

Kaleida Health
COVID-19 Update

March 30, 2021

Good afternoon,

Welcome to the last week of March. Today promises to be warm and sunny, so find some time to get outside and enjoy it. Today also marks a major anniversary for the history of medicine. It was on this date in 1842 that Crawford Long used anesthesia for the first time as part of an operation. The course of medicine was changed forever on that day.

Mini Grand Rounds

There is no Mini Grand Rounds this week.

COVID-19 Updates

Hospital Census: As of March 29, there were 37 COVID positive patients at BGMC (10 in the ICU), 27 at MFSH (7 in the ICU) and 5 at Oishei (1 in the ICU).

Erie County, New York State and United States Status (as of March 28, 2021)

Region	Positivity Rate (7-day average)	New Cases in past 24 hours	ICU Reserve Capacity	Percent Vaccinated
Erie County	6.6% (3.8% rolling average)	383	57%	31.5%
New York State	4.1% (3.5% rolling average)	7,622	67%	30.1%
United States	4.63%	43,694	<i>Not available</i>	<i>Unknown</i>

Source:

[Erie County Data](#)

<https://coronavirus.jhu.edu/>

<https://covidactnow.org/us/ny/>

COVID-19 Vaccine Updates

New York State Vaccine Eligibility

**WHO IS ELIGIBLE FOR THE COVID-19 VACCINE?
Eligible New Yorkers Include:**

✓ Age 30+	✓ Residents & Staff in Congregate Settings
✓ Healthcare personnel	✓ First Responders & Corrections Workers
✓ Teachers & Child Care Workers	✓ Restaurant Workers & Restaurant Delivery Workers
✓ Public Transit Workers	✓ For-Hire Vehicle Drivers
✓ Grocery Store Workers	✓ In-Person College Faculty & Essential Staff
✓ Hotel Workers	✓ Public-Facing Government/Public Employees
✓ People with Qualifying Comorbidities & Conditions	✓ Public-Facing Not-For-Profit Workers
✓ Residents & Staff at Long Term Care Facilities	✓ Essential In-Person Building Service Workers

Source: <https://covid19vaccine.health.ny.gov/>

- NYS has updated eligibility for the vaccine. Beginning this morning, residents over the age of 30 in New York State will be able to sign up for the vaccine
- Beginning on April 6, eligibility will expand to include anyone 16 or older
- To sign up, patients should go to: <https://am-i-eligible.covid19vaccine.health.ny.gov/>

Astra-Zeneca Vaccine Reports Updated Data

- AZD1222 US Phase III primary analysis confirms safety and efficacy
- 76% vaccine efficacy against symptomatic COVID-19
- 100% efficacy against severe or critical disease and hospitalization
- 85% efficacy against symptomatic COVID-19 in participants aged 65 years and over
- <https://www.astrazeneca.com/media-centre/press-releases/2021/azd1222-us-phase-iii-primary-analysis-confirms-safety-and-efficacy.html>

Hospital Updates

Policy Updates at Kaleida Health

Below are the revised policies that affect providers at Kaleida Health. Please take a moment to review this month's updates. The policy links below are accessible from a Kaleida Health computer only or when connected to the Kaleida Health network. For additional assistance, please contact Amber Mata at amata@kaleidahealth.org

- NEO.20- Care of the Infant with Neonatal Opioid Withdrawal Syndrome (NOWS) – Several revisions to E. Medication section. Revision of statement under minimal stimulation rooms
- SS.10- Surgical Scrub – Reference update
- TS.3- Outpatient Transfusion Therapy- Adult – Add HighPointe transfer in statement of purpose. Include HighPointe responsibilities in instruction.

Community Updates

Excelsior Pass

- NYS has announced a new app which is intended to facilitate the reopening of business and events across the community
- Excelsior Pass supports a safe reopening of New York by providing a free, fast, and secure way to present digital proof of COVID-19 vaccination or negative test results. Think of it as a mobile airline boarding pass, but for proving you received a COVID-19 vaccination or negative test
- You can store your Pass digitally on your smartphone with the Excelsior Pass Wallet app, available for free from the Apple App Store and Google Play Store. You can also print your Pass from the Excelsior Pass website and bring it with you
- Businesses and venues can scan and validate your pass to ensure you meet any COVID-19 vaccination or testing requirements for entry. Along with your Pass, you will be asked to show a photo ID that shows your name and birth date to verify that the Pass belongs to you. Adults may hold passes for accompanying minors
- Once you and your party enter an establishment, you will still be asked to follow State and CDC guidance regarding social distancing, face coverings and hand hygiene
- Participation in Excelsior Pass is voluntary. New Yorkers can always show alternate proof of vaccination or testing, like another mobile application or paper form, directly at a business or venue
- To learn more:
<https://covid19vaccine.health.ny.gov/excelsior-pass>

Monoclonal Antibody Therapy: Update on COVID-19 variants and impact on Bamlanivimab distribution

- Given the sustained increase in SARS-CoV-2 viral variants in the United States that are resistant to Bamlanivimab administered alone, and the availability of other authorized monoclonal antibody therapies that are expected to retain activity to these variants, the U.S. Government, in coordination with Eli Lilly and Company, stopped the distribution of Bamlanivimab alone starting March 24, 2021
- Other forms of monoclonal therapy are still available in this community, and evidence to date would show that they are not only safe but also effective in preventing hospitalizations
- To learn more:
 - Provider fact sheet: <https://www.fda.gov/media/143603/download>
 - <https://www.phe.gov/emergency/events/COVID19/investigation-MCM/Bamlanivimab/Pages/default.aspx>

Updates in the Literature

Interim Estimates of Vaccine Effectiveness of BNT162b2 and mRNA-1273 COVID-19 Vaccines in Preventing SARS-CoV-2 Infection Among Health Care Personnel, First Responders, and Other Essential and Frontline Workers — Eight U.S. Locations, December 2020–March 2021

- An article was published in MMWR discussing the COVID vaccine
- The authors found that “under real-world conditions, mRNA vaccine effectiveness of full immunization (≥ 14 days after second dose) was 90% against SARS-CoV-2 infections regardless of symptom status;

vaccine effectiveness of partial immunization (≥ 14 days after first dose but before second dose) was 80%.”

- The full article is available at:
<https://www.cdc.gov/mmwr/volumes/70/wr/mm7013e3.htm>

Structural impact on SARS-CoV-2 spike protein by D614G substitution

- An article was published in the journal Science discussing COVID-19 mutations
- The authors found “substitution for aspartic acid by glycine at position 614 in the spike (S) protein of severe acute respiratory syndrome coronavirus 2 appears to facilitate rapid viral spread. The G614 strain and its recent variants are now the dominant circulating forms. We report here cryo-EM structures of a full-length G614 S trimer, which adopts three distinct prefusion conformations differing primarily by the position of one receptor-binding domain. A loop disordered in the D614 S trimer wedges between domains within a protomer in the G614 spike. This added interaction appears to prevent premature dissociation of the G614 trimer, effectively increasing the number of functional spikes and enhancing infectivity, and to modulate structural rearrangements for membrane fusion. These findings extend our understanding of viral entry and suggest an improved immunogen for vaccine development.”
- The full article is available at:
<https://science.sciencemag.org/content/early/2021/03/16/science.abf2303>

SARS-CoV-2 Infection after Vaccination in Health Care Workers in California

- An article was published in the NEJM discussing vaccination of healthcare workers
- The authors found that “the rarity of positive test results 14 days after administration of the second dose of vaccine is encouraging and suggests that the efficacy of these vaccines is maintained outside the trial setting. These data underscore the critical importance of continued public health mitigation measures (masking, physical distancing, daily symptom screening, and regular testing), even in environments with a high incidence of vaccination, until herd immunity is reached at large.”
- The full article is available at:
<https://www.nejm.org/doi/full/10.1056/NEJMc2101927>

Effect of Helmet Noninvasive Ventilation vs High-Flow Nasal Oxygen on Days Free of Respiratory Support in Patients With COVID-19 and Moderate to Severe Hypoxemic Respiratory Failure the HENIVOT Randomized Clinical Trial

- An article was published in JAMA discussing management of respiratory failure in COVID
- The authors found that “among critically ill patients with moderate to severe hypoxemic respiratory failure due to COVID-19, helmet noninvasive ventilation, compared with high-flow nasal oxygen, resulted in no significant difference in the number of days free of respiratory support within 28 days.”
- The full article is available at:
<https://jamanetwork.com/journals/jama/fullarticle/2778088>

COVID-19 vaccine response in pregnant and lactating women: a cohort study

- An article was published in the American Journal of Obstetrics and Gynecology discussing COVID vaccine in pregnancy
- The authors found COVID-19 mRNA vaccines generated robust humoral immunity in pregnant and lactating women, with immunogenicity and reactogenicity like that observed in non-pregnant women. Vaccine-induced immune responses were significantly greater than the response to natural infection. Immune transfer to neonates occurred via placenta and breastmilk

- The full article is available at:
[https://www.ajog.org/article/S0002-9378\(21\)00187-3/fulltext#%20](https://www.ajog.org/article/S0002-9378(21)00187-3/fulltext#%20)

Today's theme is a note of thanks to all our physician colleagues. Today is Doctors' Day. Since it was first celebrated in 1933, this had always been a lighthearted celebration of the profession, but as with so many things, 2020 changed that. The pandemic has given us a chance to look at our colleagues and the work that they do in a different light. We have been afforded the opportunity to witness acts of bravery and self-sacrifice. We have seen leadership and altruism. When the history of the pandemic is written, it will tell the story of physicians standing up when their neighbors needed them. Today, with any luck, we are at the other end of the pandemic, but as a community, we continue to rely on the work being done every day by doctors across Western New York. Let us take a moment today to recognize this work, to thank our colleagues for their service and sacrifice as we look to move beyond the challenges of COVID-19 and, as a community, start to build a better tomorrow.

As always, your input is critical to ensure that this brief meets the needs of the community. Please send comments to coronavirusupdates@kaleidahealth.org.

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Questions

If you have questions, please reach out (coronavirusupdates@kaleidahealth.org), and we will do our best to get you the information you need.