The 3 main reasons WHY we have no COVID plan:

- i. A great gulf between The Ideal Solution and Real World USA Planners
- ii. A highly-complex "solution space" and associated, distracting chatter
- iii. Clinging to false solutions in the face of feasible ones

Yet another problem is our lack of a functioning federal government, but we cannot concern ourselves with that because **we must move forward regardless**: there is no other option.

The Ideal or <u>Theoretically-Perfect Solution</u> is simple: everyone and I mean EVERYONE, stays home for 21 days, period. It's not feasible, never really was, but if the world-over we had done that at ANY point then all the existing infections would have run their course and the COVID-19 pandemic would have ended then and there. There are some assumptions here, like do ALL cases of infection end in 21 days? Can latent virus in our bodies reactivate later? These are fair questions but are also unhelpful chatter, i.e. they are distractors that hinder our finding a *feasible* solution. Instead, we should understand the ideal theory but also understand that *we need to find the best feasible solution* and it will not be a perfect solution.

The Real-World Planners: companies, sports leagues, governors and universities, all HAVE to make decisions: fire people, shut-down, re-open and so on. Because the Ideal Solution is not obtainable we must deal with such problems as community spread, overloading the health care system and economic disaster. Each agent (person, company, school, government entity) has its own interests and agenda and we'd all like to find an optimal real-world solution, this has not happened. This is because of ongoing uncertainties about the COVID virus and the complexity of the "solutions space". This space encompasses two extreme options: OPTION 1: have everyone return to work (RTW) immediately (the Live and Let Die approach). OPTION 2: wait at home two years for a vaccine (recent Moderna hype has not really changed time frame). The latter is perfectly unfeasible because we would all die of starvation, since truckers, farmers and grocers would all also be at home, in the extreme. Even a moderated version of option 2 is unpalatable since low-resource families would be obliterated beyond even what COVID would do to them. Option 1 is no charmer either: return-to-work (RTW) with zero testing would likely lead to 500,000 to 1,000,000 dead Americans, based on current prevalence and mortality estimates. This, in turn, would lead to a larger economic collapse. So what IS the plan?

There is NO clear plan in between our two extremes, other than fuzzy "let's test and contact trace and re-open in an orderly fashion". Sounds nice, but what does that mean in an NFL football stadium packed with fans, or a university lecture with 500 people, or a subway car or the bars and restaurants that are going out of business? There are no details, nor is there even a logical progression for us to follow. This is in part due to (i) politicization of the problem and (ii) its intrinsic real-world complexity. Setting aside politics, we should instead be making our best available estimates as to (i) spread, (ii) testing options, (iii) efficacy of contact tracing and (iv) time to vaccine/treatment, so as to arrive at a FEASIBLE PLAN. It won't be perfect and will have limitations and costs, but there is only ONE question we must answer:

what are the costs/benefits of our different options?

Are Current Plans "Feasible"? In a separate document (COVID FAQs, on zfhindbrain.com), I outlined issues with contact-tracing, vaccination and herd immunity. In brief, because of massive invisible spread of COVID, the virus cannot be meaningfully contact-traced, especially in the US with large numbers of infectious individuals out in public [although this has worked well in South Korea with far more rigorous detection / tracing / public compliance mechanisms]. Phone Apps may help, and should be implemented along with contact-tracing, but absent a testing regime, this approach will do little to contain the spread. Plans for "social isolation in public" (an oxymoron) will be similarly ineffective, especially given COVID's propensity to linger on surfaces and as droplets in the air: we KNOW covid is REALLY infectious. Anyone in a confined space with another person for an extended time (classroom, cubicle, small restaurant/bar, subway) has a very high chance of being infected, even if the other person is asymptomatic and both are wearing masks. These bite-sized chains of transmission are devastating (and why cases are still rising in the US).

Why the Economy is being Driven Off a Cliff. Polls consistently show that 80% of Americans are either concerned or afraid of returning to work (RTW). This is not due to liberal politics and little impacted by activist "liberators" because most people don't want to die and nobody wants to go on a ventilator. As long as we see docs and nurses and bus drivers dying, we will be afraid. Some young folks will go to parties (and spread COVID): they are part of the unafraid 20%, but a great majority of adults (and the many kids who don't want their inheritance quite yet) are trying to NOT get covid. We all want a return to normalcy, but as retail stores and malls are "opening" many remain quite empty. No people, no economy: fear is driving us to a second Great Depression and only a combination of (i) an actual plan and (ii) psychology can fix it.

How to Mitigate Risk. Live Virus testing, mask-wearing and contact tracing are all fine and should be encouraged but we need an aircraft carrier for this war, not a tugboat. We need to immediately lobby all levels of industry/schools/government to immediately ramp-up production of the best current antibody tests, which can (i) be taken at home, (ii) give immediate results and (iii) provide enduring value to each individual. A good approach is for everyone to get tested twice, 21 days apart (which is *vastly* more feasible than Daily Live Virus testing "for all" that some folks incorrectly assert should happen). **States** should distribute these by priority to medical workers, front-line workers and other essential workers according to individual states' needs. Companies and Colleges should get contracts set for AB-testing of ALL personnel / students BEFORE they enter their premises to avoid deaths and lawsuits. Because AB-tests can be massively and economically produced, eventually everyone should be tested. Two-positive tests means you are almost certainly immune and can pretty safely return to work (and play). No test is perfect and not everyone will be fully immune: but both will be pretty good and these people will have far less fear, which is a good start! We only need to decrease / mitigate risks and fears, not eliminate all risks—the failure to understand mitigation is the crippling fallacy that has led to much nonsense discourse and muddled inaction.

<u>How does AB-testing Help?</u> Everyone gets tested (hopefully by August) just two times, ideally 21 days apart, to ensure (i) that new infections are caught and (ii) that those who test positive are no longer infectious and confirmed to be immune. There are two distinct scenarios here.

The best case scenario is that the virus is already far more prevalent than we think: only antibody testing will tell. But by best estimates, only about 20 million Americans are infected so far, with 100,000 dead (extrapolating out a few days for both numbers), for a mortality rate of 0.5%. If we allow COVID to spread to 200 million infected, that will mean 1,000,000 deaths. [And covid will spread massively with open RTW]. A better scenario would be if prevalence was, in fact, already much higher, e.g. at 50% of the US population, i.e. 150 million infected. In that case, we could simply open the flood gates, let all 300 million get infected, and only 200,000 would die. Not great, but it gets our economy back right away and we can still try to mitigate fatalities to keep it lower than 200,000. The sum of all antibody testing to date, however, suggests a much lower prevalence of only 20 million infected. In that case, and since COVID is so infectious, an open RTW policy will do little to limit covid's spread to north of 200 million Americans and thus lead to massive, economy-crippling deaths, so we must limit its spread, but how?

How Antibody Testing Helps. Covid spread cannot be totally prevented, but with rigorous antibody-testing, self-quarantine and other measures, we should be able to suppress the number of infections in public. First, the 2X positive individuals are valuable assets because they can be on the front-lines, across all sectors of the economy, and shield covid-virgins to some degree. There are probably 20 million immune individuals right now (call them **BLUE** cards). In contrast, anyone who tests negative twice, 21 days apart (and is sheltering in place) is a covidvirgin. As long as nobody infects THEM, they can infect no one! Call them WHITE cards. All of the BLUE and WHITE cards together can return to work IMMEDIATELY, i.e. as soon as we can get them tested, BUT ONLY IF we keep them away from the untested. The third category of test result is a negative test followed by a positive test: that means you somehow got covid despite being careful: hopefully you will have only mild symptoms AND after 21 more days at home you test a third time AND become a **BLUE** card, confirming your positive/immune status and also that you can't infect others. THESE individuals break the chain of transmission. It's not perfect, but it's better than one million dead. [There is more explanation on this protocol and on #VSD in my earlier COVID FAQs doc, also posted on zfhindbrain.com] **VSD** = Visual Status Display (display of covid status)

How do we Reduce Fear? VSD! Everyone objects to wearing blue or white cards in public. BUT, everyone objects more to dying and going into another Great Depression. The protocol is simple: test yourself twice at home (or 3X if need be) and print a white or blue card and wear it in public (or get piece of white paper and color it blue). Of course people can cheat, but most Americans are honest and kind and EVERYONE can easily do this. No infected people in public means no more deaths! We can return to Disneyland, but we should all be wearing cards. This can be complemented by many means: workplace and school testing (should be mandatory!), temperature checking at stadiums and other large venues, phone APPs, contact tracing and so on. Cheaters can be reported (and charged with depraved indifference if one is feeling Draconian). But AB-testing is our Foundation: if you see a sea of white and blue cards, you will feel safer in public. But if you spy outside a zombie apocalypse, you stayin' HOME!

Thanks for Reading this. Please share with everyone you know. Stay tuned for AB test updates. Don O'Malley

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