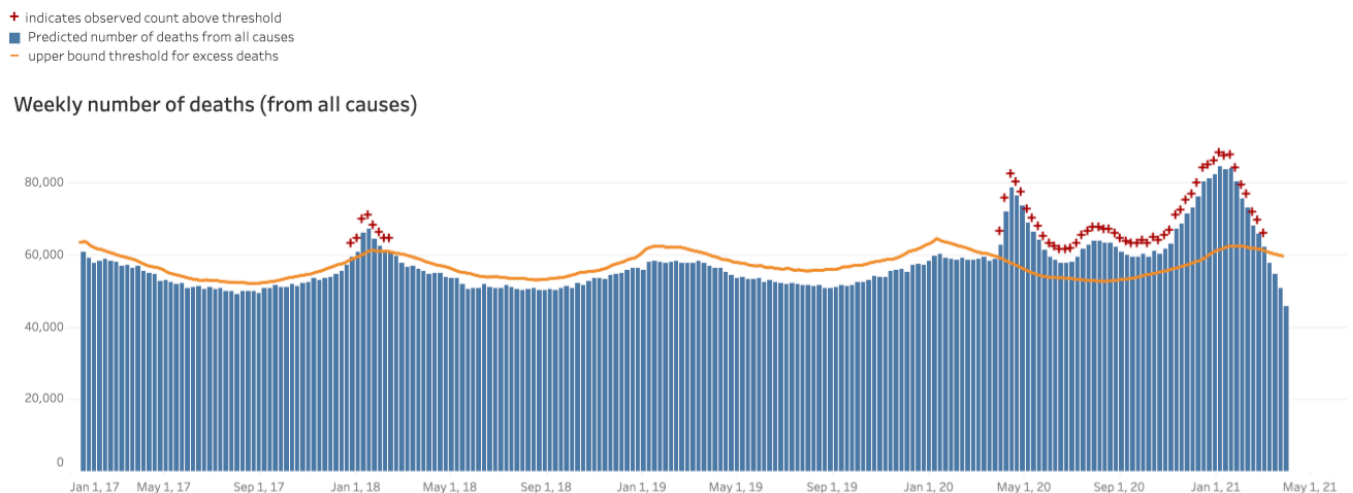


Wuhan Story (after Sept 2020) Part 2 March 21, 2021

Much has happened since the Part 1 presentation that I made in September 2020. A whole new wave of the Wuhan virus appeared in November 2020 and now at the end of April 2021 we are finally seeing the last stages of that more deadly part of the pandemic. The first two excess death mortality waves were relatively small compared to the last one.

CDC provisional deaths vs upper bound of excess deaths to April 9, 2021



Lockdowns to a limited degree had been used briefly in Asia in the past but this was the first time in history that they were used globally and for long periods of time. The argument of saving lives versus economic consequences seems like a no win contest. In most cases where saving lives was the argument, in fact, there was either a reverse condition where lockdown saved less lives or made no real difference in the numbers of lives saved while it significantly destroyed businesses and jobs. All the other effects of lockdown on everyone's social life, many people's mental health and our children's schooling must also be considered.

Looking at the global accumulated data especially of deaths indicates that the US (with by far the largest numbers of deaths globally) and Europe did something that caused a much larger mortality level than many other countries in the world. Part of that excess death problem may also be due to lack of aggressive early treatment of the disease by these relatively rich countries.

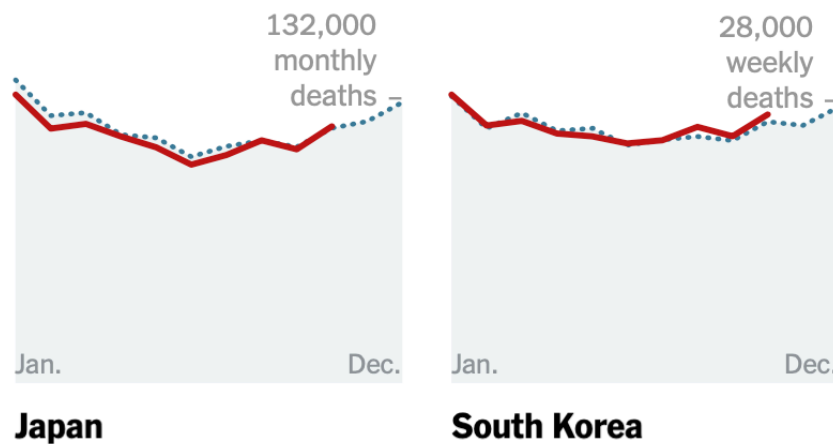
What if

There is an argument that can be made for a different excess death pattern if lockdown methods would have not been used and the method of spreading the virus among the less vulnerable that Dr. Knut Wittkowski suggested would have been used. Dr. Hope-Simpson's work on seasonal viral patterns would still have predicted the three seasonal humps but Dr. Wittkowski suggested that the early spike in March and April of 2020 and the summer of 2020 might have actually contained the majority of the deaths. In fact using Dr. Wittkowski's method and the use of medicine to treat actual cases, all three peaks might have been lower than those shown above with the final one being more like the summer peak. However, a number of doctors and epidemiologists over the past year suggested that Wittkowski's method would have been much more deadly than what is seen above which was over 1/2 a million excess deaths. Actually the Wittkowski model predicted about 100,000 deaths and maybe less especially if we would have been serious about protecting the elderly and keeping the risk periods much shorter.

The logic of quickly spreading the virus while protecting the elderly and infirm for about 6 weeks during the first two waves is reasonable when we now know that the vast majority of excess deaths were in the ranks of those folks over 55 years of age. By delaying herd immunity and allowing the Wuhan virus to remain among us for the past 12 months, we have put that vulnerable population at risk during that whole period. And very many of these old folks died as a result.

It is clear to me that this pandemic was heavily politicized and many of the so called experts that were promoted by these political factions did not really know what they were talking about. Claims of following the science were more likely to be following a political agenda. Now that the actual science is becoming more clear, we have a great opportunity to learn from these political mistakes and be more well prepared in the future.

In Part 1, I alluded to the fact that the Asian elements of the global pandemic were much more prepared than the rest of us. Look at the graphic of US excess deaths shown on the previous page (the last year of it) and look at this.



The blue dotted lines are predicted deaths from all causes for the period and the red line are the actual deaths that occurred during the pandemic. Both countries remained mostly opened internally while they strictly controlled those folks crossing their borders.

Japan's weekly deaths from all causes are about 33,000/week and Korea's are about 28,000/week. Deaths from all causes in the US are about 60,000/week. I noted in my part 1 presentation that the Japanese treated respiratory disease especially in their older population very differently than the rest of the world. Their populations are more disciplined and were better able to deal with controlling the spread of the virus. I suspect that if the US population could have carefully followed the Wittkowski method and early treatment of the disease, we might have been able to protect our elderly population in this same manner.

As noted above the other element of keeping even the potentially high death rates of elderly folks in the US at a much lower level, would have been the extensive use of medical treatments during the early stage of infection. I noted that the Japanese already treat all respiratory infections very early and very effectively often without hospitalization. I noted a number of other medical treatments in part 1 that are still not being widely used.

Most folks that I talk to continue to be leery of them while a very significant group of frontline doctors in the US and Canada have and are using many of these medicines. They face outright scorn from individual medical folks as well as governmental medical, institutional medical, political and news groups. With both Wittkowski's method and early treatment of anyone ill from the Wuhan virus, there is every reason to believe that total deaths in the US might have been even less than 100,000. Perhaps more like a bad flu season death rate like I noted in part 1 for the 2018-18 flu season that killed just over 61,000 mostly older folks.

By having effective medical treatments available during the spread stage while gaining herd immunity, all possible concerns about sickness and dying would have been much less. If these FDA approved medicines would have been used during the actual US pandemic, lockdowns and all the fear of this virus would have also been much less. We are now still living in fear. I am about to get my second vaccine shot but my wife, due to her age, has not gotten even her first one.

Flattening the curve in the early weeks of the Wuhan outbreak in the US was probably a good idea, especially since so little information was available in those days. But to continue it and to put our elderly at risk by delaying a contagion that was clearly never under control in most places in the world, was ridiculous.

The Lockdowns Weren't Worth It

By Philippe Lemoine

Texas Gov. Greg Abbott announced last week that his state is ending its mask mandate and business capacity limits. While Democrats and many public-health officials denounced the move, ample data now exist to demonstrate that the benefits of stringent measures aren't worth the costs.

This wasn't always the case. A year ago I publicly advocated lockdowns because they seemed prudent given how little was known at the time about the virus and its effects.

There's a reason no government has done a cost-benefit analysis: The policy would surely fail.

But locking society down has become the default option of governments all over the world, regardless of cost.

More than a year after the pandemic began, vaccination is under way in both Europe and the U.S. Yet stringent restrictions are still in place on both sides of the Atlantic. Germany, Ireland and the U.K. are

still in lockdown, while France is two months into a 6 p.m. curfew that the French government says will last for at least four more weeks. In many U.S. states, in-person schooling is still rare.

This time last year we had no idea how difficult it would be to control the virus. Given how fast it had been spreading, people made the reasonable assumption that most of the population would be infected in a few weeks unless we somehow reduced transmission. Projections by the Imperial College Covid-19 Response Team in London projected that more than two million Americans could die in a few months. A lockdown would cut transmission, and while it couldn't prevent all infections, it would keep hospitals from being overwhelmed. It would "flatten the curve."

We have since learned that the virus never spreads exponentially for very long, even without stringent restrictions. The epidemic always recedes well before herd immunity has been reached. As I argue in a report for the Center for the Study of Partisanship and Ideology, people get scared and change their behavior as hospitalizations and deaths increase. This, in turn, reduces transmission.

I've looked at more than 100 regions and countries. None have seen exponential growth of the pandemic



The streets of São Paulo, March 6, 2021.

continue until herd immunity was reached, regardless of whether a government lockdown or other stringent measure was imposed. People eventually revert to more-relaxed behavior. When they do, the virus starts spreading again. That's why we see the "inverted U-shape" of cases and deaths everywhere.

Sweden was the first to learn this lesson, but many other countries have confirmed it. Initially held up as a disaster by many in the pro-lockdown crowd, Sweden has ended up with a per capita death rate indistinguishable from that of the European Union. In the U.S., Georgia's

hands-off policies were once called an "experiment in human sacrifice" by the Atlantic. But like Sweden, Georgia today has a per capita death rate that is effectively the same as the rest of the country.

That isn't to say that restrictions have no effect. Had Sweden adopted more-stringent restrictions, it's likely the epidemic would have started receding a bit earlier and incidence would have fallen a bit faster. But policy may not matter as much as people assumed it did. Lockdowns can destroy the economy, but it's starting to look as if they have minimal effect on the

spread of Covid-19.

After a year of observation and data collection, the case for lockdowns has grown much weaker. Nobody denies overwhelmed hospitals are bad, but so is depriving people of a normal life, including kids who can't attend school or socialize during precious years of their lives. Since everyone hasn't been vaccinated, many wouldn't yet be living normally even without restrictions. But government mandates can make things worse by taking away people's ability to socialize and make a living.

The coronavirus lockdowns constitute the most extensive attacks on individual freedom in the West since World War II. Yet not a single government has published a cost-benefit analysis to justify lockdown policies—something policy makers are often required to do while making far less consequential decisions. If my arguments are wrong and lockdown policies are cost-effective, a government document should be able to demonstrate that. No government has produced such a document, perhaps because officials know what it would show.

Mr. Lemoine is a doctoral candidate in philosophy at Cornell University and a fellow at the Center for the Study of Partisanship and Ideology.

Lockdown and many other Pandemic issues - the bottom line

With the US data now readily available, let's look at it and see how the science really emerged. With data obtained from this site <https://www.worldometers.info/coronavirus/country/us/> for March 16, 2021, we can see a very simple pattern among several of the mostly larger states in the US. New Mexico had a particularly strange and severe lockdown strategy and it affected many of my friends, family and colleagues so I included NM data.

Minus all the drama and detail, I pulled the data for five states that shows what the death rate per million was for the whole period measured on March 16.

New York	Texas	California	Florida	New Mexico
2542 deaths/mil	1617/mil	1425/mil	1515/mil	1841/mil

New York and New Mexico win the “dumb as a hammer” prize for ineffective methods. In part 1 I noted that our governor thought that NM was really NY. Well, NY was no poster child for how to deal with the pandemic and NM turned out to be more of the same. And the Neanderthals from Texas seemed brilliant by comparison. Especially when you look at the extremes that NY and NM used to “control” the virus while Texas and Florida were more open and less restrictive of their citizens.

And at the end of the pandemic in 2021 there are some serious questions that have emerged from all the smoke and mirrors of the past year.

OPINION

Vindication for Ron DeSantis

By Allysia Finley

In the early months of the coronavirus pandemic, New York Gov. Andrew Cuomo imposed strict lockdown policies—many still in place—and became the media's golden boy. "The governor of New York's morning news conferences have become part of the country's new daily rhythm," the Washington Post's Style section gushed in March 2020. "He's the strongman who can admit he's wrong. He speaks fluently about the facts. He worries about his mother, and by extension, yours, too."

Gov. Ron DeSantis took a different approach and was pilloried. He was among the first to lift his state lockdown, adopting something resembling Sweden's strategy of protecting the vulnerable while keeping businesses and schools open. "Florida Man Leads His State to the Morgue," read a June headline in the New Republic. "Ron DeSantis is the latest in a long line of Republicans who made the state a plutocratic dystopia. Now he's letting its residents die to save the plutocrats." Screenshot

The media vilified him for rejecting harsh lockdowns. But Florida's Covid-19 numbers are better than California's or New York's, and its economy thrives.

A year after the virus hit the U.S., Mr. Cuomo's luster has faded, and Mr. DeSantis can claim vindication. The Sunshine State appears to have weathered the pandemic better than others like New York and California, which stayed locked down harder and longer.

Mortality data bear out this conclusion. The Covid death risk increases enormously with each decade of age. More than 80% of Covid deaths in the U.S. have occurred among seniors over 65. They make up a larger share of Florida's population than any other state except Maine. Based on demographics, Florida's per-capita Covid death rate would be expected to be one of the highest in the country.

Nope. Florida's death rate is in the middle of the pack and only slightly higher than in California, which has a much younger population. Florida's death rate among seniors is about 20% lower than California's and 50% lower than New York's, based on Centers for Disease Control and Prevention data.

Several Democratic governors, including Mr. Cuomo and New Jersey's Phil Screenshot the pan-

dem required nursing homes to accept Covid patients discharged from hospitals, though many were short-staffed and unable to care for them properly. The New York investigation by Attorney General Letitia James estimated that the state's nursing home deaths were 50% higher than Mr. Cuomo's official figures, though it's impossible to know how many deaths his order caused. The Journal reported Thursday that Mr. Cuomo's aides rewrote a report by state health officials in June to omit the number of New York nursing-home residents who'd died in hospitals during the pandemic.

Mr. DeSantis took a smarter approach. His administration halted outside visitations to nursing homes and bolstered their stockpile of personal protective equipment. Florida's government also set up 23 Covid-dedicated nursing centers for elderly patients discharged from hospitals. Nursing-home residents who tested positive and couldn't be isolated in their facilities were sent to these Covid-only wards. Florida set up field hospitals to handle a surge in cases that models predicted in the spring, although it never materialized.

"Those models about hospital overcrowding never even came close to bearing out, even in New York," Mr. DeSantis says in an interview. "Some of those policies that were done in these other states, they really were motivated by those models. And those models did do a lot of damage."

Like most governors, Mr. DeSantis shut down most businesses when President Trump issued guidelines for a national lockdown on March 16. "We did the 15 days to slow the spread," Mr. DeSantis says. The governor kept restrictions on "nonessential" businesses for several more weeks, but he let more places stay open than other states, including child-care facilities, construction sites, hotels and beaches. National media published photos of crowded Florida beaches. "DeSantis in Florida let everybody go crazy over spring break," CNN's Chris Cuomo, the New York governor's brother, said in June. "He then exported all that virus back to wherever—wherever they wanted to go, OK?"

But Florida's infection rate during April stayed on par with California, where most beaches and residential construction were restricted. "I was not convinced that a lot of those [lockdown] policies were making a huge difference as data came in," Mr. DeSantis says.

Florida began a phased reopening in early May, allowing restaurants, barbershops, nail salons, gyms and other retailers to operate initially at 50% capacity provided they follow social-distancing and sanitary protocols. Bars and pubs



Florida's governor at a Miami-area Covid testing site Jan. 6.

were later allowed to open at 50% capacity, and limits for other businesses were increased.

Mr. DeSantis also let theme parks—important Florida employers and tourist attractions—reopen at reduced capacity. SeaWorld Orlando and Universal Studios reopened in June. "Disney World took a little longer, but that was just because of their [own] business decisions," California's government still hasn't allowed the Disneyland or Universal Studios theme parks to reopen.

Florida's cases started climbing in June as people socialized more, including at graduation parties, summer cookouts and on Father's Day. Experts and the media castigated the governor for reopening too fast and too soon. "Despite the guidelines and the recommendations to open up carefully and prudently, some states skipped over those and just opened up too quickly," the National Institutes of Health's Anthony Fauci said in July. "Certainly Florida I know, you know, I think jumped over a couple of checkpoints."

But cases spiked across the Sun Belt, including in California, which maintained much stricter business restrictions. Still, political pressure intensified on Mr. DeSantis to shut down his state again. He refused. "I'm like, 'No, we're not going to lock down. It doesn't work. It compounds problems,'" he says. The virus is not "going to be governed by simply closing someone's business, or not letting people go to work."

Mr. DeSantis says he listened to a different cast of experts such as Stanford's Jay Bhattacharya, Harvard's Martin Kulldorff and Oxford's Carl Heneghan and Sunetra Gupta. Instead of shutting down businesses in the summer, he ordered more-frequent testing for nursing-home workers and deployed more person-

nel to hard-hit hospitals. In late July, cases in Florida and across the Sun Belt began to fall.

In September Mr. DeSantis lifted capacity restrictions on restaurants and bars. He also overrode local jurisdictions that tried to keep them closed. "We said every business has the right to operate; you cannot close anything. Everyone has the right to work. You have to let people earn a living," he says. Mr. DeSantis also required local school districts to offer in-person instruction five days a week in the fall, though parents could choose remote learning instead. "The union sued us, but we beat them in court."

Teachers unions in large school districts in California, meanwhile, have refused to return to classrooms. They claim schools are unsafe. But per capita Covid cases among children are about the same in Florida and California.

When cases began to rise again in the fall, Democratic governors like Mr. Cuomo and California's Gavin Newsom tightened business shutdowns and even sought to limit Thanksgiving gatherings to 10 people. Mr. Cuomo griped that police weren't strictly enforcing his household limits.

The fall and winter lockdowns don't appear to have made any difference in the virus spread. Between Nov. 1 and Feb. 28, there were 5.8 new cases per 100 people in New York, 6.4 in California, and only 5 in Florida, where businesses could stay open at full capacity. But the economic impact of the lockdowns has been enormous.

Employment declined by 4.6% in Florida in 2020, compared with 8% in California and 10.4% in New York. Leisure and hospitality jobs fell 15% in Florida, vs. 30% in California and 39% in New York.

Florida's freedom has drawn people and economic activity to the state. It ranked third among "U-

Haul Migration Growth States" for one-way rentals. While travel is still lower than it was last year, several airlines including Southwest, Spirit and United have added direct flights to Florida this winter. "The addition of these new flights represents United's largest expansion of point-to-point, non-hub flying and reflects our data driven approach to add capacity where customers are telling us they want to go," said Ankit Gupta, the airline's vice president in charge of domestic scheduling.

The state "had an acceleration of some of the business migration that we've seen, particularly in finance," Mr. DeSantis says. The Hedge Fund Association hosted a webinar last month titled "Capitalizing on South Florida," highlighting investment firms that had moved to the region.

Mr. DeSantis's administration counts at least 35 large businesses that have moved to the state since the pandemic began. According to Census Bureau data, Florida's per capita business formation between April 2020 and January 2021 was twice as high as California's and 75% higher than New York's.

Florida's economy shrank only 3.7% in the third quarter of 2020 from the fourth quarter in 2019, according to data from the Bureau of Economic Analysis, compared with 4.9% for California and 8% for New York. The latter states probably took even bigger economic hits in the fourth quarter when they shut down.

As for tourism, Mr. DeSantis says "the Panhandle had their best summer and best year ever," thanks to family road trips from nearby states. Orlando has been somewhat slower to bounce back because it relies more on foreign visitors, and international travel has been almost entirely shut down.

Real estate across the state is booming. Home sales increased 20% in the last six months of 2020 year over year, while the median sales price rose 14.4%. Construction wages and salaries during the third quarter were 3.2% higher in Florida year over year but 4.8% lower in California and 9.3% lower in New York. "When you talk to home builders, what they'll tell me is they've had the best year," Mr. DeSantis says. "They've noticed more [people moving] from California than they ever have."

The lesson of Florida's Covid success story, according to the governor: "We've shown people that you can have a good time, you can be safe, and you can make the decision that's best for you." What has Andrew Cuomo learned?

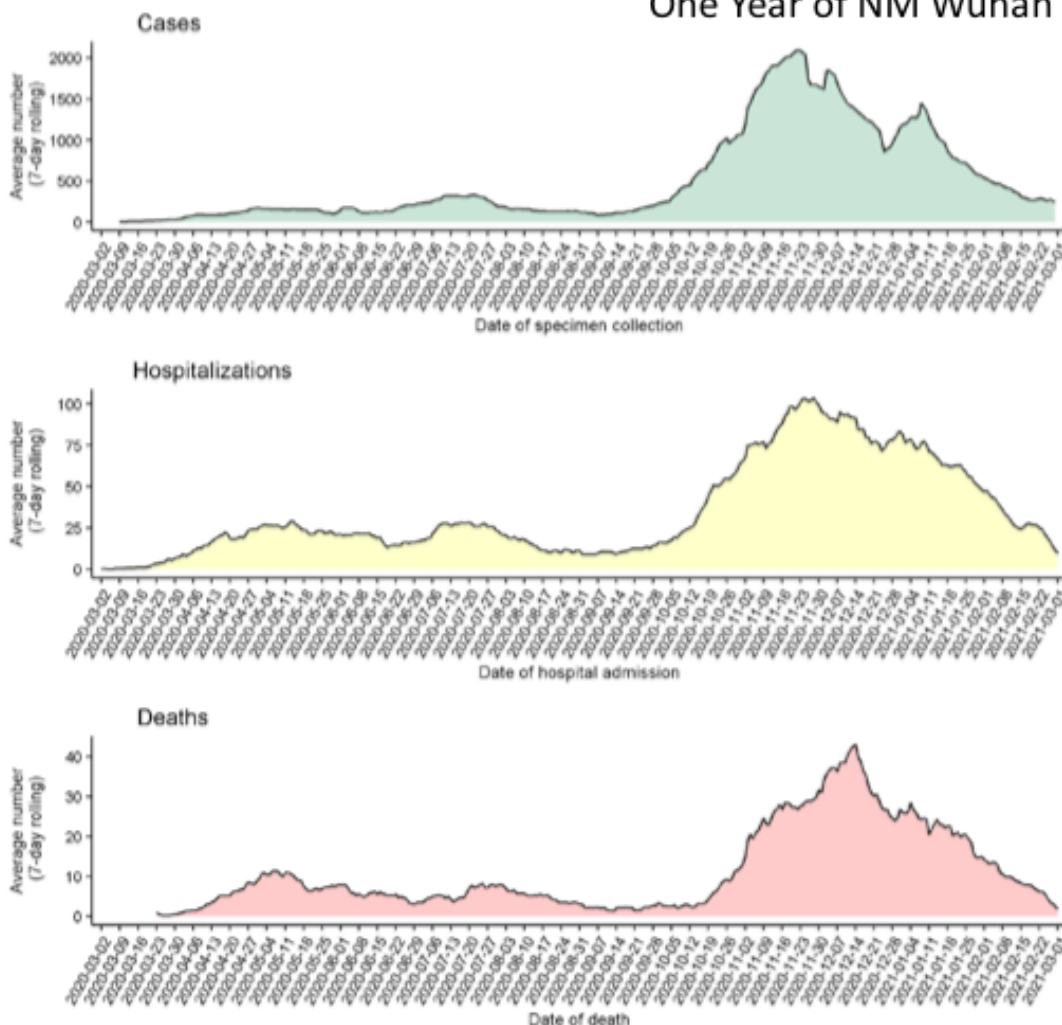
Ms. Finley is a member of the Journal's editorial board.

Lockdown NM Style

It looks like lockdown starting in March kept case numbers and hospitalizations and perhaps even deaths down. However, from experience from other respiratory viral epidemics, it is pretty clear that viruses that have a high infection rate (R_0) are almost impossible to contain. Regardless, the 3rd wave was a killer. Did this 3rd wave outcome have to happen if we would have reached herd immunity early in the spread and treated cases of sickness from the first day of even minor symptoms of illness? We will probably never know.

Average number (7-day rolling average) of cases, hospitalizations, and deaths over time

One Year of NM Wuhan Data 2020-2021



Note: Cases, hospitalizations, and deaths may not yet be reported in 7 or more days.

As of 3/1/21



And we still don't know much about what really happen in Wuhan at the beginning of the pandemic

Lab Theory a Dark Cloud on China



BUSINESS WORLD

By Holman W. Jenkins, Jr.

events. If it weren't, we wouldn't be here as a species.

This trillion-to-one collision of circumstances can be simplified in one obvious way. Say, if a human agent collected the most dangerous viruses to study them in the middle of one of the densest population centers on earth. These experimenters would at least have been alert, if all other precautions failed, to a coworker developing unexplained symptoms. Except that the Sars-Cov-2 virus, once it was loose in a human crowd, showed that it can be spread by people who never develop symptoms.

Preventing future pandemics, being better prepared next time—these are the reasons given for trying to understand how the new coronavirus emerged. But one instance of a virus bridging the species gap the natural way might be an anecdote that doesn't tell us much about the next risk. The lab theory is the big fork in the road. We might have to reset our risk perceptions dramatically—worry less about humans messing around in animal habitats, worry more about scientists messing

A lab accident in Wuhan is unlikely only in the sense that a pandemic virus's emergence is always the culmination of a series of unlikely

around in labs.

On that basis alone, the lab theory is the most important informational chokepoint as we move ahead. But there's another reason. If the lab theory remains unresolved, especially if China's refusal to cooperate makes it unresolvable, it will hang over global politics for decades to come even without conspiracy theorists and demagogues taking a hand.

Alas, the World Health Organization mission is turning into a case of disaster foretold. A credible inquiry requires China's full cooperation, not just cooperation with those lines of inquiry that are consistent with its own propaganda. And couldn't somebody have put Peter Daszak, team member from New York City's EcoHealth Alliance, under permanent mouth quarantine?

To insist that human encroachment on nature is the great risk tells us nothing about what happened in this particular case. To insist, as he did on NPR, that China's mishandling of the delegation with greeters in full hazmat garb, its forcing of the delegation into quarantine for 14 days, was merely testament to China's Covid rigor overlooks another possibility: China was seeking to intimidate and dominate the investigators because of the colossal importance it places on controlling the virus narrative.

The WHO's report, expected next week, need not be a failure if seasoned with proper skepticism. China would have

been hard-pressed not to let some new information out of the bag, adding to our store of knowledge. That Beijing emphasized the theory that the virus entered the country in imported frozen food at least tells us about China's propaganda strategy. This is worth knowing but the WHO's own gratuitous nods to the frozen-food theory raise anew the question of who really controls the World Health Organization and to what end.

The WHO's inability to divorce itself from Beijing's propaganda doesn't help.

Mr. Daszak tweeted that the group's meeting with the Wuhan virus lab staff went swimmingly, "key questions asked & answered." He might have expected a warm welcome since his organization channeled U.S. research dollars to the lab at one time. Assurances mean nothing without access to the lab's records. Deleted web pages have been recovered referring to experiments with rabbits and ferret badgers, animals seen as likely vectors for human infection. The lab is reputed to have engaged in "gain-of-function" experiments with bat viruses to which the new coronavirus is closely related.

China could have other reasons, of course, for keeping lab

data secret. Its most implausible stonewalling is its unwillingness to supply "highly confidential" patient samples that might show where and when the virus was present prior to the Wuhan outbreak. And it's obvious why: China has latched onto the good work done in other countries to identify early unrecognized cases of Covid-19 to suggest the virus originated elsewhere and was brought to Wuhan by foreign devils, never mind the virus's close similarity to bat viruses found in China's Yunnan province.

It's time to be realistic. Mr. Daszak and most others long ago figured out there won't be an unimpeachable answer to the origin question, only a battle of narratives. Politics was destined always to swamp the hunt for Covid-19's beginnings. The global scourge has become too politically explosive. There was zero chance of China letting the chips fall where they may. There is little chance of the U.S. sacrificing its other dealings with Beijing to get to the bottom of the mystery. In that sense the big "kick me" sign the WHO has placed on itself may be convenient for all who want to get back to relations as usual. Yet I would not bet on the lab theory going gently into that good night. This would be another highly unlikely event given the long-standing fears voiced by so many scientists over the years that such an accident might be the world's biggest pandemic risk.

A failure of the US Healthcare System - Lessons Learned?

One major issue with the recent pandemic is that State and Local Public Health officials seem to have shown very little ability in these matters. The Federal Public Health officials were clueless on Wuhan issues for most of this last year. They have attempted to support state and local campaigns but the results from all these government agencies have been at best spotty. Do any of them have the proper training and tools to do this kind of work?

Compared to their Asian counterparts it does not seem to be the case. And the World Health Organization has not been able to effectively deal with all the complications of this pandemic either. In short they all (in the western world) have failed. Part of the reason is that all of them have taken a political turn and have abandoned a scientific, experiment and treatment based path. If we can't change this whole structure, I fear future medical emergencies will continue to be overwhelming.

Several articles in the February 2021 issue of Imprimis discuss some of these lesson issues. <https://imprimis.hillsdale.edu> See the last entries in the Information and Data list at the very end of this report.

I had hoped that my efforts might uncover some ideas to guide us in the future. There are lots of those ideas in part 1 and 2 and also buried in the list of websites that I will include at the end of part 2. However, we must get rid of the political solutions and the propaganda that they call news, if we hope to really let the science guide us. And also remove the fear mongering so we have a more clear vision of the possibilities.

I may try to work on coming up with a plan to deal with the next pandemic or disaster that is based on some ideas I have found

during this last year, as well as some ideas that I have seen in Japanese circles. The search and rescue community has a structure and process that may also be useful. I will probably get this draft Part 2 report out before I start that plan so I can get some feedback on these basic ideas.

As for the CDC, FDA and the NIH, the Political community and most of the News Media

In my opinion the Chinese Communist Party, Fauci and almost all of the organizations noted above allowed the death rate to go to extremes and are heavily responsible for those high numbers. Something has to be done about that before we get into any sort of planning for the future. It is a major shortcoming that cannot be allowed to fester.

I have to say that the CDC does have some good data bases and oddly enough the New York Times' data bases seem to be very good as well (I can't say the same for their news reporting).

Information and Data Galore

Willis Coronavirus Chart March 21, 2020

<https://wattsupwiththat.com/2020/03/21/daily-coronavirus-covid-19-data-graphs/>

Curry and Lewis COVID-19 UK Modeling death rate overestimate

<https://wattsupwiththat.com/2020/03/25/covid-19-updated-data-implies-that-uk-modelling-hugely-overestimates-the-expected-death-rates-from-infection/>

Worldometer Corona Virus Data and Graphs

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

<http://covid19.healthdata.org/projections>

Michael Levitt Less dire prediction

<https://www.thesun.co.uk/news/11250374/coronavirus-pandemic-beaten-faster-social-distancing-vital/>

CDC COVID-19 Updated Data

<https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/cases-in-us.html#investigation>

NY Times COVID-19 Maps

https://www.nytimes.com/interactive/2020/us/coronavirus-us-cases.html?campaign_id=9&emc=edit_nn_20200405&instance_id=17362&nl=morning-briefing®i_id=109112658&segment_id=23916&te=1&user_id=b0ff0d4ce91862ddd6988dbc169d34b1#cases

Air travel stats from China NYT

<https://www.nytimes.com/2020/04/04/us/coronavirus-china-travel-restrictions.html>

COVID Tracking Project

<https://covidtracking.com/data/us-daily>

Reconstructing the 1918 Virus

<https://www.cdc.gov/flu/pandemic-resources/reconstruction-1918-virus.html>

Excess Deaths all causes CDC

https://www.cdc.gov/nchs/nvss/vsrr/covid19/excess_deaths.htm

COVID19 Death Demographic

https://www.cdc.gov/nchs/nvss/vsrr/covid_weekly/index.htm

CDC Weekly Demographic Wuhan

https://www.cdc.gov/nchs/nvss/vsrr/covid_weekly/index.htm

NM Wuhan Dashboard

<https://cvprovider.nmhealth.org/public-dashboard.html>

NY Times Data github

<https://github.com/nytimes/covid-19-data/blob/master/README.md>

HCQ Rush to Judgement Annals of Internal Medicine

<https://www.acpjournals.org/doi/10.7326/M20-1223>

CDC COVID10 Hospitalizations

https://gis.cdc.gov/grasp/COVIDNet/COVID19_3.html

Dr. Didier Raoult interview on his 2000+ HCQ study

<https://www.youtube.com/watch?v=Xhoi1JKjClk>

Dr. Richard Bartlett

<https://www.youtube.com/watch?v=iYRO6NidUP4>

<https://www.youtube.com/watch?v=6wNgjXdGH00>

<https://www.youtube.com/watch?v=205Unk4TQXI>

The last minute of two of Dr. Mobeen Syed's interview are noteworthy

Two More of Still at it

<https://youtu.be/ru7egBTOxB8>

<https://youtu.be/2MqaHyBDsp8>

Knut Wittkowski Biostatistician Epidemiology

https://videos.files.wordpress.com/UxoG7zR1/wittkowski_dvd.mp4

CDC Provisional Death Numbers

<https://www.cdc.gov/nchs/nvss/vsrr/covid19/index.htm>

NM Guv-nor

https://www.youtube.com/watch?v=owliYuzf9gc&fbclid=IwAR0xhfazuu2-4iemkMM0fjoKljCHYcn-j_R0yK76gerXcXG8lXBnRUdYP4Q

Mortality Surveillance Data

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