

# COVID-19 Update

The background of the slide is a complex digital graphic. It features a central, semi-transparent globe showing the continents of North and South America. Surrounding the globe are several 3D models of red, spherical virus particles with prominent spikes, resembling coronaviruses. These are interconnected by a network of blue and red lines, some of which are dotted. Small blue and red triangles are scattered throughout the network. Faint numerical data points are visible, including '884,526' in the upper right, '104,250' on the left, '256,640' at the bottom center, and '2024,233' on the right. The overall color palette is dominated by reds, blues, and yellows.

**Sherrill Brown, MD**  
**Medical Director, Infection Prevention**

1/11/2022

# Main Points of Discussion

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- COVID and Omicron Data Updates
- Clinical Updates
- Change in Isolation/Quarantine
- Treatment with Paxlovid and Antivirals
- At Home Testing
- Questions



# COVID-19 cases rapidly increased since the first U.S. Omicron case was reported on December 1, 2021.

January 22, 2020\* - January 05, 2022

57,898,239

Total Cases Reported

705,264

New Cases Reported\*\*

586,391

Current 7-Day Average\*\*

Dec 30, 2021 - Jan 05, 2022

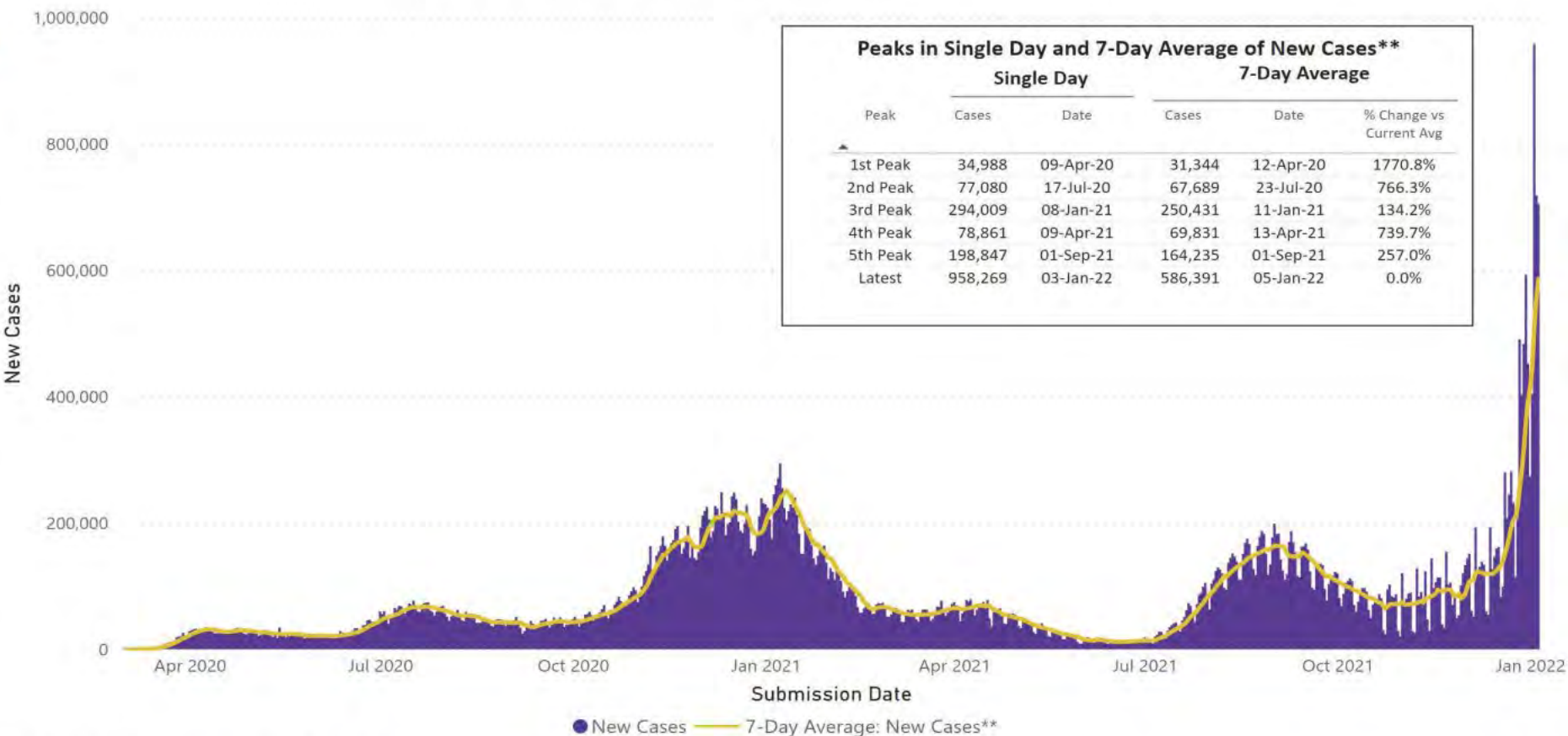
315,851

Prior 7-Day Average\*\*

Dec 23, 2021 - Dec 29, 2021

85.7%

Change in 7-Day Average



\*Graph displays data for Mar 01, 2020, to date. The totals include cases reported since Jan 22, 2020.

\*\* The histogram, total of new cases in the last 24 hours, and 7-day averages do not include historical cases retroactively that are not yet attributed to the correct date of report. Of 352,811 historical cases reported retroactively, none were reported on the most recent submission date; 134 in the current week; and 621 in the prior week.

# U.S. hospitalizations with confirmed COVID-19 are surpassing peaks from last winter.

**3,773,704**

Total New Admissions  
Aug 01, 2020 – Jan 04, 2022

**19,232**

New Admissions  
Jan 04, 2022

**16,458**

Current 7-Day Average  
Dec 29, 2021 – Jan 04, 2022

**10,271**

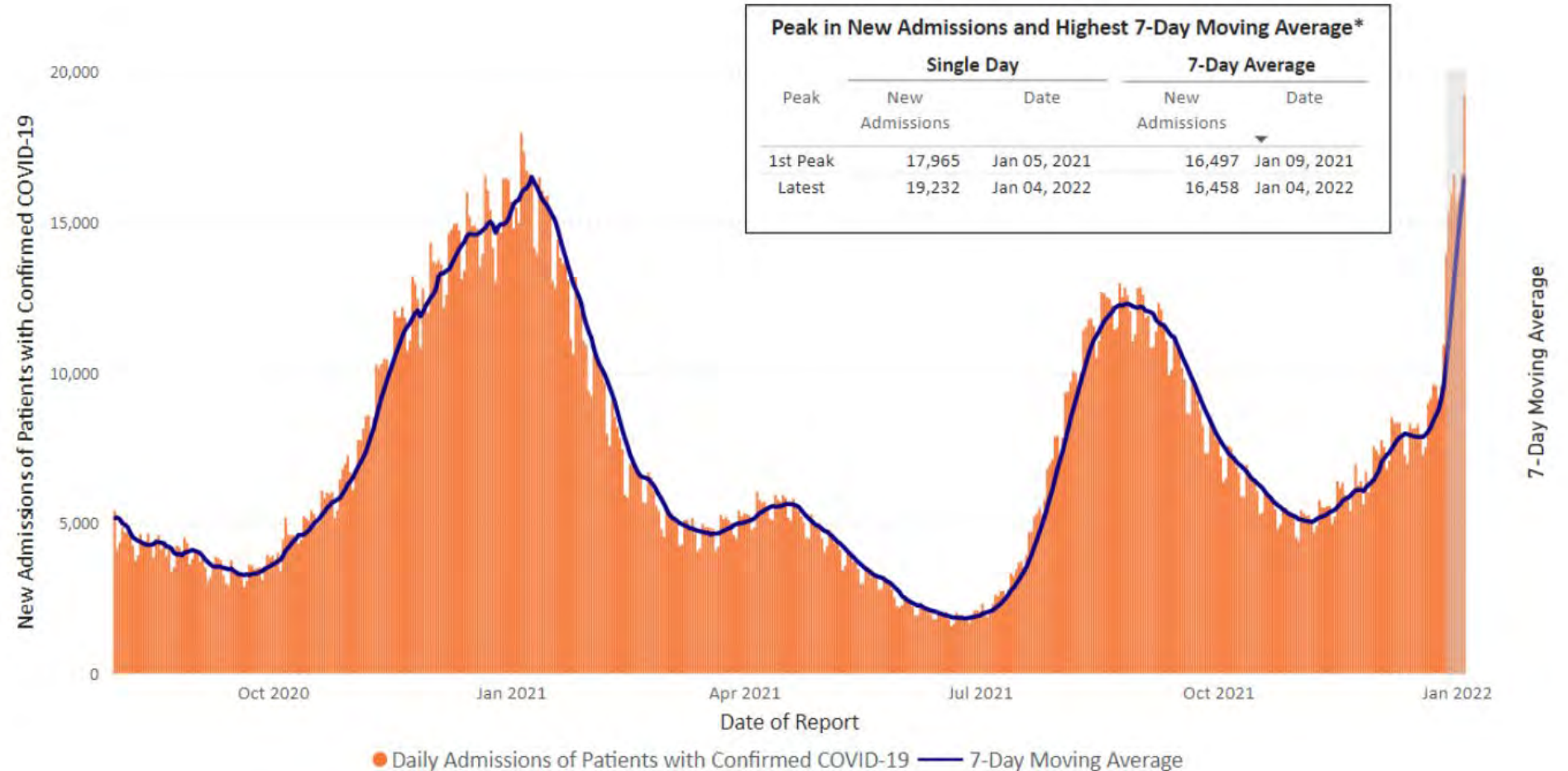
Prior 7-Day Average  
Dec 22, 2021 – Dec 28, 2021

**+60.2%**

Change in 7-Day Average

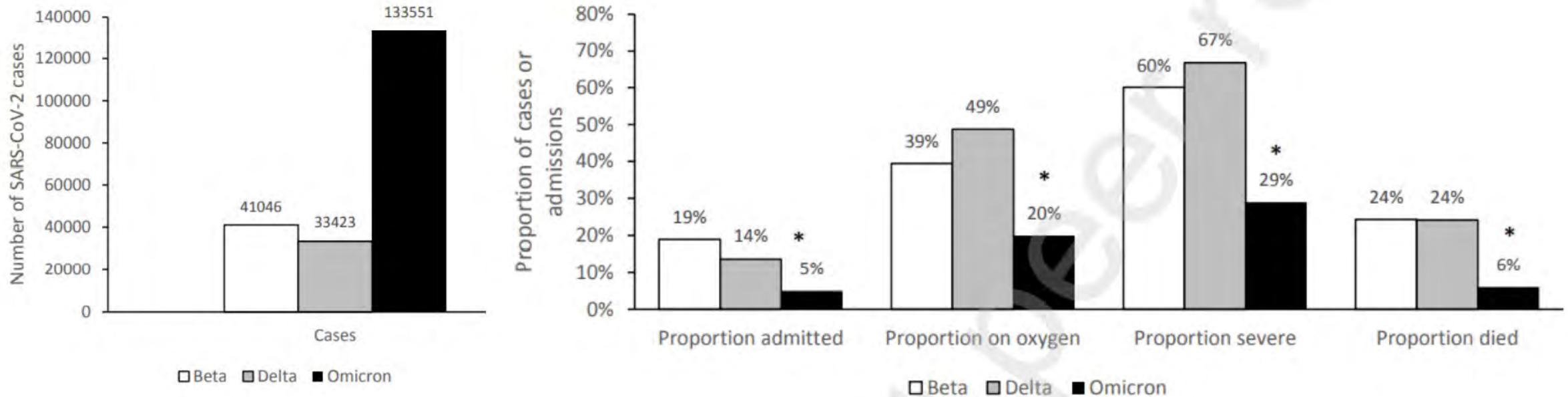
**-0.2%**

Change Since Peak 7-Day Average



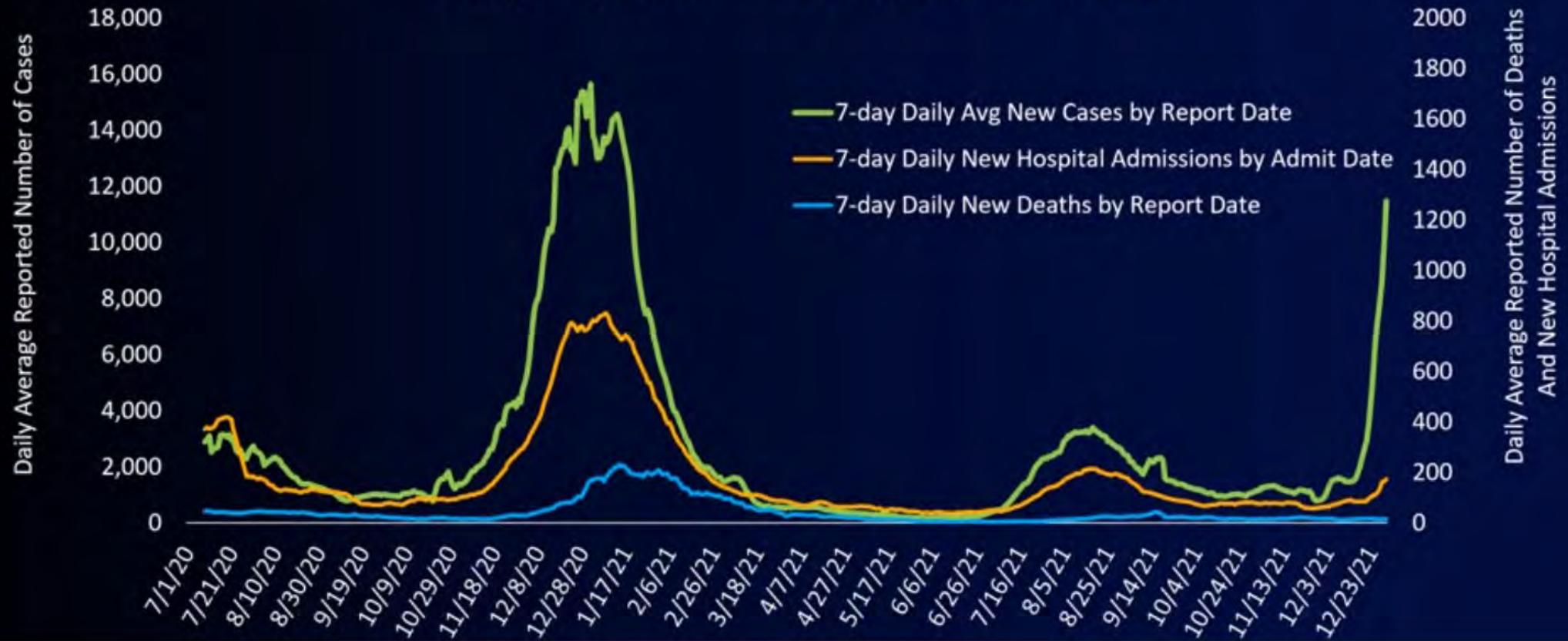


**In South Africa, patients admitted during the Omicron wave were 73% less likely to have severe disease than those admitted during the Delta wave.**



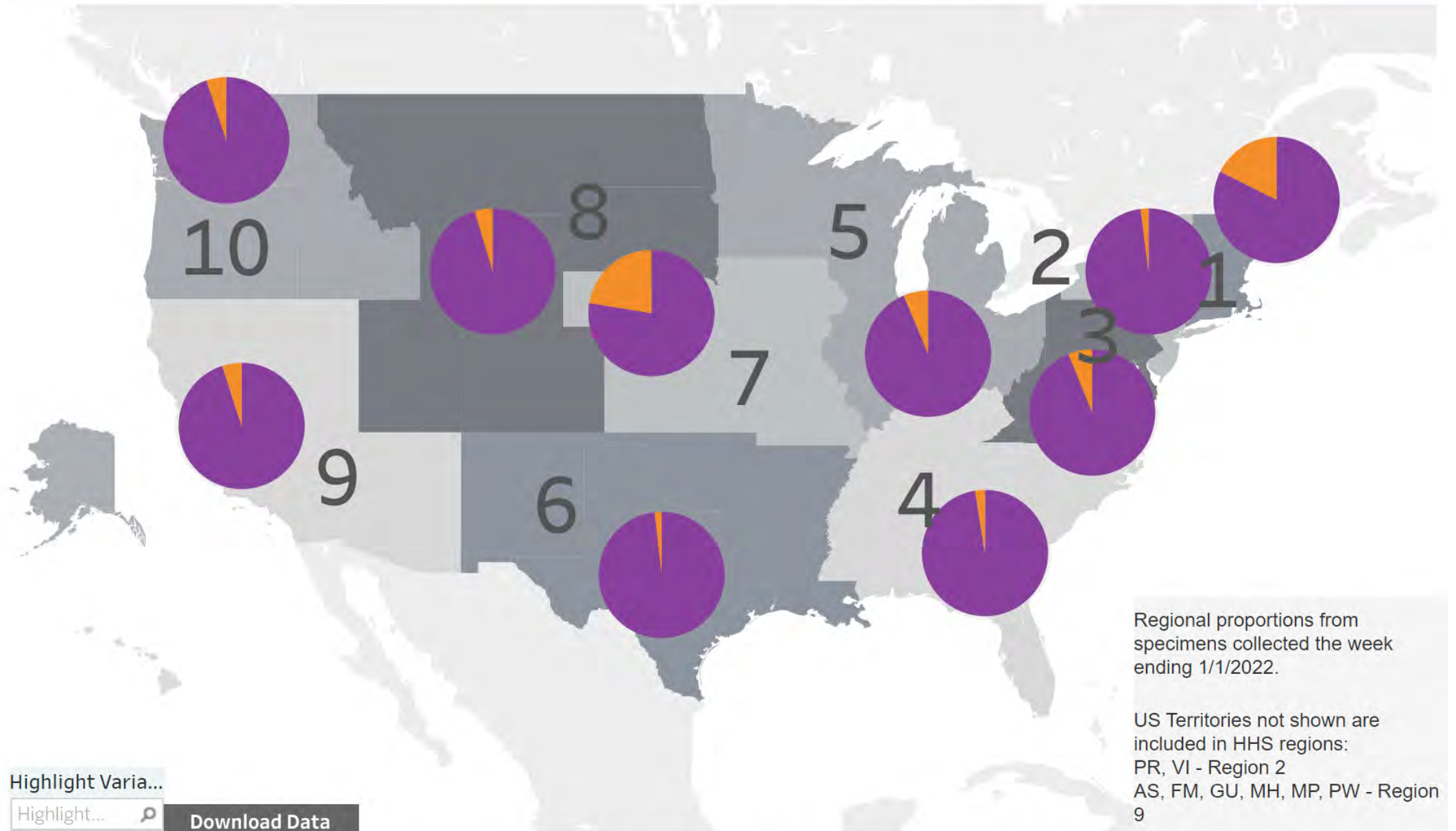
[Clinical Severity of COVID-19 Patients Admitted to Hospitals in Gauteng, South Africa During the Omicron-Dominant Fourth Wave by Waasila Jassat, Salim Abdool Karim, Caroline Mudara, Richard Welch, Lovelyn Ozougwu, Michelle Groome, Nevashan Govender, Anne von Gottberg, Nicole Wolter, DATCOV Author Group, Lucille Blumberg, Cheryl Cohen :: SSRN](#)

# New COVID-19 Cases and Deaths by Report Date\* and New Hospital Admissions by Admit Date – 7-Day Daily Average July 1<sup>st</sup>, 2020 – December 30<sup>th</sup>, 2021





## United States: 12/26/2021 – 1/1/2022 NOWCAST



B.1.1.529 using pango-designation (PANGO)-v1.2.105, pangolin v3.1.17, pangoLEARN version 12/06/21  
B.1.617.2 3.16.

Updated January 4, 2022

# Percent of Cases by Age Group Over the Past Week

## % Cases in Age Group

December 22nd – 28th, 2021

Age 0-4	2%
Age 5-11	4%
Age 12-17	5%
Age 18-29	33%
Age 30-49	39%
Age 50-64	12%
Age 65-79	4%
Age 80+	1%



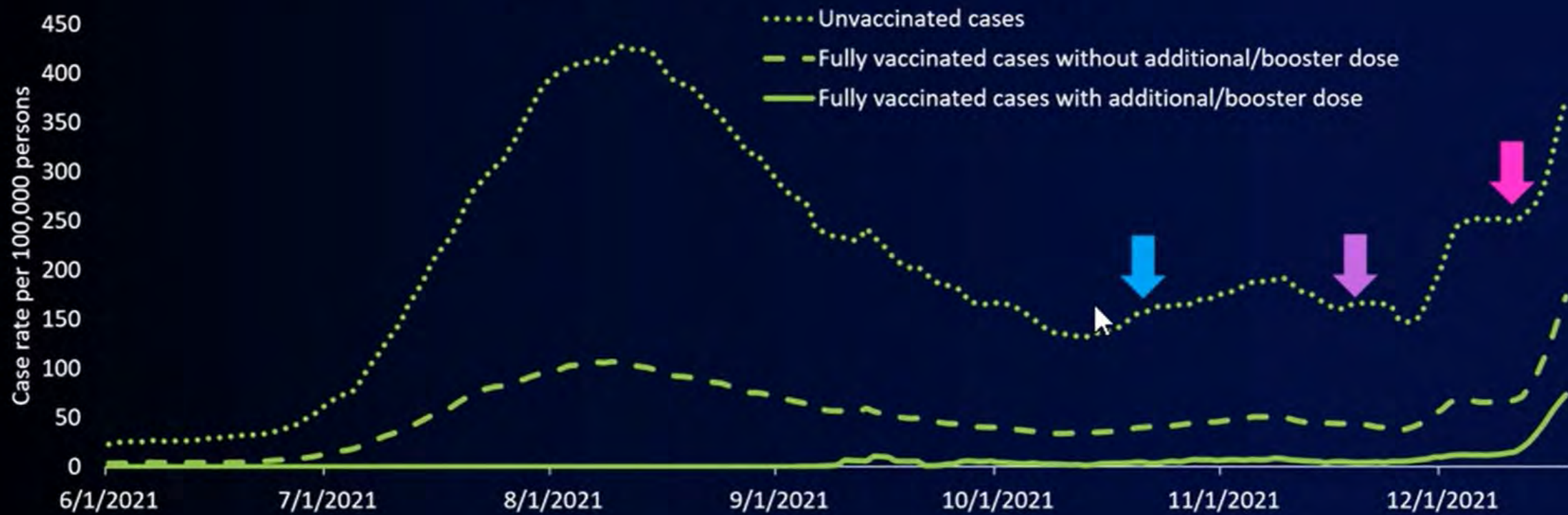
[covid19.lacounty.gov](https://covid19.lacounty.gov)

12/30/2021

Press Ctrl+Shift+M to unmute your microphone.



## 7-Day Cumulative Age-Adjusted Case Rates per 100,000 by Vaccination Status, including Additional/Booster Dose\* June 1<sup>st</sup> – December 18<sup>th</sup>, 2021



\*Excludes partially vaccinated (3% of cases)



**covid19.lacounty.gov**

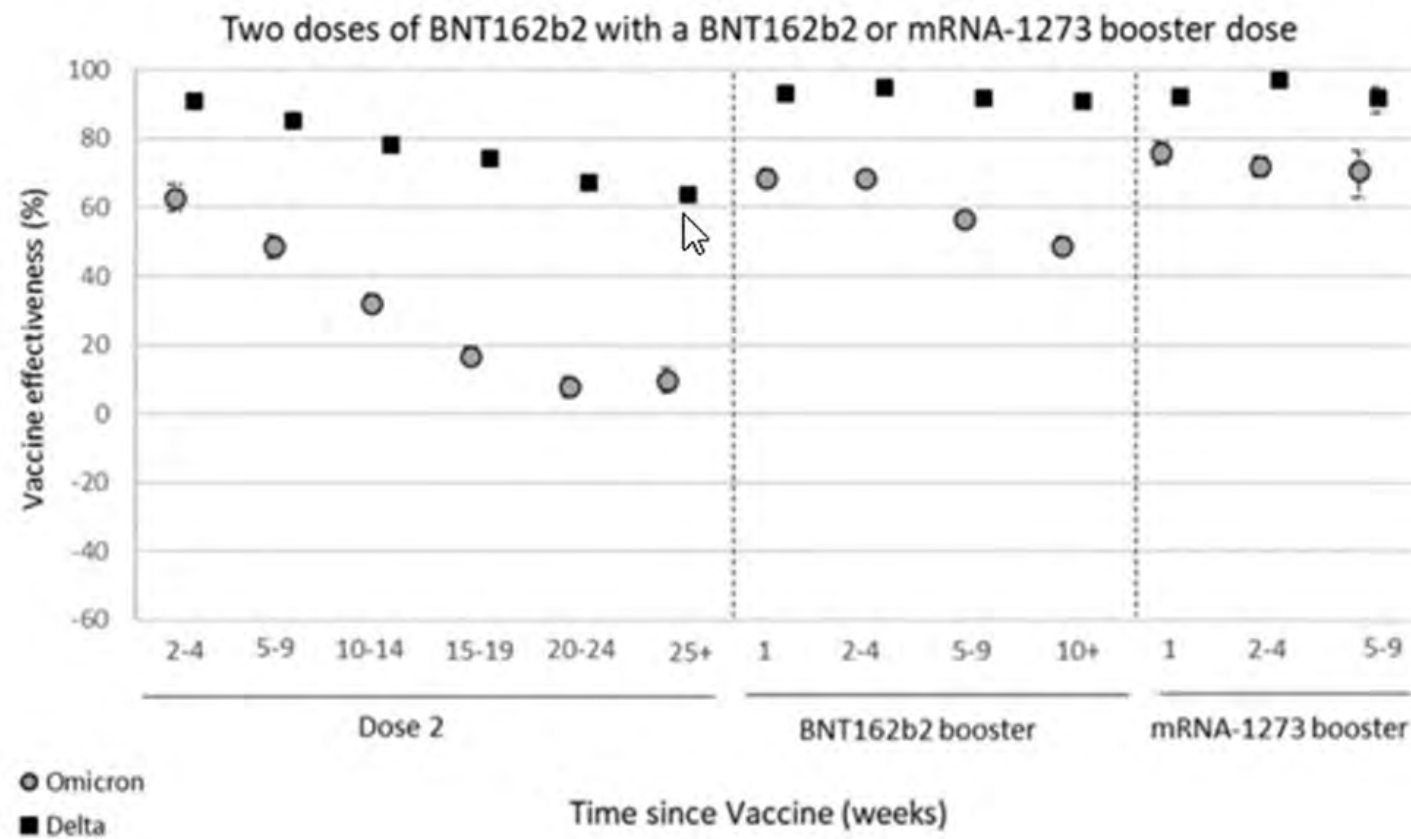
**12/30/2021**



## Preliminary results for Omicron from South Africa

- Pfizer vaccine — 70% protection against COVID-19 hospitalization and 33% against infection, during current Omicron wave
  - Reduced compared with Delta (93% for hospitalization and 80% for infection)
  - Booster vaccination not evaluated
- Risk of hospital admission among adults with COVID-19 — 29% lower for Omicron variant compared with ancestral lineage during mid-2020, after adjusting for vaccination status





# Myocarditis after Covid-19 Vaccination in a Large Health Care Organization

Guy Witberg, M.D., Noam Barda, M.D., Ph.D., Sara Hoss, M.D., Ilan Richter, M.D., M.P.H., Maya Wiessman, M.D., Yaron Aviv, M.D., Tzlil Grinberg, M.D., Oren Auster, M.Sc., Noa Dagan, M.D., Ph.D., M.P.H., Ran D. Balicer, M.D., Ph.D., M.P.H., and Ran Kornowski, M.D.

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Article

Figures/Media

Metrics

December 2, 2021

<https://www.nejm.org/doi/full/10.1056/NEJMoa2110737>





## Available SARS-CoV-2 mAb preparations based on indication and age/weight inclusion criteria in children and adolescents

	Minimum Age & Weight	
Treatment Mild to Moderate COVID-19	<b>&gt;1 kg and &lt;40 kg</b> <ul style="list-style-type: none"><li>• Bamlanivimab/Etesevimab</li></ul>	<b>&gt;40 kg</b> <ul style="list-style-type: none"><li>• Bamlanivimab/Etesevimab</li></ul> <b><u>&gt;12 years and &gt;40kg</u></b> <ul style="list-style-type: none"><li>• Casirivimab/Imdevimab</li><li>• Sotrovimab</li></ul>
POST- Exposure Prophylaxis	<b>&gt;1 kg and &lt;40 kg</b> <ul style="list-style-type: none"><li>• Bamlanivimab/Etesevimab</li></ul>	<b>&gt;40 kg</b> <ul style="list-style-type: none"><li>• Bamlanivimab/Etesevimab</li></ul> <b><u>&gt;12 years and &gt;40kg</u></b> <ul style="list-style-type: none"><li>• Casirivimab/Imdevimab</li></ul>
PRE- Exposure Prophylaxis	<b>&lt;12 years and &lt;40 kg</b> <ul style="list-style-type: none"><li>• No mAb option</li></ul>	<b>&gt;12 years and &gt;40kg</b> Tixagevimab and Cilgavimab

**NOTE:**

Bamlanivimab/Etesevimab & Casirivimab/Imdevimab are not active vs omicron

**Sotrovimab has activity vs omicron**

Tixagevimab unknown activity vs omicron

AAP 2021  
CHOP 2021

## Where to obtain mAb

- Where to get it:
  - 1) EMS Agency: [laemsadutyofficer@dhs.lacounty.gov](mailto:laemsadutyofficer@dhs.lacounty.gov)
  - 2) Mobile provider for on-site administration (not LACDPH):



### Combat Covid-19 Team

- Coverage area: Across Los Angeles County
- Email: [LTC@combatcovid19.com](mailto:LTC@combatcovid19.com)
- Phone: 1-866-TREAT-19 (1-866-873-2819)
- [www.combatcovid19.com](http://www.combatcovid19.com)

### Hope Specialty Pharmacy

- Coverage area: Across Los Angeles County
- Email: [DIRECTOR@HOPESP.COM](mailto:DIRECTOR@HOPESP.COM)
- Phone: 800-557-5555



## Tixagevimab/cilgavimab (Evusheld)

- Combination of two long-acting monoclonal antibodies
- EUA for pre-exposure prophylaxis > 12 years & > 40 kgs
- Intended to use in those who are unable to receive or not expected to mount an appropriate response to COVID-19 vaccination
  - List of indications on next slide
  - Should be given to eligible high-risk patients at least 2 weeks after their last COVID-19 vaccine dose.
  - Duration of protection is being evaluated and may continue for at least 6 months
- 2 IM injections at 2 different sites
- Available at limited facilities in LAC (see <http://publichealth.lacounty.gov/acd/ncorona2019/therapeutics/#obtainmedication> )

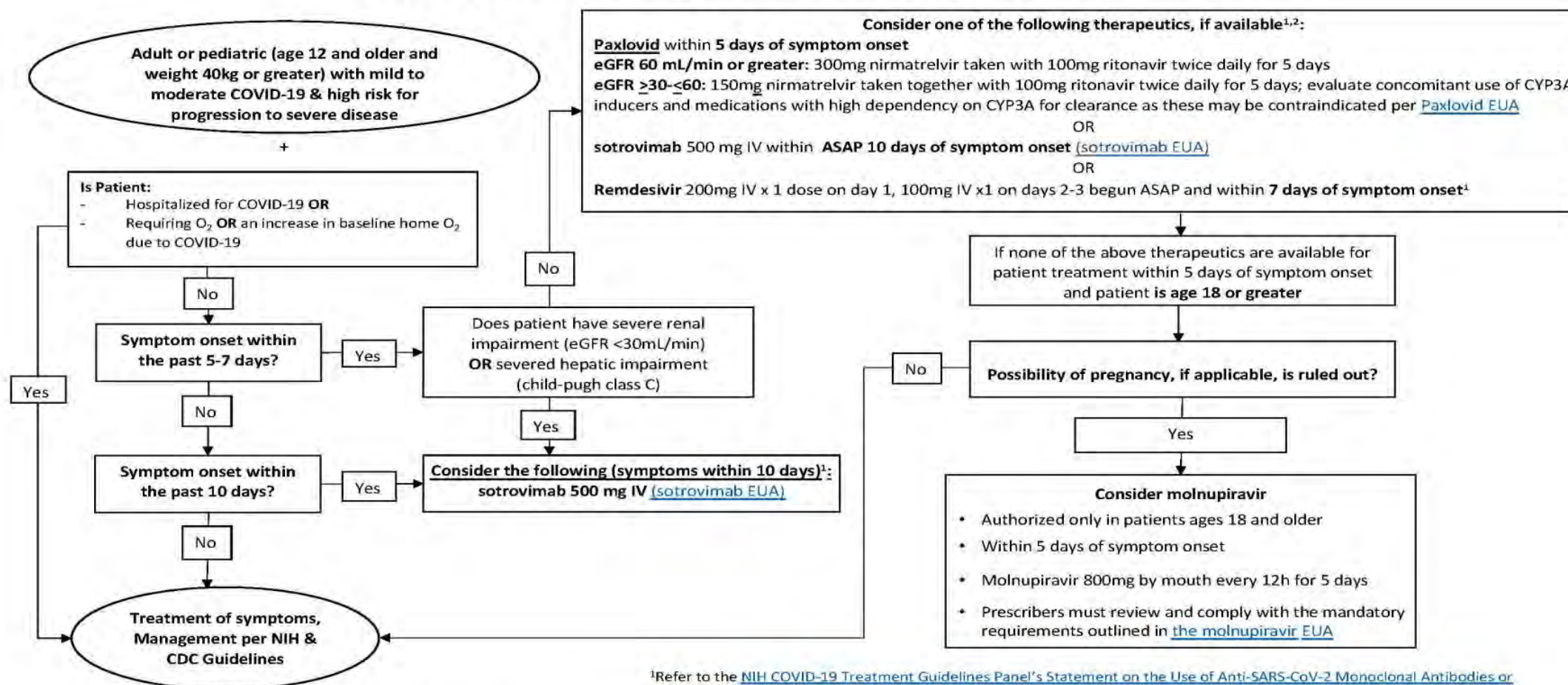


## Indications for use of Evusheld:

- Receipt of a **hematopoietic cell transplantation** in the previous 2 years and lack of immune reconstitution or taking immunosuppressive medications
- Receipt of **chimeric antigen receptor (CAR) T-cell therapies** in the previous 2 years
- Known underlying **primary immunodeficiency** (eg, DiGeorge syndrome, Wiskott-Aldrich syndrome)
- Untreated or advanced **HIV infection** (eg, history of having an AIDS-defining illness without immune reconstitution, CD4+ T-lymphocyte count  $<200/\text{mm}^3$ )
- Receiving **active chemotherapy** for underlying hematologic malignancies or solid tumors
- Receipt of a **solid organ transplant** within the last 3 months and receiving immunosuppressive medications leading to moderate/severe immunocompromise
- Actively receiving treatment with **immunosuppressive medications** leading to moderate/severe immunocompromise



# COVID-19 Outpatient Therapeutics Decision Guide



**Limited use of bamlanivimab/etesevimab and REGEN-COV as they are not expected to be active against the Omicron variant<sup>1</sup>**

December 30, 2021

<sup>1</sup>Refer to the [NIH COVID-19 Treatment Guidelines Panel's Statement on the Use of Anti-SARS-CoV-2 Monoclonal Antibodies or Remdesivir for the Treatment of Covid-19 in Nonhospitalized patients when Omicron is the Predominant Circulating Variant](#);

Remdesivir is only approved for hospitalized individuals with COVID-19. Outpatient treatment is based on information from the literature ([Dec 22, 2021 Early Remdesivir to Prevent Progression to Severe Covid-19 in Outpatients](#); DOI: 10.1056/NEJMoa2116846)

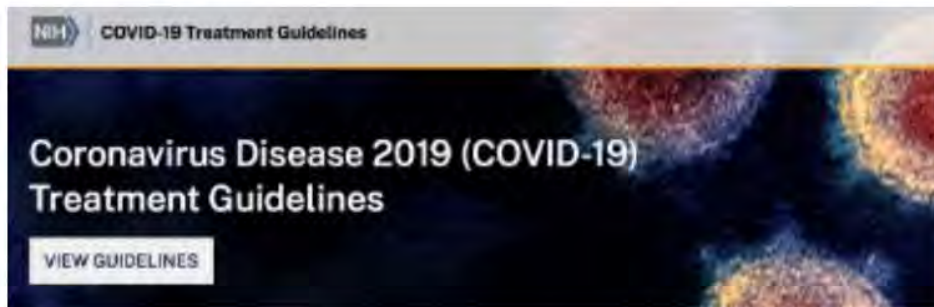
<sup>2</sup> COVID-19 convalescent plasma with high titers of anti-SARS-CoV-2 antibodies is authorized for the treatment of COVID-19 in patients with immunosuppressive disease in either the outpatient or inpatient setting ([COVID-19 Convalescent Plasma EUA](#))

# Bringing it All Back Home: Outpatient Treatment Options for COVID-19



Option	Patient Population
Nirmatrelvir/ ritonavir	<ul style="list-style-type: none"><li>• Patient not on interacting medications</li><li>• As soon as possible and within 5 days of symptom onset</li></ul>
Sotrovimab	<ul style="list-style-type: none"><li>• Patient on interacting medication/able to come to health care facility</li><li>• As soon as possible and within 10 days of symptom onset</li></ul>
Remdesivir	<ul style="list-style-type: none"><li>• Patient in health care facility or through home infusion service</li><li>• As soon as possible and within 7 days of symptom onset</li></ul>
Molnupiravir	<ul style="list-style-type: none"><li>• Patient not able to be treated with one of the options above</li><li>• Not pregnant (if given during pregnancy, shared decision making)</li><li>• As soon as possible and within 5 days of symptom onset</li></ul>





## The COVID-19 Treatment Guidelines Panel's Interim Statement on Patient Prioritization for Outpatient Anti- SARS-CoV-2 Therapies or Preventive Strategies When There Are Logistical or Supply Constraints

*Last Updated: December 23, 2021*

<https://www.covid19treatmentguidelines.nih.gov/>

Tier	Risk group
1	Immunocompromised individuals regardless of vaccine status <b>or</b> Unvaccinated individuals age $\geq 75$ y or age $\geq 65$ y with additional risk factors*
2	Unvaccinated individuals age $\geq 65$ y or age $< 65$ y with risk factors*
3	Vaccinated individuals age $\geq 75$ y or age $\geq 65$ y with additional risk factors*
4	Vaccinated individuals age $\geq 65$ y or age $< 65$ y with risk factors*

\*Risk factors for progressing to severe COVID include advanced age, cancer, cardiovascular disease, chronic kidney disease, chronic lung disease, diabetes, immunocompromised, obesity, pregnancy, sickle cell disease, other conditions\*

\*<https://www.cdc.gov/coronavirus/2019-ncov/hcp/clinical-care/underlyingconditions.html>





## Nirmatrelvir-ritonavir (Paxlovid)

- Oral protease inhibitor + booster
- EUA since 12/22/21
  - > 12 years & > 40 kgs
- Treatment of mild-moderate COVID-19 only
  - Non-hospitalized patients
  - Risk of progression to severe COVID-19
- 300 mg nirmatrelvir (2 pills) + 100 mg ritonavir (1 pill) PO BID x 5 days
- Start within 3-5 days of symptom onset
- Supply extremely limited
  - See below for list of pharmacies that have received initial shipments:  
<http://publichealth.lacounty.gov/acd/ncorona2019/therapeutics/#obtainmedication>

# Nirmatrelvir/ritonavir (Paxlovid™)

- **Recommendation (NEW):** In ambulatory patients with mild to moderate COVID-19 at high risk for progression to severe disease, the IDSA guideline panel suggests nirmatrelvir/ritonavir initiated within five days of symptom onset rather than no nirmatrelvir/ritonavir.
  - (Conditional recommendation, Low certainty of evidence)
- **Remarks:**
  - Patients' medications need to be screened for serious drug interactions (i.e., medication reconciliation). Patients on ritonavir- or cobicistat-containing HIV or HCV regimens should continue their treatment as indicated.
  - Dosing based on renal function:
    - Estimated glomerular filtration rate (eGFR) > 60 mL/min: 300 mg nirmatrelvir/100 mg ritonavir every 12 hours for five days
      - o eGFR ≤60 and ≥30 mL/min: 150 mg nirmatrelvir/100 mg ritonavir every 12 hours for five days
      - o eGFR <30 mL/min: not recommended
  - Patients with mild to moderate COVID-19 who are at high risk of progression to severe disease admitted to the hospital for reasons other than COVID-19 may also receive nirmatrelvir/ritonavir.



# Renal Dosing Paxlovid™ (nirmatrelvir/ritonavir)

eGFR Range	Nirmatrelvir* Dose	Ritonavir Dose
eGFR ≥ 60 mL/min (mild)	300 mg twice daily x 5 days	100 mg twice daily x 5 days
eGFR > 30 to < 60 mL/min (moderate)	150 mg twice daily x 5 days	100 mg twice daily x 5 days
eGFR < 30 mL/min (severe)	Paxlovid (nirmatrelvir/ritonavir) not recommended until more information available	
* Nirmatrelvir is renally eliminated; Cmax and AUC were 48% and 204% higher in those with severe renal impairment		

Prescriptions should specify the numeric dosage of each active ingredient within Paxlovid™



# Paxlovid™

## Medication Contraindications and Resources

### Drugs highly dependent on CYP3A for clearance and subject to increased concentrations

- Alpha1-adrenoreceptor antagonist: alfuzosin
- Analgesics: pethidine, piroxicam, propoxyphene
- Antianginal: ranolazine
- Antiarrhythmic: amiodarone, dronedarone, flecainide, propafenone, quinidine
- Anti-gout: colchicine
- Antipsychotics: lurasidone, pimozide, clozapine
- Ergot derivatives: dihydroergotamine, ergotamine, methylergonovine
- HMG-CoA reductase inhibitors: lovastatin, simvastatin
- PDE5 inhibitor: sildenafil (Revatio®) when used for pulmonary arterial hypertension (PAH)
- Sedative/hypnotics: triazolam, oral midazolam

### Drugs that can speed up the metabolism of nirmatrelvir

- Anticancer drugs: apalutamide
- Anticonvulsant: carbamazepine, phenobarbital, phenytoin
- Antimycobacterials: rifampin
- Herbal products: St. John's Wort (hypericum perforatum)

### Resources:

- <https://www.covid19-druginteractions.org/>
- <https://www.hiv-druginteractions.org/>
- HIV/Hep C literature

# Paxlovid™ DDI's in Cardiology

- Statins
  - Lovastatin-not recommended
  - Simvastatin-not recommended
  - Hold all statins x 5 days?
- Antiarrhythmics-not recommended d/t risk of arrhythmias
  - Amiodarone
  - Dronedarone
  - Flecainide
  - Propafenone
  - Quinidine
- Clopidogrel-not mentioned in FDA EUA however known interaction in HIV literature
  - Risk of thrombosis s/p stenting; high risk 6 weeks post stent
- Antihypertensives
  - Increased levels of calcium channel blockers
- Increased digoxin levels

# **Additional\* Paxlovid™ DDI's**

## **(\*not an exhaustive list)**

- Oncology agents
  - Various concerns if drug ends in:
    - -ib
    - -clax
    - -tine
- Systemic corticosteroids
  - Cushing's syndrome
  - ? Inhaled steroids
  - ? Injectable steroids
- Women's Health
  - Decreased effectiveness on ethinyl estradiol
  - Counsel on backup non-hormonal method of contraception
- Men's Health
  - PDE5-no warning for use in ED; warnings on max doses in HIV literature



# Requirements for Oral Antiviral Rx

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**These medications are now available at some LA County locations and these Orange County locations including pharmacies and clinics.**

**[COVID-19 Monoclonal and Antiviral Therapy \(lacounty.gov\)](https://lacounty.gov)**

**[SARS-CoV-2 Antiviral Therapeutics \(ca.gov\)](https://ca.gov)**

**As supplies are currently very limited, providers/patients should call ahead to check that product is available.**

# NIH COVID-19 Treatment Guidelines

Fluvoxamine is a selective serotonin reuptake inhibitor (SSRI) that is approved by the Food and Drug Administration (FDA) for the treatment of obsessive-compulsive disorder and is used for other conditions, including depression. Fluvoxamine is not FDA-approved for the treatment of any infection.

Anti-Inflammatory Effect of Fluvoxamine and Rationale for Use in COVID-19

<https://www.covid19treatmentguidelines.nih.gov/therapies/immunomodulators/fluvoxamine/>



# Additional Clinic Updates—

- MD Labs Testing (Southgate&Anaheim)-
  - PCR Testing
  - They will be given isolation and quarantine instructions
  - Results emailed to patients, will get a call for positives
  - Patients should set up a MyAltaMed account to schedule a follow up telehealth visit if needing a letter or counseling on a positive result
  - These results do not need to be reported to Public Health
- COVID testing standing order
  - Nurses can do covid and flu testing if needed
  - POC tests will be given results right then, PCR tests sent to fulgent
  - POC and PCR tests will not need to be reported to public health
- COVID Registry Live
  - Starting 1/7/22 Labs, positive patients will be notified and given a letter
  - Positive PCR test results will be reported to department of health
- COVID Vaccines
  - Vaccines + boosters can be given to ages 12 and up (12-17 need Pfizer)
  - 5-11 year olds can be given 3<sup>rd</sup> dose if severely immune compromised
- COVID Therapeutics (Paxlovid and Molnupirivir)
  - For People severely immune suppressed or those >65 an unvaccinated
  - Need to write out prescription specifying exact doses of each medication
  - Need to call the location you are sending patient to to make sure they have the med in stock

# Updated Isolation And Quarantine for General Public

## Isolation and Quarantine Recommendations for the General Public (not applicable to healthcare personnel)

**Isolation:** separates those infected with a contagious disease from people who are not infected.

**Quarantine:** restricts the movement of persons who were exposed to a contagious disease in case they become infected.

Scenario	Isolation Duration	Follow up test	Isolation Ends
Positive Covid Test	Isolate for 5 days	Antigen test on Day 5 or after. If unable to test or choose not to continue Isolation for 10 days	If Neg Ag test- Yes <u>Must</u> wear well-fitting mask for next 5 days around others
Negative Covid Test & Symptoms	Isolate for 5 days	Antigen test on Day 5 or after. If unable to test or choose not to continue Isolation for 10 days	If Neg Ag test- Yes <u>Must</u> wear well-fitting mask for next 5 days around others
Exposure to someone with Covid-19 & Unvaccinated or Booster Eligible but have not received booster dose.	Quarantine for 5 days	Antigen test on Day 5 or after ok. PCR best. If unable to test or choose not to continue Isolation for 10 days	If Neg Ag or PCR test- Yes <u>Must</u> wear well-fitting mask for next 5 days around others
Exposure to someone with Covid-19 & Boosted OR Fully Vaccinated but not yet eligible for booster	No Quarantine  Wear well-fitting mask around others for 10 days	Antigen test Day 5 or after ok PCR best.	NA

# Healthcare Worker Guidance on Isolation and Quarantine

COVID Test (Positive):	General Work Assessment	Testing
Vaccinated Status?		
*Boosted and/or Fully Vaccinated:		
	Symptomatic <ul style="list-style-type: none"> <li>Isolate for 10 days and return to work on 11th day with symptoms improvement.</li> <li>May return to work after 5 day isolation with symptoms improvement and the ability to wear an N95 mask, KN95 mask, or double surgical masks at all times.</li> </ul>	No Test Required
	Asymptomatic <ul style="list-style-type: none"> <li>Isolate for 5 days; return to work on 6th day.</li> <li>Must wear an N95 mask, KN95 mask, or double surgical masks at all times.</li> </ul>	No Test Required
*Unvaccinated:		
	Isolate for 10 days. May return to work on 11th day with symptoms improvement.	No Test Required
Exposure:		
*Boosted and/or Fully Vaccinated:	No work restrictions; must wear an N95 mask, KN95 mask, or double surgical masks at all times <ul style="list-style-type: none"> <li>Test immediately and on day 5 (if possible).</li> <li>If positive test, please refer to Test Positive protocol above</li> </ul>	<ul style="list-style-type: none"> <li>Test immediately and on day 5 (if possible).</li> <li>If positive test, please refer to Test Positive protocol above</li> </ul>
*Unvaccinated:	<ul style="list-style-type: none"> <li>Quarantine for 5 days and test on day 5.</li> </ul> Must wear N95 mask, KN95 mask or double surgical masks at all times. If positive test, please refer to Test Positive above.	<ul style="list-style-type: none"> <li>Quarantine for 5 days and test on day 5.</li> </ul>



# QuickVue Antigen Test Kits

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**please also give staff the instructions for use and they need to be stored in a temperature controlled setting.**

**Once your Carestart and Binax Now antigen tests have been exhausted, we should be using the Quidel Quickvue antigen test to order for your clinic.**

**Quidel Quickvue antigen tests should now be used to:**

- Hand out to patients (max of 2 test kits per person)
- Hand out to staff (max of 2 test kits per person)
- Utilize for in clinic staff testing by employee health
- Utilize for in clinic testing for patients.

**Please hand out the testing packet to patients picking up test kits. They do not need to come back to clinic for confirmatory or repeat testing.**

**Order more supply through the excel sheet standard ordering process. Couriers are doing their best to get supplies out as soon as possible but there are delays due to size of kits, size of vans and availability of couriers.**

# COVID Vaccine Eligibility

Primary, Additional and Booster Doses for FDA Approved/Authorized COVID-19 Vaccines<sup>1</sup>

	Pfizer <sup>2</sup> /Comirnaty	Moderna <sup>3</sup>	Johnson & Johnson (J&J)
	Preferred vaccines for primary series, additional doses, and booster doses.		For people who cannot get a Pfizer or Moderna vaccine. <sup>4</sup>
Eligible age	5 and older <sup>2</sup>	18 and older	18 and older
Primary Series	Two doses 21 days apart	Two doses 28 days apart	One dose
Booster Dose	<b>Who:</b> Everyone age 12 and older who got Pfizer for their primary series <b>should</b> get a booster dose. <ul style="list-style-type: none"><li>• People 18+ can get any of the 3 vaccines: <i>Pfizer or Moderna are preferred over J&amp;J booster.</i></li><li>• People age 12-17 can get the Pfizer vaccine.</li></ul>	<b>Who:</b> Everyone who got Moderna for their primary series <b>should</b> get a booster dose.  Can get any of the 3 vaccines: <i>Pfizer or Moderna are preferred over J&amp;J booster</i>	<b>Who:</b> Everyone who got J&J for their primary series <b>should</b> get a booster dose.  Can get any of the 3 vaccines: <i>Pfizer or Moderna are preferred over J&amp;J booster</i>  This includes if you have a moderately or severely <a href="#">weakened immune system</a>
	<b>When:</b> 5 months after your second dose <sup>6</sup>	<b>When:</b> 5 months after your second dose <sup>6</sup>	<b>When:</b> 2 months after your J&J dose
Additional (3 <sup>rd</sup> ) Dose for people with weak immune systems <sup>3, 5</sup>	<b>Who:</b> People age 5 or older who have a moderately or severely <a href="#">weakened immune system</a> <b>should</b> get an additional dose of the same vaccine as their primary series. Children 5-17 should only get Pfizer vaccine. <sup>2</sup>		Not recommended. See Booster Dose above
	<b>When:</b> At least 28 days after your second dose		



## Summary

### Benefits and Harms

- In the setting of Omicron, likely lower vaccine effectiveness in all populations, compared to effectiveness seen with Delta variant
- Higher antibody titers improve neutralization of Omicron variant; booster doses of COVID-19 vaccines increase neutralization titers
- Impact of booster dose on neutralizing antibody or VE in adolescents 12–15 years of age is unknown, but likely to provide additional protection
- Myocarditis rates after booster dose likely lower than what is seen after a 2<sup>nd</sup> dose in younger adolescents

## Additional Clinic Updates—

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- Employees are required to have their COVID-19 booster if eligible by Feb 1<sup>st</sup>, 2022.
- Those with Boosters outside of AltaMed need to send [employeehealth@altamed.org](mailto:employeehealth@altamed.org) proof of booster shot.
- Until Those that are booster eligible are vaccinated with booster will be required to do twice a week antigen testing
- Employee Health will send out communication with emails to those needing boosters per their records and what instructions will be given to be compliant with testing
- For those not yet eligible (<5 months from mRNA vaccine) will need to get vaccinated within 2 wks from beginning eligible