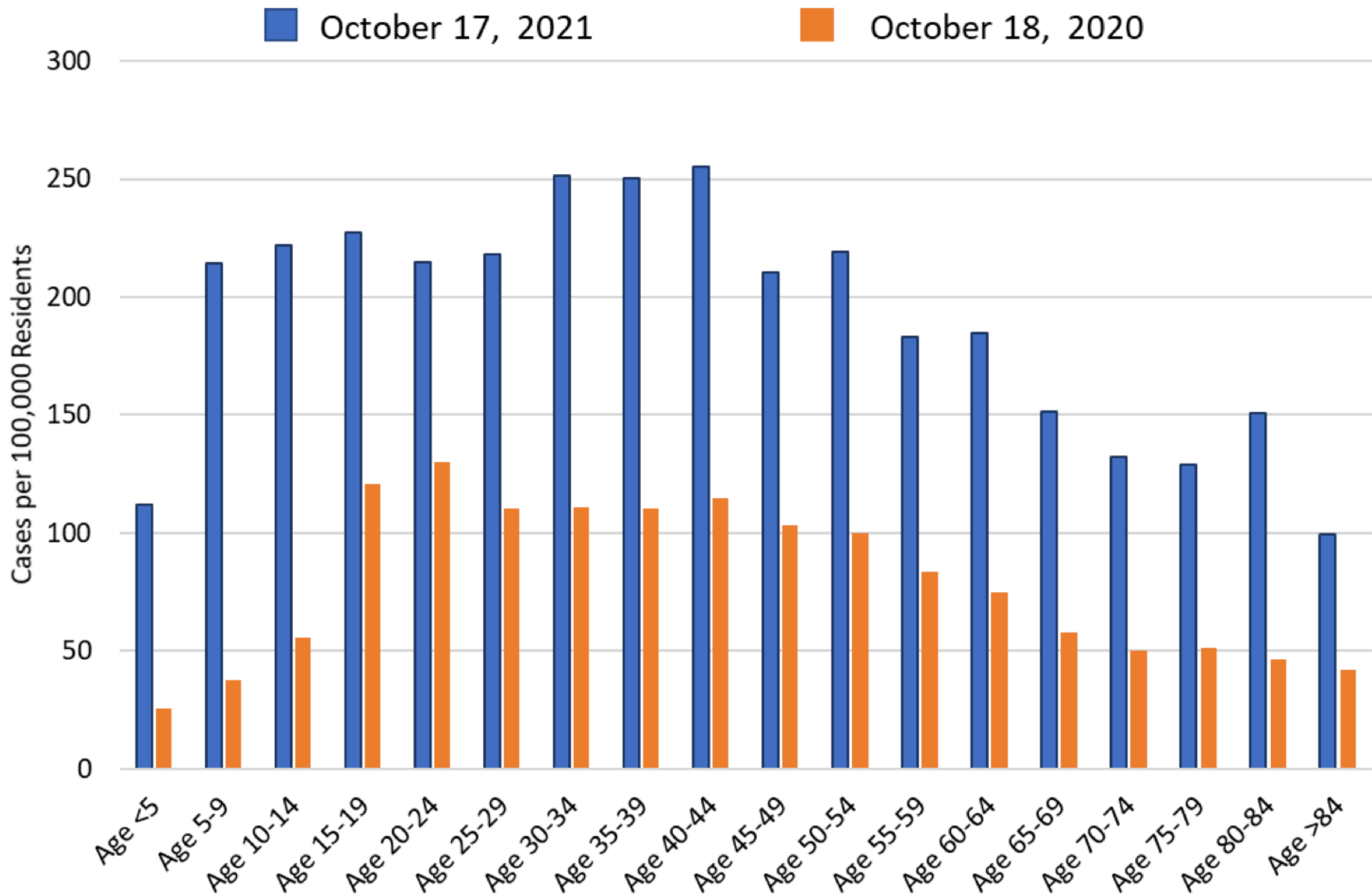
Dunning-Kruger Effect





New Confirmed COVID-19 Cases per Day by States/Territories, normalized by population





COVID-19 Cases in Arizona by Age Group Week Ending October 18, 2020 versus October 17, 2021.

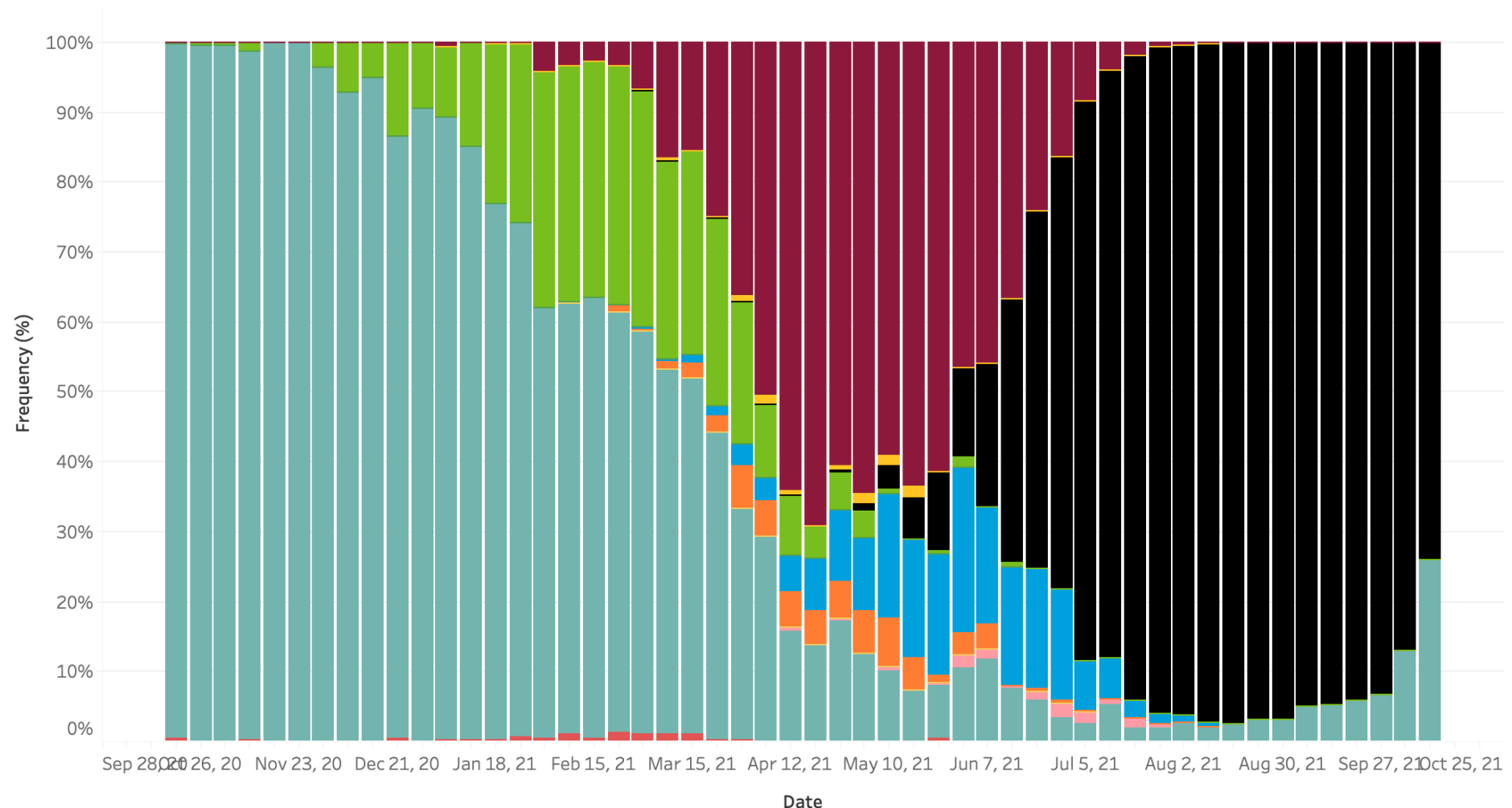
circulating variants

The stacked bar chart colors represent the proportion of SARS-CoV-2 variants circulating in Arizona by week. Data of COVID-19 cases are genetically sequenced to monitor variant distribution. Source: Efrem Lim, Biodesign Center for Fundamental and Applied Microbiomics and other laboratories who obtained samples, generated data share via [GISAID](#) and [NCBI](#).

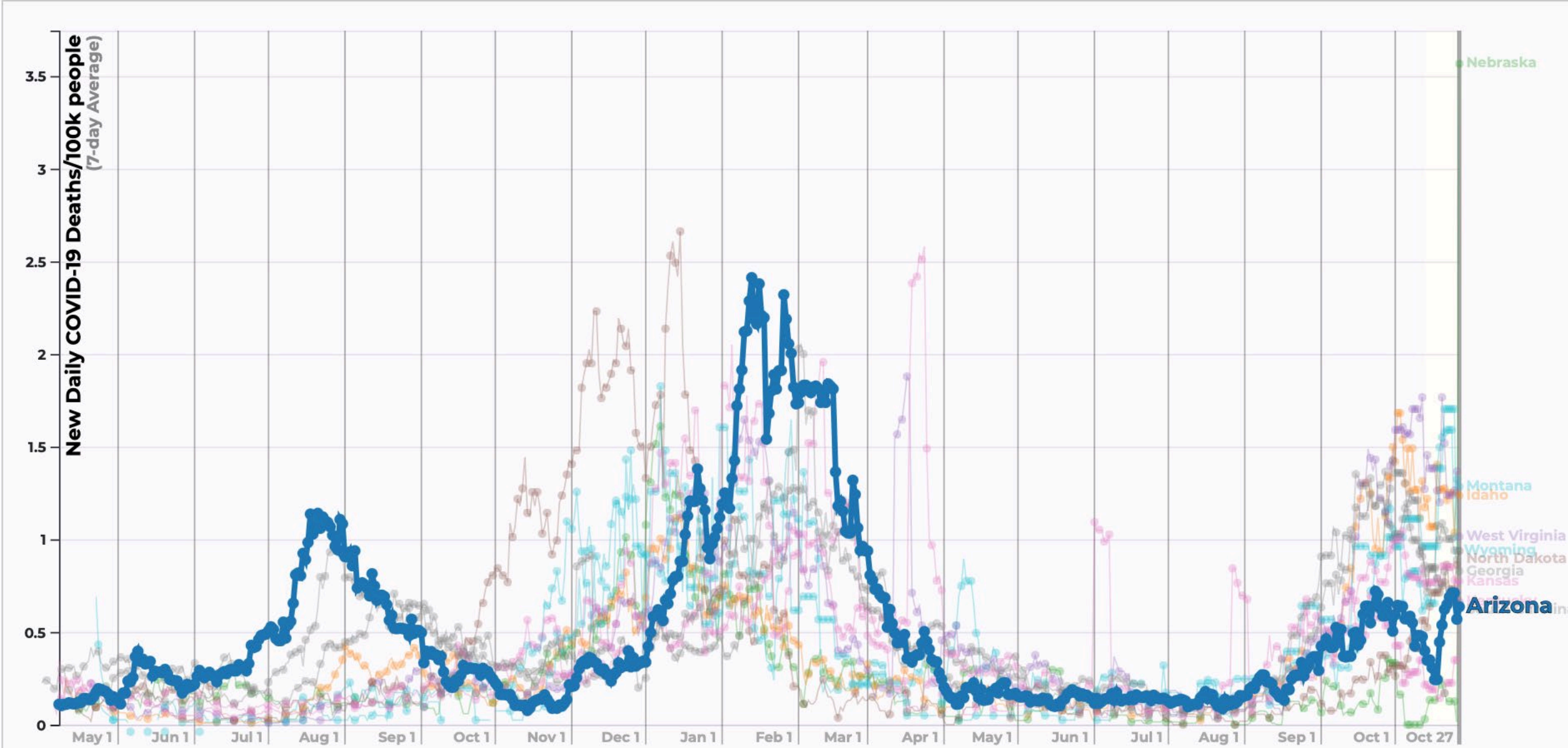
Variant ■ Alpha (B.1.1.7) ■ Beta (B.1.351) ■ Delta (B.1.617.2) ■ Epsilon (B.1.42...) ■ Eta (B.1.525) ■ Gamma (P.1) ■ Iota (B.1.526) ■ Kappa (B.1.617.2) ◀ ▶

Weeks to Show

52



New Deaths from COVID-19 per Day by States/Territories, normalized by population

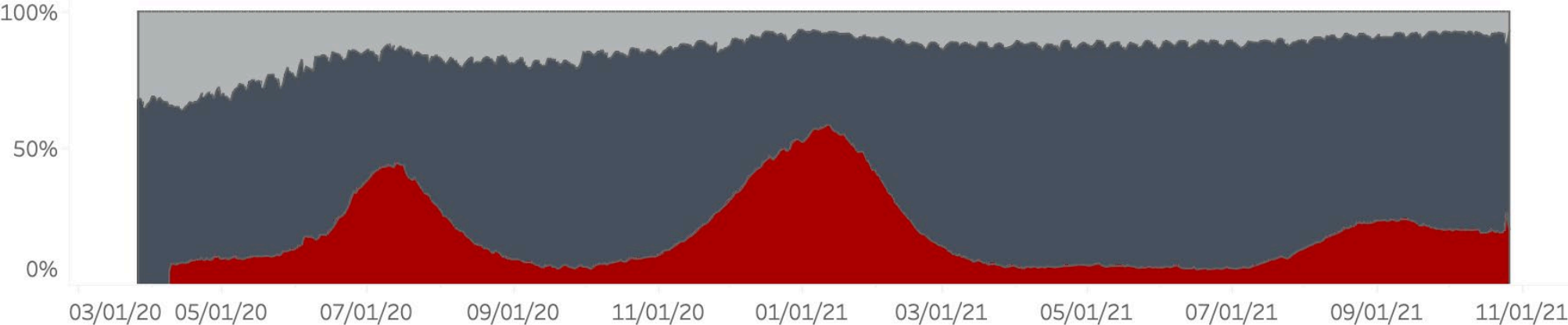


Data: Johns Hopkins University CSSE / CCI; Updated: 10/28/2021
Interactive Visualization: <https://91-DIVOC.com/> by @profwade_

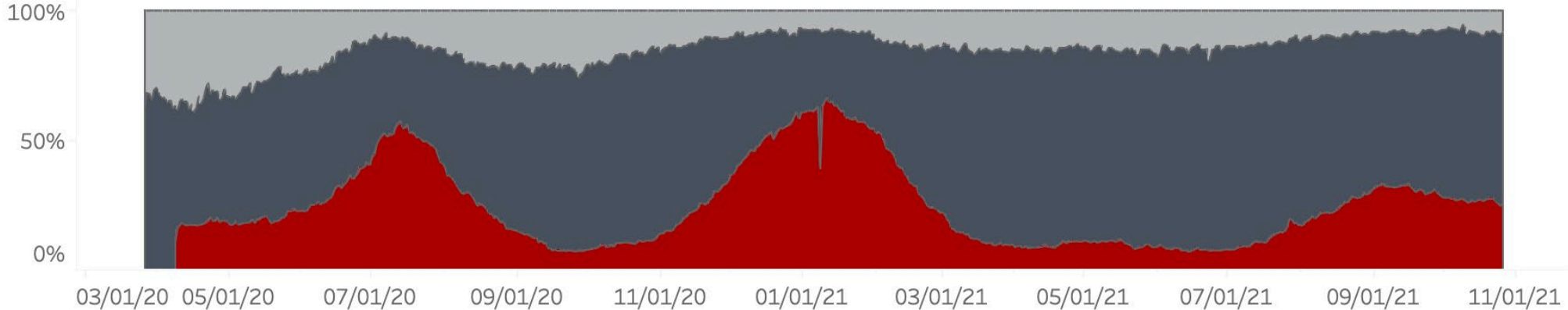
Hospital Bed Capacity

<https://www.azdhs.gov/>

Number of **Inpatient Beds** ■ Available, ■ In Use by non-COVID Patients, and ■ In Use by COVID Patients (starting 4/10/20) at Arizona Hospitals



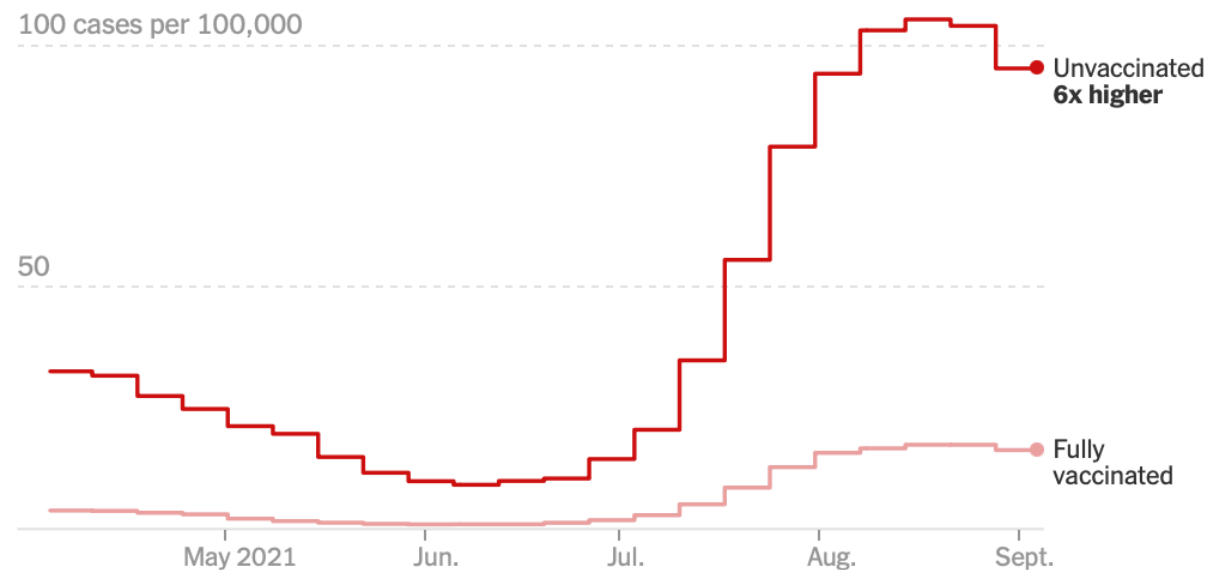
Number of **Intensive Care Unit (ICU) Beds** ■ Available, ■ In Use by non-COVID Patients, and ■ In Use by COVID Patients (starting 4/10/20) at Arizona Hospitals



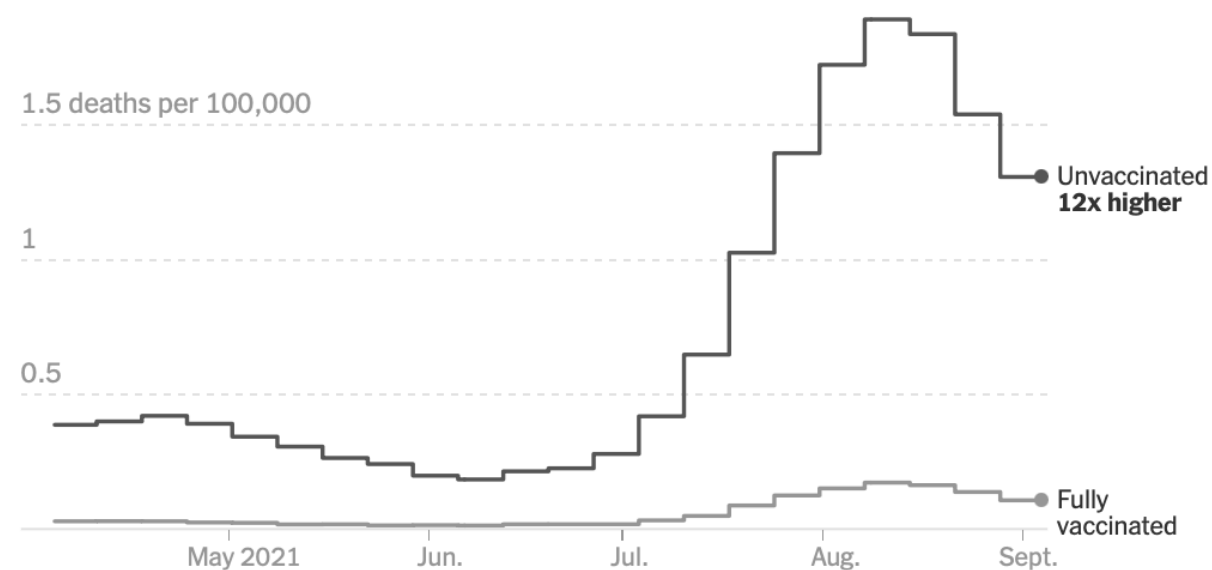
Rates for vaccinated and unvaccinated

Data from the [Centers for Disease Control and Prevention](#) shows that people who are unvaccinated are at a much greater risk than those who are fully vaccinated to get sick or die from Covid-19. These charts compare average daily case and death rates for vaccinated and unvaccinated people in the 14 states and two cities that provide this data.

Average daily cases



Average daily deaths



▼ About this data:

Source: [Centers for Disease Control and Prevention](#). This data was made available on Oct. 15, 2021, and is expected to update monthly. The C.D.C. releases the data as a weekly figure per 100,000 and is presented as a daily average per 100,000 for consistency with other population-adjusted figures on this page. See the notes on the [C.D.C.'s page](#) for more information.

<https://www.nytimes.com/interactive/2021/us/covid-cases.html>

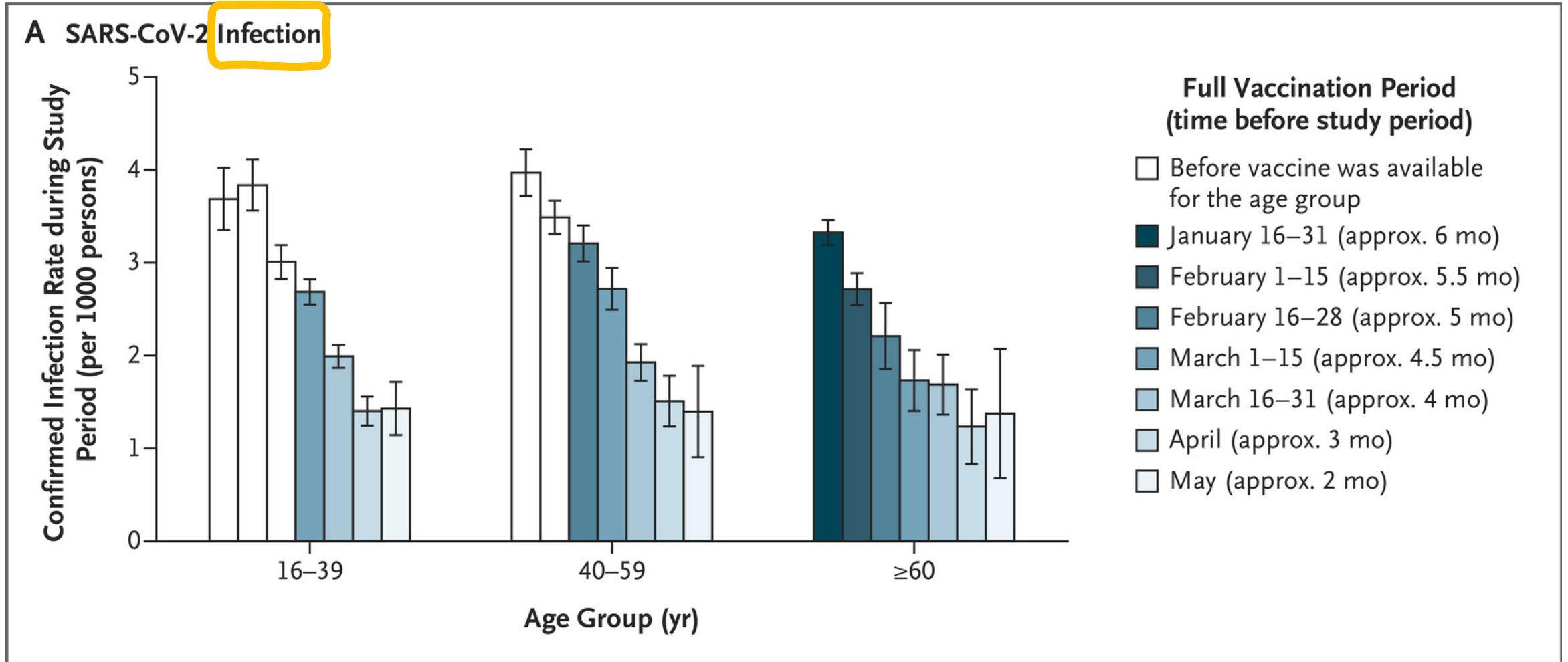
Waning Immunity after the BNT162b2 Vaccine in Israel



The NEW ENGLAND
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October 27, 2021

DOI: 10.1056/NEJMoa2114228



N ~ 5 million people



KOLD FACT FINDERS

EXPERTS DIVIDED ON BOOSTER BENEFITS

SOME SAY GETTING OTHER COUNTRIES VACCINATED SHOULD BE PRIORITY

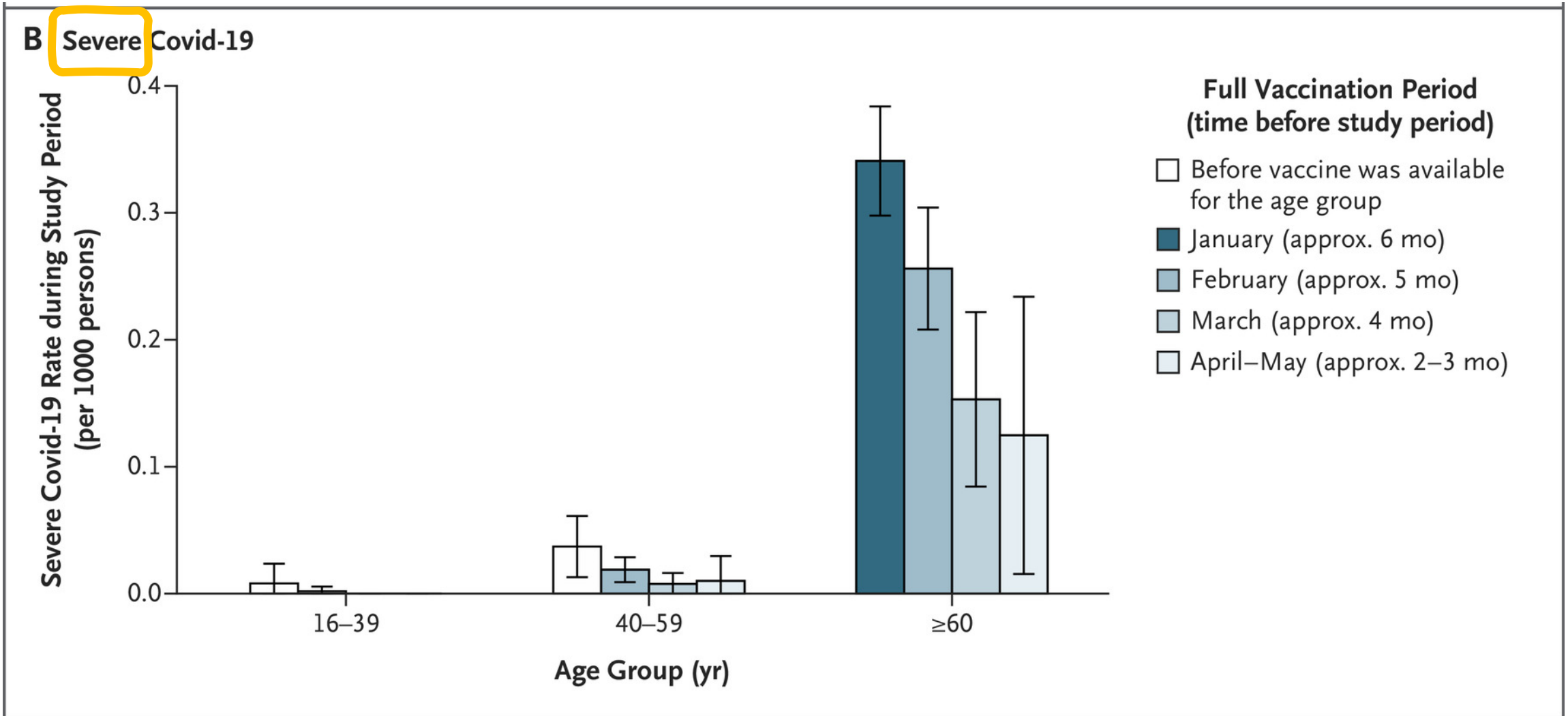
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N ~ 5 million people

Protection of BNT162b2 Vaccine Booster against Covid-19 in Israel

October 7, 2021

N Engl J Med 2021; 385:1393-1400

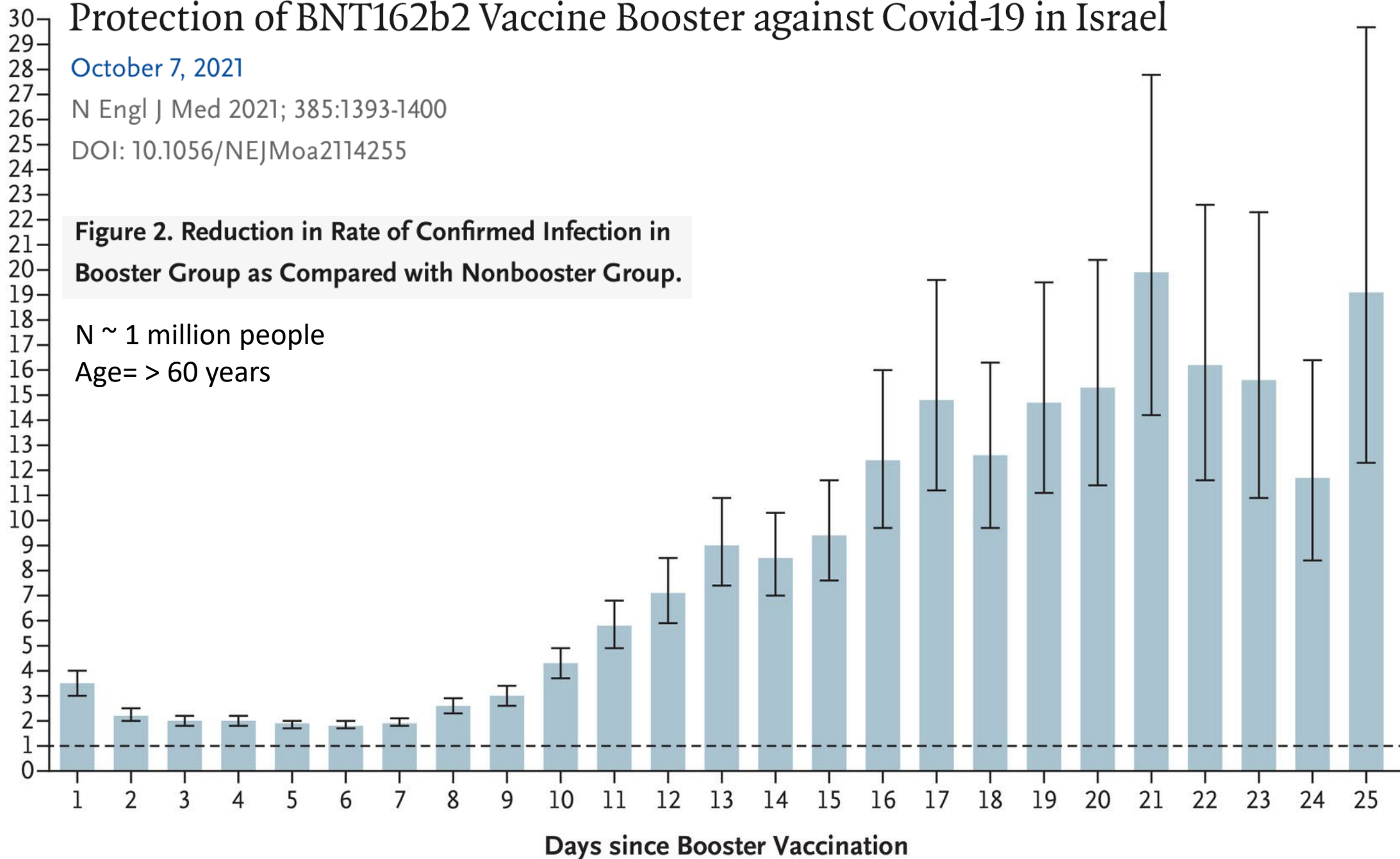
DOI: 10.1056/NEJMoa2114255

Figure 2. Reduction in Rate of Confirmed Infection in Booster Group as Compared with Nonbooster Group.

N ~ 1 million people

Age = > 60 years

Factor Reduction in Confirmed Infection Rate





**KEEP
CALM
AND
CARRY
ON**