Vaccine Availability in L.A. County

The field of choices has expanded recently to include the FEMA/CalOES site at <u>Cal State L.A.</u> that started vaccinating on 2/16/2021, the <u>CVS and Walgreen pharmacies</u> that started vaccinating on 2/12/2021 and the yet to be announced California <u>Federally Qualified Health Center</u> offering COVID vaccine funded by the federal Health Resources and Services Administration. All three of these new vaccination avenues say they won't cut into the allocations to the state of California though that doesn't answer the question of why many vaccination sites across L.A. have been limited to 2nd doses over this week and the last with only <u>4,600 doses earmarked for first doses</u> at Pierce College and mobile clinics in hard hit South and East L.A.

In order to get a dose at Cal State L.A., <u>the state suggests</u> that you go to <u>myturn.ca.gov</u> though it appears that some <u>churches</u>, <u>social service agencies and other groups</u> will be allocated group tickets for a portion of the vaccines (does this mean that the 2 mobile clinics attached to the Cal State L.A. site will go to those groups?).

Appointment information for the pharmacy vaccination sites can be accessed through CVS.com, the CVS smartphone app or 800-746-7287 for CVS and Walgreens.com/ScheduleVaccine for Walgreens. Both pharmacy chains will make appointments for your first and second dose at the same time. So far, CVS and Walgreens are the two pharmacy chains participating at a variety of locations in CA. Do not call the individual stores; use the pharmacy websites and other scheduling tools. CVS says new appointments are added daily.

Dodger Stadium and other L.A. County vaccination sites got back into the game this week though, like last week, their appointments are primarily for second doses with vaccine held back for that purpose. Pasadena Public Health does not have vaccine to give first doses this week and have second doses only for persons who got their first dose from them earlier. If you are a healthcare worker living or working in Pasadena or someone 65+ living in Pasadena looking for a first dose and can show up on 30-60 minutes notice they suggest that you join their "On-Call" list. The good news is that Newsome expects the state's allocation for this week to be 1.28 million doses and 1.31 million doses next week. If that is true, why does L.A. County with one fourth of the state's population of residents 18+ years old only have 4,600 doses for first vaccinations this week?

COVID Vaccines and Children

<u>Pfizer will be testing children 12 through 15 and Moderna will be testing children 12 through 17</u> in clinical trials of their vaccines with results expected in mid-2021.

These trials are small with some 3,000 participants and because of those low numbers and the lower incidence of COVID infection (and especially severe COVID) in this age group, efficacy will be based on measuring the strength of immune response in these children rather than using infection with COVID as an endpoint. Moving on to children 6 months through 11 years would be a separate study with possible modifications of dosing and schedule.

Not Too Early to Think About the Next Novel Coronavirus

Researchers are starting to develop prototypes of a so-called <u>pancoronavirus vaccine</u>. When the coronavirus was discovered in the 1960's, no one was interested in vaccine research because all it seemed to do was cause mild head colds. When the first novel coronavirus created SARS (Severe Acute Respiratory Syndrome) in 2002 and the second resulted in MERS (Middle Eastern Respiratory Syndrome) in 2012, there was discussion but no research funding for a SARS and MERS pancoronavirus vaccine. Though both were more lethal than COVID, neither became widespread before they went dormant and attention turned to Ebola and Zika viruses.

Last month, Paula Bjorkman, a structural biologist at Caltech, and colleagues showed that a vaccine made from the spike tips of eight different coronaviruses generated effective antibodies in vaccinated animals not only for those eight coronaviruses but also for four other coronaviruses not in the vaccine.

Another strategy may be to look at the vast array of antibodies made during a coronavirus infection in hopes of finding the rare antibody that works against a range of related strains and develop a vaccine to promote production of a broadly neutralizing antibody. Either approach is likely to be better than crossing our fingers and hoping we don't get fooled again.

Finally, Some Data on Sputnik V

Russia drew criticism from many when it approved its 2-dose Sputnik V viral vector vaccine for use in August 2020 before phase 3 trials had begun. Those concerns are largely answered with the <u>publication of results</u> in *The Lancet* showing the vaccine to be safe with an overall efficacy of 91% and a 100% efficacy for preventing severe disease. This puts it on par with the Pfizer and Moderna vaccines.

The price of \$10 per dose and storage requirements, no worse than normal freezer temperatures, make it a useful addition to world vaccination options. The drawbacks are that it is more difficult to mass produce and the Moscow based phase three trials lacked ethnic diversity to ensure equivalent performance in non-white recipients. A trial with a more diverse study group is underway in the United Arab Emirates and it will also be important to know how it performs against the South African viral variant that has been a stumbling block for so many other vaccines.