



August 06, 2021

***New Information From Your CPMG Medical Directors...
... always interesting to us – hopefully useful to you!***

From: Morris, Kenneth MD <kmorris@rchsd.org>

Sent: Friday, August 6, 2021 4:41 PM

Subject: CPCMG/RCPMS COVID CHRONICLES 8/6/2021 (Edition #179)

These are weekly updates for all CPCMG and RCPMS staff. Other valued community members which includes all CPMG affiliates and Radys Executives, as asked, have been included for the sake of collaboration. Please note that the information included herein is geared towards CPCMG & RCPMS staff and while generally useful to the broad community, all aspects may not always be applicable to your respective organizations.

I will be “gone fishin” next week and as a result, there will not be any Covid Chronicles on Friday the 13th (maybe not a bad thing). To make up for your reading loss, I have included lots of commentary perspective and a little satire into the opening topics.

Opening Plenary

Perspective: I’m somewhat bemused when I hear about CA healthcare workers who are unvaccinated complaining about the 1-2 times per week testing and mandatory masking that is being thrust upon them with the basis being that their rights are being infringed upon. Really?_Let’s take a look at China. Despite being the epicenter of the COVID-19 pandemic, the country of 1.4 billion people was one of the first in the world to reopen with their government swiftly stamping out outbreaks with an aggressive test and trace zero tolerance campaign. Despite these tactics, the Delta variant is now rolling through the country. With (3) new cases in Wuhan. Yes, I said three, the government is mandating that every single person of their 12 million residents stand in line and get tested, no exceptions. In recent weeks, other cities within China have already had to endure 4 rounds of testing for every resident. One citizen was quoted as saying “*It’s just torturing the masses.*”

We all want freedom from masking, freedom from testing, freedom from being told what to do and most of all freedom from COVID itself. That freedom comes at a price and it really requires all of us to comes together and do what is best for society. If we don’t do our part, we will eventually have freedom from Covid, but at what cost? I’m pretty sure that most of us, regardless of personal and political convictions are not searching for the type of freedom that we are seeing in places where the government dictates it with zero tolerance. Let’s mask up when we need to, let’s get vaccinated and we will eventually put this ugly infectious disease chapter behind us.

The Blah's: Back on April 30th, I included the article on languishing, that “blah” feeling that we all have been feeling during the pandemic. The following week, we shared the article on flourishing (the other side of languishing). Some followed the suggested steps, but truth be told as all of California approached the magical June 15th date, we all began to emerge from the pandemic doldrums. Some could barely wait, tossing their masks to the wind, some never followed directives in the first place while others despite being fully vaccinated were super cautious about not wearing their masks in public. Was it truly safe? Could we really go on an enjoyable vacation? Over a couple of weeks, most of us joined the collective side of having survived Covid happy to have our liberties restored. Unfortunately, the past month has been like taking an arrow to the heart. It feels as though all of the hard work we have been through has been for naught although that really isn't the case. We all have the feeling that we are just done with this! With that being said, it is time for us to pick ourselves off the mat.

This weekend, we will witness the running of the marathon, which is typically the final event of the Olympics (at least for the men). I reflect back to the 1984 Olympics in Los Angeles when Swiss marathoner Gabriela Andersen-Schiess agonizingly staggered across the finish line, a victim of heat stroke. The Covid pandemic has been a marathon and not a 100 meter dash. We are at mile marker 20 and we have just tripped and tripped big time. Are we going to just lay on the road wallowing in our misery? No, we are going to dig deep. We are going to persevere and pull ourselves together and find a way to make it across the finish line. Maybe we won't be gold medalists, but let's follow Gabriela's lead make it to the end and we will all be winners!

Quick hitters:

The Quest for Immunity

- Look no further than the San Diego Zoo for a place with one of the highest vaccination rates around. More than 250 vulnerable animals have been vaccinated as noted in the U-T on Wednesday.
 - Apparently, several Sumatran tigers and snow leopards had held out concerned that zookeepers were infringing upon their rights by injecting needles into their bodies without giving their permission. They have since recovered or are recovering from their Covid illnesses.
 - Instead of issuing a cash prize lottery, a cheetah was inoculated after being offered a “yummy morsel of meat or bloodsuckle” while a Coati was coaxed with a spoonful of honey.
 - Apparently, after some of the animals have been inoculated, they don't want to leave the area (it is harder to get them to leave than to come and get the vaccine in the first place).
 - Rumors are running rampant that the lions gathered the entire zoo full of animals at the Africa Rocks (the Zoo's version of Pride Rock) and convinced the entire contingent that they all needed to do their part and get vaccinated in order to protect the wild kingdom. Vaccuna Matata!

- *Can you imagine if we could all just get together following the Lions' lead, agree and do what was right for society?*
- *What if it only took a "Scooby snack" as bribery to convince people to get the shot?*
- *Can you imagine if our biggest challenge was how to get people to leave vaccine centers instead of getting them to come in the first place?*
- Some countries have begun giving boosters for higher risk citizens. This includes Israel, Germany, Russia, France and Hungary. This comes while billions of people around the globe are waiting for their first doses.
 - Scientists are not in alignment regarding the need for boosters. Some believe it would be a benefit while others believe that the vaccines are working as they were intended (to prevent severe illness) and that vaccinating those in poor countries will make it harder for new variants to evolve.
 - We know that titers decrease over time, but how much is required to prevent any symptoms vs serious symptoms vs protection against the Delta strain.
 - We don't know the safety/side effects of adding a booster dose. We also do not know the safety/side effects of adding a booster dose with an adjustment against the Delta strain if you had already added a 3rd dose of the original Pfizer/Moderna product.
 - Pfizer (a for profit company) has been pushing the booster.
 - The US has purchased enough Moderna and Pfizer in the event that booster doses are required.
 - The World Health Organization (WHO) called on Wednesday for a moratorium on coronavirus vaccine booster shots until the end of September, so that vaccine supplies can be focused on helping all countries vaccinate at least 10 percent of their populations.
- There was a great deal of chatter this week that the FDA is working on fully approving Pfizer's Covid vaccine (removing the EUA) at the very latest by Labor Day. A Kaiser Family Foundation poll has found that 3 of every 10 unvaccinated people have said that they would be more likely to take a fully approved vaccine.
- Novavax Covid Vaccine: I know of several people including some providers who have been holding out getting vaccinated against COVID-19 because they have been waiting for the Novavax Covid vaccine approval. It was announced yesterday that Novavax has had data validation delays as well as production delays and that they would not be seeking US EUA approval until some time in the 4th quarter. It was also announced that it is more likely than not that the Novavax will be targeted for lower income countries at least to start. This will likely mean that we are not going to see the Novavax in the US in any significant numbers or anytime soon.

Cases & Numbers:

- Local:
 - In San Diego, there has been an average of 1,023 new cases per day over the previous week compared to 812 per day over the preceding week (63.0% increase).
 - San Diego passed the not so enthralling mark of 300,000 positive cases this past week.
 - In Riverside, there has been an average of 676 new cases per day over the previous week compared to 396 per day over the preceding week (85.3% increase).
- At the State level, there has been an average of 9,878 new cases per day over the previous week compared to 7,407 per day over the preceding week (66.5% increase).
- Worldwide, we have surpassed the grim mark of 200 million reported Covid cases with more than 4.2 million reported deaths (source Johns Hopkins data)
 - The US (35 million), India (31 million) and Brazil (20 million) lead the world by far with regards to reported total cases.
 - The US (614K), Brazil (558K) and India (425K) also lead the world by far with regards to reported deaths.
 - There has been an excess of 4.26 billion vaccines administered to date
- We only had 1 new staff/provider case this past week, but it was unfortunately in a fully vaccinated provider.
- Reported patient Covid cases at CPCMG were 178 over the preceding week, which is a 70.6% increase from 126 cases the week prior.

The Delta Variant

- The trend continues to be that young adults are getting sicker, faster. Doctors have coined a new phrase: “younger, sicker, quicker.”

My Words of Wisdom message:

- **Don't Wait—It's not too late—Please Vaccinate!**

In today's edition, we have some updates on new and existing topics for the following:

- Vaccimeter
- Covid Cases (1 **NEW** Provider case (vaccinated))
- CA CDPH Mandatory Vaccinations for HCW's
- Post-COVID-19 Conditions in Children and Adolescents-AAP
- COVID-19: Advocacy vs Personal Opinion
- Covid Cases in Unvaccinated vs Vaccinated in SD County
- Vaccinated & Exposed
- Is My Positive Covid Test Really Positive
- RCPMS Staff Getting Their Covid Vaccine @ Radys
- Digital Covid Vaccine Records Issues Resolved (from our friends at Radys)
- School Decision Tree (**newly revised**)
- Rady Town Hall News
 - Benefits & Risks After COVID-19 Vaccine by Age Group & Sex

- Adolescent Covid Vaccination Update
- Delta Variant Infections in Singapore
- Female Sterility & COVID-19 Vaccination
- mRNA Vaccines Pregnancy Side Effects
- Male Fertility & mRNA Vaccination
- SARS Co-V-2 Strain Mutations (updated)
- The Quest for Immunity-Vaccination Information (repeated)
- Monoclonal Antibody Regional Centers (MARC)s (repeated)

RISK LEVEL-INCIDENT COMMAND

- Risk Level: 4
- Updates:
 1. Indoor Masking: mandatory regardless of vaccination status.
 2. High Volume Scheduling: now effective

COUNTY COVID-19 TRIGGERS

- Please click the Triggers [Scorecard \(SD County\)](#) to see how San Diego is doing with all 13 of the criteria metrics across the 3 categories. As of 8/4/21 (now updated weekly), San Diego is now failing 5à7 metrics.
 - **Community Outbreaks**: >7 new outbreaks in community settings in a 7-day period: **59 (up from 30)**
 - **Case Rate**: >1.9 per 100,000 for the 7-day average case rate: **20.4 (up from 13.4)**
 - **Case Investigation**: 70% or less of investigations are initiated within 24 hours of notification over a 7 day period: **48.2% (down from 62.2%)**
 - **COVID Syndromic**: Upward trajectory of COVID-like syndromic cases reported within a 14-day period: **3.7% (up from 3.3%)**
 - **Influenza Like Illness**: Upward trajectory of influenza-like illnesses (ILI) reported within a 14-day period: **3.5% (up from 3.3%)**
 - **Increasing Hospitalizations (NEW)**: >10% increase in the number of confirmed COVID-19 patients currently hospitalized, measured as an average of the past 3 days and compared to the average of the 3 days prior: **16.9%**
 - **Testing Positivity (NEW)**: Greater than 8% of positive tests as a percent of total tests, measured using specimen collection date in a 7-day period with a 7-day lag: **8.1%**

VACCIMETER (as of 8/5/2021)

	% Fully Vaccinated	% ≥12 y/o 1 or More Doses	% ≥12 y/o Fully Vaccinated	Notes
CPCMG	98%			1 of 3 unvaccinated has past Hx of Covid infection
RCPMS	73.5%			4 staff members have not had 2 nd of 2

				Vaccine doses
National CDC Vaccine Tracker		68.1%	58.4%	
California CA Vaccine Tracker		72.9%	63.2%	
San Diego SD Vaccine Rate		82.1%	71.9%	>2 million San Diegans are now fully vaccinated
Riverside RS Vaccine Rate		58.2%	50.3%	

COVID CASES (as of 8/6/21)

- **CPCMG (Provider) COVID Positive cases (confirmed): 17**
 - 1 NEW Provider Case:
 - A fully vaccinated provider had some mild asthma symptoms, but no Covid specific symptoms until the following day when a fever developed. Covid testing returned positive. There are no known external COVID exposures and the provider recalls seeing a couple of Covid positive patients, but did not have any break in PPE (wore an N95 while in clinic and ate alone). Contact tracing has not revealed any direct and unprotected staff exposures.
 - 2 positive tests felt to be false positives (not included in the total number)
- **RCPMS (Staff) COVID Positive Cases (confirmed): 104**
 - 0 NEW Staff Cases:
 - 4 of 104 positive cases that are possibly work-related exposure (worker to worker). Two cases in question have identified breaks in PPE or social distancing protocols and a third is yet to be determined, but is suspected to be a brief break in PPE. The 4th case does not represent a break in required PPE, but will likely be part of the genesis for a return to indoor masking regardless of vaccination status.
- **CPCMG Patient COVID Positives & Interesting Cases**
 - As of 8/2/2021: >4,811 (+178 in the past week). This number does not include patients testing positive at County sites or hospital labs outside of the Rady, Quest or Lab Corp network.
 - We have had a number of positives in CPCMG patients where the teacher was the direct contact exposure (passed it to the students). Are we really sure that we don't want the kids to mask in school???

Riverside County Weekly Update Total Covid Cases: 311,573 (as of 8/4/21)

Riverside County Total Pediatric (0-17 y/o) Cases: 42,267 (13.6% of cases)

average # of new daily cases over the previous week	396
average # of new daily cases over the past week	676↑

San Diego County Total Covid Cases: 302,220 (as of 8/5/21)

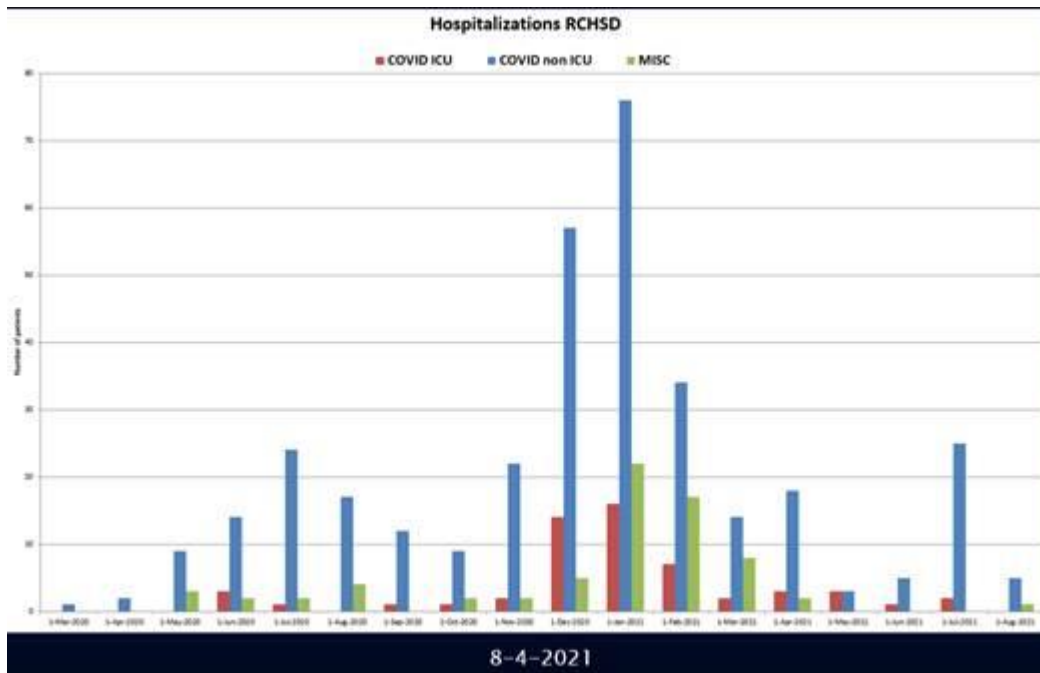
San Diego County Total Pediatric (0-19 y/o) Cases: 49,485 (16.8% of cases)

average # of new daily cases over the previous week	812
average # of new daily cases over the past week	1,023↑

Statewide Total Covid Cases: 3,899,158 (as of 8/5/21)

Statewide Total Pediatric (0-17 y/o) Cases: 515,548 (13.1% of cases)

average # of new daily cases over the previous week	7,423
average # of new daily cases over the past week	9,878↑



CA CDPH MANDATORY COVID VACCINATIONS FOR HCW'S



In response to increasing COVID-19 hospitalizations and ICU patients due to the highly contagious Delta variant, and to further protect vulnerable Californians and health care workers, the California Department of Public Health (CDPH) today issued two new public health orders. The [first order](#) requires workers in health care settings (HCW's) to be fully vaccinated or receive their second dose by September 30, 2021. The [second public health order](#) directs hospitals, skilled nursing facilities, and intermediate care

facilities to verify that visitors are fully vaccinated or have tested negative for COVID-19 in the prior 72 hours before indoor visits. Updates to guidance for visitors to other long-term care facilities is expected in the near future. This makes CA the first state in the country to have such a mandate around mandatory Covid vaccines for HCW's.

Recognizing traditional accommodation requirements, the order also provides that a worker may be exempt from the vaccination requirements only upon providing the employer a declination form, signed by the individual stating either of the following: (1) the worker is declining vaccination based on Religious Beliefs, or (2) the worker is excused from receiving any COVID-19 vaccine due to Qualifying Medical Reasons. To be eligible for a Qualified Medical Reasons exemption the worker must also provide to their employer a written statement signed by a physician, nurse practitioner, or other licensed medical professional practicing under the license of a physician stating that the individual qualifies for the exemption (but the statement should not describe the underlying medical condition or disability) and indicating the probable duration of the worker's inability to receive the vaccine (or if the duration is unknown or permanent, so indicate). There is no guidance on how to handle the declination based on religious beliefs. I suspect that will be coming soon.

The July 26th Public Health Order with regards to weekly testing remains in place.

Healthcare clinics such as ours must continue to develop testing protocols for unvaccinated or incompletely vaccinated health care workers.

POST-COVID-19 CONDITIONS IN CHILDREN AND ADOLESCENTS-AAP

In new interim guidance from the AAP, [Post-COVID-19 Conditions in Children and Adolescents \(aap.org\)](https://www.aap.org/clinical-resources/post-covid-19-conditions-in-children-and-adolescents) the AAP offers pediatricians guidance in the follow-up care of infants, children, and adolescents after infection with COVID-19. Pediatric health care visits are important to monitor resolution of COVID-19 symptoms, administer the COVID-19 vaccine and other routine vaccines, screen for and address mental health concerns, and coordinate care with specialists as appropriate.

“Pediatricians play a vital role in caring for children and adolescents after they’ve been infected with COVID-19,” said Dr. Sarah Risen, a pediatric neurologist at Texas Children’s Hospital and an author of the guidance. “A follow-up visit allows doctors to assess if there are any lingering or new symptoms or complications from the COVID-19 infection and gives pediatricians the chance to discuss the COVID-19 vaccination. Importantly, pediatricians are able to check for mental health and cognitive/learning issues and recommend the appropriate supports for children returning to daily life as seamlessly as possible.”

The AAP recommends that all children and adolescents who test positive for a COVID-19 infection have at least one follow-up conversation or visit with their primary care medical home. Follow-up visits should take place after the recommended quarantine period and before a child returns to physical activity.

At these visits, pediatricians can discuss vaccinations, and these vaccinations can occur immediately after the recommended quarantine period unless the patient received monoclonal antibody therapy, which requires a delay of at least 90 days. The AAP recommends COVID-19 vaccine for all children who are eligible and who do not have

contraindications. Children and teens ages 12 and older currently are authorized for the COVID-19 vaccination.

Pediatricians can counsel families about the return to day care, team sports, and school, and should be on the lookout for new or residual mental and physical issues. AAP guidance on well child health care during the COVID-19 pandemic can be found [here](#).

The guidance notes that a post-COVID-19 condition called “long-haul COVID” is an umbrella term that encompasses physical and mental health consequences four or more weeks after a COVID-19 illness. Although the reported frequency of post-COVID-19 conditions varies widely, several studies show that long-term symptoms can occur in children and adolescents. If concerns persist past 12 weeks, then additional diagnostic testing and/or referral to a multidisciplinary post-COVID-19 clinic may be appropriate.

At the follow-up visit after infection, pediatricians should take note of ongoing or residual issues that can include:

- **Respiratory:** Because the lungs are the most commonly affected organ for patients with COVID-19 infection, persistent respiratory symptoms following acute COVID-19 are not uncommon. The symptoms include chest pain, cough, and exercise-induced labored breathing.
- **Cardiac:** One of the most concerning aspects of COVID-19 infection is the risk for heart problems, including myocarditis. Symptoms of myocarditis can include chest pain and shortness of breath, as well as arrhythmias and fatigue.
- **Cognitive fogginess or fatigue:** “Brain fog” (a generic term that refers to unclear or “fuzzy” thinking, inattention, difficulty with concentration or memory) is a frequent neurologic complaint in adults after COVID-19 infection. School aged-children and adolescents may have similar complaints.
- **Physical fatigue/poor endurance:** Children and adolescents may complain of fatigue and poor endurance even without known cardiac and respiratory symptoms. Assuming both cardiac and respiratory function are clinically normal, post-viral fatigue typically improves over time.
- **Mental health/behavioral health:** Pediatricians should be aware of the impact of stress and adjustment disorders when diagnosing and managing new symptoms in children who have experienced COVID-19.

“It’s important for pediatricians to carefully consider other conditions, including multisystem inflammatory syndrome in children and myocarditis,” Dr. Risen said. “Patients and families also should be instructed about signs and symptoms that require further evaluation.”

Other resources:

- [COVID-19 Vaccines in Children and Adolescents](#)
- [CDC Evaluating and Caring for Patients with Post-COVID Conditions](#)
- [Interim Guidance on Integrating and Supporting the Emotional and Behavioral Health Needs of Children, Adolescents, and Families Affected During the COVID-19 Pandemic](#)

- [Caring for Children with Special Health Care Needs During the COVID-19 Pandemic](#)
- [Information for Healthcare Providers about Multisystem Inflammatory Syndrome in Children \(MIS-C\)](#)
- [Long-Haul COVID-19 in Children and Teens](#)

COVID-19: ADVOCACY VS PERSONAL OPINION

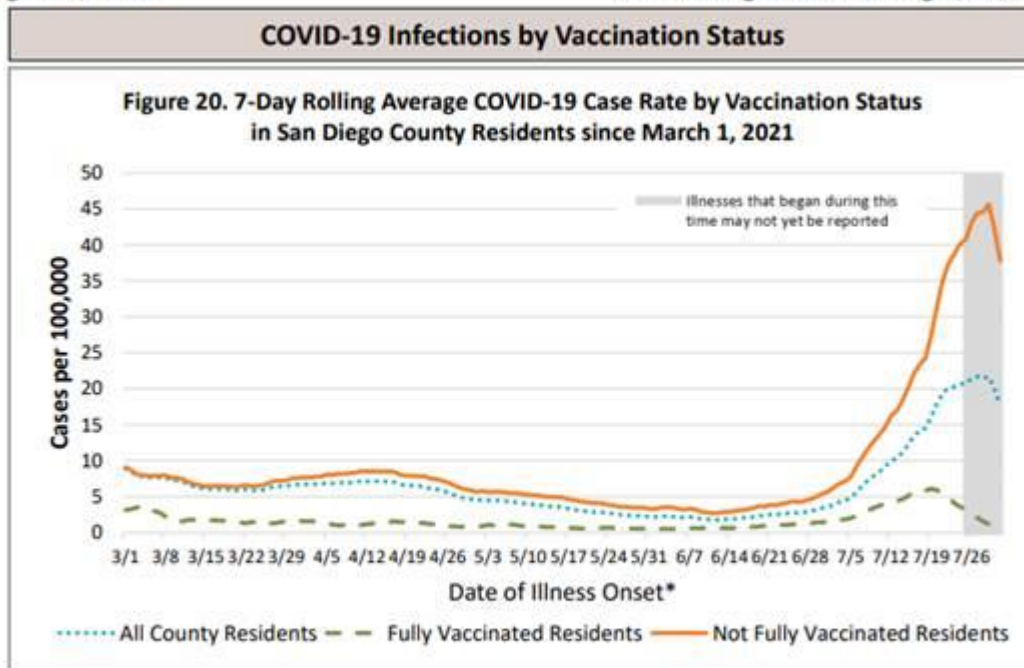
During the past year, COVID-19 has had polarizing impact on many of us. This extends to our own families, friends and even amongst ourselves as medical professionals. As pediatric providers, sometimes our personal beliefs might come in conflict with what we need to do or advocate for professionally. The issues of return to learn, return to sports, masking and vaccinating against Covid have all elicited strong emotions and contributed to conflict at times. Our opinions carry a lot of weight as medical professionals and we need to be mindful of what we say, how we say it and where we say it. It matters not whether it is done in private or in public (which includes social media). Done delicately, it can have a positive impact. The opposite also rings true. I recently was made aware of a number of communications that have left negative impacts. Some involved CPCM providers and others involved other community pediatric providers.

- A local pediatrician's name was broadcast across social media because of their open advocacy for the "Freedom to Breathe" movement prompting the poster to asking for recommendations to change pediatricians.
- Another pediatric provider expressed their strong objection to children being masked in schools upsetting a nurse because they were aware of the official AAP recommendation who then shared said Pediatrician's opinions broadly.
- A third pediatrician while being asked about the Covid vaccine deflected and said they were treating affected patients with ivermectin.

The take home message is to be careful on how you temper or frame your messages. What we say carries a lot of weight, both positive and negative and can have a lasting impact.

COVID CASES IN UNVACCINATED VS VACCINATED IN SD COUNTY

The graph is telling when comparing Covid cases in the vaccinated vs unvaccinated in San Diego. Currently, 91% of cases are in non-fully vaccinated. 98% of hospitalizations are in unvaccinated. The green dotted line is fully vaccinated residents and the orange line is the non-fully vaccinated.



*If case did not have symptoms or illness onset date is unavailable, the earliest of specimen collection date, date of death, or date reported is used instead.
 San Diego County Population from SANDAG 2019 Population Estimates (Prepared June 2020) = 3,351,784.
 The fully vaccinated population for each day is the cumulative number of county residents documented to have received the final dose of COVID-19 vaccine more than 14 days prior to that day. The not fully vaccinated population is the estimated total county population minus the fully vaccinated population.

VACCINATED & EXPOSED

Lots of questions regarding: *What do I do if I have been vaccinated and direct exposed to a person with COVID-19?*

Answers:

- Monitor for symptoms
- The CDC suggests testing 3-5 days after the exposure
- For household direct exposures, it is reasonable to test right away
- For non-direct exposures (6 feet and 10-15 minutes), surveillance testing can be considered 5-7 days after the exposure
- You are not required to quarantine pending results and can work
- Mask precautions should be taken while in public
- If you become symptomatic within the 14-day time frame after exposure, you should be tested again even if your original test was negative.

IS MY POSITIVE COVID TEST REALLY POSITIVE?

Since the beginning of the pandemic, we have had several inquiries per week questioning the validity of a positive PCR test. Of course, nobody ever seems to question the validity of a negative PCR test. There have been a handful of times where I have questioned the validity. Those times have generally been related to a patient who never leaves the house, but has a surveillance test return positive when all else in the house are asymptomatic and all have negative test results.

With the Delta variant running roughshod through our community, we know that it is twice as contagious as the original version and that vaccination is far from a guarantee against infection. Yet, some of our parents continue to question the validity of the results even with histories entirely consistent with the diagnosis.

- If a patient is symptomatic and they test positive, we need (and the parents) to assume that the test results are valid.
- If a patient and/or family member is direct exposed to a known case of Covid, we need (and the parents) to assume that test results are valid.

RCPMS STAFF GETTING THEIR COVID VACCINE @ RADYS

Not coincidentally, with CA Department of Public Health new guidance over the past 2 weeks mandating testing and vaccinations, we have had an uptick in staff members asking about where they can get vaccinated. Please see the following clip for direction and **THANK YOU** for doing your part!

Schedule your Covid-19 vaccine in just two simple steps. ¶

¶
As an employee, you can schedule the vaccine appointment in just two simple steps: ¶

1. → Call RCHSD Occupational Health at (858) 966-5865 or cisco ext. 224567 ¶
2. → Submit a consent form on PeopleSoft prior to your appointment. ¶
(Navigate to Main Menu > Employee Self-Service > COVID Vaccine Consent → Fill out a new form) ¶

BONUS: Employees can use COVID Supplemental Sick Time to get themselves vaccinated. ¶

¶
For Occupational Health related questions, please reach out to RCPMS_OHN@rchsd.org ¶
For vaccination questions please email the hospital COVID administration team directly at: covid19vaccine@rchsd.org ¶
For any other questions, please email: RCPMS_HR@rchsd.org ¶

Radys

DIGITAL COVID VACCINE RECORDS-ISSUES RESOLVED (from our friends at Radys)

We are happy to report all issues between the San Diego Immunization Registry (SDIR) and the California Department of Public Health (CDPH) Digital Vaccine Record tool have been resolved, including for workforce, patients and community members. You can access the CDPH Digital Vaccine Record tool using this link: <https://myvaccinerecord.cdph.ca.gov/>. It is recommended you do this on your mobile device because the output of this tool is a picture you can save and store on your mobile device, like the picture below:



SCHOOL DECISION TREE (NEWLY REVISED)

The school decision tree continues to be tweaked and updated since I last broadcast it. See [COVID-19 > Health Practices > Guidelines for Schools \(sdcoe.net\)](https://www.sdcoe.net/COVID-19/HealthPractices/GuidelinesforSchools)

RADYS TOWN HALL NEWS (courtesy of Dr. Bradley/Dr. Pong/Chris Abe)

Benefits & Risks After COVID-19 Vaccine by Age Group & Sex

The following came from the CDC ACIP meeting on 7/22/2021 and compares known higher profile side effects (myocarditis for mRNA vaccines) and (Guillain Barre/TTS events for the J&J vaccine) compared to prevented Covid outcomes of deaths, ICU and general hospitalizations.

Benefits and risks after COVID-19 vaccine, by age group & sex

For every million doses of vaccine given with US exposure risk and hospitalization rates from June 19, 2021

Age	Janssen COVID-19 vaccine					mRNA COVID-19 vaccines			
	Prevented COVID-19 Outcomes			GBS Cases	TTS Cases	Prevented COVID-19 Outcomes			Myocarditis Cases
	Hospitalization	ICU	Death			Hospitalization	ICU	Death	
FEMALES									
18-29 years	700	50	5	1	4-5	750	50	5	3-4
30-49 years	900	140	20	6-7	8-10	950	140	20	1-2
50-64 years	1600	350	120	7-8	3-4	1,700	375	125	1
65+ years	5,900	1250	840	8-10	0	6,200	1300	900	<1
MALES									
18-29 years	300	60	3	2	2-3	300	60	3	22-27
30-49 years	650	150	25	7-8	1-2	700	160	25	5-6
50-64 years	1,800	480	140	14-17	1-2	1,900	500	150	1
65+ years	11,800	3300	2300	7-8	0	12,500	3500	2400	<1

Adolescent Covid Vaccination Update

- 8.9 million vaccinations in 12-17 y/o
- 9246 VAERS reports in this age group
- 90.3% are non-serious
- 9.7% (897) out of 8.9 million were serious
 - Myocarditis related symptoms were the most common serious report, but still very rare (<1 in 10,000)
 - No deaths related to myocarditis

Delta Variant Infections in Singapore

Looked at 130 unvaccinated vs 71 vaccinated breakthrough infections. The vaccinated cohort tended to be: older, more likely to be asymptomatic and less likely to have a pneumonia or O2 requirement.

- The Ct (viral load) was similar at the beginning of illness
- The Ct increased (viral load decreased) faster in those that were vaccinated
- Virus neutralization was greater in the vaccinated cohort

Chia PY et al, Virological and serological kinetics of SARS-CoV-2 Delta variant vaccine2 breakthrough infections: a multi-center cohort study, medRxiv preprint doi: <https://doi.org/10.1101/2021.07.28.21261295>

Female Sterility & COVID-19 Vaccination

- In vitro fertility clinic frozen embryo transfer
- Compared pregnancy rates between those vaccinated, those with natural infection and those without a history of vaccination or infection
- Findings: *“No statistically significant differences were found in the implantation, clinical, and sustained pregnancy rates between the three groups.”*

Morris R, SARS-CoV-2 spike protein seropositivity from vaccination or infection does not cause sterility Fertil Steril Rep 2021

mRNA Vaccines Pregnancy Side Effects

- Similar rates of side effects after vaccination compared to non-pregnant people
- Rates of pregnancy loss and neonatal issues similar to previously reported figures

Shimabukuro TT et al, Preliminary Findings of mRNA Covid-19. Vaccine Safety in Pregnant Persons, NEJM April 2021

Male Fertility & mRNA Vaccination

- No decrease in sperm parameters after vaccination

Gonzalez DC et al, Sperm Parameters Before and After COVID-19 mRNA Vaccination, JAMA 2021

SARS CO-V-2 STRAIN MUTATIONS (updated)

Origin/Lineage Name: Variants of CONCERN	Name	Origin/Lineage Name: Variants of INTEREST	Name
British-B.1.1.7	Alpha	CA-B.1.427/B.1.429	Epsilon

South Africa-B.1.351	Beta	Brazil-P.2	Zeta
India-B.1.617.2	Delta	Multiple-B.1.525	Eta
Brazil-P.1	Gamma	Philippines-P.3	Theta
		NY-B.1.526	Iota
		India-B.1617.1	Kappa
		Peru-C.37	Lambda

- Variants of High Consequence: None

CA Variant [Tracker](#) & [Outbreak.info](#) & [CDC CA Breakdown](#)

CA Variants	B.1.1.7 (Alpha)	AY.2 (Delta+)	AY.3 (Delta+)	B.1.617.2 (Delta)	(Other Lineages)
Lineage % as of 7/14/21 (over 30 days)	3%	2%	4%	87%	4%

THE QUEST FOR IMMUNITY-VACCINATION INFORMATION

San Diego County COVID-19 Vaccine Web Page: [San Diego County Public Health COVID-19 Vaccines](#)

CA COVID-19 Vaccine Web Page: <https://covid19.ca.gov/vaccines/>

CDC COVID-19 Vaccine Web Page: <https://www.cdc.gov/vaccines/covid-19/index.html>

CDC V-Safe Registration: <https://vsafe.cdc.gov/>

CDC COVID-19 Vaccine Special Considerations: [CDC Interim Clinical Considerations](#)

CA My Turn: <https://myturn.ca.gov/> (use google)

CDC COVID-19 Vaccine Errors/Deviations: [CDC Covid Vaccine Errors/Deviations](#)

CDC COVID-19 Vaccine Info for Parents of Children &

Teens: <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/recommendations/adolescents.html>

CDC Pediatric Professional COVID-19 Vaccine Tool

Kit: <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/toolkits/pediatrician.html>

Regional Covid Clinic Clinical

Direction: <https://cpcmg.knowledgeowl.com/help/covid-vaccine-administration-guidelines>

MONOCLONAL ANTIBODY REGIONAL CENTERS (MARC'S)

Refer COVID-19 patients at high-risk for disease progression for monoclonal antibody treatment as early as possible in their disease, for greatest effectiveness while their symptoms are still mild or moderate. To access, have you or your patients call: **619-685-2500**.

THE FOLLOWING TOPICS HAVE REPEATED GUIDANCE FROM PREVIOUS COVID CHRONICLES EDITIONS (thanks to Dr. Jacobson, they are now hyperlinked)

- **School Covid Decision Tree:** [COVID-19 > Health Practices > Guidelines for Schools \(sdcoe.net\)](#)
- [TESTING-FALSE POSITIVE EVALUATION \(last 12/11/2020\)](#)
- [NEWBORNS & COVID-19 POSITIVE MOTHERS \(last 7/31/2020\)](#)
- [IN CLINIC ALBUTEROL & NEBULIZER GUIDANCE \(last 9/4/2000\)](#)

CMIO REPORT (from the desk of Dr. Michael Jacobson/Dr. Ashvin Shenoy)
(generally distributed every other Thursday, last update 8/5/2021)

Knowledge Base

Please visit the [CPCMG Knowledge Base](#) for all sign-ups, knowledge articles, and tip sheets.

Thanks,

-KM

Kenneth H. Morris, MD, FAAP

Chief Medical Officer



Phone: (858) 502-1146

Fax: (858) 636-4319

www.cpcmg.net

"CONFIDENTIALITY NOTICE: This e-mail communication and any attachments may contain confidential and privileged information for the use of the designated recipients named above. If you are not the intended recipient, you are hereby notified that you have received this communication in error and that any review, disclosure, dissemination, distribution or copying of it or its contents is prohibited. If you have received this communication in error, please notify Children's Physicians Management Services immediately by telephone at (858) 636-4300 and destroy all copies of this communication and any attachments."