

THE ALCIVAX

Alcimed investigates quarantine fatigue symptoms and how normalcy establishment can play in preventing the 2nd wave.

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Not the Time for Complacency

The WHO warns that the pandemic is still accelerating, and its effects may be felt for decades. The WHO reported a record increase in global coronavirus cases as the total rose by 183,020 in a 24-hour period. The biggest increase was fueled by an influx in cases from North and South America. Even countries that seemed to have the virus under control, like South Korea and New Zealand are now seeing a new rise in cases.



The Culprit - Quarantine Fatigue

The longer we go without a sense of normalcy, the more likely we are to throw caution to the wind when given the tiniest bit of freedom. This phenomena is called quarantine fatigue and it explains why people are so quick to abandon the best practices developed for risk avoidance during the beginning of the pandemic. It can also manifest itself in other symptoms such as insomnia or oversleeping. But how can quarantine fatigue be combated if we are still waiting for the 2nd wave? Finding a new normal will be best bet with a way of establishing routines and gaining a sense of hope. This is also important to help prevent or stem the mental health crisis that many are speculating will arise from the pandemic and potentially lead to post-traumatic growth, the positive change often seen after emerging from a traumatic event.



Life Saving Office Work?

Most of us don't see returning to the office as the obvious solution to quarantine fatigue, but it could actually be the easiest method for re-establishing a sense of normalcy as well as habituating the risk avoidance behaviors that could keep us from needing extensive 2nd wave lock downs. A recent report in the New England Journal of Medicine discusses the challenges in returning to work or school, but they are not impossible to overcome.

Most of the necessary solutions are low-tech and require direct participation of the employee or student involved. Here is what a new office routine may look like:

- Employees would conduct a symptom self-check each morning before going to work and request telework for the day if exhibiting any problematic symptoms, such as fever, cough, sinus pain, or chills.
- Masks would be worn in common areas and during communal meetings.
- Informal communal gatherings, such as lunch, would be staggered to reduce the capacity of people required to be in one space.
- Office furniture would be rearranged to encourage social distancing which can be reinforced by visual cues.
- Employees would disinfect their work spaces as they finish and move to a new space
- Business related travel would be closely regulated and re-prioritized based on necessity.

Employers and schools could also institute weekly testing to keep active track of emergent cases for quick isolation. To this end, a weekly coronavirus testing protocol using a "no-swab" saliva test is being tested in Southampton, England, and could offer a simpler and quicker way to detect outbreaks. More than 14,000 doctors and health workers, other essential workers, university staff, and their households will participate in the trial, which uses an Optigene test. Participants will provide a saliva sample and receive test results within 48 hours. When implemented with contact tracing these simple procedures could alleviate many of the dangers in repopulating office buildings and push off the long term effects of quarantine fatigue, making it possible for us to sustain our increased sense of vigilance for the longer haul required for all of us to ride out this pandemic, and know how to better handle the next one.

Safe Stress & Anger

The death of George Floyd in the US has set of a wave of protests across the globe. Many have expressed concern that this large gatherings of people will thwart re-opening efforts and force new lock down measures as new COVID cases appear among protesters. The good news: they don't surprisingly.

Anti-racism demonstrations are the perfect scapegoat for a rise in Covid-19 cases, but science suggests their risks can be mitigated. The evidence is becoming clear that wearing a mask can substantially lower the risk of spread and severity of illness. We are seeing more and more masks worn by protesters. A second feature of gatherings that affects the spread of the virus is whether they happen outdoors or indoors. Here, too, research suggests that outdoor activities are much safer than indoor ones, as transmission is 19 times more likely in an indoor environment. Finally, although this is more preliminary, evidence suggests that if you're going to be in a crowd, a mobile one is better than a stationary one.

A recent study conducted of protesters revealed that only 14 out of 1,288 people tested positive for coronavirus at a US pop-up site that was set up following large demonstrations in Boston. Similarly, other cities are offering free COVID testing where protests are ongoing. Protest organizers are also encouraging people to be tested before participating and postponing protests in areas where protests have led to an increase in positive cases.

The ability to allow for large public outdoor gatherings with mobile crowds without increasing the risk of transmission could help pave the way forward for smart decision making about how to maintain some level of normalcy as the pandemic pushes forward. This may also bolster some confidence in the Disneyland Paris "phased reopening" starting July 15, with visitor numbers limited via a new online reservation system to ensure social distancing. Visitors aged 11 and older will have to wear face masks, and many shows and events will remain suspended due to the pandemic.



Prevention & Treatment

There is a race to be the first vaccine to market, and then there is the race to be the best vaccine on the market. GSK is hoping that its adjuvant can be part of the best solution, which only began its first COVID clinical trial this week. To that end, it has seven collaborations going and could supply 1 B doses worth of adjuvant per year. One of those collaborations is with Sanofi Pasteur, will enter clinical trials in September, massively accelerating from its original December timeline. Being based on the well proven Flublok technology, the SP/GSK collaboration is in good position to produce a robust vaccine. SP's new deal with Translate Bio, also expands SP's COVID vaccine possibilities into novel mRNA vaccine technologies. In this same vein, a recombinant VSV vaccine from the Israel Institute for Biological Research has shown strong neutralizing antibodies in animal studies after a single dose. A highly potent vaccine will be necessary to counteract the potentially quick waning period of naturally acquired antibodies to COVID.

As we barrel towards vaccine production, it will also be important not to abandon the development of necessary treatments for COVID. Earlier this month, BARDA abruptly announced that it was halting funding for treatments for severe forms of Covid-19. This shift represents a move away from severe cases to antiviral therapies that could treat people earlier in the course of the disease. Gilead is already working on this front, as Gilead plans to begin clinical trials of an inhaled version remdesivir in August. The inhaled formulation would be given through a nebulizer, which could potentially allow for easier administration outside hospitals. Gilead has also increased their dose projections to 2B through Indian drugmakers Hetero Labs and Cipla making generic versions. Glenmark Pharmaceuticals has secured regulatory approval for the antiviral drug Favipiravir under the brand name FabiFlu to treat mild to moderate Covid-19. While US hospitals step up use of steroids for COVID, the diabetes drug Metformin may lower risk of mortality from COVID in women by dampening the immune response to infection.



Sports in the Time of Pandemic

Many people took refuge in personal exercise, during lock down, but may have to wait a good deal longer for the full resurrection of professional sports. Most sports restart attempts worldwide have mostly resulted in COVID-19 positive players.

- Serbian football champions Red Star Belgrade reported five of their players have tested positive for the coronavirus. However, the remaining players and the management were tested, and none were positive.
- Forty MLB players and staff members tested positive for COVID-19 in the last week. This news comes as Major League Baseball players delay their vote on whether to accept the owners' latest proposal for the 2020 season.
- An exhibition tennis tournament organized by the top-ranked men's player, Novak Djokovic, is causing panic in Zadar, the small coastal town in Croatia that had no confirmed infections until it hosted a leg of the competition. One of the players, Grigor Dimitrov, revealed that he had tested positive for the coronavirus, along with Borna Coric and two coaches, sending the Croatian authorities into a scramble to trace and test people who may have come in contact with him and other participants during his stay in Zadar. Novak is also now positive.
- The Premiere league restarted its season last week and currently 18 players are positive based on league wide testing results, including a month's worth of training.
- Golfers have begun pulling out of planned tournaments, after two players on the PGA tour tested positive.
- The NBA's abbreviated season to take place entirely at DisneyWorld Orlando is also in jeopardy, as the number of rise in the area of Florida that surrounds the ESPN Wide World of Sports campus that was set to hold the tournament as well as the restart of the MLS.



Keeping an Eye Out

According to the United Nations, food security means, "that all people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious food that meets their food preferences and dietary needs for an active and healthy life." This pandemic has stressed how important this concept from potentially causing the pandemic to significantly increasing the death toll.

A study of the wildlife trade in three provinces in southern Vietnam has confirmed that the sale of such meat offers an ideal opportunity for viruses to jump between animal species. The study showed that the percentage of field rats, eaten in Vietnam and other parts of Southeast Asia, that tested positive for at least one of six coronaviruses jumped significantly after being transported with other species. It rose from 20 percent of wild-caught rats sold by traders, to slightly over 30 percent at large markets, to 55 percent of rats sold in restaurants.

In East Africa, a swarm of locusts, the largest in 70 years, is threatening to demolish this year's harvest as well as the pasture land used to graze livestock. This will put 5 million people at risk of hunger and famine, as locusts can consume the same amount of food in a single day as 35,000 people. Immediate aid is needed to prevent these countries from being pushed to the brink of starvation. But with COVID-19 raging, will international organizations have the bandwidth to deal with these concentric crisis in Africa?



All joking aside



While opera in Berlin is testing out the acoustics in a car park, the Barcelona Opera went a little more native, celebrating their reopening by filling the

auditorium with over 2000 house plants, which where donated to healthcare workers after the concert.

The pandemic has caused sharp swings in cheese prices, which rose to record highs this month. Consumers are buying way more cheese, even as the huge demand from restaurants and schools has fallen off. Shoppers continue to buy 20% to 30% more cheese. The return of demand has again pushed cheese prices higher, where they hover roughly 3 percent below record levels. Not all cheese is enjoying the boon with Stilton on the verge of collapse.

The Unanticipated Challenges Post Lock Down

Eating out challenges



Image Credit: Terry Mosher

The worst new job



Image Credit: Peter Kuper

Magic 8 Ball's Revenge



Image Credit: Dave Whamond

Hamlet's New Dilemma

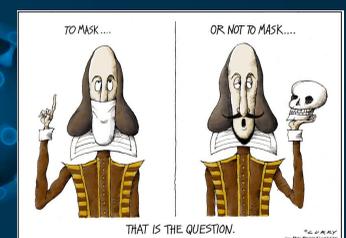


Image Credit: Tom Curry