



COVID Lessons Learned

A Retrospective After Four Years

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Executive Summary

This report reviews the major policy errors and lessons learned during the COVID pandemic from a balanced perspective that includes health, economic, educational, and civil liberty considerations.

We outline ten key lessons that must be learned to avoid mistaken policy responses to future pandemics and other crises.

Lesson #1: Leaders Should Calm Public Fears, Not Stoke Them

Conventional wisdom pre-COVID was that communities respond best to pandemics when the normal social functioning of the community is least disrupted. During COVID, the public health establishment followed the opposite principle: they intentionally stoked and amplified fear, which overlaid enormous economic, social, educational, and health harms on top of the harms of the virus itself.

Non-COVID excess deaths from lockdowns and societal panic are estimated at about 100,000 per year in the United States and zero in non-lockdown Sweden.

Lesson #2: Lockdowns Do Not Work to Substantially Reduce Deaths or Stop Viral Circulation

Most lockdown measures were realized around the time when hospitalizations peaked, which due to the time-lag between infection and severe disease, necessarily occurs well after the infective peak. They were timed to claim credit for declining waves, but rarely had any discernible causal impact.

A comprehensive literature review was conducted by Herby, Jonung, and Hanke and published in an authoritative, peer-reviewed book by the Institute of Economic Affairs in London. The Herby-Jonung-Hanke Johns Hopkins research found: “lockdowns in the spring of 2020 had a negligible effect on COVID-19 mortality. This result is consistent with the view that voluntary changes in behavior, such as social distancing, did play an important role in mitigating the pandemic.”

A much wiser strategy than issuing lockdown orders would have been to tell the American people the truth, stick to the facts, educate citizens about the balance of risks, and let individuals make their own decisions about whether to keep their businesses open, whether to socially isolate, attend church, send their children to school, and so on.

Lesson #3: Lockdowns and Social Isolation Had Negative Consequences that Far Outweighed Benefits

According to the World Bank, “Mobility restrictions, lockdowns, and other public health measures... produced the largest global economic crisis in more than a century.”

In a comprehensive and authoritative review of lockdown harms, Kevin Bardosh concludes:

“The promotion of lengthy social distancing restrictions by governments and scientific experts during the Covid crisis had severe consequences for hundreds of millions of people. Many original predictions are broadly supported by the cumulative research data presented above: a rise in non-Covid excess mortality, mental health deterioration, child abuse and domestic violence, widening global inequality, large increases in debt, food insecurity, lost educational opportunities, unhealthy lifestyle behaviours, increased loneliness and social polarization, democratic backsliding and human rights violations... The pandemic response leaves behind a legacy of poverty, mental health illness, learning loss, debt, food insecurity, social polarization, erosion of respect for human rights and elevated excess mortality for non-Covid health conditions.”

The employment impact in the United States was staggering, with lockdowns putting over 49 million Americans out of work according to Bureau of Labor Statistics (BLS) survey data, and over two million remaining out of work due to COVID closures as recently as July 2022.

This enormous unemployment shock has health as well as economic consequences. An NBER study found that the lockdown unemployment shock is projected to result in 840,000 to 1.22 million excess deaths over the next 15 to 20 years, disproportionately killing women and minorities.

In contrast, Jonung and Andersson compare the health and economic outcomes in Sweden, commonly viewed as an outlier relying more on recommendations and voluntary adjustments than on strict lockdowns, to the United States and comparable European OECD countries. Their results suggest that the Swedish policy of advice and trust in the population to reduce social interactions voluntarily was relatively successful. Sweden combined low excess death rates with relatively small economic costs. In future pandemics, policymakers should rely on empirical evidence rather than panicking and adopting extreme measures.

Lesson #4: Government Should Not Pay People More Not to Work

Congress authorized \$600 per week unemployment bonuses early in the pandemic, despite warnings that the consequences would be substantial, prolonged unemployment and associated economic underperformance. The evidence shows conclusively that bonuses for not working increased unemployment rates, which plunged rapidly when the original \$600 bonus ended, before stalling when a \$300 bonus took effect.

Lesson #5: Shutting Down Schools Was a Major Policy Mistake With Tragic Effects on Children, Especially the Poor

The case for opening schools was widely known throughout the world by spring/summer 2020, but teacher unions pressured authorities to close schools.

The harms to children of closing in-person schooling are dramatic and irrefutable. The shutdowns caused serious harm to children, including poor learning, school drop-out, social isolation, mental illness, drug abuse, suicidal ideation, and 300,000 cases of child abuse unreported in spring 2020.

These harms were most severe for lower income and minority students.

The original round of global school closures is estimated by the United Nations to result in \$17 trillion in lost lifetime earnings for students and a 14 percent reduction of world GDP.

Lesson #6: Masks Were of Little or No Value and Possibly Harmful

There was no high-quality evidence in support of community masking for respiratory viruses in spring 2020; in fact, the randomized clinical trials regarding masking for influenza found it to be ineffective for protecting the wearer and for preventing spread. Unfortunately, rather than commission cluster randomized controlled trials to produce high-quality evidence on masking with respect to SARS-CoV2, global and US public health authorities overstated the benefits of masking and persisted even as evidence to the contrary accumulated.

Mask mandates were likely imposed as a way to calm people's fears and help them re-engage in society. But they ended up doing the opposite – amplifying fears by creating the irrational belief that an unmasked face presented a threat, causing conflict and division among citizens, and giving high-risk people the mistaken impression that masks were protective, potentially resulting in some people risking exposure who otherwise may not have.

The CDC continues to recommend, contrary to evidence, masking for respiratory viruses, undermining its credibility.

Lesson #7: Government Should Not Suppress Dissent or Police the Boundaries of Science

A poisonous interplay between America's media, Big Tech, and the academic science and public health community has severely harmed the public. Scientists used the media to bully others, and the media gave them the imprimatur of "the experts" to disparage the opposing views.

Censorship took many forms, including legacy media, social media, preprint servers, and university campuses. Scientific journals published character smears and social media actively suffocated voices that dissented from the accepted COVID narrative.

Anthony Fauci, the head of the largest federal grantmaking entity, created an environment in which it was very difficult for most medical experts to break with the dominant narratives on lockdowns, masks, or overwhelmed hospitals. The National Institutes of Health (NIH) became the principal advocate of lockdown policies, but failed to run high-quality trials of repurposed drugs and non-pharmaceutical interventions.

Lesson #8: The Real Hospital Story Was Underutilization

The tragedy of the non-COVID death pandemic was in large part driven by record-low hospital utilization - with very few exceptions - throughout the entire pandemic period. This was a result of public health messaging and political orders canceling medical procedures and intentionally stoking fear, causing people to cancel their own appointments for serious medical care.

The U.S. Department of Health and Human Services (HHS) data show that COVID waves rarely moved topline inpatient utilization, and that the total number of staffed beds steadily declined during the pandemic. The COVID utilization numbers from HHS are overstated because the agency has refused to differentiate causal from incidental COVID.

This underutilization was likely a significant contributor to non-COVID excess deaths in the United States.

Lesson #9: Protect the Most Vulnerable

One of the most striking features of the earliest COVID morbidity and mortality data was a profound differential in risk between the old and the young.

When specific populations are known to have a high risk for death or serious illness, a strategic use of resources to heighten their protection and awareness should be employed. Specific steps might include: prioritized testing to nursing homes and senior centers; high-frequency testing of all nursing home staff and visitors; extra infection control standards in nursing homes, in alliance with hospitals; frequent monitoring and alert outreach to high-risk seniors in communities and nursing homes when infections are high.

Lesson #10: Warp Speed: Deregulate But Don't Mandate

Project Warp Speed developed multiple highly effective monoclonal antibody treatments and vaccines in record time, but there were multiple failures.

NIH failed to conduct randomized trials of low-cost repurposed drugs, and government monopoly purchasing and distribution of monoclonal antibodies created chronic shortages and politicized distribution decisions, which led to the announcement that Regeneron would be rationed in the South, where it was needed, due to concerns for “equitable distribution, both geographically and temporally.”

The vaccines were a deregulatory triumph, because they were developed quickly and had a favorable risk/benefit profile for high-risk populations.

However, the safety of new drugs should have been prioritized and assessed in a far more detailed and thorough manner. This is especially critical in new technologies like the mRNA vaccines. Beyond a failure to assess safety, the failures regarding vaccines included a lack of transparency on what endpoints were assessed, overstatement of benefits, and an all-out “vaccinate everyone” pressure campaign, including mandates, that undermined informed consent.

Conclusion: Limit Government Emergency Powers and Earn Back Public Trust

One result of the government’s error-ridden COVID response was that Americans have justifiably lost faith in public health institutions. Lockdowns, school closures, and mandates were catastrophic errors, pushed with remarkable fervor by public health authorities at all levels.

We recommend that Congress and the states define by law “public health emergency” with strict limitations on powers conferred to the executives and time limits that require legislation to extend. Additionally, term limits should be established for all senior health agency positions.

Grantmaking should be independent of policy-making and public communication, and NIH funding itself should be decentralized or block-granted to the states.

Congress should require full transparency of all Food and Drug Administration (FDA), CDC, and NIH discussions with immediate posting to public forums. In addition, statements from all advisors in those meetings should be made widely visible to the public.

It should be definitively restated that CDC guidance is strictly advisory and the CDC does not have power to set laws or mandates.

The U.S. should halt all binding agreements with the World Health Organization until satisfactory transparency and accountability is achieved.

Unless and until key institutions openly acknowledge that lockdowns, school closures, and mask/vaccine mandates were catastrophic errors that will not be repeated in the future, the American people will – and should – withhold their trust.

Lesson #1: Leaders Should Calm Public Fears, Not Stoke Them

SARS-CoV2 was a dangerous virus, but a calm, proportionate response would have applied the lessons from past influenza pandemics and used existing pandemic response plans. Instead, from the moment the virus was detected in America, the public health community and politicians spread an outsized message of fear and doom.

Conventional wisdom pre-COVID was best summarized in a 2006 paper co-authored by the legendary Johns Hopkins professor of public health D.A. Henderson, who led the global campaign for smallpox eradication:

“An overriding principle. Experience has shown that communities faced with epidemics or other adverse events respond best and with the least anxiety when the normal social functioning of the community is least disrupted. Strong political and public health leadership to provide reassurance and to ensure that needed medical care services are provided are critical elements. If either is seen to be less than optimal, a manageable epidemic could move toward catastrophe.”¹

During COVID, the U.S. and most other countries followed for the most part the precisely opposite principle: Rather than calm fears, public health authorities, political leaders, and media stoked and amplified fear out of all proportion. This fundamental misstep set the stage for other substantial errors. It overlaid enormous economic, social, educational, and health (including substantial non-COVID excess mortality) harms on top of the virus itself, which nonetheless worked its way through substantially all of the population.

Francis Collins, the director of the National Institutes of Health until his 2023 retirement, acknowledged this stunning failure in a surprisingly frank statement:

*“As a guy living inside the Beltway, feeling a sense of crisis, trying to decide what to do in some situation room in the White House... weren't really considering the consequences in communities that were not New York City or some other big city... If you're a public health person and you're trying to make a decision, you have this very narrow view of what the right decision is, and that is something that will save a life. It doesn't matter what else happens. So you attach infinite value to stopping the disease and saving a life. **You attach a zero value to whether this actually totally disrupts people's lives, ruins the economy, and has many kids kept out of school in a way that they never quite recovered...** This is a public health mindset. And I think a lot of us involved in trying to make those recommendations had that mindset, and that was really unfortunate. It's another mistake we made. Okay.”²*

Collins had been warned early – but he and the rest of the key public health leaders ignored the warnings. In March 2020 three nationally visible publications called for “targeted protection:” Ioannidis in *Stat*³, Atlas in

- 1 Inglesby, T., Nuzzo, J., O’Toole, T., & Henderson, D. A. (2006). Disease Mitigation Measures in the Control of Pandemic Influenza. *Biosecurity and Bioterrorism*, 4(4). <https://doi.org/10.1089/bsp.2006.4.366>
- 2 Braver Angels. (2023, July 10). A Deplorable and an Elitist Walk into a Bar: Francis Collins and Wilk Wilkinson [Video]. YouTube. <https://youtu.be/W1eAvh1sWiw?si=9aHC4JmKFFlJlXnC>
- 3 Ioannidis, J. P. A. (2020, March 17). A fiasco in the making? As the coronavirus pandemic takes hold, we are making decisions without reliable data. *Stat News*. <https://www.statnews.com/2020/03/17/a-fiasco-in-the-making-as-the-coronavirus-pandemic-takes-hold-we-are-making-decisions-without-reliable-data/>

*Washington Times*⁴, and Katz in the *New York Times*.⁵ In testimony to the Senate on May 6, 2020, Ioannidis, Atlas, and Katz independently in the same session testified that intentional societal disruption via lockdown was both scientifically wrong and destructive.⁶

The results were tragic. Casey Mulligan and Rob Arnott examined two years of death certificates and found a second man-made pandemic imposed on top of COVID by the “panic” response:

“It should be no surprise that a widespread disruption to patient circumstances would degrade health and even elevate mortality from chronic conditions... During the pandemic, elective procedures were canceled, including colonoscopies and lung cancer CT screenings, and many other procedures, which have saved countless lives through early detection...

“From April 2020 through the end of 2021, Americans died from non-Covid causes at an average annual rate of 97,000 in excess of previous trends for a cumulative total of 52 per 100,000 population through the end of 2021. Presumably excess mortality continues into calendar year 2022.

Summing our estimates across causes and age groups, we estimate 171,000 excess non-Covid deaths through the end of 2021.”⁷

Mulligan and Arnott note that Sweden, which followed traditional pandemic response principles with a focus on maintaining calm and a normally functioning society and health care system, experienced no non-COVID excess death.

Indeed, Sweden, which rejected lockdowns, experienced cumulative excess mortality during the pandemic period that according to some calculations was among the lowest in the world:

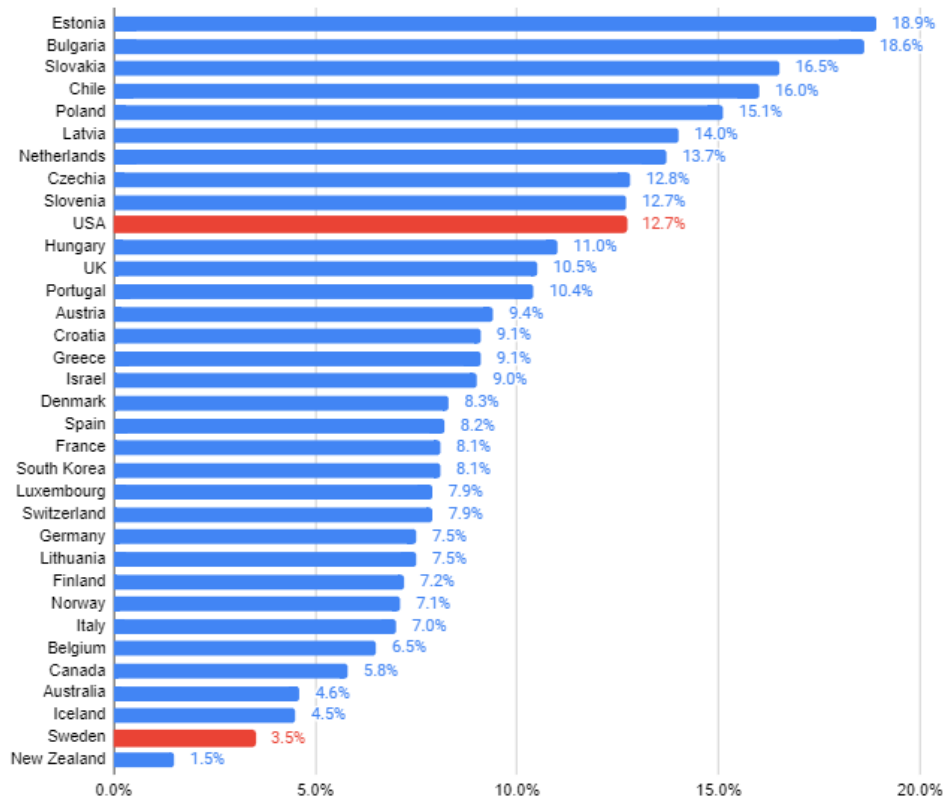
4 Atlas, S. W. (2020, March 26). Widespread isolation and stopping all human interaction will not contain the COVID-19 pandemic. *The Washington Times*. <https://www.washingtontimes.com/news/2020/mar/26/widespread-isolation-and-stopping-all-human-intera/>

5 Katz, D. L. (2020, March 20). Is Our Fight Against Coronavirus Worse Than the Disease? *New York Times*. <https://www.nytimes.com/2020/03/20/opinion/coronavirus-pandemic-social-distancing.html>

6 Senate Committee on Homeland Security and Government Affairs. (2020, May 6). COVID-19: How New Information Should Drive Policy. <https://www.hsgac.senate.gov/hearings/covid-19-how-new-information-should-drive-policy/>

7 Mulligan, C., & Arnott, R. (2022). The Young were not Spared: What Death Certificates Reveal about Non-Covid Excess Deaths. *INQUIRY: The Journal of Health Care Organization, Provision, and Financing*. <https://doi.org/10.1177/00469580221139016>

Cumulative Excess Death Between January 2020 and July 2023 in the 34 Countries with the Best Data



Source: Ioannidis, J. P. A., Zonta, F., & Levitt, M. (2023). Variability in excess deaths across countries with different vulnerability during 2020–2023. *Proceedings of the National Academy of Sciences of the United States of America*, 120(49). <https://doi.org/10.1073/pnas.2309557120>

Ioannidis, Zonta, and Levitt note: “The United States of America would have had 1.60 million fewer deaths if it had the performance of Sweden, 1.07 million fewer deaths if it had the performance of Finland, and 0.91 million fewer deaths if it had the performance of France.”⁸

Jonung and Hanke found that Sweden’s exceptionalism rests on both its formal written constitution and the high degree of trust infused in the country’s customs and habits. The Swedish constitution (the Regeringsform of 1634), insulates Sweden’s public institutions from political meddling to a much greater degree than most other democracies. Furthermore, the Regeringsform protects Swedes against the deprivations of personal liberty and guarantees their freedom of movement within the realm.⁹

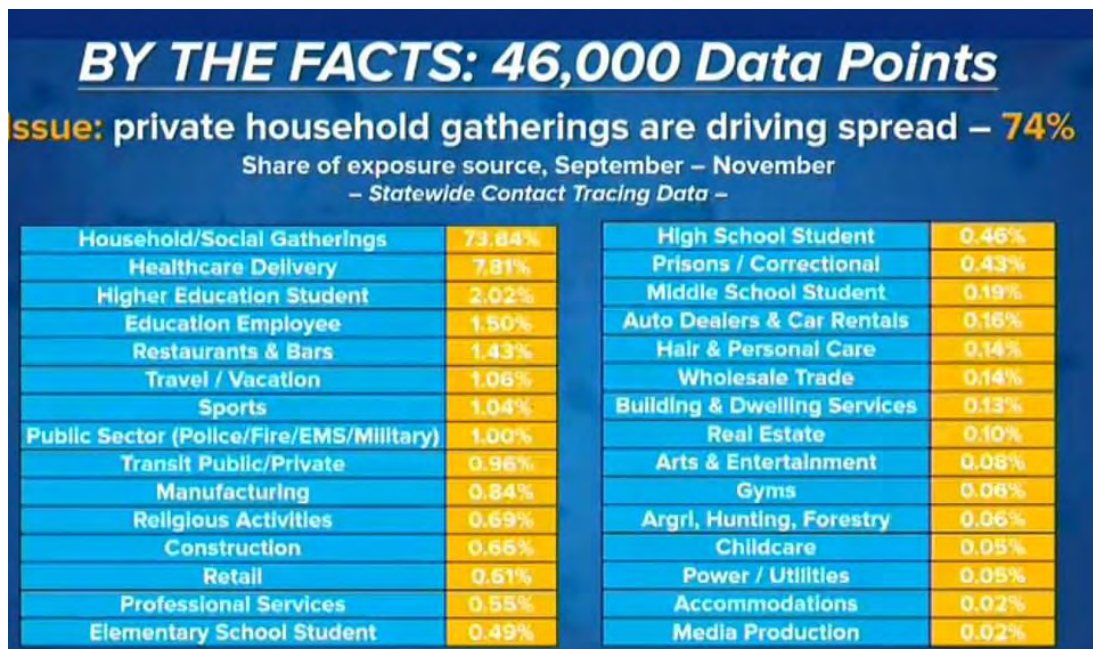
8 Ioannidis, J. P. A., Zonta, F., & Levitt, M. (2023). Variability in excess deaths across countries with different vulnerability during 2020–2023. *Proceedings of the National Academy of Sciences of the United States of America*, 120(49). <https://doi.org/10.1073/pnas.2309557120>

9 Jonung, L., & Hanke, S. H. (2020). Freedom and Sweden’s Constitution. *The Wall Street Journal*. <https://www.wsj.com/articles/freedom-and-swedens-constitution-11589993183>

Lesson #2: Lockdowns Do Not Work to Substantially Reduce Deaths or Stop Viral Circulation

The wholesale suspension of fundamental civil and human rights – to move freely, to engage in commerce, recreation, worship, etc. – was unthinkable in the United States prior to COVID, and with good reason. We should have known that suspension of rights, which has commonly become known as “lockdowns,” would be ineffective, because infectious disease response is no exception to the usual rule that freedom produces better outcomes than central planning. Businesses have strong incentives and efficiencies to reduce transmission that people cannot replicate in their own homes.¹⁰

Ironically, Governor Andrew Cuomo showed this slide indicating that 74 percent of transmission in New York was in private homes – two minutes before ordering a second closure of New York restaurants.¹¹



Source: Daily Mail. (2020, December 11). ‘The final nail in the coffin for NYC restaurants’: Indoor dining will STOP on Monday despite it causing less than 1.34% of new COVID cases. <https://www.dailymail.co.uk/news/article-9044211/Indoor-dining-New-York-City-STOP-Monday.html>

10 Mulligan, C. B. (2021). The Backward Art of Slowing the Spread? Congregation Efficiencies during COVID-19. University of Chicago, Becker Friedman Institute for Economics Working Paper No. 2021-51. <https://ssrn.com/abstract=3832326> or <http://dx.doi.org/10.2139/ssrn.3832326>

11 Daily Mail. (2020, December 11). ‘The final nail in the coffin for NYC restaurants’: Indoor dining will STOP on Monday despite it causing less than 1.34% of new COVID cases. <https://www.dailymail.co.uk/news/article-9044211/Indoor-dining-New-York-City-STOP-Monday.html>

Moreover, most lockdown measures came around the time when hospitalizations peaked, which due to the time-lag between infection and severe disease, necessarily occurs well after the infective peak. They were timed to claim credit for declining waves, but rarely had any discernible causal impact.

A comprehensive literature review and meta-analysis was conducted by Herby, Jonung, and Hanke and published in an authoritative, peer-reviewed book by the Institute of Economic Affairs in London. The Herby-Jonung-Hanke Johns Hopkins research found that:

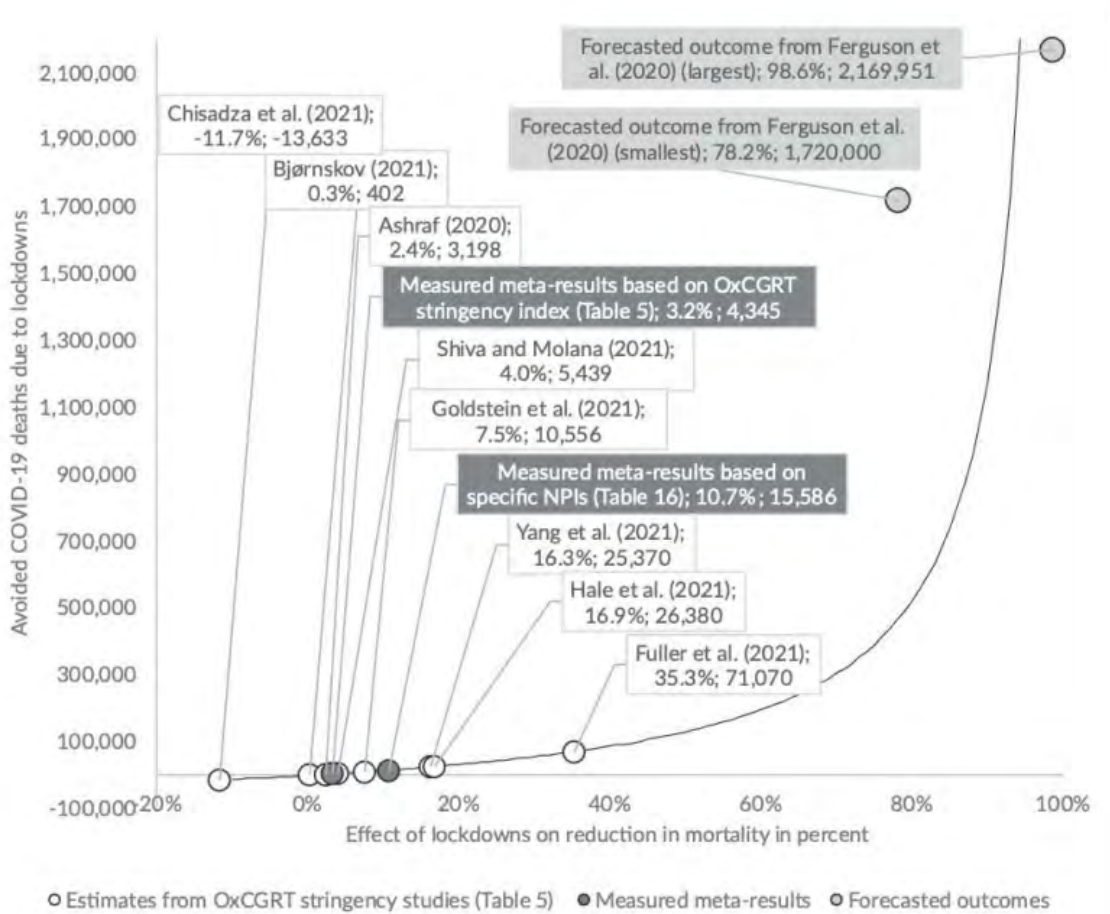
Stringency index studies find that the average lockdown in Europe and the United States in the spring of 2020 only reduced COVID-19 mortality by 3.2 per cent. This translates into approximately 6,000 avoided deaths in Europe and 4,000 in the United States. SIPOs [shelter-in-place orders] were also relatively ineffective in the spring of 2020, only reducing COVID-19 mortality by 2.0 per cent. This translates into approximately 4,000 avoided deaths in Europe and 3,000 in the United States. Based on specific NPIs [non-pharmaceutical interventions], we estimate that the average lockdown in Europe and the United States in the spring of 2020 reduced COVID-19 mortality by 10.7 per cent. This translates into approximately 23,000 avoided deaths in Europe and 16,000 in the United States. In comparison, there are approximately 72,000 flu deaths in Europe and 38,000 flu deaths in the United States each year. When checked for potential biases, our results are robust. Our results are also supported by the natural experiments we have been able to identify. The results of our meta-analysis support the conclusion that lockdowns in the spring of 2020 had a negligible effect on COVID-19 mortality. This result is consistent with the view that voluntary changes in behaviour, such as social distancing, did play an important role in mitigating the pandemic.¹²

Figure 10 from the Herby-Jonung-Hanke book presents the effect of lockdowns on mortality in the United States based on the measured estimates from all stringency studies included in the Herby-Jonung-Hanke meta-analysis as well as Herby-Jonung-Hanke's two central measured estimates for the effect of lockdowns in the spring of 2020 (the precision-weighted average from the stringency studies and the estimate based on specific NPIs). In addition, and importantly, Herby, Jonung, and Hanke have included the maximum and minimum forecasted estimates from the epidemiological modeling exercises conducted by Ferguson et al. at Imperial College London (ICL). Even if the most extreme empirical estimate of the effects of lockdowns on mortality is picked, the measured effect of lockdowns is orders of magnitude less than those generated by ICL and their epidemiological modeling exercises.¹³

12 Herby, J., Jonung, L., & Hanke, S. H. (2023, June). Did Lockdowns Work? The verdict on Covid restrictions. IEA Perspectives 1. https://iea.org.uk/wp-content/uploads/2023/06/Perspectives-_1_Did-lockdowns-work__June_web.pdf

13 Ibid.

Divergence between avoided number of deaths in the United States as measured by the meta-results, studies based on the OxCGRT stringency index, and the forecasted outcome from Imperial College London



Source: Herby, J., Jonung, L., & Hanke, S. H. (2023, June). Did Lockdowns Work? The verdict on Covid restrictions. IEA Perspectives 1. https://iea.org.uk/wp-content/uploads/2023/06/Perspectives-1_Did-lockdowns-work__June_web.pdf

The importance of the fatality estimates generated by the ICL's epidemiological models can't be overstated. It was those estimates of between 1.7 and 2.2 million deaths in the United States that sent officialdom into a state of panic. It is also worth noting that the ICL's flawed epidemiological models have a long track record of generating hair-raising predictions of disaster that have missed the mark, set off panic, and motivated officialdom to implement a variety of ill-conceived lockdown policies.

That dreadful record started with the U.K. foot-and-mouth disease epidemic in 2001, during which the ICL modelers persuaded the government to adopt a policy of mass animal slaughter. Their model predicted that daily case incidences would peak at about 420. At the time, the number of incidences had already peaked at just over 50 and was falling. The prediction missed its mark, and as many as 10 million animals, most of which could have been vaccinated, were needlessly killed.

Shortly thereafter, in January 2002, the ICL's epidemiological models suggested that up to 150,000 people in the U.K. could die from mad cow disease. As it turned out, the total number of U.K. deaths was 178 – another miss for the ICL team.

Then, in 2005, ICL's Ferguson suggested that “up to around 200 million” could die from bird flu globally. He justified this claim by comparing the lethality of bird flu to that of the 1918 Spanish flu outbreak, which killed 40 million. By 2021, bird flu had killed 456 people worldwide, making it ICL's biggest miss yet.

The ICL team was back at it again in 2009 when they claimed that 65,000 people could die of swine flu in the U.K. By the end of March 2010, the outbreak had killed fewer than 500 people before petering out – yet another big miss.¹⁴

The computer models that scared most of the world into lockdown were wildly wrong by any reasonable measure, but lockdowns were one of the principal causes of the panic and fear that drove non-COVID health harms, as well as imposing massive economic and social harms. It's clear that in future planning and reactions to the onset of pandemics, policymakers should view epidemiological models with a great deal of skepticism. In the past, these models have been nothing more than fear machines that generate alarming fantasy numbers.

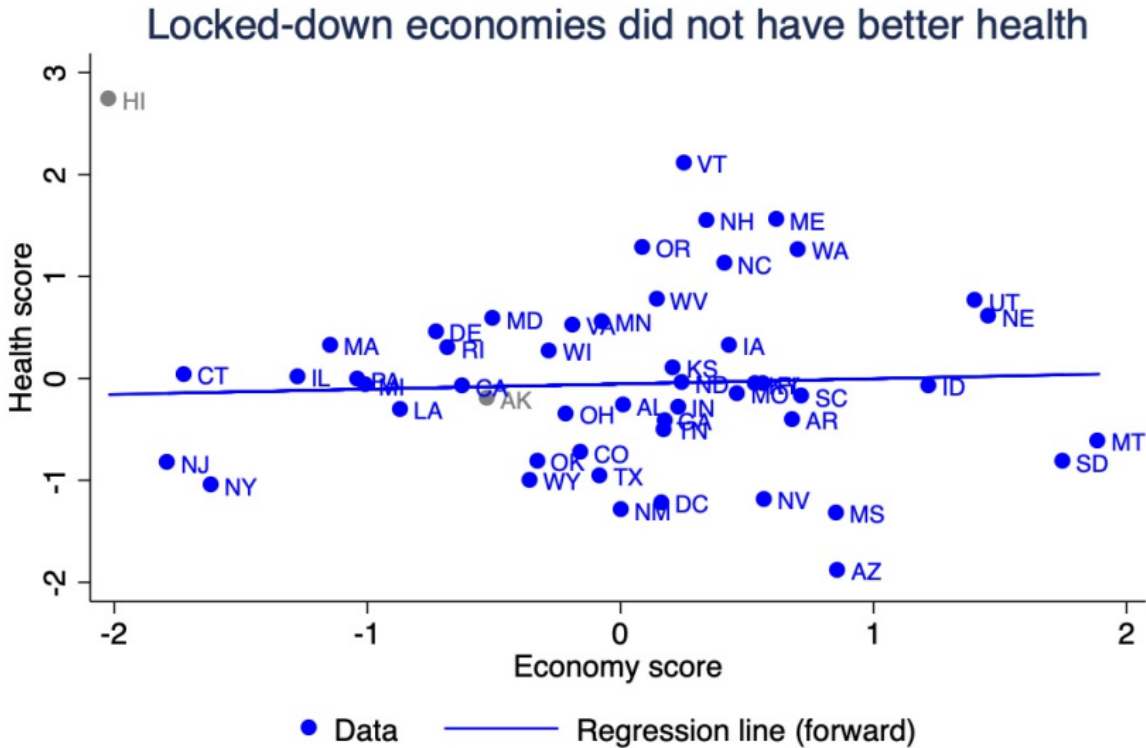
In the US context specifically, Committee To Unleash Prosperity analysis of state economic and health performance during the pandemic analysis found no correlation between withdrawing from economic activity and mortality, indicating lockdowns were all pain and no gain.¹⁵

14 Hanke, S. H., & Dowd, K. (2022). Imperial College's Fear Machine. *National Review*. <https://www.wsj.com/articles/free-dom-and-swedens-constitution-11589993183>

15 Kerpen, P., Moore, S., & Mulligan, C. (2022, April). A Final Report Card on the States' Response to COVID-19. National Bureau of Economic Research Working Paper Series No. 29928. <https://doi.org/10.3386/w29928>

The Relationship Between Mortality, Education, and Economy Scores

Excluding the geographically unusual cases of Hawaii and Alaska to focus on the continental U.S., there is no apparent relationship between reduced economic activity during the pandemic and our composite mortality measure.



Notes: The correlation without AK and HI is 0.05. The regression line is estimated for the continental U.S. Greater health (economy) scores mean less mortality (more economic growth), respectively.

Source: Kerpen, P., Moore, S., & Mulligan, C. (2022, April). A Final Report Card on the States' Response to COVID-19. National Bureau of Economic Research Working Paper Series No. 29928. <https://doi.org/10.3386/w29928>

It's noteworthy that one of the most prominent US lockdown advocates has admitted error. University of Minnesota epidemiology professor Michael Osterholm, who in November 2020 recommended a hard national lockdown¹⁶ concluded in October 2023: "There is actually no role for lockdowns."¹⁷

The UK COVID Inquiry recently concluded lockdowns worked by suppressing the best available evidence. The Inquiry refused to include the Herby-Jonung-Hanke book despite it being an authoritative assessment of

16 Feuer, W. (2020, November 14). Biden Covid advisor says U.S. lockdown of 4 to 6 weeks could control pandemic and revive economy. CNBC. <https://www.cnbc.com/2020/11/11/biden-covid-advisor-says-us-lockdown-of-4-to-6-weeks-could-control-pandemic-and-revive-economy.html>

17 Nocera, J., & McLean, B. (2023, October 30). COVID lockdowns were a giant experiment. It was a failure. New York Magazine. <https://nymag.com/intelligencer/article/covid-lockdowns-big-fail-joe-nocera-bethany-mclean-book-excerpt.html>

lockdown effectiveness. U.K. COVID Inquiry Secretary Ben Connah asserted that Thomas Hale covered the material in the book.¹⁸ Hale, however, includes studies that do not answer the question about the effectiveness of lockdowns, confuses statistical significance with significance in size (As seen in Herby-Jonung-Hanke's Figure 10, his own study only finds that lockdowns avoided approximately 26,000 deaths during the first wave), and does not refer to or engage the findings of Herby-Jonung-Hanke. Only by excluding the best available evidence did the U.K. COVID Inquiry reach the incorrect conclusion that lockdowns were effective and that the only mistake was that lockdowns should have been imposed earlier than they were.











A much wiser strategy than issuing lockdown orders would have been to tell the American people the truth, stick to the facts, educate citizens about the balance of risks, and let individuals make their own decisions about whether to keep their businesses open, whether to socially isolate, attend church, send their children to school, and so on.

18 Connah, B. (2024, January 16). Letter from Ben Connah, UK Covid Inquiry Secretary, to Steve Baker MP, Member of Parliament for Wycombe, House of Commons.

Lesson #3: Lockdowns and Social Isolation Had Negative Consequences that Far Outweighed Benefits

As explained in Lesson #1, the lockdown/panic response overlaid a human-induced pandemic on top of the viral pandemic, causing hundreds of thousands of additional deaths. It also caused vast economic and social harms. The catastrophic economic damage was confirmed by no less than the International Monetary Fund’s deputy managing director and Harvard professor Gita Gopinath, who said, “... the Great Lockdown [was] the worst recession since the Great Depression, and far worse than the Global Financial Crisis.”¹⁹

A comprehensive and authoritative framework for analyzing lockdown harms was developed by Kevin Bardosh of the group Collateral Global, a group that was created to address this question.²⁰

THE SOCIETAL HARMS OF THE COVID-19 PANDEMIC RESPONSE				
Health  Medical services Care seeking Morbidity Mental health Excess mortality	Economy  Growth Trade Business Inflation Supply chains Government debt	Income  Labor Inequality Earnings Remittances Extreme poverty	Education  Learning loss Dropouts Lost potential	Food security  Hunger Food systems Nutrition
Lifestyle  Physical exercise Sleep Screen use Diet Addiction Drug use Obesity Frailty Personality Child Development	Relationships  Child abuse Violence Family Fertility Sex	Community  Social network Stigma Mobility Crime & law Trust Mass protests Media Elections	Environment  Pollution Wildlife Ecosystems Plastic waste	Governance  Armed conflict Democracy Freedom Human rights Institutions

Source: Bardosh, K. (2023, May 14). How Did the COVID Pandemic Response Harm Society? A Global Evaluation and State of Knowledge Review (2020-21). <https://ssrn.com/abstract=4447806> or <http://dx.doi.org/10.2139/ssrn.4447806>

19 Gopinath, G. (2020, April 14). The Great Lockdown: Worst Economic Downturn Since The Great Depression. IMF Blog. <https://www.imf.org/en/Blogs/Articles/2020/04/14/blog-weo-the-great-lockdown-worst-economic-downturn-since-the-great-depression>

20 Bardosh, K. (2023, May 14). How Did the COVID Pandemic Response Harm Society? A Global Evaluation and State of Knowledge Review (2020-21). <https://ssrn.com/abstract=4447806> or <http://dx.doi.org/10.2139/ssrn.4447806>

He found studies quantifying some of these harms:

- In North America, non-COVID deaths accounted for about 20% of excess mortality, rising to 70% for people less than 45 years old.
- In low- and middle-income countries, non-COVID child deaths rose sharply, with an estimated 113,962 excess deaths under age 5, compared to 4,480 deaths with COVID in the same age group.
- A 61-country study found that “15% of patients in regions with full lockdowns did not receive elective cancer surgery.”
- Multiple studies found skyrocketing rates of anxiety and depression.
- According to the World Bank, “Mobility restrictions, lockdowns, and other public health measures... produced the largest global economic crisis in more than a century.”
- Government fiscal stimulus dramatically increased public debt and unleashed inflation, lowering living standards.

Bardosh concludes:

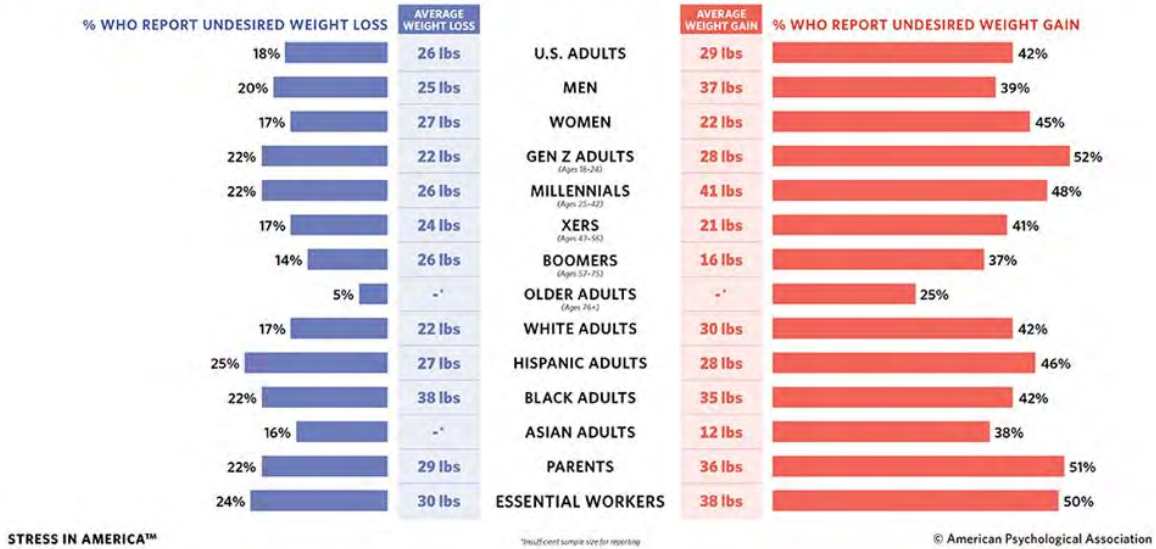
“The promotion of lengthy social distancing restrictions by governments and scientific experts during the Covid crisis had severe consequences for hundreds of millions of people. Many original predictions are broadly supported by the cumulative research data presented above: a rise in non-Covid excess mortality, mental health deterioration, child abuse and domestic violence, widening global inequality, large increases in debt, food insecurity, lost educational opportunities, unhealthy lifestyle behaviours, increased loneliness and social polarization, democratic backsliding and human rights violations... The pandemic response leaves behind a legacy of poverty, mental health illness, learning loss, debt, food insecurity, social polarization, erosion of respect for human rights and elevated excess mortality for non-Covid health conditions. These consequences are unequally distributed: the younger generation, individuals and countries with lower socioeconomic status, women and those with pre-existing vulnerabilities were hit hardest and will bear the brunt of future consequences.”

One of the starkest health harms from lockdowns was the rise in obesity. Even college-aged children now face an obesity crisis – more than half reported an unwanted weight gain during the 2020 lockdowns, and it averaged 28 pounds, according to the American Psychological Association.²¹

21 American Psychological Association. (2021). 2021 Stress in America Graphs. <https://www.apa.org/news/press/releases/stress/2021/infographics-march>

PANDEMIC SURVEY

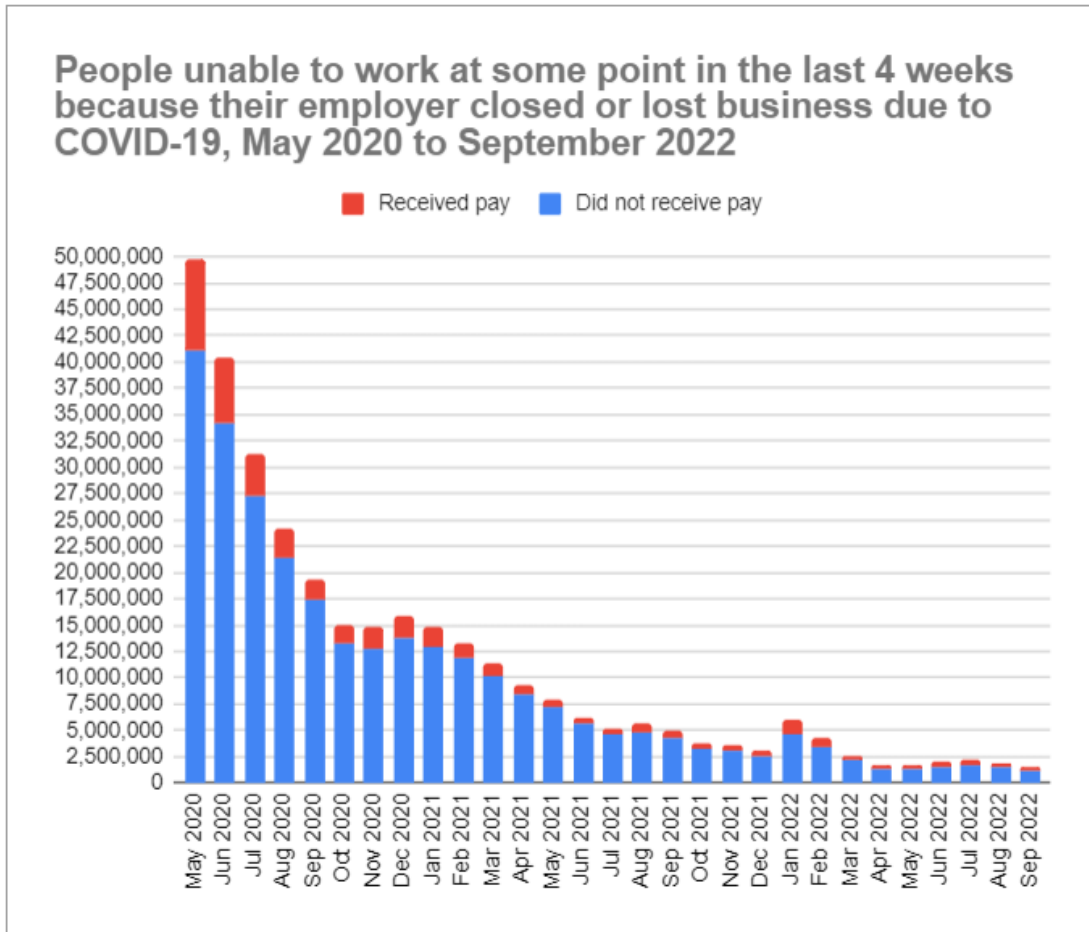
Slightly More Than 6 in 10 U.S. Adults (61%) Report Undesired Weight Change Since Start of Pandemic



Source: American Psychological Association. (2021). 2021 Stress in America Graphs. <https://www.apa.org/news/press/releases/stress/2021/infographics-march>

The employment impact in the United States was staggering, with lockdowns putting over 49 million Americans out of work according to BLS survey data, and over two million remaining out of work due to COVID closures as recently as July 2022.²²

22 U.S. Bureau of Labor Statistics. (2024, January 17) May 2020 to September 2022 supplemental data tables. <https://www.bls.gov/cps/covid-may2020-sept2022-data-tables.htm>



Source: U.S. Bureau of Labor Statistics. (2024, January 17) May 2020 to September 2022 supplemental data tables. <https://www.bls.gov/cps/covid-may2020-sept2022-data-tables.htm>

This enormous unemployment shock has health as well as economic consequences. An NBER study found that the lockdown unemployment shock is projected to result in 840,000 to 1.22 million excess deaths over the next 15 to 20 years, disproportionately killing women and minorities.²³

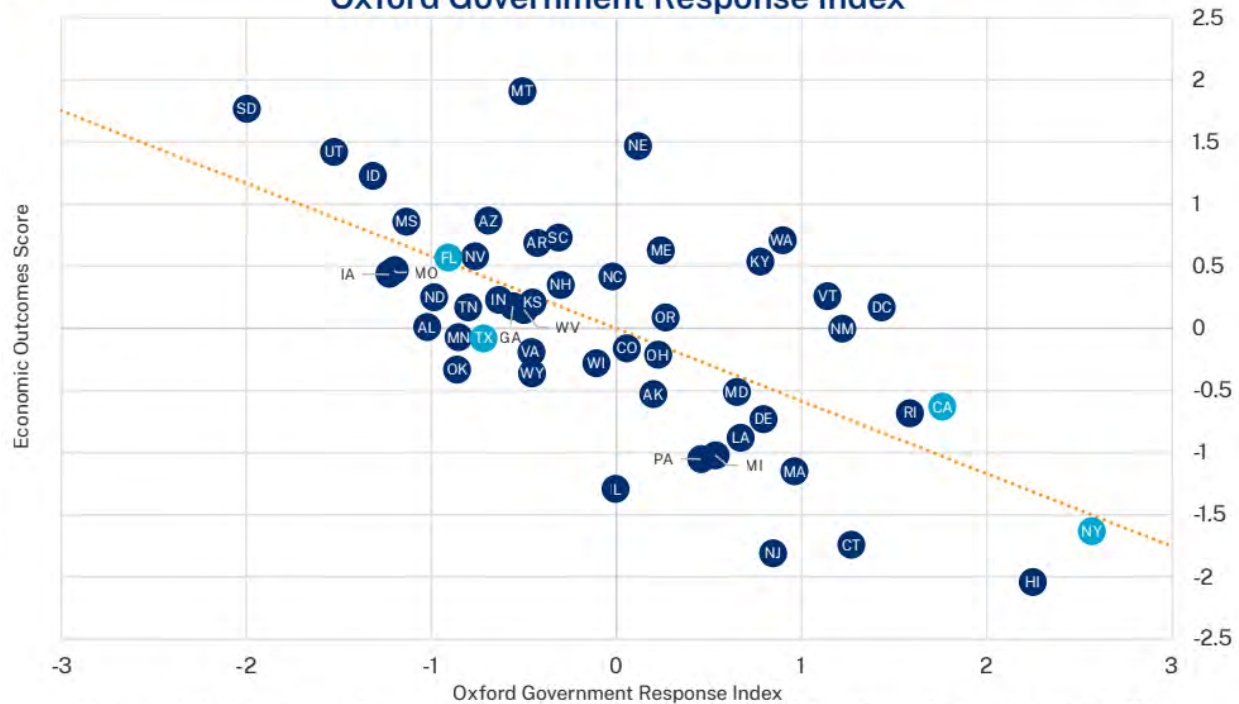
While there is no quantifiable relationship between lockdown severity and a reduction in COVID health harms as demonstrated in Lesson #2, states with more severe lockdowns suffered significantly worse economic outcomes according to an analysis by the Paragon Institute:²⁴

23 Bianchi, F., Bianchi, G., & Song, D. (2021, September). The Long-Term impact of the COVID-19 unemployment shock on life expectancy and mortality rates. <https://doi.org/10.3386/w28304>

24 Zinberg, J. M., M. D. , J. D., Blase, B. C., PhD, Sun, E., Mulligan, C. B., PhD, & Paragon Health Institute. (2023). Freedom Wins: States with Less Restrictive COVID Policies Outperformed States with More Restrictive COVID Policies. Paragon Health Institute. <https://paragoninstitute.org/wp-content/uploads/2023/02/freedom-wins-policy-paper.pdf>



Economic Outcomes Score vs. Oxford Government Response Index



Sources: Oxford Government Response Index; Kerpen, Moore, and Mulligan, "A Final Report Card on the States," IJEB.

Each dot represents a state's z-scores (standard deviations above or below the mean) for the Oxford Government Response Index (x-axis) and the economic outcomes score (y-axis). The line of best fit is also shown.

Source: Zinberg, J. M., M. D., J. D., Blase, B. C., PhD, Sun, E., Mulligan, C. B., PhD, & Paragon Health Institute. (2023). *Freedom Wins: States with Less Restrictive COVID Policies Outperformed States with More Restrictive COVID Policies*. Paragon Health Institute. <https://paragoninstitute.org/wp-content/uploads/2023/02/freedom-wins-policy-paper.pdf>

In closing Lesson #3, it is worth noting that Jonung and Andersson compared the health and economic outcomes in Sweden, commonly viewed as an outlier relying more on recommendations and voluntary adjustments than on strict lockdowns, to the United States and comparable European OECD countries. They found that the Swedish policy of advice and trust in the population to reduce social interactions voluntarily was relatively successful. Sweden combined low excess death rates with relatively small economic costs. In future pandemics, policymakers should rely on empirical evidence rather than panicking and adopting extreme measures.²⁵

25 Andersson, F. N. G. & L. Jonung. (2024, February). The Covid-19 lesson from Sweden: Don't lock down. *Economic Affairs*. <https://doi.org/10.1111/ecaf.12611>

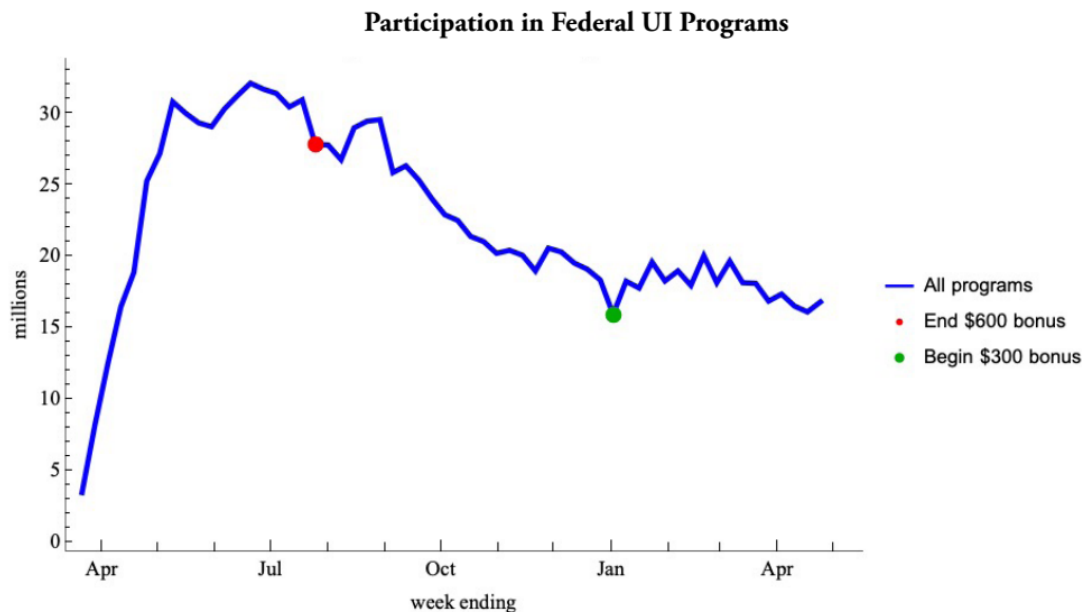
Lesson #4: Government Should Not Pay People More Not to Work

The COVID-era was the largest natural experiment in American history in what happens when the government pays people a substantial amount for not working.

Congress authorized \$600 per week unemployment bonuses early in the pandemic, despite warnings that the consequences would be substantial, prolonged unemployment and associated economic underperformance.²⁶

The previous largest federal unemployment bonus – enacted by President Obama and a Democratic Congress during the Great Recession – was just \$25.

As expected, large federal bonuses that made unemployment pay more than work indeed resulted in elevated unemployment rates, which plunged rapidly when the original \$600 bonus ended, before stalling when a \$300 bonus took effect.²⁷ After all, economics is all about incentives.



Note: Participation is measured according to weeks claimed, which may reflect batch retroactive claims.

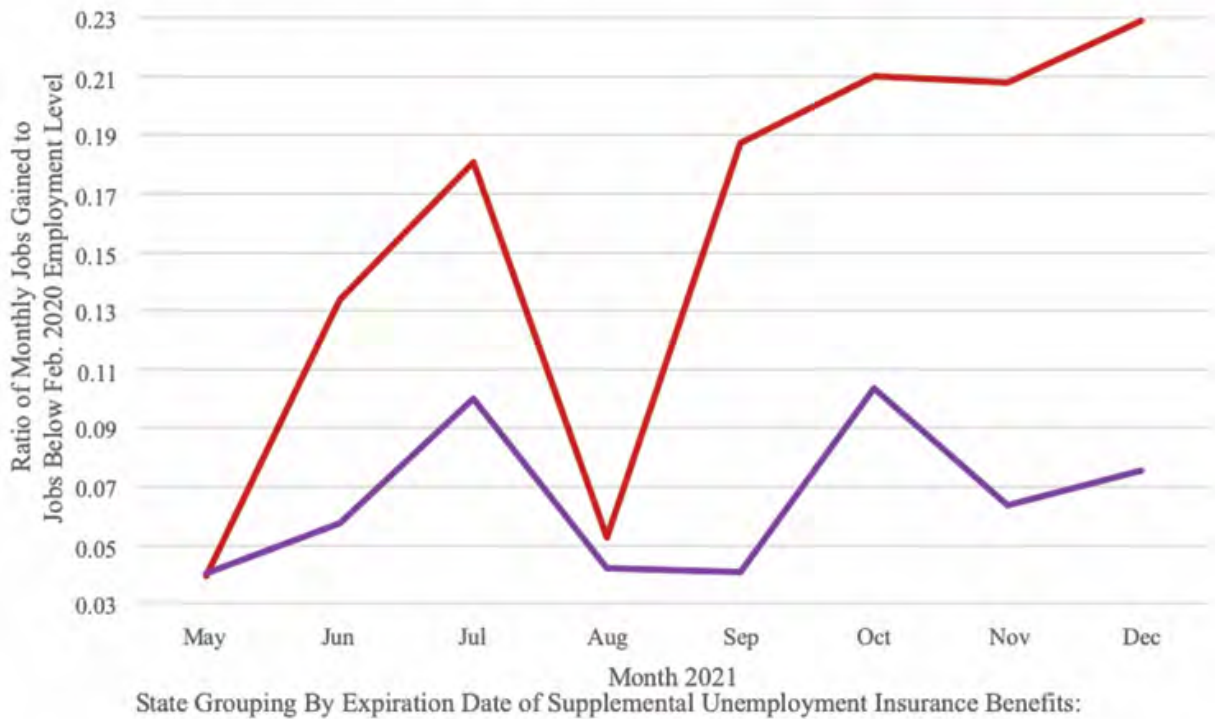
Source: Mulligan, C., Moore, S., & Antoni, E. J. (2021, June). *Bonus Unemployment Benefits Are Causing Major Labor Shortage in America*. Committee to Unleash Prosperity. https://committeetounleashprosperity.com/wp-content/uploads/2021/06/CTUP_BonusUnemploymentBenefitsLaborShortage.pdf

26 Moore, S., & Kerpen, P. (2020, March 31). The \$2 trillion relief package makes unemployment pay more than work. The Hill. <https://thehill.com/opinion/finance/490476-the-2-trillion-relief-package-makes-unemployment-pay-more-than-work/>

27 Mulligan, C., Moore, S., & Antoni, E. J. (2021, June). *Bonus Unemployment Benefits Are Causing Major Labor Shortage in America*. Committee to Unleash Prosperity. https://committeetounleashprosperity.com/wp-content/uploads/2021/06/CTUP_BonusUnemploymentBenefitsLaborShortage.pdf

Some states – like Florida and Texas - ended bonus unemployment benefits far earlier than others – like New York and California. The states that cut off these extra benefits earlier had a much faster return-to-work effect. Their economies recovered much faster than those with high and prolonged benefits. Some high benefit states didn't fully recover all the lost employment for three years after the lockdowns and bonus benefits began.²⁸

States Terminating Supplemental Benefits Recovered Faster



Source: Antoni, E.J. (2022, February). *Paid Not To Work: How Supplemental Unemployment Insurance Benefits Decreased Employment From 2020 To 2021*. Texas Public Policy Foundation. <https://www.texaspolicy.com/wp-content/uploads/2022/02/PaidNottoWork-02-22-Antoni.pdf>

All of these payments for not working may have hurt the very people they were designed to benefit.

According to the Urban Institute: “The long-term unemployed tend to earn less once they find new jobs. They tend to be in poorer health and have children with worse academic performance than similar workers who

28 Antoni, E.J. (2022, February). *Paid Not To Work: How Supplemental Unemployment Insurance Benefits Decreased Employment From 2020 To 2021*. Texas Public Policy Foundation. <https://www.texaspolicy.com/wp-content/uploads/2022/02/PaidNottoWork-02-22-Antoni.pdf>

avoided unemployment. Communities with a higher share of long-term unemployed workers also tend to have higher rates of crime and violence.”²⁹

We need a safety net for those who lose their jobs. But it should never be the policy of the US government to lavishly subsidize unemployment and make non-work pay better than work.

29 Nichols, A., Mitchell, J., & Lindner, S. (2013, August 20). Consequences of Long-Term Unemployment. Urban Institute. <https://www.urban.org/research/publication/consequences-long-term-unemployment>

Lesson #5: Shutting Down Schools Was a Major Policy Mistake With Tragic Effects on Children, Especially the Poor

Healthy children do not have significant risk of serious illness or death from this virus, and that has been known with certainty since spring 2020. People under 20 years of age have a 99.997% chance of survival.³⁰

Studies from early 2020 through today in Iceland³¹, Norway, Sweden³², Finland, Spain, the Netherlands³³, Ireland, Switzerland³⁴, France³⁵, Australia³⁶, Germany, Greece, South Korea³⁷, and the UK³⁸, almost all coronavirus transmission to children comes from adults, not the other way around.

Opened schools and childcare centers did not show significant dangers to children, adults or teachers, a profession with half its members younger than 41 and 82 percent under 55.³⁹ These facts were shown in spring

- 30 Centers for Disease Control and Prevention. (n.d.). COVID-19 Pandemic Planning Scenarios. Retrieved from <https://www.cdc.gov/coronavirus/2019-ncov/hcp/planning-scenarios.html>
- 31 Science Museum Group. (2020, April 27). Hunting down COVID-19. Retrieved from <https://www.sciencemuseumgroup.org.uk/blog/hunting-down-covid-19/>
- 32 Folkhälsomyndigheten. (2020). COVID-19 in school-aged children. Retrieved from <https://www.folkhalsomyndigheten.se/contentassets/c1b78bffbde4a7899eb0d8ffdb57b09/covid-19-school-aged-children.pdf>
- 33 RIVM. (2020). Children and COVID-19. Retrieved from <https://www.rivm.nl/en/coronavirus-covid-19/children-and-covid-19>
- 34 Eurosurveillance. (2020). COVID-19 in children and the role of school settings in transmission - first review. Retrieved from <https://www.eurosurveillance.org/content/10.2807/1560-7917.ES.2020.25.21.2000903>
- 34 RTS. (2020). En Suisse, 104 enfants de moins de 10 ans ont été testés positifs au Covid-19. Retrieved from <https://www.rts.ch/info/sciences-tech/medecine/11255942-en-suisse-104-enfants-de-moins-de-10-ans-ont-ete-testes-positifs-au-covid-19.html>
- 35 BFMTV. (2020, May 12). Peu porteurs, peu transmetteurs: une étude confirme le rôle minime des enfants dans l'épidémie de Covid-19. https://www.bfmtv.com/sante/peu-porteurs-peu-transmetteurs-une-etude-confirme-le-role-minime-des-enfants-dans-l-epidemie-de-covid-19_AV-202005120233.html
- 36 Australian Health Protection Principal Committee. (2020, April 24). Coronavirus (COVID-19) statements. <https://www.health.gov.au/news/australian-health-protection-principal-committee-ahppc-coronavirus-covid-19-statements-on-24-april-2020#updated-advice-regarding-schools>
- 37 Kerpen, P. (2020, July 22). New York Times-Hyped Korean Report Actually Shows Kids Are Not Spreading Coronavirus. <https://thefederalist.com/2020/07/22/new-york-times-hyped-korean-report-actually-shows-kids-are-not-spreading-coronavirus/>
- 38 Archives of Disease in Childhood. (2020). COVID-19: children and schools. <https://adc.bmj.com/content/105/7/618>
- 38 ScienceDaily. (2020, July 10). COVID-19 is not Influenza. <https://www.sciencedaily.com/releases/2020/07/200710100934.htm>
- 38 Education.org. (2021, January 25). One Year of School Disruption. <https://education.org/facts-and-insights#f09a6e46-8c5f-4d01-8297-d2a3f6c8f873>
- 38 American Academy of Pediatrics. (2021). COVID-19 Transmission in US Child Care Programs. <https://publications.aap.org/pediatrics/article/147/1/e2020031971/33500/COVID-19-Transmission-in-US-Child-Care-Programs>
- 39 National Center for Education Statistics. (n.d.). Number and percentage distribution of teachers in public and private elementary and secondary schools, by selected teacher characteristics: Selected years, 1987-88 through 2011-12. https://nces.ed.gov/surveys/sass/tables/sass1112_2013314_t1s_002.asp

2020 and verified in multiple studies, including from Brown University, Duke University, Norway, and many others.⁴⁰ Teachers who insisted they were at higher risk than other professions were either lying or simply did not know the facts.

These facts were plainly understood in the spring and summer of 2020, and were widely publicized by the authors of this report⁴¹ and other leading academics.⁴² Yet most schools remained closed for more than six months and some for almost two full school years.

By spring/summer 2020, almost all other industrialized nations had committed to opening schools for fall 2020. Yet teacher unions and some public health groups pressured authorities to extend school closures in the United States.⁴³ Shamefully, the American Academy of Pediatrics reversed its open school advocacy just three days after appearing at a Trump White House pro-schools forum – in a literal joint statement with the teachers unions that advocated extending school closures until a massive new federal aid package was passed.⁴⁴

The White House held another event on August 12, 2020 with assembled policy experts, teachers, parents, special needs families, and doctors calling for opening the schools.⁴⁵

School closures were in fact extended, especially in Democratically-controlled jurisdictions, into 2021 and then even further as a matter of intentional Biden administration policy.⁴⁶

- 40 The Atlantic. (2020, October 19). Schools Aren't Super-Spreaders. <https://www.theatlantic.com/ideas/archive/2020/10/schools-arent-superspreaders/616669/>
CIDRAP. (2021, January 19). Three studies highlight low COVID risk with in-person school. <https://www.cidrap.umn.edu/news-perspective/2021/01/three-studies-highlight-low-covid-risk-person-school>
Eurosurveillance. (2020). COVID-19 in children and the role of school settings in transmission - first review. <https://www.eurosurveillance.org/content/10.2807/1560-7917.ES.2020.26.1.2002011>
Biocomsc. (2020, October 2). Report 136: An analysis of school absences in England during the COVID-19 pandemic. https://biocomsc.upc.edu/en/shared/20201002_report_136.pdf
- 41 The Hill. (2020). Science says: Open the schools. <https://thehill.com/opinion/education/500349-science-says-open-the-schools/>
- 42 Kerpen, P. (2020, July). It's Not Safe to Keep Schools Closed. https://committeetounleashprosperity.com/wp-content/uploads/2020/10/CTUP_NotSafeToKeepSchoolsClosed_Study-1.pdf
- 43 EdWeek. (2020, December). How Teachers Unions Are Influencing Decisions on School Reopenings. <https://www.edweek.org/teaching-learning/how-teachers-unions-are-influencing-decisions-on-school-reopenings/2020/12>
EdWorkingPapers. (2020). The Impact of COVID-19 on Student Achievement and What It May Mean for Educators. <https://www.edworkingpapers.com/ai20-304>
- 44 American Academy of Pediatrics. (2020). Pediatricians, Educators and Superintendents Urge a Safe Return to School This Fall. <https://www.aap.org/en/news-room/news-releases/aap/2020/pediatricians-educators-and-superintendents-urge-a-safe-return-to-school-this-fall/>
- 45 C-SPAN. (2020, August 12). White House Event on Children Returning to School. <https://www.c-span.org/video/?474738-1/white-house-event-children-returning-school#>
- 46 Keene, H. (2023, September 6). Biden nixed goal of getting kids back to school post-COVID to avoid conflict with teachers' union boss: book. Fox News. <https://www.foxnews.com/politics/biden-nixed-goal-kids-going-back-school-post-covid-avoid-conflict-randi-weingarten-book>

From a nationwide analysis of insurance claims indicating visits for medical care, closing in-person schools during 2020, compared to the 2019 non-pandemic year, had the following impacts:⁴⁷

- Mental health care visits for teenagers and college-aged children skyrocketed;
- Self-harm visits (e.g., extinguishing cigarettes on skin, slashing wrists) by teenagers to doctors doubled to tripled versus 2019;
- Manic-depressive and anxiety disorder visits by college-aged (19-22 years) to doctors skyrocketed;
- Overdoses and substance use disorders in teenagers increased by 40% to 120%.

These effects occurred even though overall medical claims decreased because medical care was shut down and public health leaders convinced the public that hospitals were dangerous environments for COVID.

The harms to children of closing in-person schooling are dramatic and irrefutable. These were already known after the first two or three months of spring 2020 closures and were entirely predictable. Online learning is a failure.

Serious harms were inflicted on children, including poor learning, school drop-out, social isolation, mental illness, drug abuse, suicidal ideation, all recognized in July 2020 by the CDC.⁴⁸ Most of these effects were far worse for lower income groups.⁴⁹ That included approximately 300,000 cases of child abuse, unreported in spring 2020 because schools are the number one agency where child abuse is noticed.⁵⁰

The National Assessment of Educational Progress (NAEP) Report Card on America's school performance reported the largest score declines in math since the first assessments more than 30 years ago.⁵¹ An analysis of these scores based on learning-mode found: "considerable declines in math and ELA pass rates for students in Grades 3–8 in Spring 2021, and these declines were larger in school districts with less in-person instruction. Pass rate declines were larger in districts serving a higher population of Black students."⁵²

47 FAIR Health. (2021, March 18). FAIR Health Releases Study on Impact of COVID-19 on Pediatric Mental Health. <https://www.fairhealth.org/article/fair-health-releases-study-on-impact-of-covid-19-on-pediatric-mental-health>

48 Centers for Disease Control and Prevention. (2020). Mental Health, Substance Use, and Suicidal Ideation During the COVID-19 Pandemic. <https://www.cdc.gov/mmwr/volumes/69/wr/mm6932a1.htm>

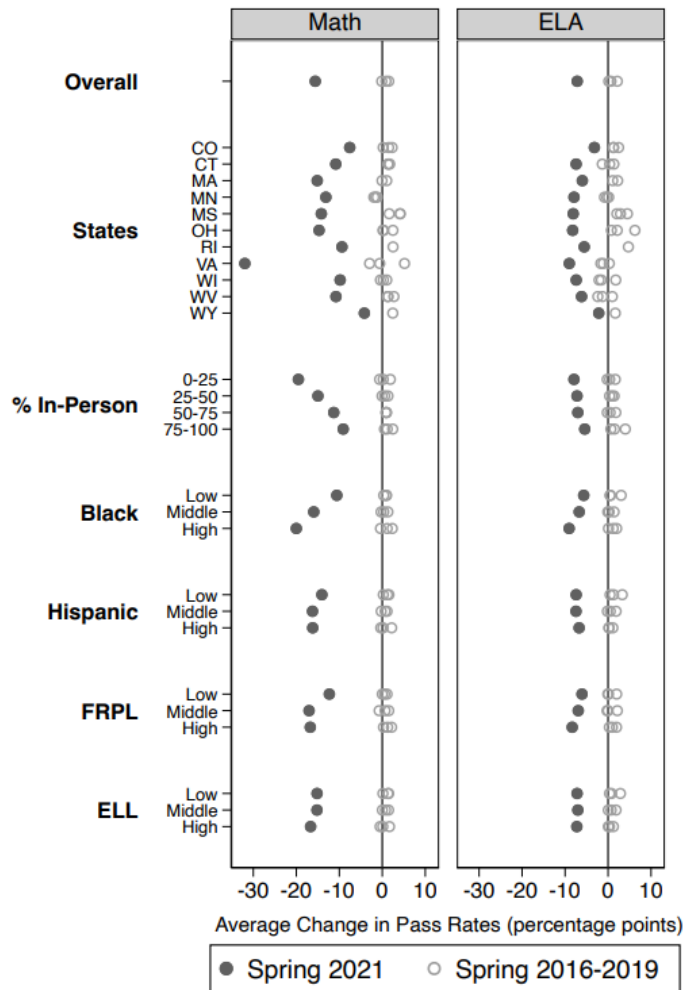
49 Centre for Economic Policy Research. (2020). Long-term effects of school closures. <https://cepr.org/voxeu/columns/long-term-effects-school-closures>

50 News-Medical.Net. (2020, November 12). 250,000 cases of child abuse or neglect may have gone unreported in US COVID pandemic. <https://www.news-medical.net/news/20201112/250000-cases-of-child-abuse-or-neglect-may-have-gone-unreported-in-US-COVID-pandemic.aspx>

51 The Nation's Report Card. (2023). <https://www.nationsreportcard.gov/>

52 Jack, R., Halloran, C., Okun, J. & Oster, E. (2022, April 26) Pandemic Schooling Mode and Student Test Scores: Evidence from U.S. School Districts. https://emilyoster.net/wp-content/uploads/MS_Updated_Revised.pdf

Average Change in Pass Rates on State Standardized Assessments in Spring 2021 vs. Spring 2016-2019

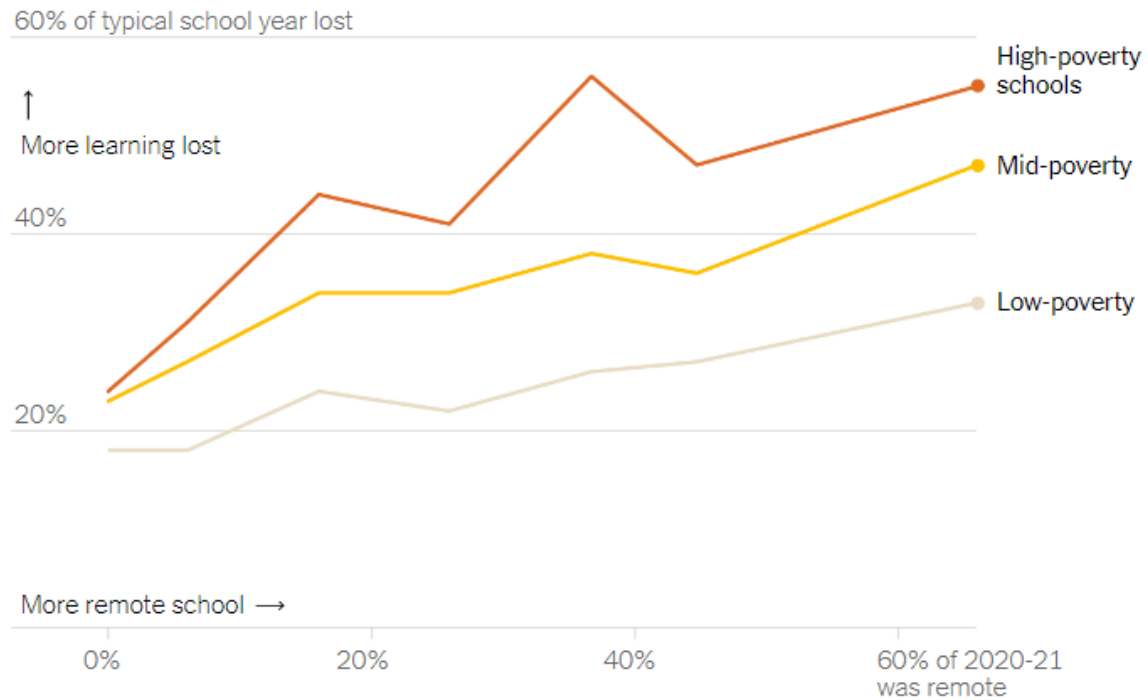


Source: Jack, R., Halloran, C., Okun, J. & Oster, E. (2022, April 26) *Pandemic Schooling Mode and Student Test Scores: Evidence from U.S. School Districts*. https://emilyoster.net/wp-content/uploads/MS_Updated_Revised.pdf

Learning loss was much more severe among poor and minority children, according to a study from Harvard’s Center for Education Policy Research.⁵³

53 Goldhaber, D., Kane, T., McEachin, A., Morton, E., Patterson, T., & Staiger, D. (2022). *The Consequences of Remote and Hybrid Instruction During the Pandemic*. Research Report. Cambridge, MA: Center for Education Policy Research, Harvard University. <https://cepr.harvard.edu/files/cepr/files/5-4.pdf?m=1651690491>

Learning loss in math from fall 2019 to fall 2021



Sources: Harvard University; NWEA; AIR • By The New York Times

Source: Leonhardt, D. (2022, May 5). 'Not Good for Learning' New research is showing the high costs of long school closures in some communities. *New York Times*. <https://www.nytimes.com/2022/05/05/briefing/school-closures-covid-learning-loss.html>

One of the study's authors, Harvard professor of education Thomas Kane, told the *New York Times*: "This will probably be the largest increase in educational inequity in a generation."⁵⁴

Another co-author, Stanford professor of education Sean Reardon, told PBS: "When you have a massive crisis, the worst effects end up being felt by the people with the least resources."⁵⁵

The educational harms are also health harms because there is a well-established relationship between education and income as well as life-expectancy. For example, a 2020 study in the *Journal of the American Medical*

54 Leonhardt, D. (2022, May 5). 'Not Good for Learning' New research is showing the high costs of long school closures in some communities. *New York Times*. <https://www.nytimes.com/2022/05/05/briefing/school-closures-covid-learning-loss.html>

55 Vázquez Toness, B., & Lurye, S. (2022, October 28). COVID-19 pandemic massively set back learning, especially for high-poverty areas. *PBS NewsHour*. <https://www.pbs.org/newshour/education/covid-19-pandemic-massively-set-back-learning-especially-for-high-poverty-areas>

Association (JAMA) found that the loss of educational attainment the two months at the end of the 2019-20 school year is expected to reduce life expectancy by a staggering 13.8 million years of life.⁵⁶

US public health recommendations and actions are not limited to the US, but have had a worldwide impact on school policies, and they selectively harmed children from low-income families and the poor. The sinful legacy of those who advocated for closing schools was recently highlighted in UNICEF's "The State of Global Learning Poverty: 2022 Update":⁵⁷

- "... The increases (in learning poverty) have been especially large in South Asia and in Latin America and the Caribbean, the regions where schools have been closed the longest."
- "...new measurements of student learning is confirming that remote learning was largely ineffective and a poor substitute for in-person schooling ... widespread school closures have disproportionately affected students from disadvantaged backgrounds ..."
- "... recent analysis suggests that learning losses are concentrated among poor students, as documented in the Netherlands, Italy, United States, Mexico, Bangladesh, and Ghana."
- "Because universal foundational skills are essential to the flourishing of individuals and societies, this widespread learning poverty threatens to undermine the future of today's children and the economic prospects of their countries."

The original round of global school closures is estimated by the UN to result in \$17 trillion in lost lifetime earnings for students and a 14 percent reduction of world GDP.⁵⁸

If that is not bad enough, school closures failed to achieve their narrow intended purpose of preventing pediatric SARS-CoV2 infections. In the CDC's December 2022 seroprevalence survey, 91.9% of children had infection-induced antibodies.⁵⁹ Because seroconversion does not happen in all cases, the true ever-infected percentage is likely close to 100%.⁶⁰

Extended school closures severely harmed children with no offsetting benefit.

56 Christakis, D. A., Van Cleve, W., & Zimmerman, F. J. (2020). Estimation of US children's educational attainment and years of life lost associated with primary school closures during the coronavirus disease 2019 pandemic. *JAMA Network Open*, 3(11), e2028786. <https://doi.org/10.1001/jamanetworkopen.2020.28786>

57 UNICEF. (2022). State of Learning Poverty. <https://www.unicef.org/media/122921/file/State%20of%20Learning%20Poverty%202022.pdf>

58 COVID-19: Students face \$17 trillion loss in lifetime earnings. (2021, December 8). UN News. <https://news.un.org/en/story/2021/12/1107282>

59 Centers for Disease Control and Prevention, "United States COVID-19 Pediatric Seroprevalence," updated January 27, 2023. <https://covid.cdc.gov/covid-data-tracker/#pediatric-seroprevalence>

60 D. Follmann, H. E. Janes, O. D. Buhule et al., "Antinucleocapsid antibodies after SARS-CoV-2 infection in the blinded phase of the randomized, placebo-controlled mRNA-1273 COVID-19 vaccine efficacy clinical trial," *Annals of Internal Medicine*, vol. 175, no. 9, pp. 1258–1265, 2022. <https://www.acpjournals.org/doi/10.7326/M22-1300>

Lesson #6: Masks Were of Little or No Value and Possibly Harmful

There was no high-quality evidence in support of community masking for respiratory viruses in spring 2020; in fact, the randomized clinical trials regarding masking for influenza found it to be ineffective for protecting the wearer and for preventing spread. Unfortunately, rather than commission cluster randomized controlled trials to produce high-quality evidence on masking with respect to SARS-CoV2, global and US public health authorities overstated the benefits of masking and persisted even as evidence to the contrary accumulated.

The CDC's own May 2020 systematic review found:

“Although mechanistic studies support the potential effect of hand hygiene or face masks, evidence from 14 randomized controlled trials of these measures did not support a substantial effect on transmission of laboratory-confirmed influenza.”⁶¹

This matched the July 2020 conclusion of University of Oxford's Centre for Evidence-Based Medicine's review of the literature: “Despite two decades of pandemic preparedness, there is considerable uncertainty as to the value of wearing masks.”⁶² Their subsequent fall 2020 review of 9 published trials found that: “Results of randomised trials did not show a clear reduction in respiratory viral infection with the use of medical/surgical masks during seasonal influenza.”⁶³

The landmark Respiratory Protection Effectiveness Clinical Trial (ResPECT) conducted in multiple sites over four years had just been published in 2019 and found that N95 respirators were ineffective for health care workers compared to placebo procedure masks.⁶⁴

Nonetheless, the CDC and other public health authorities embraced unscientific, over-the-top claims of near perfect efficacy based on case studies (most infamously a case study of two hairstylists in Missouri) and endpoint-driven ecological studies.

The CDC dismissed a rigorous Danish randomized control trial on SARS2 and 10 additional viruses that found “the recommendation to wear a surgical mask when outside the home among others did not reduce, at conventional levels of statistical significance, the incidence of SARS-CoV-2 infection in mask wearers,” as well

61 Xiao, J., Shiu, E., Gao, H., Wong, J. Y., Fong, M. W., Ryu, S...Cowling, B. J et al. (2020). Nonpharmaceutical Measures for Pandemic Influenza in Nonhealthcare Settings—Personal Protective and Environmental Measures. *Emerging Infectious Diseases*, 26(5), 967-975. <https://doi.org/10.3201/eid2605.190994>

62 Jefferson, T. and Heneghan, C. (2020, July 23). Masking lack of evidence with politics. Centre for Evidence-Based Medicine. <https://www.cebm.net/covid-19/masking-lack-of-evidence-with-politics/>

63 Jefferson T, et al. (2020, November). Physical interventions to interrupt or reduce the spread of respiratory viruses. *Cochrane Database Syst Rev*. doi: 10.1002/14651858.CD006207.pub5.

64 Radonovich, L. J., Simberkoff, M. S., Bessesen, M. T., et al. (2019). N95 Respirators vs Medical Masks for Preventing Influenza Among Health Care Personnel: A Randomized Clinical Trial. *JAMA*, 322(9), 824–833. <https://doi.org/10.1001/jama.2019.11645>

as all other viruses tested. The study used “high-quality surgical masks with a filtration rate of 98%.”⁶⁵

CDC called the Danish study with 4,862 participants “inconclusive” and “too small,” while praising its own severely flawed case study of 67 self-selected close contacts of two hairdressers in Missouri as “showing that wearing a mask prevented the spread of infection.”⁶⁶

Some claimed support for masking from a Bangladesh trial, but it found a difference of only 20 fewer cases across 300 masked villages in two months, which may have been a result of observation bias and certainly not a result of mask mandates as masks were required (but widely ignored) in all villages in the trial, masked as well as unmasked.⁶⁷

Masks became a symbol of political allegiance and highly divisive in a climate of fear. But ultimately the gold standard of evidence-based medicine, the Cochrane Review, reached the same conclusion about masking for COVID that previous research had shown for influenza:

Wearing masks in the community probably makes little or no difference to the outcome of influenza-like illness (ILI)/COVID-19 like illness compared to not wearing masks (risk ratio (RR) 0.95, 95% confidence interval (CI) 0.84 to 1.09; 9 trials, 276,917 participants; moderate-certainty evidence. Wearing masks in the community probably makes little or no difference to the outcome of laboratory-confirmed influenza/SARS-CoV-2 compared to not wearing masks (RR 1.01, 95% CI 0.72 to 1.42; 6 trials, 13,919 participants; moderate-certainty evidence). Harms were rarely measured and poorly reported (very low-certainty evidence).⁶⁸

It also confirmed the ResPECT finding that N95 masks were no more effective than ineffective surgical masks.

Mask mandates were likely imposed as a way to calm people’s fears and help them re-engage in society. But they ended up doing the opposite – amplifying fears by creating the irrational belief that an unmasked face presented a threat, causing conflict and division among citizens, and giving high-risk people the mistaken impression that masks were protective, potentially resulting in some people risking exposure who otherwise may not have.

The CDC continues to recommend, contrary to evidence, masking for respiratory viruses, undermining its credibility.

65 Bundgaard, H. et. al. (2021). Effectiveness of Adding a Mask Recommendation to Other Public Health Measures to Prevent SARS-CoV-2 Infection in Danish Mask Wearers: A Randomized Controlled Trial. *Ann Intern Med*, 174(3), 335-343. <https://doi.org/10.7326/M20-6817>

66 Anderson, J. H. (2021, August 11). Do Masks Work? A review of the evidence. *City Journal*. <https://www.city-journal.org/do-masks-work-a-review-of-the-evidence>

67 Chikina, M., Pegden, W., & Recht, B. (2022). Re-analysis on the statistical sampling biases of a mask promotion trial in Bangladesh: a statistical replication. *Trials*, 23(1), 786. <https://doi.org/10.1186/s13063-022-06704-z>

68 Jefferson, T., Dooley, L., Ferroni, E., Al-Ansary, L. A., van Driel, M. L., Bawazeer, G. A., Jones, M. A., Hoffmann, T. C., Clark, J., Beller, E. M., Glasziou, P. P., & Conly, J. M. (2023). Physical interventions to interrupt or reduce the spread of respiratory viruses. *Cochrane Database of Systematic Reviews*, 2023(1), CD006207. <https://doi.org/10.1002/14651858.CD006207.pub6>

Lesson #7: Government Should Not Suppress Dissent or Police the Boundaries of Science

A poisonous interplay to stop the free exchange of ideas, a combined effort between America's media, Big Tech, and the academic science and public health community, has severely harmed the public. University professors are granted a privileged position in society. They represent the experts in the eye of the public; the source of expertise in the media; the group from which the government selects health agency leaders; the controllers of research funding; and most importantly, they are entrusted as role models to teach children critical thinking.

During the pandemic, there was a symbiotic relationship, where both parties leveraged the other for the shared goal of suppression of “unaccepted” views. Scientists use the media and so-called fact checkers, along with their control of science funding and academic careers, to bully others. The media selects their favored scientists and gives them the imprimatur of “the experts” who then willingly disparage and dismiss opposing views.

Examples of censorship abound, and it took many forms. Legacy and print media, social media, and university campuses – in theory the center for the free exchange of ideas – overtly stopped the flow of information necessary to arise at the truths we need, particularly during a crisis. And when scientific journals published character smears in an attempt to intimidate and silence alternative views of the data, the public was seriously harmed.

Social media, particularly Twitter, YouTube, and Facebook, were actively suffocating voices that dissented from the accepted COVID narrative. These are private companies and therefore have the right to decide what content to allow on their platforms, but government policy should have been to encourage open public debate. Instead the government actively encouraged and perhaps demanded suppression of dissent, a potential First Amendment violation presently before the Supreme Court in *Missouri v. Biden*.⁶⁹

Censorship was used as a key tool of the lockdown/mandate advocates at key policy inflection points. The active censorship of data on masks occurred in August 2020 on Twitter, blocking tweets from Scott Atlas when he was an advisor to the president. The active censorship of minuscule risk to children and the schools was done in September 2020 by YouTube pulling down a key Atlas interview on Uncommon Knowledge that cited the facts back in spring 2020.

Another vehicle for the suffocation of science was the most important source of research knowledge – the science journals and academia. Politically-motivated professors at elite universities and some of the world's most influential medical science journals abrogated their responsibility to the world and instead became opinionated vehicles for censorship and intimidation. Top medical journals suppressed data by omission in an effort to conjure up their chosen “consensus.” As Bhattacharya and Hanke document in “SSRN and medRxiv Censor Counter-Narrative Science,” the SSRN and medRxiv preprint servers, which are important platforms in the social sciences and medical fields respectively, actively censored research that questioned the efficacy of

69 A summary of the case is available from the New Civil Liberties Alliance, counsel for the plaintiffs. <https://nclalegal.org/missouri-et-al-v-joseph-r-biden-jr-et-al/>

lockdowns.⁷⁰ Major journals shockingly published opinion pieces in an attempt to intimidate and “cancel” the research and scientific interpretations of the evidence pointed out by Bhattacharya, Hanke, the acclaimed scientists authoring the Great Barrington Declaration, and other top experts.

In July 2020, the *New England Journal of Medicine* published an article on ‘reopening primary schools during the pandemic’.⁷¹ Amazingly, it did not even mention the evidence from one of the only major Western countries that kept schools open throughout the pandemic, Sweden. As Harvard’s Martin Kulldorff put it, “That is like evaluating a new drug while ignoring data from the placebo control group.”⁷²

In February 2020, the influential journal *Lancet* published a remarkable letter signed by prominent virologists and other scientists. The authors began by lauding China for its “rapid, open, and transparent sharing of data” – even though the world knew that China delayed warning the world about the early COVID cases, forbade an open exploration of the Wuhan lab, and subsequently destroyed critical evidence that could have helped identify the origin of the virus.⁷³ The authors undermined the public’s trust in science itself by abusing their platform as a tool of intimidation.

The authors of the *Lancet* letter wrote, “We stand together to strongly condemn conspiracy theories suggesting that COVID-19 does not have a natural origin. Scientists from multiple countries have published and analysed genomes of the causative agent, severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), and they overwhelmingly conclude that this coronavirus originated in wildlife.” They then explicitly, and shockingly, called for “unity” – an unheard of plea from scientists interested in research-driven conclusions. It was an unbridled attempt to marginalize and pre-empt any scientist who might show contrary evidence about the origin of the virus – evidence that is now known was present even then, as shown by the trove of Fauci emails later exposed under the Freedom of Information Act.

Then in October 2020, *Lancet* published an extraordinarily misleading opinion piece in which a group of scientists and professors forcefully presented their assertions, onto the public as some sort of settled consensus, even though some of their arguments were contrary to scientific evidence about immunity.⁷⁴ As Kulldorff and Bhattacharya pointed out, the *Lancet* authors falsely stated “there is no evidence for lasting protective

70 Bhattacharya, J., & Hanke, S. H. (2023). SSRN and medRxiv Censor Counter-Narrative Science. *Econ Journal Watch*, 20(2), 450-459. <https://econjwatch.org/File+download/1276/BhattacharyaHankeSept2023.pdf?mimetype=pdf>

71 Levinson, M., Cevik, M., & Lipsitch, M. (2020, September 3). Reopening Primary Schools during the Pandemic. *New England Journal of Medicine*. <https://doi.org/10.1056/NEJMms2024920>

72 Kulldorff, M. (2021, June 4). Why I spoke out against lockdowns. *Spiked Online*. <https://www.spiked-online.com/2021/06/04/why-i-spoke-out-against-lockdowns/>

73 Calisher, C., et. al. (2020). Statement in support of the scientists, public health professionals, and medical professionals of China combatting COVID-19. *Lancet*. [https://doi.org/10.1016/S0140-6736\(20\)30418-9](https://doi.org/10.1016/S0140-6736(20)30418-9)

74 Alwan, N. A., et. al. (2020, October 15). Scientific consensus on the COVID-19 pandemic: we need to act now. *The Lancet*. [https://doi.org/10.1016/S0140-6736\(20\)32153-X](https://doi.org/10.1016/S0140-6736(20)32153-X)

immunity to SARS-CoV-2 following natural infection.”⁷⁵ The Lancet piece tried to demonize the authors of the Great Barrington Declaration, wrongly claiming that they advocated letting the infection “spread freely until population immunity was achieved” – which would cause massive deaths.

Groupthink and censorship allowed policy errors to persist much longer than they would have in an environment of open and honest public debate.

75 Bhattacharya, J., Gupta, S., & Kulldorff, M. (2021, June 4). The Beauty of Vaccines and Natural Immunity. Smerconish. <https://www.smerconish.com/exclusive-content/the-beauty-of-vaccines-and-natural-immunity/>

Lesson #8: The Real Hospital Story Was Underutilization

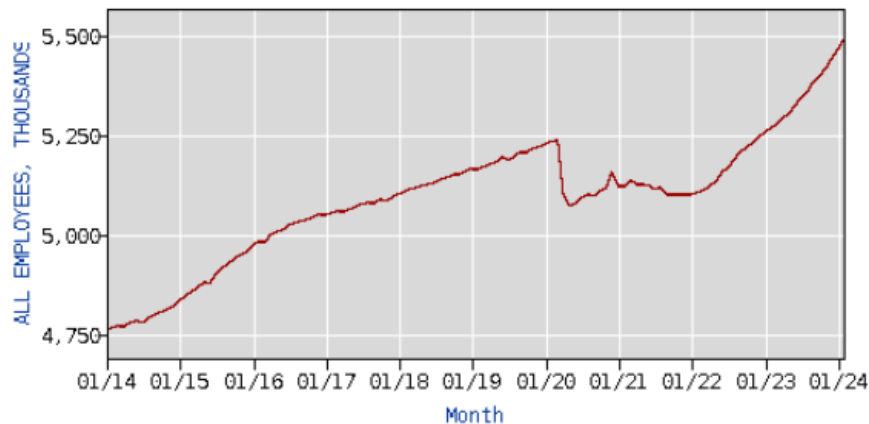
One of the most persistent myths of the pandemic was that hospitals were under unusually high load. In fact, the tragedy of the non-COVID death pandemic was likely driven by record low hospital utilization – with very few exceptions – throughout the entire pandemic period.

Hundreds of millions of dollars were spent on field hospitals, which were dismantled weeks later, most without serving a single patient.⁷⁶ Nurses – if they still had jobs after mass hospital layoffs (see the chart below)⁷⁷ – did choreographed dances in empty hospital hallways.⁷⁸

Data extracted on: March 8, 2024 (3:44:24 PM)

Employment, Hours, and Earnings from the Current Employment Statistics survey (National)

Series Id: CES6562200001
Seasonally Adjusted
Series Title: All employees, thousands, hospitals, seasonally adjusted
Super Sector: Private education and health services
Industry: Hospitals
NAICS Code: 622
Data Type: ALL EMPLOYEES, THOUSANDS



Source: US Bureau of Labor Statistics. Series Id: CES6562200001 <https://data.bls.gov/cgi-bin/srgate>

76 NPR. (2020, May 7). U.S. Field Hospitals Stand Down, Most Without Treating Any COVID-19 Patients. <https://www.npr.org/sections/health-shots/2020/05/07/851610771/u-s-field-hospitals-stand-down-most-without-treating-any-covid-19-patients>

77 Bureau of Labor Statistics, Employment, Hours, and Earnings from the Current Employment Statistics survey (National), Series Id: CES6562200001 Data extracted on: February 13, 2023

78 Massachusetts Department of Public Health. (2022, January 31). COVID-10 Interactive Data Dashboard reports. <https://www.mass.gov/info-details/covid-19-response-reporting>

The collapse in hospital utilization was driven by political orders canceling medical procedures and stay-at-home orders causing people to cancel their own appointments. An equally if not more significant factor was the environment of fear that kept people out of hospitals – including the deadly false belief that the underutilized hospitals were too busy for people suffering from heart attacks and strokes.

Notably, emergency visits collapsed nationally, even in areas where COVID was not spreading. A study published in JAMA concluded this was a result of public health messaging:

“A possible explanation for these temporal associations is that the public responded more to national-level risk messaging about COVID-19 than to changes in the local situation with regard to reported cases. For example, individuals may have avoided seeking emergency care because of a fear of being exposed to COVID-19 in the ED, concerns about the possibility of extended wait times, or a sense of civic responsibility to avoid using health care services that others may have needed.”⁷⁹

A study of emergency department utilization in the HCA health care system found volume dropped 44 percent with an associated rise in all-cause mortality.⁸⁰ The study’s author explained:

“We see a direct inverse correlation. As the volume went down, we saw out-of-hospital cardiac arrests going up, and as near as we can tell, that was not due to COVID. Without adding too many details to violate privacy, we saw several people who were suffering from conditions that were essentially benign and easy to treat in the early stage but who waited much, much longer than they would have in any other time frame, and then suffered pretty drastic complications, disability and even death; some things that, really, no one should die from.”⁸¹

Dr. Scott Atlas summarized the foregone care:

“In Spring of 2020 alone, there were 650,000 chemotherapy patients in America alone, half of which never got treatment. They were told it was too dangerous to go to medical facilities; 85 percent of living organ transplants in the U.S. didn’t get done. 50 percent of Americans suffering a stroke or heart attack refrained from calling an ambulance out of fear.”⁸²

79 Jeffery MM, D’Onofrio G, Paek H, et al. Trends in Emergency Department Visits and Hospital Admissions in Health Care Systems in 5 States in the First Months of the COVID-19 Pandemic in the US. *JAMA Intern Med.* 2020;180(10):1328–1333. doi:10.1001/jamainternmed.2020.3288 <https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/2768777>

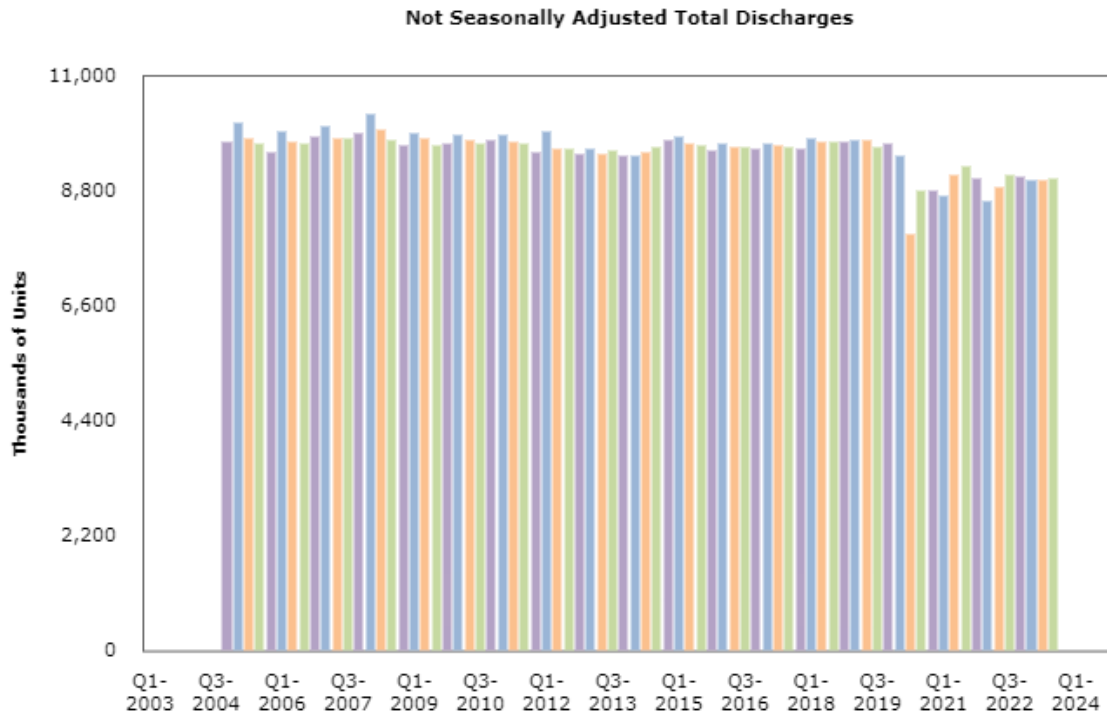
80 Gutovitz S, Pangia J, Finer A, Rymer K, Johnson D. Emergency department utilization and patient outcomes during the COVID-19 pandemic in America. *J Emerg Med.* 2021;60(6):798-806. doi:10.1016/j.jemermed.2021.01.002

81 My Horry News, “Horry County and S.C. saw a spike in non-COVID deaths in 2020. But why?,” June 14, 2021. https://www.myhorrynews.com/coronavirus/horry-county-and-south-carolina-saw-a-spike-in-non-covid-death-in-2020/article_4c-b9811e-c4a3-11eb-8fb7-a73ec28b723e.html

82 Remarks at Committee to Unleash Prosperity Economic Summit, October 21, 2022. <https://www.c-span.org/video/?523748-2/trump-administration-officials-covid-19-pandemic-economy>

These charts show monthly utilization collapsed sharply at the advent of the pandemic and failed to reach 2019 levels for inpatients or emergency visits in any month during the pandemic.⁸³

**Source: Quarterly Services Survey
NAICS 622: Hospitals: U.S. Total
Q1-2003 to Q4-2024**



Data Extracted on: March 8, 2024 (3:49 pm) EST

These data are subject to sampling and nonsampling error. For more information see https://www.census.gov/services/qss/how_the_data_are_collected.html

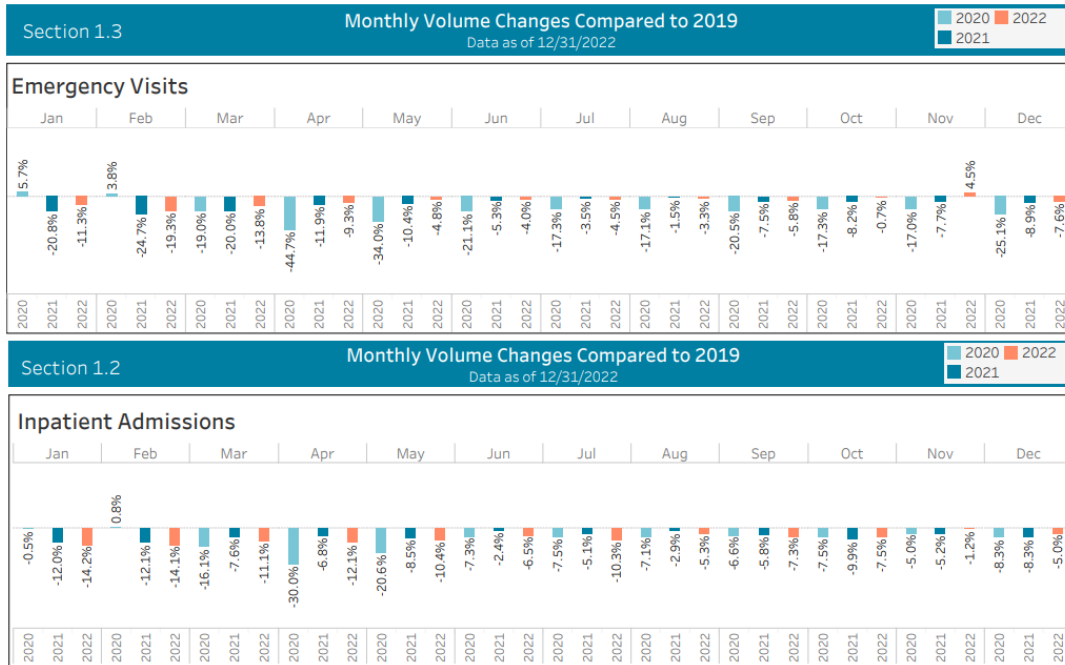


Source: Strata Decision, NationalPatientandProcedureVolumeTracker™ Monthly Update 12/31/2022, https://info.stratadecision.com/hubfs/Website/NPPVT/NPPVT%202023%20January_Final_w_Appendix.pdf

This data comes from a private market analyst, Strata Decision, because the official hospital utilization data series from HHS never collected retrospective data, and so cannot be easily compared to pre-pandemic utilization levels. Census survey data, however, shows total discharges plunging to a record low level when the pandemic began.⁸⁴

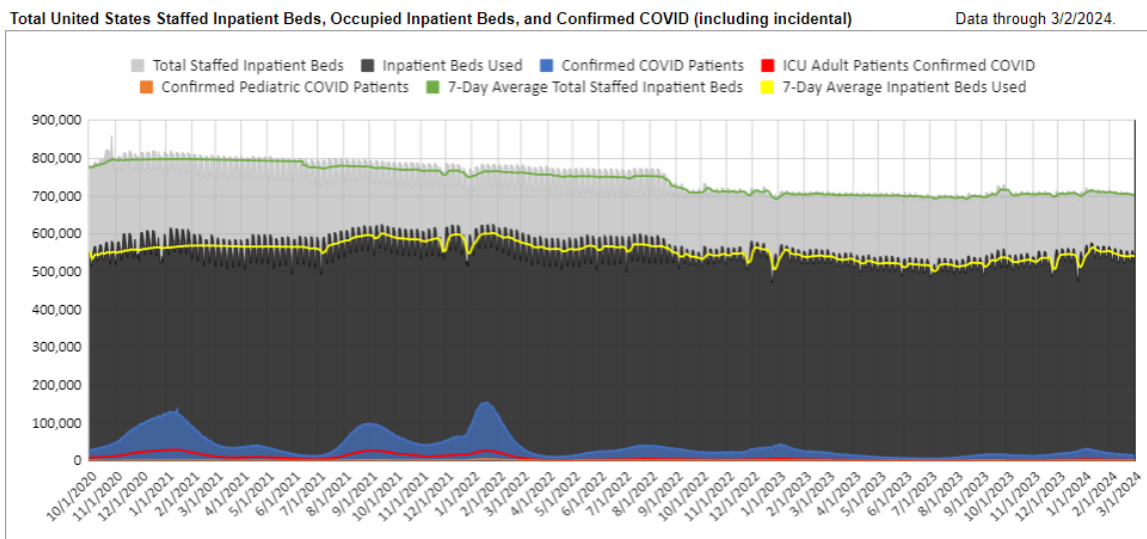
83 Strata Decision, NationalPatientandProcedureVolumeTracker™ Monthly Update 12/31/2022, https://info.stratadecision.com/hubfs/Website/NPPVT/NPPVT%202023%20January_Final_w_Appendix.pdf

84 US Census Bureau, Quarterly Services Survey, 622: Hospitals: U.S. Total — Not Seasonally Adjusted Total Discharges



Source: US Census Bureau. Quarterly Services Survey. <https://www.census.gov/econ/>

The HHS data shows that COVID waves rarely moved topline inpatient utilization, there were substantial numbers of unused staffed beds throughout the period, and the total number of staffed beds steadily declined – the opposite of what might have been expected given headlines about high utilization and record transfers of tax dollars to hospital systems.



Source: Author's calculation using HHS Protect data. <https://docs.google.com/spreadsheets/d/15YbHKtjdHgS8kpZ7JUwluYLcVATvP95ypoGqUBdgcUo/edit?usp=sharing>

This is not a composition effect; state charts all follow the same pattern. The COVID utilization numbers from HHS are overstated because the agency has refused to differentiate causal from incidental COVID, even as the latter category has increased to around 70 percent in Massachusetts⁸⁵ and a reported 90 percent at Los Angeles County's largest safety-net hospital.⁸⁶

Congress should consider requiring retrospective hospital reporting of midnight census by service line going back five or ten years to better understand normal utilization levels and what happened during the pandemic.

85 Massachusetts Department of Public Health COVID-10 Interactive Data Dashboard reports, for instance: "On January 31, 202, there were 211 patients primarily hospitalized for COVID-19 related illness and 744 total patients hospitalized with COVID-19." <https://www.mass.gov/info-details/covid-19-response-reporting>

86 Los Angeles Times. (2022, July 18). Coronavirus cases are soaring in L.A. County, but this wave is different. <https://www.latimes.com/california/story/2022-07-18/1-a-county-faces-coronavirus-paradox-soaring-cases-but-hospitals-less-taxed>

Lesson #9: Protect the Most Vulnerable

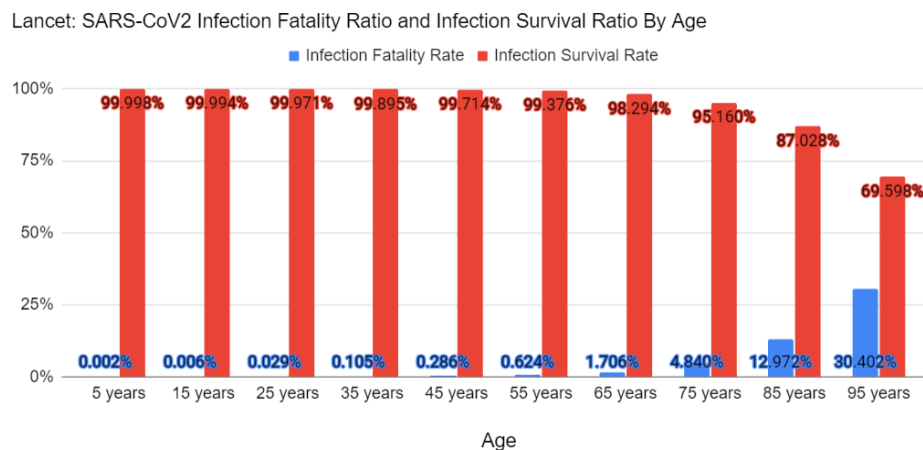
One of the most striking features of the earliest COVID morbidity and mortality data was a profound differential in risk between the old and the young.

As Martin Kulldorf explained in April 2020, based on data published in February and March:

“Among COVID-19 exposed individuals, people in their 70s have roughly twice the mortality of those in their 60s, 10 times the mortality of those in their 50s, 40 times that of those in their 40s, 100 times that of those in their 30s, 300 times that of those in their 20s, and a mortality that is more than 3000 times higher than for children. Since COVID-19 operates in a highly age specific manner, mandated counter measures must also be age specific. If not, lives will be unnecessarily lost.”⁸⁷

It was also mathematically demonstrated that a virus with this feature would be deadlier society-wide than with targeted mitigation strategies in a model posted on March 16, 2020, by Maria Chikina of the University of Pittsburgh and Wes Pegden of Carnegie Mellon University.⁸⁸

A global analysis of infection fatality rates by the Lancet found the survival rate was above 99% for every age under 60, even before it attenuated with the Omicron variants.⁸⁹



Source: *The Lancet*. (2022). Variation in the COVID-19 infection–fatality ratio by age, time, and geography during the pre-vaccine era: a systematic analysis. *The Lancet*, 397(10269), 163-175. [https://doi.org/10.1016/S0140-6736\(21\)02867-1](https://doi.org/10.1016/S0140-6736(21)02867-1)

87 Kulldorff, M. (2020, April 10). COVID-19 Counter Measures Should be Age Specific. LinkedIn. <https://www.linkedin.com/pulse/covid-19-counter-measures-should-age-specific-martin-kulldorff/>

88 Chikina, M., & Pegden, W. (2020, March 16). Fighting COVID-19: the heterogeneous transmission thesis. <https://www.math.cmu.edu/~wes/covid.html>

89 The Lancet. (2022). Variation in the COVID-19 infection–fatality ratio by age, time, and geography during the pre-vaccine era: a systematic analysis. *The Lancet*, 397(10269), 163-175. [https://doi.org/10.1016/S0140-6736\(21\)02867-1](https://doi.org/10.1016/S0140-6736(21)02867-1)

Not surprisingly, first-wave COVID deaths were concentrated not just among the elderly but specifically in nursing homes. As of April 12, 2020, it was reported that nursing home residents comprised 57 percent of all COVID-19 deaths in Spain, 53 percent in Italy, and 45 percent in France.⁹⁰

Through June 2020, more than half of all US COVID deaths were among nursing home residents. This fact was partly underappreciated because neither HHS nor CDC tracked these data. However, the Committee to Unleash Prosperity compiled it regularly from state sources and presented it to Congress. Remarkably, several states pursued the precise opposite of a protect the vulnerable strategy – an expose the vulnerable strategy – of requiring still-infectious patients to be returned to nursing homes once they were clinically stable.⁹¹

In New Jersey, whistleblowers in the state health department alleged that the governor’s administration intentionally diverted testing supplies needed at nursing homes to public drive-up testing sites.⁹²

When specific populations are known to have a high risk for death or serious illness, a strategic use of resources to heighten their protection and awareness should be employed. Specific steps might include: prioritized testing to nursing homes and senior centers; high-frequency testing of all nursing home staff and visitors; extra infection control standards in nursing homes, in alliance with hospitals; frequent monitoring and alert outreach to high-risk seniors in communities and nursing homes when infections are high.

Targeted measures were specifically proposed by Scott Atlas within the White House task force. Still, his proposals were mischaracterized as doing nothing by other task force members and denigrated in favor of ineffective lockdown measures.⁹³

The Great Barrington Declaration was a simple statement of the importance of focusing protection on the at-risk population.⁹⁴ When the declaration was issued, public health authorities in the United States neither embraced it nor refuted it – instead they suppressed it and smeared its signatories.

90 Comas-Herrera, A., & Zalakain, J. (2020, April 12). Mortality associated with COVID-19 outbreaks in care homes: early international evidence. International Long Term Care Policy Network. <https://ltccovid.org/wp-content/uploads/2020/04/Mortality-associated-with-COVID-12-April-3.pdf>

91 Kerpen, P. (2020, June 11). COVID-19: The Nursing Home Disease. Testimony to the House Select Committee on Coronavirus. <https://committeetounleashprosperity.com/wp-content/uploads/2020/10/465227534-Kerpen-Testimony-6-11.pdf>

92 Members of the NJ Pandemic Response Team. (n.d.). Letter to the Bipartisan Review and Recovery Committee to Investigate COVID-Related Crises. <https://s3.documentcloud.org/documents/6934674/Letter-From-N-J-Health-Department-Employees.pdf>

93 Atlas, S. (2020, October 15). [Email response to Deborah Birx]. Twitter. https://twitter.com/ScottAtlas_IT/status/1753117473606668419/

94 Great Barrington Declaration. (n.d.). <https://gbdeclaration.org/>

Indeed, NIH Director Francis Collins directed a smear campaign, writing in an email that was later made public: “This proposal from the three fringe epidemiologists . . . seems to be getting a lot of attention – and even a co-signature from Nobel Prize winner Mike Leavitt [sic] at Stanford. There needs to be a quick and devastating published take down of its premises.”⁹⁵

The most persistent criticism of shielding the vulnerable has been that it is impossible to segment society and; therefore, no one can be protected without protecting everyone. However there is empirical evidence that it is possible to achieve differential protection.⁹⁶ Moreover, to the extent that mitigation measures can succeed for anyone, educating the vulnerable on their risks allows them to make their own decisions and take voluntary measures based on their values without the societal disruptions associated with mandates.

A future virus may not have the same profound age differential risk as COVID. Identifying the most vulnerable groups and focusing resources on their protection will always be critical to any sensible crisis response.

95 Wall Street Journal. (2021, December 21). How Fauci and Collins Shut Down Covid Debate. https://www.wsj.com/articles/fauci-collins-emails-great-barrington-declaration-covid-pandemic-lockdown-11640129116?st=7f3jxc8xeafz64u&reflink=desk-topwebshare_permalink

96 Axfors, C., et. al. (2023). Differential COVID-19 infection rates in children, adults, and elderly: Systematic review and meta-analysis of 38 pre-vaccination national seroprevalence studies. *J Glob Health*, 13(06004). <https://doi.org/10.7189/jogh.13.06004>

Lesson #10: Warp Speed: Deregulate But Don't Mandate

Project Warp Speed was a remarkable achievement in reducing time of drug development. It developed multiple highly effective monoclonal antibody treatments. It also facilitated the development of vaccines in record time. Most critics asserted that it would take two to four years to deploy a vaccine – by which time the pandemic would be over. But while the speed of innovation was a remarkable deregulatory success story, there were multiple failures, including the focus on new treatments to the exclusion of conducting trials of repurposed existing drugs, politicized distribution of treatments, and most significantly, an all-out “vaccinate everyone” pressure campaign that papered over real evidence of potential harms and undermined informed consent. This culminated in Biden’s shameful mandates that sought to exclude people from the military, government service, and even private sector employment based on their vaccination status.

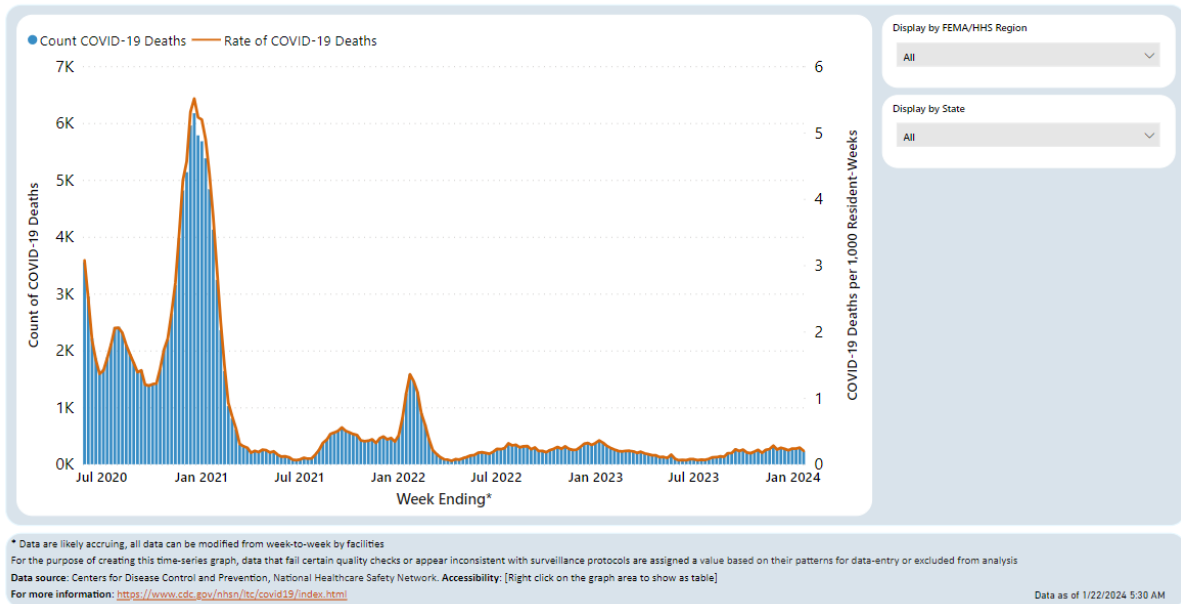
Government monopoly purchasing and distribution of monoclonal antibodies created chronic shortages and politicized distribution decisions, most catastrophically the announcement at the peak of the Delta wave that Regeneron would be rationed in the South, where it was needed, due to concerns for “equitable distribution, both geographically and temporally.”⁹⁷ By the time the expected winter COVID wave arrived in the North, Regeneron distribution was stopped completely because it was ineffective against Omicron, even though there was still substantial Delta circulation and testing could have been used to identify likely Delta cases. The stockpiled Regeneron that was denied to people in the South who needed it went unused.

Four companies with authorized monoclonals were effective during Delta. Had these remedies been purchased and distributed through normal commercial channels, there would have been no shortages, no politicized distribution decisions, and likely substantially fewer deaths.

The vaccines were also a deregulatory triumph. The original vaccine was well-matched to then-circulating variants, and there was a sharp drop-off in hospitalizations and deaths, especially among the nursing home population.⁹⁸

97 Public Health Emergency. (2021, September 16). FAQs on Monoclonal Antibodies. [Archived page]. <https://web.archive.org/web/20210916155644/https://www.phe.gov/emergency/events/COVID19/Investigation-MCM/Pages/FAQs-mAB.aspx>

98 Centers for Disease Control and Prevention. (n.d.). COVID-19 Long-term Care Facility Module. https://www.cdc.gov/nhsn/covid19/ltc-report-overview.html#anchor_1594393305



Source: Centers for Disease Control and Prevention. (n.d.). COVID-19 Long-term Care Facility Module. https://www.cdc.gov/nhsn/covid19/ltc-report-overview.html#anchor_1594393305

Because viruses mutate rapidly, the Warp Speed deregulatory approach that enabled rapid development was critical to making a vaccine available quickly enough to be beneficial. An estimate by Casey Mulligan found that if normal regulatory timelines had been imposed, “additional deaths and more delays in returning to work and school, pushing back access to vaccines by even six months would have cost more than \$1 trillion in the U.S. alone.”⁹⁹

But moving at Warp Speed should prompt public officials to be meticulous in communicating the experimental nature of the vaccine, the known and unknown potential risks, and the relative risks of COVID itself. The opposite approach was taken, which falsely communicated universal benefit and actively suppressed critical information.

The Biden administration went all-in on a “vaccinate everyone” push that included even low-risk younger populations for whom the risk/benefit equation was questionable. Suppression of dissent also undermined informed consent by downplaying vaccine side effects, especially myocarditis for which the CDC blocked the release of an alert to shape public opinion.¹⁰⁰

99 Mulligan, C. B. (2023, October 6). We Need More ‘Warp Speed’ Operations. Wall Street Journal. <https://www.wsj.com/articles/we-need-more-operation-warp-speed-covid-cancer-diabetes-bureaucracy-fda-ace77028>

100 Stieber, Z. (2024, January 25). Email Reveals Why CDC Didn’t Issue Alert on COVID Vaccines and Myocarditis. Epoch Times. https://www.theepochtimes.com/article/exclusive-email-reveals-why-cdc-didnt-issue-alert-on-covid-vaccines-and-myocarditis-5571675?utm_medium=social&utm_source=twitter&utm_campaign=digitalsub

The public was not adequately informed about the chosen clinical end-points of the early clinical trials, and about what was not assessed. Those were not “lives saved” or “serious illness prevented”; instead, less important end-points were chosen. In addition, the public was not informed that infection prevention was not studied.

While the development of monoclonal antibody treatments was a success, the focus on developing new drugs was to the exclusion of conducting high-quality trials of already FDA-approved drugs safely used for other infections in billions of doses worldwide. Implausibly, Fauci’s National Institute of Allergy and Infectious Diseases (NIAID) claimed it could not find enough volunteers for such trials. That should have been a top priority, given that those drugs were so safe that in some countries they are often purchased over-the-counter without prescription.

Royalty payments likely biased regulators in favor of new drugs. Over \$325 million in royalties were received by NIH employees, including Anthony Fauci and Francis Collins, from private drug companies in the 2009-2019 period.¹⁰¹ Those agreements should have been disclosed to the public up front.

As Omicron variants displaced earlier strains in late 2021 and early 2022, there was far less benefit to the vaccine because the virus itself was much less virulent, and the vaccine no longer had any appreciable effect on transmission – Omicron spread through nearly the entire population with generally mild disease, ending the pandemic. A vaccine not deployed until after that point would have had negligible benefits, underscoring the essential value of speed to market in a pandemic.

Yet the Biden administration nonetheless pressed forward with its efforts to effect or even mandate universal vaccination. The White House even directed child-vaccine and booster approvals instead of allowing the FDA to conduct appropriate trials. This resulted in the resignation of the FDA’s top two vaccine officials.¹⁰²

Aside from inadequate understanding of safety and potential serious adverse effects, the most catastrophic vaccine error was the Biden administration policy mandating vaccination throughout the private economy, a policy which was only stopped by a 6 to 3 decision of the Supreme Court in *NFIB v. OSHA*.¹⁰³ If the Court had allowed the OSHA rule to take effect, the vaccine would have been mandated as a condition of employment for every private company in the country with 50 or more employees.

The successful rapid development of vaccines and therapeutics in a pandemic should focus on removing regulatory barriers, conducting high-quality trials, effectively communicating known risks and benefits, and allowing commercial channels to handle distribution. Moreover, the safety of new drugs must be prioritized and assessed in a detailed and thorough manner. This is especially critical in new technologies like the mRNA vaccines. Mandates and intentional undermining of informed consent should be rejected, allowing individuals to make their own decisions.

101 Open The Books. (2023, August 11). NIH Secret Third-Party Royalty Database Uncovered. <https://www.openthebooks.com/nih-secret-third-party-royalty-database-uncovered/>

102 Endpoints News. (2021, August 31). In a major blow to vaccine efforts, senior FDA leaders stepping down. <https://endpts.com/breaking-in-a-major-blow-to-vaccine-efforts-senior-fda-leaders-stepping-down-report/>

103 *National Federation of Independent Business v. Department of Labor, Occupational Safety and Health Administration*, 595 U.S. ____ (2022), https://www.supremecourt.gov/opinions/21pdf/21a244_hgci.pdf

Conclusion: Limit Government Emergency Powers and Earn Back Public Trust

From the very start of COVID, politicians assigned unprecedented powers to public health agencies – many of which imposed strict limits on Americans’ basic civil liberties. There was very little oversight or limitation on the powers conferred to these agencies.

Granting public health agencies these extraordinary powers was a major error. It, in effect, granted these agencies a license to deceive the public. Contrary to popular belief, Bjørnskov and Voigt found that “the more advantages emergency constitutions confer to the executive, the higher the number of people killed as a consequence of a natural disaster, controlling for its severity.”¹⁰⁴

Lockdowns, school closures, and mandates were tragically flawed strategies but they were pushed with remarkable fervor by public health authorities at all levels. Consequently, these authorities have discredited themselves to a large segment of the American public. To the extent that means future catastrophic policy errors may provoke a robust public backlash, which may be a good thing. But even better would be to reform these institutions to be worthy of trust.

Towards that end, we recommend that Congress and the states define by law “public health emergency” with strict limitations on powers conferred to the executives and time limits (e.g., two weeks), that requires legislation to extend. Crises are when checks and balances and well-functioning institutions are most needed – not when they should be discarded and decision-making outsourced to alleged experts like Francis Collins, who casually confessed to a completely incorrect decision calculus years later.

Congress and the states should establish term limits (e.g., six years) for all senior health agency positions, including top- and mid-level posts, after first replacing the heads of CDC, NIH, and FDA. For instance, Anthony Fauci worked as a bureaucrat for 38 years. Such longevity accrues power and seems to inhibit dissenting voices, while setting up unhealthy relationships with outside parties, including the media.

There is a serious structural problem when the principal face of pandemic response policy – Anthony Fauci – is the head of the largest federal grantmaking entity on which nearly all medical experts are dependent for their research funding. This structural problem created an environment in which it was very difficult for most experts to break with the dominant narratives on lockdowns, masks, or overwhelmed hospitals regardless of their own research findings, experiences, or judgment. Worse, those who did break with the party line were subject to intimidation and abuse, as well as censorship at the request and insistence of government actors.

104 Bjørnskov, C., & Voigt, S. (2021). Emergencies: on the misuse of government powers. *Public Choice*, 190(1–2), 1–32. <https://doi.org/10.1007/s11127-021-00918-6>

While NIH became the principal advocate of lockdown policies, it also conspicuously failed to do its job – running high-quality trials of repurposed drugs and non-pharmaceutical interventions. As a result, clinicians were largely flying blind, and policy decisions were made based on very limited high-quality evidence.

When NIH and NIAID control the grants on which the majority of scientists make a living, it is inappropriate for the heads of those agencies to be key policy advisers to the president as well as public communicators establishing an alleged scientific consensus. NIH funding itself should be decentralized or block-granted to the states. A total of 19 U.S. medical centers receive over \$500 million yearly from the NIH.¹⁰⁵ Indeed, NIH is the dominant funder of all scientific research, to the tune of \$48 billion per year.¹⁰⁶

The heads of NIH and its subagency NIAID should be people with little or no publicly facing role, who will allocate grant money on the merits of applications and commit to a research agenda that quickly identifies and rigorously applies randomized control trials to both repurposed drugs and non-pharmaceutical interventions in an emergency.

It requires full transparency of all FDA, CDC, and NIH discussions and immediate posting to public forums. Statements from all advisors in those meetings, such as the startling October 26, 2021, recommendation of Eric Rubin, M.D., FDA advisor for children’s COVID vaccines, that “we’re never going to learn about how safe this vaccine is [in children] unless we start giving it. That’s just the way it goes,”¹⁰⁷ must be widely visible to the public.

Restate definitively that the CDC and other health agencies are strictly advisory and do not have the power to set laws or mandates. Limiting health agency power is a way to begin holding elected officials accountable to the citizens, rather than allowing the pretense of hiding behind those agencies.

Immediately halt all binding agreements or pledges to the World Health Organization. The U.S. is the largest nation funding WHO activities, but the WHO record is abysmal on the issues covered in this report.

Until key institutions openly acknowledge that lockdowns, school closures, and mask and vaccine mandates were catastrophic errors that will not be repeated in the future, the American people will – and should – withhold their trust.

105 Nietzel, M. (2024, February 10) Top 20 Universities For NIH Funding; Johns Hopkins Ranks First Again. Forbes. <https://www.forbes.com/sites/michaelt Nietzel/2024/02/10/top-20-universities-for-nih-funding-johns-hopkins-ranks-first-again/>

106 NIH (2024). Budget. <https://www.nih.gov/about-nih/what-we-do/budget>

107 Makary, M. (2022, June 23). CDC recommends COVID-19 vaccines for babies, kids under 5. Here are 6 things parents need to know. Fox News. <https://www.foxnews.com/opinion/cdc-recommends-covid-19-vaccines-babies-kids-under-5-6-things-parents-need-know>

