

# COVID conundrums



We're at a crossroads. More people are receiving vaccines as availability improves and hesitancy abates. There's a slight uptick in cases, but that's to be expected as restrictions loosen and spring fever overtakes restless young people who haven't yet been immunized.

But questions remain: Where are we headed? Are things getting better, or are we on the cusp of a dreaded "4th wave"? It's a schizophrenic time.

Last week, CDC head Rochelle Walensky, proclaimed she had a sense of "impending doom" and implored people to hang in for "just a while longer" and maintain precautions. She said she "can't face the prospect of another COVID-19 surge".

But paradoxically, she claimed that the latest data shows that vaccinated people had "zero chance" of spreading the virus. That may be the case, but it's far from "settled science".

How do we reconcile these seemingly contradictory statements from a respected medical authority, formerly the head of Infectious Disease at the prestigious Massachusetts General Hospital?

I attribute her downer prognostications to the *negativity bias* that doctors have. Yes, we are drilled to anticipate the worst. Most Americans who smoke, drink, eat

junk food, don't exercise, and do nothing about their excess pounds blow off their doctors' advice until they get really sick. Now America is stricken with COVID-19, so all of a sudden, we're listening attentively to the dire warnings of health authorities we usually ignore. Nerdy doctors are suddenly veritable rock stars, courted by the media, who tend to sensationalize the negative. Politicians may have their own ulterior motives when they tell us to "follow the science" – or not.

So where are we really headed? The answers to these questions will determine the course of the pandemic:

- **Will people who've had COVID-19 enjoy long-lasting immunity?** It's a proposition that's highly controversial. There are some ominous signs from Brazil that new variants will elude people's immune defenses acquired from last year's COVID-19, but other studies suggest that, even if antibodies wane, T-cell memory will confer protection even against new variants. A new test has just been launched to assess T-cell mediated COVID-19 immunity.
- **Can vaccine recipients still transmit COVID-19?** That's what Dr. Walensky says a new study precludes, but it's by no means certain. Yes, rarely, some previously vaccinated individuals have tested positive for coronavirus, but they're usually asymptomatic. Plus, the sensitivity of the PCR nasal swab is such that it might detect the presence of infinitesimal amounts of viral RNA, even when a person has not actually come down with COVID-19. Could they spread it? A new study of college students is underway, testing vaccinees and their immediate contacts, to see if they're capable of transmitting it. But results won't be out for at least 5 months!
- **What about variants?** "COVID variants are a "whole new ballgame" warns infectious disease expert Michael Osterholm. He luridly claimed that "We're in the eye of the hurricane". Of course, there's secondary gain for public health officials to "cry wolf"; in addition to drawing attention to themselves, some of their attitudes may be shaped, unfortunately, by their political orientation. But there's a real possibility some of the new variants (remember, they used to claim the coronavirus RNA was extremely "stable", unlikely to change as rapidly as the influenza bug, which requires annual updates to the shot) will elude the artificial immunity conferred by the vaccine. But lately some good news is that the Pfizer vaccine remains 91% effective against the pesky new South African variant that threatens to make inroads in the US. Meanwhile, in an abundance of caution, all the major vaccine manufacturers are developing booster shots that can be rolled out later this year if variants evade the protection conferred by first-generation vaccines.
- **Are children a major source of transmission?** An important question, because we don't want school openings to prompt another surge. And, if kids spread it, this opens the door to widespread vaccination of school kids, even toddlers, which is being seriously proposed. Most studies suggest that adults in school settings are less likely to acquire COVID-19 from pupils than from other adults in the community; moreover, localities that have resumed in-person schooling are usually not faring worse than comparable communities where schools remain shuttered. Again, there's a lot of political spin invoking contradictory studies to support a chosen narrative, so as schools reopen, we need to follow the data without prejudice.
- **Will there be long-term side effects of the vaccines?** The good news, so far, is that minimal serious immediate reactions are being recorded worldwide. And, even if there's a tendency for public health authorities and the media to downplay them in the interest of vaccine compliance, more people are taking the shot and reassuring their friends and families that it wasn't so bad. Hopefully that portends freedom from subtle or overt problems emerging months or even

years after vaccination. But we must maintain careful surveillance of vaccinees to assure that long-term problems don't emerge. And that could be tricky as people succumb naturally over the years, as they inevitably do, to a myriad of health problems. Are they coincidental? Or will vaccine-priming cause certain susceptible individuals (or people who've already had COVID-19) to experience immune-related disorders? Even if a tiny minority of recipients are affected, it's an important consideration to inform future vaccine efforts. Are there categories and subsets of people—albeit small numbers—who shouldn't get the vaccine? That's a possibility we can't preclude.

- **How serious is “long-hauler syndrome”?** I was disgusted to read an op-ed in the *Wall Street Journal* by a psychiatrist-in-training that opined that the debilitating symptoms experienced by some in the aftermath of COVID-19 were mostly in their heads: *“The Dubious Origins of Long Covid: Echoes of chronic fatigue in the effort to blame the coronavirus for a host of questionable symptoms.”* Fortunately, the *Journal's* editorial page soon applied a needed corrective: *“The Science Behind ‘Long Covid’ and the Desire to Wish It Away: We’ve been burned before by attributing unexplained physical symptoms to psychological issues”*. It's very real, and I discussed it with Dr. Leo Galland in a recent podcast. Going forward, we need research dollars appropriated to investigate the extent of this problem, with a view toward developing therapies to prevent or alleviate it. For those reluctant to take the vaccine, long covid is a reminder that merely surviving a coronavirus infection is no shield against long-term after-effects.
- **Will lockdowns, social distancing, and masking make a difference?** Especially now that increasing numbers of Americans have been exposed to COVID-19 and/or have taken the vaccine, how necessary is it to maintain rigorous precautions? Unfortunately, lockdown vigilantes and breakout advocates alike can cherry-pick studies to buttress their positions. Politics has even further polarized their entrenched views. A vast uncontrolled experiment is underway pitting compliant localities vs. wide-open precincts; only time will tell which prevails. And beware of selective reporting to validate one or the other ideological narrative—objective science and the ever-elusive virus will have the last word.