

COVID 19



Keeping Up with a Moving Target



CME Information

Jointly provided by Postgraduate Institute for Medicine, DKBmed, and the Institute for Johns Hopkins Nursing.

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The faculty reported the following financial relationships or relationships they or their spouse/life partner have with commercial interests related to the content of this continuing education activity:

| Name of Faculty or Presenter | Reported Financial Relationship |
|-----------------------------------|---|
| Paul G. Auwaerter, MD, MBA, FIDSA | JNJ: Ownership equity Scientific Consulting: Verily, EMD Serono, Shionogi DMSB: Humanigen |

Dr. Auwaerter has indicated that may be referencing the unlabeled or unapproved use of agents currently being investigated in on-going studies and trials, including monoclonal antibodies, antivirals, and several vaccine platforms.

All activity, content, and materials have been developed solely by the activity directors, planning committee members, and faculty presenters, and are free of influence from a commercial entity.



CME Information

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COVID19.dkbmed.com



Learning Objectives

- Describe current data pertaining to "rebound" infections after treatment with nirmatrelvir plus ritonavir.



Thank You

This activity is supported by an educational grant from Gilead Sciences, Inc. and in-kind support by DKBmed LLC

All activity content and materials have been developed solely by the activity directors, planning committee members, and faculty presenters.

Please see **COVID19.DKBmed.com** for additional resources and educational activities



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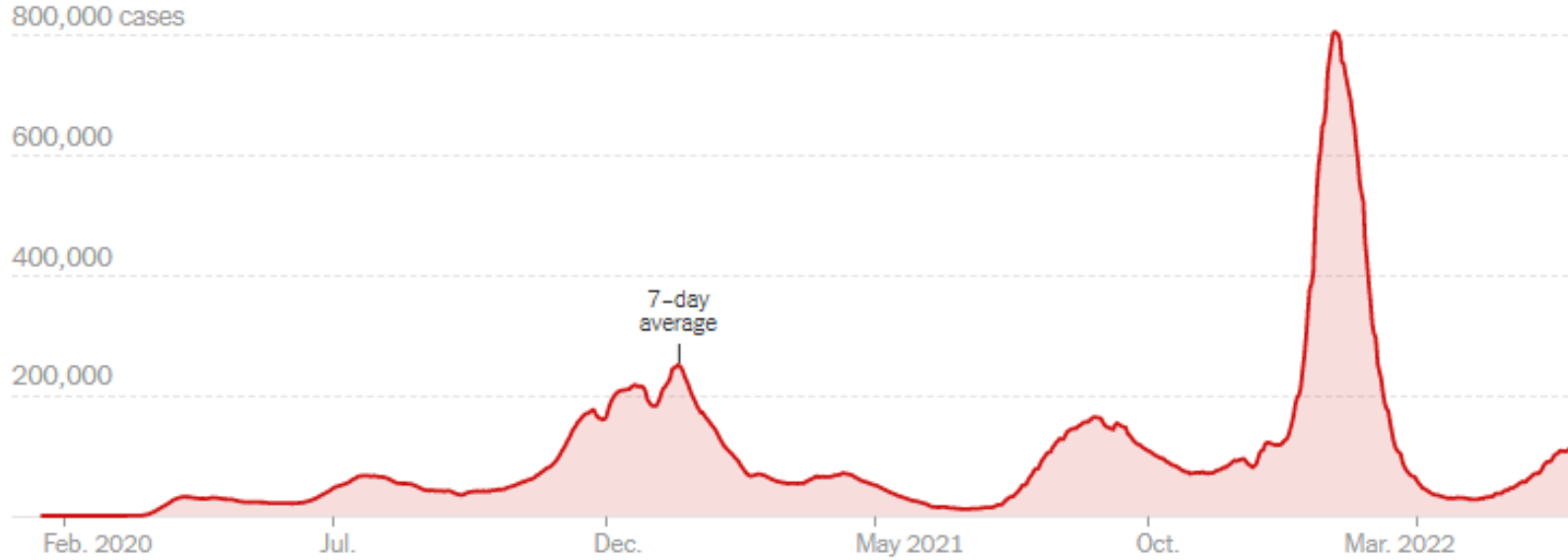
COVID-19 Pandemic

Still with us, but more than ever, less of a handle

COVID-19: Recent Rise in REPORTED Cases Unclear True Extent of Current Infections

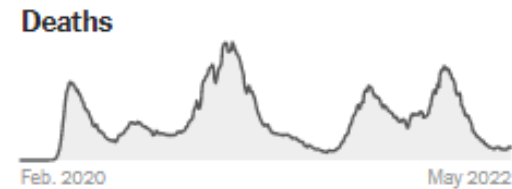
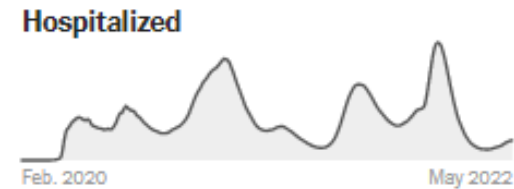
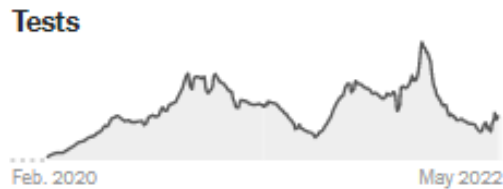
New reported cases

All time Last 90 days



Vaccinations

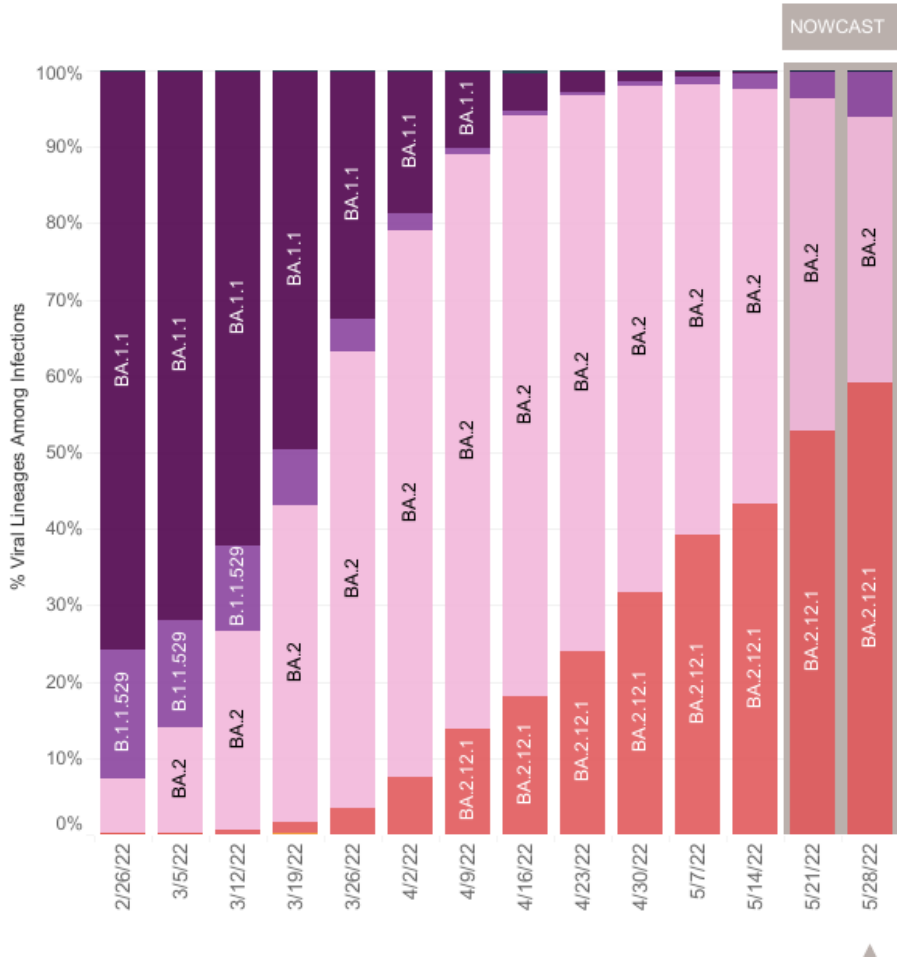
| | AT LEAST ONE DOSE | FULLY VACCINATED |
|-----------|-------------------|------------------|
| All ages | 78% | 67% |
| 5 and up | 83% | 71% |
| 65 and up | 95% | 91% |



Ongoing Changing Virological Landscape

United States: 2/20/2022 – 5/28/2022

United States: 5/22/2022 – 5/28/2022 NOWCAST



| USA | | | | |
|-----------|-----------|----------|--------|------------|
| WHO label | Lineage # | US Class | %Total | 95%PI |
| Omicron | BA.2.12.1 | VOC | 59.1% | 54.7-63.3% |
| | BA.2 | VOC | 34.7% | 30.8-38.8% |
| | B.1.1.529 | VOC | 6.1% | 4.1-8.8% |
| | BA.1.1 | VOC | 0.1% | 0.0-0.1% |
| Delta | B.1.617.2 | VBM | 0.0% | 0.0-0.0% |
| Other | Other* | | 0.1% | 0.0-0.1% |

* Enumerated lineages are US VOC and lineages circulating above 1% nationally in at least one week period. "Other" represents the aggregation of lineages which are circulating <1% nationally during all weeks displayed.
 ** These data include Nowcast estimates, which are modeled projections that may differ from weighted estimates generated at later dates
 # AY.1-AY.133 and their sublineages are aggregated with B.1.617.2. BA.1, BA.3, BA.4, BA.5 and their sublineages (except BA.1.1 and its sublineages) are aggregated with B.1.1.529. For regional data, BA.1.1 and its sublineages are also aggregated with B.1.1.529, as they currently cannot be reliably called in each region. Except BA.2.12.1 and its sublineages, BA.2 sublineages are aggregated with BA.2.

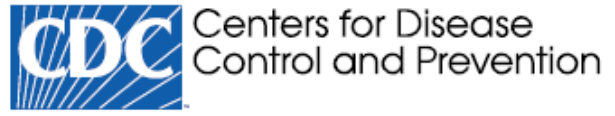
<https://covid.cdc.gov/covid-data-tracker/#variant-proportions> (accessed 5/31/22)

Treatment Update

Not much has changed; however, are there nuances to prescribing nirmatrelvir/ritonavir?



Rebound of the Virus

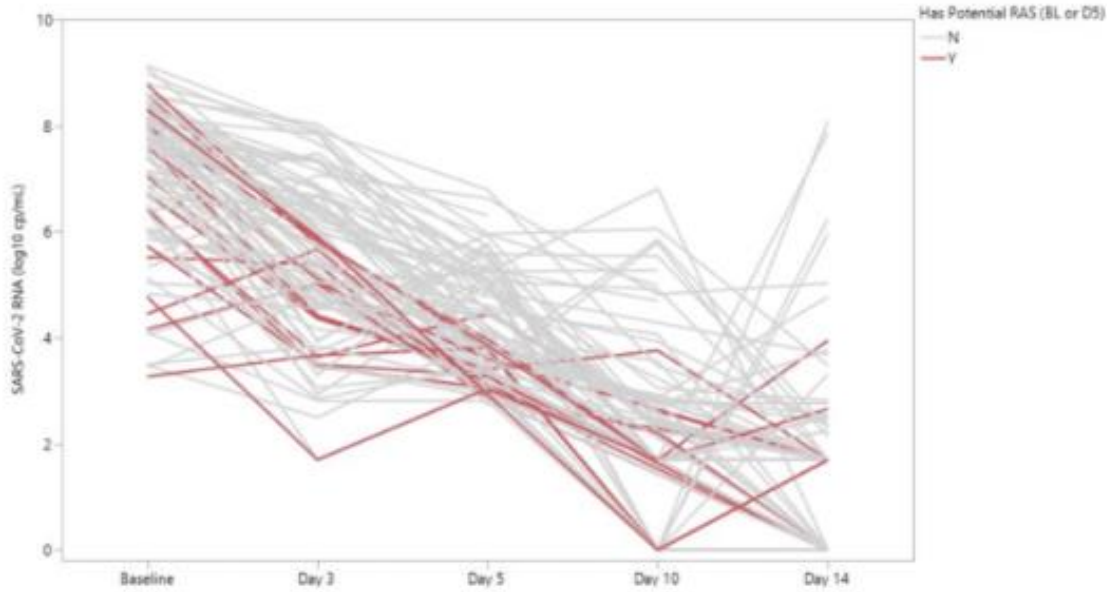


COVID-19 Rebound After Paxlovid Treatment



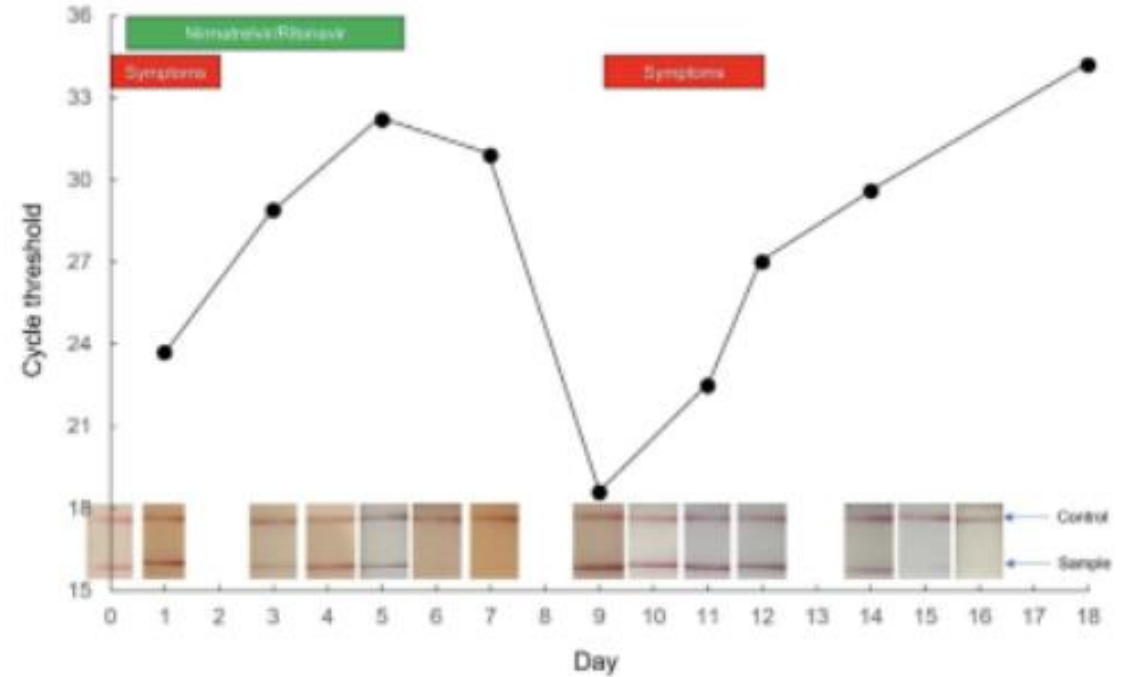
Distributed via the CDC Health Alert Network
May 24, 2022, 9:00 AM ET

Rebound of SARS-CoV-2



Source: FDA analysis.

Figure 2. SARS-CoV-2 RNA levels in NP swabs among Paxlovid treated subjects with or without SARS-CoV-2 amino acid substitutions detected in Mpro or cleavage site positions potentially associated with resistance.



<https://www.fda.gov/media/155194/download> (12/21/21)

Gupta, <https://assets.researchsquare.com/files/rs-1588371/v1/48342d2c-b3ea-4228-b600-168fca1fded7.pdf?c=1650977883>

CDC Health Advisory: Rebound Paxlovid

Brief return of symptoms

- Occurs +/- treatment
- Regardless of vaccine status

Frequency w/ Rx, unclear

- Pfizer says 2%
- Mechanism unclear
- Transmission may occur (Boston VA)
 - Not due to mutational changes
 - 10 nonimmunocompromised pts (31-71 yrs) →
2 infected household members during relapse

Average 2-8 days post Rx

https://emergency.cdc.gov/han/2022/pdf/CDC_HAN_467.pdf (5/24/22)

<https://www.researchsquare.com/article/rs-1588371/v3> (5/23/22)

Forms:

<https://paxaes.pfizersafetyreporting.com/#/en>

<https://www.fda.gov/safety/medwatch-fda-safety-information-and-adverse-event-reporting-program>

Remains “highly recommended”

- Reduction hospitalization/death
 - Trial in the unimmunized

No evidence for additional Rx

If rebound

- Isolate additional 5d + 5d w/ mask (10d total)
post rebound symptoms

Report cases

- Pfizer
- FDA MedWatch

Paxlovid Indications

EUA

- Within 5d symptom onset \geq 12 yrs, at least 40 kg
- High risk for progression
- Positive SARS-CoV-2 test
 - Outpatient (non-severe COVID-19)

Potential Implications of Rx

- Rebound of symptoms or antigen (+) post 5d course = need for return to isolation
- If with risk factors, and expected to respond well to vaccine w/ boosters
 - Consider no Rx
 - Avoid need for return to isolation



COVID Aftermath

Only beginning to understand the scope and the complexity

Post-COVID Conditions

Morbidity and Mortality Weekly Report (MMWR)

CDC

Post-COVID Conditions Among Adult COVID-19 Survivors Aged 18–64 and ≥65 Years — United States, March 2020–November 2021

Weekly / May 27, 2022 / 71(21);713–717
On May 24, 2022, this report was posted online as an MMWR Early Release.
Lara Bull-Otterson, PhD¹; Sarah Baca^{1,2}; Sharon Saydah, PhD¹; Tegan K. Boehm Harris, MD¹ ([View author affiliations](#))

Approximately 1 in 5 adults ages 18+ have a health condition that might be related to their previous COVID-19 illness, such as:

- Neurologic and mental health conditions*
- Cardiovascular conditions
- Kidney failure
- Respiratory conditions
- Musculoskeletal conditions
- Blood clots and vascular issues

Talk to your health care provider if you have symptoms after COVID-19

bit.ly/MMWR7121 **MMWR**
MAY 24, 2022

* Adults aged 65 and older at increased risk



Is there any value of fluvoxamine in treating outpatients with COVID-19?



The CDC still says that people with COVID can leave isolation after 5 days (if symptoms are improving). In your opinion, with rapid antigen tests readily available now, what do you think of the CDC guidance?



Thank You!

To receive CME/CE/AAPA credit:

Complete the evaluation on at COVID19.DKBmed.com

Upon registering and successfully completing the activity evaluation, you will have immediate access to your certificate.

To access more resources related to COVID-19:

- Access our resource hub at COVID19.DKBmed.com

To ask your own question, email:

- QA@dkbmed.com