

Bob Wachter @Bob_Wachter Sun Jun 13 18:59:40 +0000 2021
Covid (@UCSF) Chronicles, Day 453

1/ I know everybody's sick of playing 3-dimensional Covid chess. Sorry, but the Delta variant forces us back to the chess board. Ergo, this ■.

If you're fully vaxxed, I wouldn't be too worried, especially if you're in a highly vaxxed region.

2/ If you're not vaccinated: I'd be afraid. Maybe even very afraid.

Why? Let's start with the things that we know about the current situation, then layer in new information about the Delta (aka, Indian) variant, B.1.617.2 Then we'll end with what I'd suggest you, and we, do.

3/ Current U.S. situation is good. Cases, hospitalizations, & deaths are falling fast, largely due to our fabulous vaccines. In SF – w/ 70% of people aged >12 fully vaxxed – we're nearly in a post-Covid world. Everybody's opening up, including (on Tues) CA. That's fine...for now.

4/ Sadly, ~50% of the U.S. (>age 12) remains unvaccinated, and in certain states (mostly southern & right-leaning), it's more like 2/3rds. We know that a small # of vaccinated people will get breakthru infections, but they'll rarely get very sick & will almost never die of Covid.

5/ Unvaccinated people remain at high risk of getting Covid... if they're exposed to it. In April, I argued @washingtonpost that this is the most dangerous time for unvaccinated people (without prior Covid), since their bodies are no better ... <https://t.co/wH8F58Q9zV>

6/ ...at fighting the virus than they were in 2019, & the virus they're likely to see (back then, it was Alpha [UK] variant) is better at infecting people. But unvaxxed folks had 2 advantages: 1) they tend to be younger, so less likely to get sick, & 2) they were less likely...

7/ ...to be exposed to virus since community rates had fallen so much (due to kindness of vaccinated strangers). This remains true, which is why unvaxxed may well do OK for a while, probably through summer.

But fall/winter now scares me a lot, much more than it did 2 weeks ago.

8/ Reason: Delta.

From the start, we said the 3 things to know about variants are: a) are they more infectious? b) are they more serious? (ie, are you likelier to get very sick) & c) are they vaccine (or prior Covid-based immunity) resistant? Alpha was ~40% more infectious.

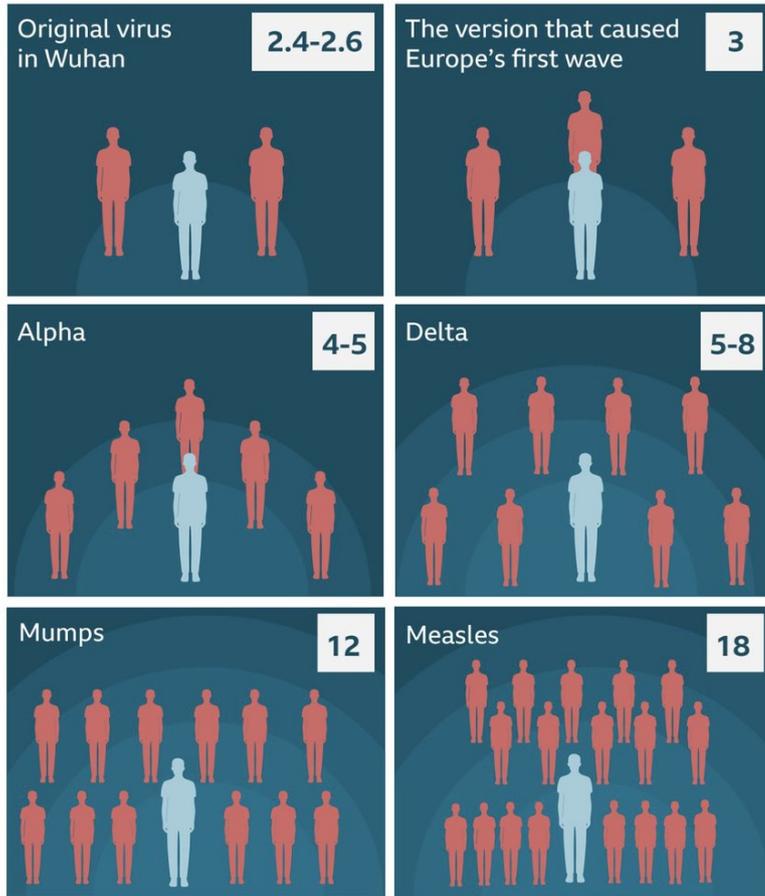
9/ There's still debate over whether Alpha is more serious (some studies say yes, others no). But there's no question that the vaccines (at least the 3 approved in the U.S.) work just fine against it. This meant that – even though it became the dominant virus in Israel, the UK...

10/ ... & now the U.S. (here, it's 69% of current cases <https://t.co/j1RSRewzVB>) – relatively high vaccination rates in these countries prevented it from becoming much of a problem (although unvaccinated people ARE at higher risk of catching it and dying).

11/ Why is Delta scarier? First, it appears to be even more infectious than the Alpha variant, probably by a similar amount (~40% more infectious than Alpha.)(h/t @EricTopol for @BBC table below) This means the same exposure that a person might have had last year is now about... <https://t.co/wjMkpuDSIL>

How the R0 numbers of Covid-19 variants and other diseases compare

The more contagious, the higher the R0 number



Source: Imperial College, Lancet, Australian government

BBC

12/ ...twice as likely to result in Covid. Second, it's looking like it is more serious, though we need more data to be sure. Third – and this is the big one – it does appear to be somewhat immune resistant. Before getting too freaked out about this, it's worth noting that the...

13/ ...data are reassuring, in a way: the efficacy of 2-doses of Pfizer is 88%, only a smidge lower than the 95% we're used to, and still great.

But the first dose data is concerning. Normally, a few weeks after dose 1, you're about 80% protected (this was the argument for...

14/ ...delaying 2nd doses when jabs were scarce). But for Delta, Pfizer dose 1 is only ~33% protective. <https://t.co/fakl7tn7tZ> This creates 2 problems: 1) People stay vulnerable until after shot 2 (& many let guard down earlier); 2) Loss in efficacy for dose 1 points to some...

15/ ...degree of vaccine/immune escape. And – though this isn't proven – I'd worry that a fully vaccinated elder, or someone whose immunity stems from an infection >12 mths ago, won't be sufficiently protected over time, if immunity falls below a threshold needed to thwart Delta.

16/ What to do? For a vaccinated person, watch the Delta % in your region (currently ~6% in the U.S. & rising) & Covid cases in your community. <https://t.co/7Nn2gGJKPW> If you're seeing more cases & more Delta, I'd restore some precautions (esp. if you're high risk) – at least...

17/ ... indoor mask wearing (if you've stopped; BTW, I haven't) in places w/ unvaxxed/unmasked folks.

If you're unvaxxed, get your shots! You may be reassured by a low a local case rate, but don't be: it may be due to summer plus the still-low Delta fraction. Both will change.

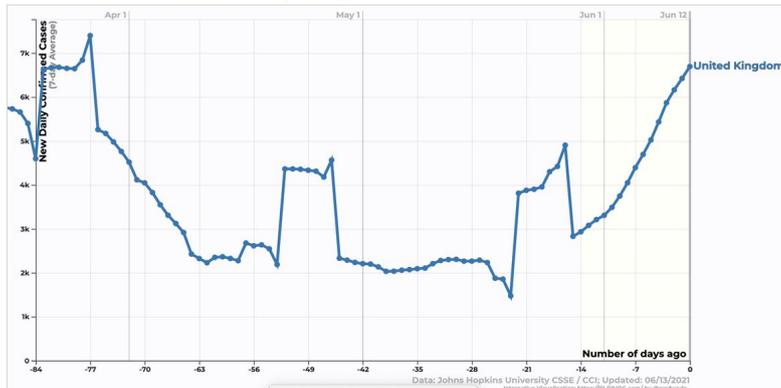
18/ As you can see, Delta has made me nervous: I'll now bet we'll see significant (incl. many hospitalizations/deaths) surges this fall in low-vaccine populations due to combo of seasonality, Delta's nastiness, & "back to normal" behavior. If you're unvaxxed, you've made a bet...

19/ ...that Covid is yesterday's news, & that now seems like an awful bet. Moreover, I worry that a right-leaning Governor who opened up early & proudly (& has gotten away with it so far) will be stubbornly unwilling to reverse course, even in the face of surging cases & deaths.

20/ And there's the matter of timing. If your strategy was "I'll consider a shot if I see an uptick in cases," that's also a loser, since once a surge begins, you won't be well protected against Delta for 4-6 weeks after shot #1. By that time, you may be very sick, or dead.

21/ Is the threat real? UK has been a step ahead of U.S. on vaccinations, & cases/deaths have fallen faster in UK than in U.S. But look at recent UK case # s – they've doubled in past 2 wks, as Delta became dominant strain (now 91% of UK cases). Reassuringly, deaths remain low... <https://t.co/1bp4Vbje6u>

New Confirmed COVID-19 Cases per Day



22/ ...since unvaxxed are mostly younger & less likely to get sick. But don't be surprised if we see upticks in hospitalizations/deaths, esp. if Delta proves to be more serious (it's looking that way), and if it begins to dodge immunity in those with low or waning protection.

23/ We've been lulled by the amazing efficacy of the vaccines & by fact that prior variants haven't been all that nasty (esp. w/ regard to immune escape). Delta should ring the alarm & spur action. We need FDA to fully authorize our vaccines, to step up research on boosters,...

24/ ...& faster approvals for kids. We also need > outreach to unvaxxed (incl. info on Delta) & vaccine mandates in risky settings (healthcare, nursing homes).

For me, Delta adds to my resolve to keep mask on indoors when unvaxxed/unmasked people may be around. And I'm getting...

25/ ...psychologically prepped for some restrictions to return in fall (tho highly vaxxed places like SF will likely do fine). Nobody wants that, but the virus doesn't care what we want.

For unvaxxed, I wish you well but my sympathy is flagging. Your bad choice is looking worse.