

## The Coronavirus Marathon

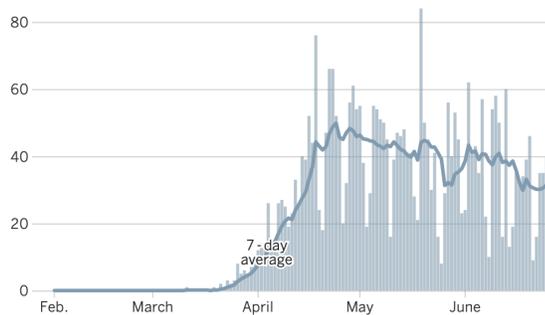
Dear Families,

As you know, we are seeing a rise in the number of COVID cases, and I am sure you are asking yourself how concerned or worried you should be. While we are seeing a rise in hospitalizations, it is reassuring to see that ICU admission and COVID-related deaths have been stable. Obviously death rates lag, so we may see this data change. Please also keep in mind that elevated numbers we see are in some way reflecting wide spread testing that was not available at the start of the pandemic. Were our numbers much higher at the onset of this pandemic, and we just did not know it? It is entirely possible!

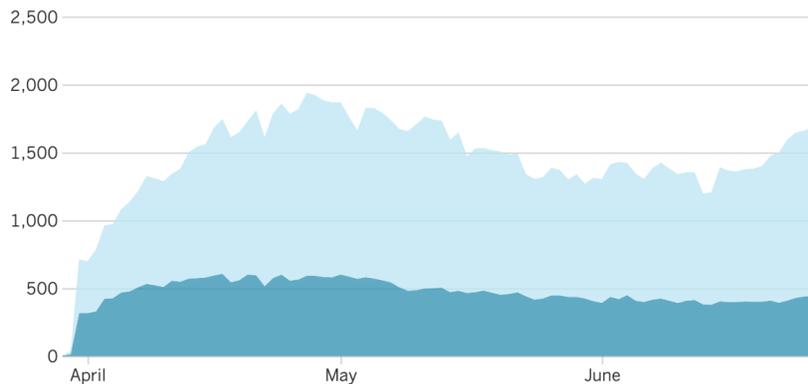
**New cases by day**



**Deaths by day**

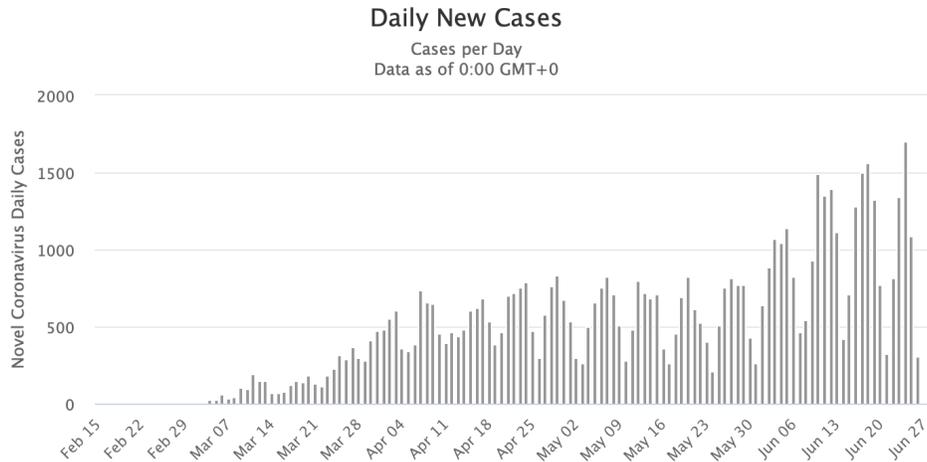


**Intensive care and other hospitalized patients**



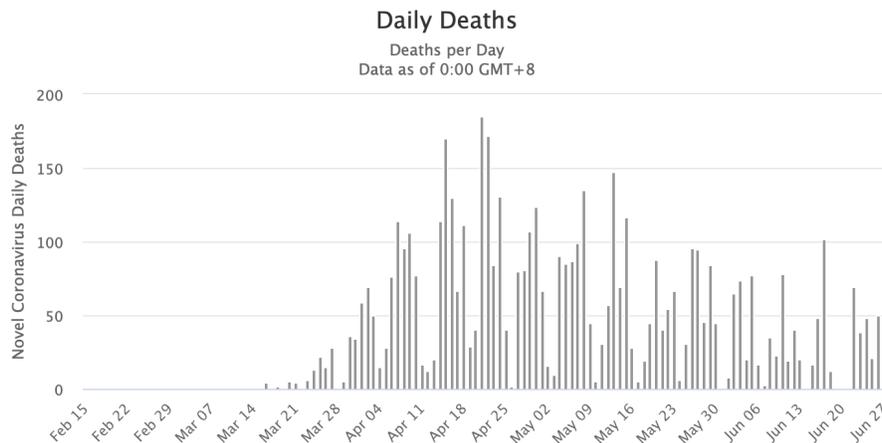
<https://www.latimes.com/projects/california-coronavirus-cases-tracking-outbreak/los-angeles-county/>

Some suggest that this rise is due to the reopening of society. I am sure that the opening of our society has not helped, and we will certainly never know exactly what factors have caused these spikes. At the same time, I do want to direct you to Sweden's numbers.



<https://www.worldometers.info/coronavirus/country/sweden/>

That society had remained “open” with social distancing measures in place since the beginning. June 3-4 was the start of the protests. It appears that their new cases doubled shortly after the start of the protests... Please also take note of their death rates...



What should you take away from this? It appears that the protests did contribute in some way to this rise, which also means that prior social distancing measures are likely protecting you even in the midst of this surge.

How worried should you be? If you were partying in large groups at bars and clubs (not that you would or could), then I would say that you need to be worried far more careful... Along these lines, also exercise caution with individuals who may be living this lifestyle (teens, young adults...).

Outside of this, I don't think you need to be alarmed. The reality is that you have all been acting responsibly, and honestly I don't think you need to be doing anything differently, other than perhaps temporarily increasing supplementation if you feel that is warranted. In this regard, I have made a handout that has supplementation guidelines for maintenance (low new cases), surge (high new cases)

and active infection (if you or loved ones are having fevers, etc.). Sadly, this will not be the first or last time we will see a surge, so having the ability to change back and forth may be helpful.

In the lines of supplements, there is some interesting data that I want to bring to your attention.

**Glutathione** – Studies are now starting to validate the previously presumed benefits of glutathione for COVID. ***Glutathione should remain the most powerful tool in your family’s arsenal in response to a COVID infection.***

<https://pubs.acs.org/doi/10.1021/acsinfecdis.0c00288> - “Endogenous Deficiency of Glutathione as the Most Likely Cause of Serious Manifestations and Death in COVID-19 Patients”

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7172740/>

Other than for high-risk individuals (elderly, severe asthmatic, immune-compromised), I don’t think taking glutathione on an ongoing basis is necessary or wise. We suspect that external glutathione supplementation actually downregulates your body’s glutathione production over time... This is why I believe NAC, sulfur-rich veggies and vitamin C are great for maintenance and naturally boosting your body’s ability to produce glutathione, and supplemental glutathione becomes the product to take right at the onset of illness.

**CoQ10 and the mitochondria** – Some time ago, I had suggested that CoQ10 may be a useful supplement for the elderly. There is a new article that suggests that errors in the mitochondria may be one way COVID takes over our cellular machinery to replicate itself and infect us.

<https://journals.physiology.org/doi/pdf/10.1152/ajpcell.00224.2020>

These authors say, “Mitochondria function as a platform for innate immune signaling. ***Notably, the host responses against viral infections depend on mitochondrial functions...***”

This statement is perhaps far more important than we realize! While this is not the only reason why the elderly are far more vulnerable, this article help us identify one important piece of the puzzle... I think it is a good idea for the elderly in your life, along with individuals with diabetes or other metabolic conditions to be taking CoQ10 on a regular basis. If nothing else, make sure they are getting antioxidants (colorful vegetables, resveratrol, vitamin C, etc.), as these antioxidants serve an invaluable role to protect the mitochondria. While any form of CoQ10 is better than nothing, ubiquinol is generally thought to be superior. 100mg once a day is perfect. If cost is an issue, even every 2-3 day dosing may be helpful.

CoQ10 supplements to consider...

<https://www.neuroneeds.com/product/q-needs/>

<https://www.pureformulas.com/best-ubiquinol-with-kanekas-qh-100-mg-60-softgels-by-doctors-best.html>

<https://www.pureformulas.com/ubiquinolqh-100mg-60-softgel-capsules-by-pure-encapsulations.html>

Organ meats are another source of CoQ10 and can be another way to boost levels...

## YOUR LONGTERM GAME PLAN

There is no doubt that COVID is a disease we should all take seriously. Each of you have taken different measures to protect yourself and your family. I need all of you to ask yourself one question. **Is your lifestyle and safety plan sustainable for at least 4-6 months?** If it is, then that is perfect! If it is not, then you may wish to find a game plan that is sustainable. **Our journey with COVID is a marathon, not a quick sprint...**

Are you or other members of your family (children included) experiencing unwanted psychological or other consequences due to the currently restricted lifestyle or game plan you have in place? If you are, then please ask yourself if the degree of social restriction is warranted for you and your family's risk profile. Please remember that little will change in the next 4-6 MONTHS (at least).

We have two dear families where an individual is undergoing chemotherapy. For them, the obvious choice is to avoid any contact with the outside world indefinitely. This degree of precaution may not be necessary or even wholistically healthy for all! Are you taking steps to safely recharge your batteries (outings, day trips, safe vacations...)? Even with the current surge, what is the healthiest, wholistic plan for your family? In making these decisions, please take into account the physical, psychological and social well-being of your family. Only you can decide what is best! I also want you to keep this in mind as you reflect on summer activities, camps and upcoming school year for your children.

I wish to close with prayer. With all that our society has experienced, I pray that we come out a kinder, wiser and healthier society. I pray that we come together as one to support one another and deeply heal as one, so that our future generations can thrive regardless of the color of their skin or religion.

Wishing you all a wonderful summer to come! I thank you for being the best part of Wholistic Kids!

Sincerely,  
Dr. K