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~ Why Reading this May Make You Angry or Unsettled ~

I have been increasingly perplexed during the last year at how few people are willing to consider for themselves the data, the studies, and the arguments surrounding COVID. A study out of New Zealand, published in *The Journal of Experimental Social Psychology*, examines this phenomenon. Entitled, "Moralization of COVID-19 Health Response: Asymmetry in Tolerance for Human Costs,"² the study examines people's readiness to overlook negative consequences of lockdowns while displaying an extreme unwillingness to tolerate COVID-related suffering.

Among their observations is, "Although moralization may be a natural response to such an imposing health threat, this process may also blind people to potential human costs resulting from a Covid-19 elimination strategy (e.g., extreme financial strain, undiagnosed illnesses). **Importantly, the moralization of Covid-19 may also mean that merely questioning elimination strategies is not acceptable.**" Indeed, this is exactly what their findings revealed.

In the COVID era, loyalty to the authoritative narrative has become paramount, a litmus test that signals that you are responsible and "following the science." But, what if the science does not support the narrative? What if true science occurs only when every idea is allowed to be responsibly vetted? As a classical liberal who believes that free inquiry and free speech are the

¹ In this essay, I am speaking in a personal capacity as a mathematician and do not intend to represent the views of Winona State University. These documents began as my attempt to organize for myself information which complements and even challenges the dominant narrative on COVID-19. It was not my intent to make them publicly available, but enough people have found them helpful that I decided to do that. Unlike government bureaucrats and social media fact-checkers, I do not claim to be infallible. I am simply a classical liberal who is quite concerned at the lack of robust conversation around such an important topic.

² <https://www.sciencedirect.com/science/article/pii/S0022103120304248>

non-negotiable foundation of a truly productive intellectual culture, I submit that loyalty to the narrative must bow to the pursuit of truth.

If you are willing to consider, even provisionally, an alternative point of view, supported by factual analysis and heavily footnoted to that end, then this essay is for you. If you find yourself defensive at the mere exposure to an idea that questions the authoritative narrative, then this essay will likely enrage you.

~ Until COVID-19, Everyone Knew Masks Don't Work ~

The strong and supported conventional wisdom before COVID was that surgical and cloth masks are not an effective transmission preventative measure for respiratory illnesses. There are many reasons for this conviction. But first, some context:

- **March 8, 2020:** Dr. Fauci in an interview on 60 Minutes, said, “There’s no reason to be walking around with a mask. When you’re in the middle of an outbreak, wearing a mask might make people feel a little bit better and it might even block a droplet, but it’s not providing the perfect protection that people think that it is. And, often, there are unintended consequences — people keep fiddling with the mask and they keep touching their face.”³
- **March 31, 2020:** “There is no specific evidence to suggest that the wearing of masks by the mass population has any potential benefit. In fact, there's some evidence to suggest the opposite in the misuse of wearing a mask properly or fitting it properly,” Dr. Mike Ryan, executive director of the WHO health emergencies program, said at a media briefing in Geneva, Switzerland, on Monday.⁴
- **April 3, 2020:** The CDC updated its previous advice and recommended people wear cloth face coverings “in public settings when around people outside their household, especially when social distancing measures are difficult to maintain.”
- **Question:** What incredible scientific breakthrough occurred in those few days between March 8 and April 3 to induce the CDC to do a complete about face? The answer is obvious: NONE. The decision was made for other reasons, not because of science.

³ See the 30 second mark in https://youtu.be/PRA6t_e7dgl

⁴ <https://www.cnn.com/2020/03/30/world/coronavirus-who-masks-recommendation-trnd/index.html>

- **June 5, 2020:** Even two months later, the WHO admitted that there was minimal evidence for the effectiveness of masks: “Results from cluster randomized controlled trials on the use of masks among young adults living in university residences in the United States of America indicate that face masks may reduce the rate of influenza-like illness, *but showed no impact on risk of laboratory-confirmed influenza*....At present, there is no direct evidence (from studies on COVID- 19 and in healthy people in the community) on the effectiveness of universal masking of healthy people in the community to prevent infection with respiratory viruses, including COVID-19...Many countries have recommended the use of fabric masks/face coverings for the general public. At the present time, the widespread use of masks by healthy people in the community setting is not yet supported by high quality or direct scientific evidence and there are potential benefits and harms to consider.”⁵

~ Types of Evidence ~

Various types of evidence provide different levels of confidence.

- **Anecdotal:** This is the weakest form of evidence. It takes the form of individual stories such as, “When I had a cold last winter, I ate garlic every day and none of my family members got sick!” That obviously does not prove that they stayed well because you sneezed ate garlic every day, and it ignores potential stories of people who did the same and infected their entire household.
- **Observational/Correlative:** This is a step up from anecdotal evidence. It usually involves a statistical analysis comparing two groups after an event occurred. An example is hormone replacement therapy for post-menopausal women. Some decades ago, this was common practice, and it was noticed that women who had received the treatment had a lower risk of heart disease, osteoporosis, and a few other diseases. Correlation is an important indicator that some significant cause and effect relationship may exist, but it is not proof of such a relationship.

⁵ https://apps.who.int/iris/bitstream/handle/10665/332293/WHO-2019-nCov-IPC_Masks-2020.4-eng.pdf?sequence=1&isAllowed=y

- **Modeling**: These are analyses involving mathematical models that are designed to simulate real-world scenarios. They are important but only as reliable as the assumptions upon which they are based. They are not a substitute for real data.
- **Mechanistic Studies**: Are done in a laboratory setting to show that, in theory, a particular measure or treatment should be effective. The weakness of such studies is that they are performed in idealized and often unrealistic settings and so it is not clear if the effects will persist when the measure is implemented in real life circumstances.
- **Controlled, Randomized Trial (CRT)**: This is the gold standard of evidence and is the only statistical method known that can establish cause and effect. It involves randomly assigning people to a treatment group and a control group before the experiment begins and then using statistical analysis to determine whether the difference between the two groups is large enough that it is extremely unlikely to be due only to chance (i.e. the difference is “statistically significant”). In the hormone replacement therapy example cited above, the CRT established that the treatment increases the risk of 3 of 7 diseases to such a high degree as to nullify the benefits obtained for the remaining 4 diseases. As it turns out, the observational studies involved predominantly women who were “healthier, wealthier, and [had] a better health profile” than the average woman. Hence, women in that group fared worse than they would have without the treatment but better, on average, than those who didn’t receive the treatment, simply because they were healthier to begin with.⁶ We note that the observational studies, conducted independently and in several different countries, all indicated that hormone replacement therapy is warranted. It was not until a CRT was conducted that the truth was illuminated. **This is a cautionary tale about using only observational studies to make public health recommendations.**

~ Evidence Supporting Mask Use ~

⁶ See the article: “Hormone Replacement Therapy Falls Out of Favor With Expert Committee,” Journal of the American Medical Association (JAMA), Volume 287, No. 15, April 15, 2002, pp. 1923-1924.

We take this from the latest version of the CDC's *Science Brief: Community Use of Cloth Masks to Control the Spread of SARS-CoV-2*.⁷ I list all 38 studies cited by the CDC in the appendix at the end of this essay, along with summaries of the studies (written mostly by the authors themselves), and a classification of each. An executive summary is below:

- **Assessment by the American College of Physicians:** Before I present my analysis of the CDC's references in the above brief, I note that an ongoing, living review of the literature, *Update Alert 4: Masks for Prevention of Respiratory Virus Infections, Including SARS-CoV-2, in Health Care and Community Settings*, conducted by the American College of Physicians and published in the *Annals of Internal Medicine* on December 29, 2020⁸ concluded that “[f]or any mask use versus no use and for surgical use versus no use in community settings, the strength of evidence was changed from insufficient to low for a small reduction in risk for SARS-CoV-2 infection...[E]vidence for various comparisons about mask use in health care settings and risk for SARS-CoV-2 remains insufficient.” Their most recent update on March 9, 2021, maintains this position.⁹ This is hardly a glowing endorsement of the evidence for mask effectiveness and certainly not nearly strong enough to warrant imposing mandates.
- **Mechanistic Studies:** 23 studies cited in the CDC document are of this type. They examine, in various ways, how effective various mask materials and masks are at restricting the dispersion of droplets and/or aerosols. Most report some level of effectiveness, but none give glowing endorsements. These are what the WHO called “low-confidence studies” that indicate that masks could possibly offer some protection. The studies report wide variability in effectiveness and note: masks could not completely block transmission [5], the need for airtight masks to ensure effectiveness [9, 13, 16, 19], masks may not be effective against aerosols [14], masks may be effective against aerosols [6, 22, 23, 24], mask protection may be marginal at best [18, 19], that homemade masks are minimally effective

⁷ https://www.cdc.gov/coronavirus/2019-ncov/science/science-briefs/masking-science-sars-cov2.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fmore%2Fmasking-science-sars-cov2.html

⁸ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7774035/>

⁹ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7974711/>

and should only be a last resort [10], that the type of material doesn't affect transmission [37], note the need for CRTs [35, 38], indicate that their study may overestimate the effectiveness of masks [14]. The primary consideration here is that these are the best studies that the CDC could produce, and they are minimally convincing, and of low confidence. Even if there is effectiveness of some sore demonstrated here, it often depends on using the correct material, having tight-fitting masks, having a non-moist and clean mask,¹⁰ and wearing the masks properly. We all know that, in everyday use, these parameters are not followed by most individuals.

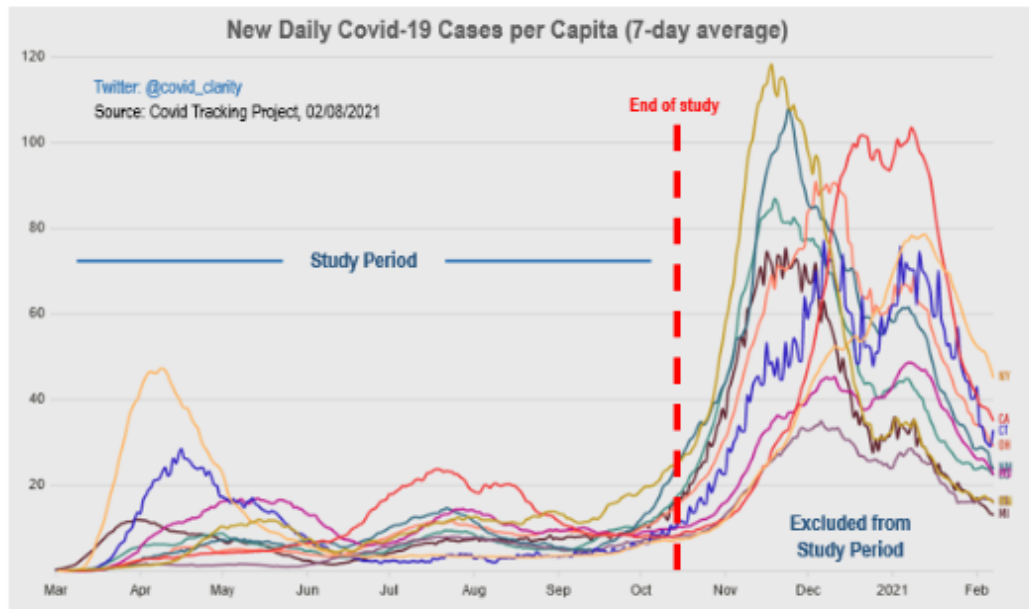
- **Observational Studies:** 8 studies are of this type. Most analyze data from confined situations, such as airplane flights or a healthcare settings. They all report some level of correlation between transmission and mask wearing. One study notes, in contrast to some of the mechanistic studies, "the type of mask worn was not independently associated with infection and contacts who always wore masks were more likely to practice social distancing" [37]. At best, these correlations point to the need for CRTs in order to establish whether masks really were a cause in the reduction of transmission. At least one study acknowledges this fact [38].
- **Models:** 2 studies are of this type. They are only as reliable as their assumptions, which are based on studies like those cited above.
- **Anecdotal Studies:** One study is anecdotal [1] and concerns two COVID positive hairdressers that treated 139 clients without transmission. They were wearing masks. This is the weakest possible evidence, not only because it is anecdotal, but because it is singular. Is this the only such instance they could find of non-transmission in a workplace? Are we sure there weren't other hairdressers or work situations in which fully masked individuals did pass on the infection to coworkers or clients? That the CDC cites this anecdote in their official science brief on mask wearing speaks of desperation and is embarrassing.

¹⁰ Mask efficacy decreases as the mask gets moist. See <https://www.cbc.ca/news/canada/hamilton/heat-covid-masks-1.5586327>

- **Debunked Studies:** 4 studies have been subsequently debunked. They consist of observational data that compare different communities with and without mask protocols in place and note a difference in transmission. As we shall see in the next portion of this essay, there are an overwhelming number of examples that demonstrate, time and again, in every part of the country and world, that neither the mask mandates nor lockdown measures correlate at all with transmission rates, case numbers, or per capita deaths from COVID-19.
- **One Horrifically Debunked Study:** The CDC published a report, *Decline in COVID-19 Hospitalization Growth Rates Associated with Statewide Mask Mandates — 10 States, March–October 2020*.¹¹ It is an example of statistical manipulation and dishonesty that surprises even me, and I’m pretty cynical. The study was published on February 12, 2021. Why is this important? Because they chose to stop analyzing data after October of 2020. Why the arbitrary October end date? Perhaps the slight, almost imperceptible trend in the following chart might explain it. Notice that, just as the case counts began to rise, they terminated the study. We are supposed to believe that this study shows statewide mask mandates caused the decline in cases and yet those same mandates remained in place through the end of the year, when the largest spike in cases occurred. This is not just ridiculous. It is scandalous. A thorough debunking of this “study” can be found from the American Institute of Economic Research.¹²

¹¹ <https://www.cdc.gov/mmwr/volumes/70/wr/mm7006e2.htm>

¹² <https://www.aier.org/article/the-cdcs-mask-mandate-study-debunked/>



- **CRTs:** The CDC mentions no CRT studies that support masking.
- **What is Missing:** The CDC also leaves out of this brief all of the evidence against face mask efficacy, including a paper they published on their website in May of 2020. This lack of integrity I find appalling, as now infamous “fact checks” routinely point to this precise type of error in social media posts that cherry-pick evidence to support a pre-defined narrative. Considering that the decision to support mask wearing was obviously made for non-scientific reasons (see the Page 2 of this essay), it makes sense that their rationale would have to involve cherry-picked evidence in order to present the illusion of a solid scientific foundation supporting that decision.

~ Evidence Against Mask Effectiveness ~

Why Was it the Conventional Wisdom Before COVID?: Before COVID, as we saw above from Dr. Fauci’s comments, it was the conventional wisdom that surgical and cloth masks cannot protect from a coronavirus. Why is that the case?

This article from the [City Journal](#)¹³ and this one from the [American Institute for Economic Research](#)¹⁴ both give nice overviews of what is known about the effectiveness of masks in mitigating respiratory illness.

1. **Physics and Industrial Hygiene:** Is an area of science that is very specialized, studying the effectiveness of various measures to increase safety in the workplace (cf. OSHA). According to leading industrial hygienist Stephen Petty,¹⁵
 - Medical doctors use surgical masks to stop spittle from dropping into open wounds and to protect splashes from entering their nose and mouth, not to protect themselves from respiratory viruses.
 - OSHA does not classify surgical masks or cloth masks as PPE for the simple reason that they cannot be fit tested.
 - To get a better idea why the lack of fit testing is important, he offers the analogy of trying to keep out gnats with a chain linked fence – that is approximately the size difference between a coronavirus aerosol and the mesh size of a cloth or surgical mask. But, since the mask does not fit tightly around your face, the gnat doesn't even have to go through the fence, because around the sides of the fence are open windows. The coronavirus has a diameter between 0.06 and 0.14 microns, whereas the thread diameter in an average mask is between 55 and 440 microns, almost 1,000 times larger.
 - A simple demonstration suggested by Petty uses vaping smoke to demonstrate how aerosols easily pass through and around various types of masks. Such a demonstration has in fact been recorded and posted on Youtube.¹⁶

¹³ https://www.city-journal.org/do-we-need-mask-mandates?wallit_nosession=1

¹⁴ <https://www.aier.org/article/masking-a-careful-review-of-the-evidence/>

¹⁵ Stephen Petty, P.E. CIH., C.S.P. of EES Group, Inc., is an actual expert in the use of masks. He has served repeatedly as an expert witness in trials such as those involving exposure to Round-Up. He holds degrees in See the podcast <https://podcasts.apple.com/us/podcast/ep-826-only-neanderthal-can-believe-mask-stops-virus/id1065050908?i=1000511752553>

¹⁶ https://www.youtube.com/watch?v=TkdTyZ9xd_g



- Petty offers a second comparison to help us understand the absurdity of believing a cloth mask can stop a virus. He would lose his license if he suggested that a worker wear a cloth or surgical mask while performing asbestos abatement, because the asbestos particles would easily be inhaled through and around the mask. Yet, asbestos particles are 20 to 50 times larger than a coronavirus trapped in an aerosol. If we don't trust such masks to protect us from asbestos particles, then why would we believe they protect us from something much, much smaller?
- From the NIH Website: "The N95 filtering face piece respirators may not provide the expected protection level against small virions. Some surgical masks may let a significant fraction of airborne viruses penetrate through their filters, providing very low protection against aerosolized infectious agents in the size range of 0.01 to 0.08 microns."¹⁷
- From a physics perspective, cloth and surgical masks simply cannot protect against inhaling or exhaling coronavirus aerosols. "It is absurd on its face," says Petty in the interview.
- The evidence increasingly shows that COVID-19 is primarily spread by aerosols (particles under 5 microns that linger in the air for days) and not droplets (which are larger and fall to the ground fairly quickly).
- Insert from Peratt: We have known that COVID is transmitted by aerosols from early on in the pandemic. On May 6, 2020, Professor of comparative immunology and biology Erin Brommage at the University of Massachusetts Dartmouth detailed a case of the spread of COVID in a restaurant in which patrons were infected according

¹⁷ <https://pubmed.ncbi.nlm.nih.gov/16490606/>

to whether they were in the air conditioning flow, downstream from the infected individual.¹⁸ Stephen Petty informs us that such aerosols can remain suspended in the air for hours or sometimes days, thereby completely eliminating the effectiveness of both masks and social distancing.

- Finally, he suggests that our obsession with masks and social distancing is using time, energy, and funding that could better be used on measures that will actually lower transmission, such as HEPA filters, good fresh air ventilation, and technologies such as bi-polar ionization for air duct systems.

2. **Controlled, Randomized Trials:** The CDC cited zero CRTs on transmission in their list of studies. Here, we cite several CRTs, and the CDC has done most of the work for us.

- *MacIntyre et al., April 2020:* A study in the International Journal of Nursing Studies examined 6 CRTs on transmission in healthcare settings to conclude: “Randomised controlled trials in health care workers showed that respirators, if worn continually during a shift, were effective but not if worn intermittently. Medical masks were not effective, and cloth masks even less effective.”¹⁹ They also examine five CRTs on community spread to conclude that masks “appeared to be effective.” Interestingly, the CDC examined those same studies and concluded the opposite, as delineated in the next bullet.
- *CDC Policy Report, May 2020:* The CDC published a collection of controlled, randomized studies that had been done up to that point on the efficacy of masks in mitigating the spread of respiratory illness. A relevant quote from the abstract of that paper is, “Although mechanistic studies support the potential effect of hand hygiene or face masks, evidence from 14 randomized controlled trials of these measures [only 10 of these studies addressed mask usage] did not support a substantial effect on transmission of laboratory-confirmed influenza. We similarly found limited evidence on the effectiveness of improved hygiene and environmental cleaning. We identified several major knowledge gaps requiring further research,

¹⁸ <https://www.erinbromage.com/post/the-risks-know-them-avoid-them>

¹⁹ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7191274/>

most fundamentally an improved characterization of the modes of person-to-person transmission.”²⁰

- Jacobs, J. L. et al. (2009): “Use of surgical face masks to reduce the incidence of the common cold among health care workers in Japan: A randomized controlled trial,” *American Journal of Infection Control*, Volume 37, Issue 5, 417–419.²¹ N95-masked health-care workers (HCW) were significantly more likely to experience headaches. *Face mask use in HCW was not demonstrated to provide benefit in terms of cold symptoms or getting colds.*
- Radonovich, L.J. et al. (2019): “N95 Respirators vs Medical Masks for Preventing Influenza Among Health Care Personnel: A Randomized Clinical Trial,” *JAMA*. 2019; 322(9): 824–833.²² “Among 2862 randomized participants, 2371 completed the study and accounted for 5180 HCW-seasons. ... Among outpatient health care personnel, *N95 respirators vs medical masks as worn by participants in this trial resulted in no significant difference in the incidence of laboratory-confirmed influenza.*”
- Bungaard et al., March 2021: The Danmask Study²³ only CRT of which I am aware that considers the effect of masks on the transmission of COVID-19, in particular. It found no significant effect and noted, in particular, that “although the difference observed was not statistically significant, the 95% CIs are compatible with a 46% reduction to a 23% increase in infection.” Since this study was completed at a time when the infection rate in Denmark was low, it is statistically underpowered, which means that, since so few people in Denmark were actually infected, it was quite unlikely to contract COVID-19 at that time whether or not one was wearing a mask.
- Alfelali et al., October 2020: A large randomized controlled trial with close to 8,000 participants, published in PLOS One, found that face masks “did not seem to be effective against laboratory-confirmed viral respiratory infections nor against clinical respiratory infection.”²⁴

²⁰ https://wwwnc.cdc.gov/eid/article/26/5/19-0994_article

²¹ <https://www.ncbi.nlm.nih.gov/pubmed/19216002>

²² <https://jamanetwork.com/journals/jama/fullarticle/2749214>

²³ <https://pubmed.ncbi.nlm.nih.gov/33205991/>

²⁴ <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0240287>

3. **Reviews and Mechanistic Studies:**²⁵

- *Long, Y. et al. (2020)*: “Effectiveness of N95 respirators versus surgical masks against influenza: A systematic review and meta-analysis,” J Evid Based Med. 2020; 1–9.²⁶ “A total of six RCTs involving 9,171 participants were included. There were no statistically significant differences in preventing laboratory-confirmed influenza, laboratory-confirmed respiratory viral infections, laboratory-confirmed respiratory infection, and influenza-like illness using N95 respirators and surgical masks. Meta-analysis indicated a protective effect of N95 respirators against laboratory-confirmed bacterial colonization (RR = 0.58, 95% CI 0.43-0.78). The use of N95 respirators compared with surgical masks is not associated with a lower risk of laboratory-confirmed influenza.”
- *Cowling, B. et al. (2010)*: “Face masks to prevent transmission of influenza virus: A systematic review,” Epidemiology and Infection, 138(4), 449-456.²⁷ None of the studies reviewed showed a benefit from wearing a mask, in either HCW or community members in households (H). See summary Tables 1 and 2 therein.
- *Bin-Reza et al. (2012)*: “The use of masks and respirators to prevent transmission of influenza: a systematic review of the scientific evidence,” Influenza and Other Respiratory Viruses 6(4), 257–267.²⁸ “There were 17 eligible studies. ... None of the studies established a conclusive relationship between mask/respirator use and protection against influenza infection.”
- *Smith, J.D. et al. (2016)*: “Effectiveness of N95 respirators versus surgical masks in protecting health care workers from acute respiratory infection: a systematic review and meta-analysis,” CMAJ Mar 2016.²⁹ “We identified six clinical studies In the meta-analysis of the clinical studies, we found no significant difference between N95 respirators and surgical masks in associated risk of (a) laboratory-confirmed respiratory infection, (b) influenza-like illness, or (c) reported workplace absenteeism.”

²⁵ These were obtained from an article published by the Swiss Policy Research Institute at <https://swprs.org/face-masks-evidence/>

²⁶ <https://onlinelibrary.wiley.com/doi/epdf/10.1111/jebm.12381>

²⁷ <https://www.cambridge.org/core/journals/epidemiology-and-infection/article/face-masks-to-prevent-transmission-of-influenza-virus-a-systematic-%20review/64D368496EBDE0AFCC6639CCC9D8BC05>

²⁸ <https://onlinelibrary.wiley.com/doi/epdf/10.1111/j.1750-2659.2011.00307.x>

²⁹ <https://www.cmaj.ca/content/188/8/567>

- *Offeddu, V. et al. (2017)*: “Effectiveness of Masks and Respirators Against Respiratory Infections in Healthcare Workers: A Systematic Review and Meta-Analysis,” *Clinical Infectious Diseases*, Volume 65, Issue 11, 1 December 2017, pages 1934–1942.³⁰ “Self-reported assessment of clinical outcomes was prone to bias. Evidence of a protective effect of masks or respirators against verified respiratory infection (VRI) was not statistically significant.”
- *February 2021*: A review by the European CDC found no significant evidence supporting the effectiveness of non-medical and medical face masks in the community. Furthermore, the European CDC advised against the use of FFP2/N95 masks by the general public.³¹
- *November 2020*: Cochrane review found that face masks did not reduce influenza-like illness (ILI) cases, neither in the general population nor in health care workers.³²
- *August 2020*: A review by a German professor in virology, epidemiology and hygiene found that there is no evidence for the effectiveness of face masks and that the improper daily use of masks by the public may in fact lead to an increase in infections.³³
- *July 2020*: A review by the Oxford Centre for Evidence-Based Medicine found that there is no evidence for the effectiveness of face masks against virus infection or transmission.³⁴
- *May 2020*: A *New England Journal of Medicine* article came to the conclusion that face masks offer little to no protection in everyday life.³⁵
- *April 2020*: A review by two US professors in respiratory and infectious disease from the University of Illinois concluded that face masks have no effect in everyday life, neither as self-protection nor to protect third parties (so-called source control).³⁶

³⁰ <https://academic.oup.com/cid/article/65/11/1934/4068747>

³¹ <https://www.ecdc.europa.eu/sites/default/files/documents/covid-19-face-masks-community-first-update.pdf>

³² <https://www.cochrane.org/CD006207/ARI-do-physical-measures-such-hand-washing-or-wearing-masks-stop-or-slow-down-spread-respiratory-viruses>

³³ <https://www.thieme-connect.com/products/ejournals/html/10.1055/a-1174-6591>

³⁴ <https://www.cebm.net/covid-19/masking-lack-of-evidence-with-politics/>

³⁵ <https://www.nejm.org/doi/full/10.1056/NEJMp2006372>

³⁶ <https://www.cidrap.umn.edu/news-perspective/2020/04/commentary-masks-all-covid-19-not-based-sound-data>

- April 2015: A study in the British Medical Journal BMJ Open found that cloth masks were penetrated by 97% of particles and may increase infection risk by retaining moisture or repeated use.³⁷
- More Studies & Analysis: If you want to review yet more studies and analysis, you can find them at a blog authored by Dennis G. Rancourt, Ph.D.³⁸ and a list of 47 studies is available from LifeSiteNews.³⁹

4. **Observational Studies**: Even if masks did work under ideal conditions in a laboratory setting, this would still not imply that mask mandates would be effective, since everyday mask use is far from the ideal called for in those studies. In this section, we consider an overabundance of observational data that severely challenges the assertion that mask mandates made any statistically recognizable difference at all.

- May 2021: From the BMJ, “Ventilation upgrades are correlated with lower rates in Florida but not in New York [schools]. We do not find any correlations with mask mandates.”⁴⁰
- May 2021: From the BMJ, “Case growth was not significantly different between mandate and non-mandate states at low or high transmission rates, and surges were equivocal...Mask mandates and use are not associated with slower state-level COVID-19 spread during COVID-19 growth surges. Containment requires future research and implementation of existing efficacious.”⁴¹
- Charts and Lack of Correlation: An important point to make before we look at the following data is this:

If data show a correlation, this does not mean that a cause-and-effect relationship exists (which is why CRTs are the gold standard, not observational studies).

³⁷ <https://bmjopen.bmj.com/content/5/4/e006577>

³⁸ <https://www.rcreader.com/commentary/masks-dont-work-covid-a-review-of-science-relevant-to-covide-19-social-policy>

³⁹ See <https://www.lifesitenews.com/news/47-studies-confirm-ineffectiveness-of-masks-for-covid-and-32-more-confirm-their-negative-health-effects/>. Since it generally reports on news that is antithetical to the prevailing secular narrative, so-called “fact checking” sites have sought to discredit LifeSiteNews. However, I have found that they meticulously document their sources. Therefore, the authority and reliability of this list derives not from LifeSiteNews, but from the sources themselves, many of which are articles published in refereed journals.

⁴⁰ <https://www.medrxiv.org/content/10.1101/2021.05.19.21257467v1>

⁴¹ <https://www.medrxiv.org/content/10.1101/2021.05.18.21257385v1>

*However, if a cause-and-effect relationship does exist, you **must** have correlation (if A causes B, then wherever A appears, B must also be found).*

The following charts show, consistently, that there is no correlation between mask mandates (or lockdowns) and cases or deaths per capita. **If masks are nearly as effective as is claimed, “even more powerful than a vaccine,” as former director of the CDC Robert Redfield said,⁴² we **must** be able to see some correlation, somewhere, of some size.** More charts like the ones that follow, accompanied by an excellent but simple analysis, are available in a book by Tom Wood’s entitled, *COVID Charts CNN Forgot*.⁴³

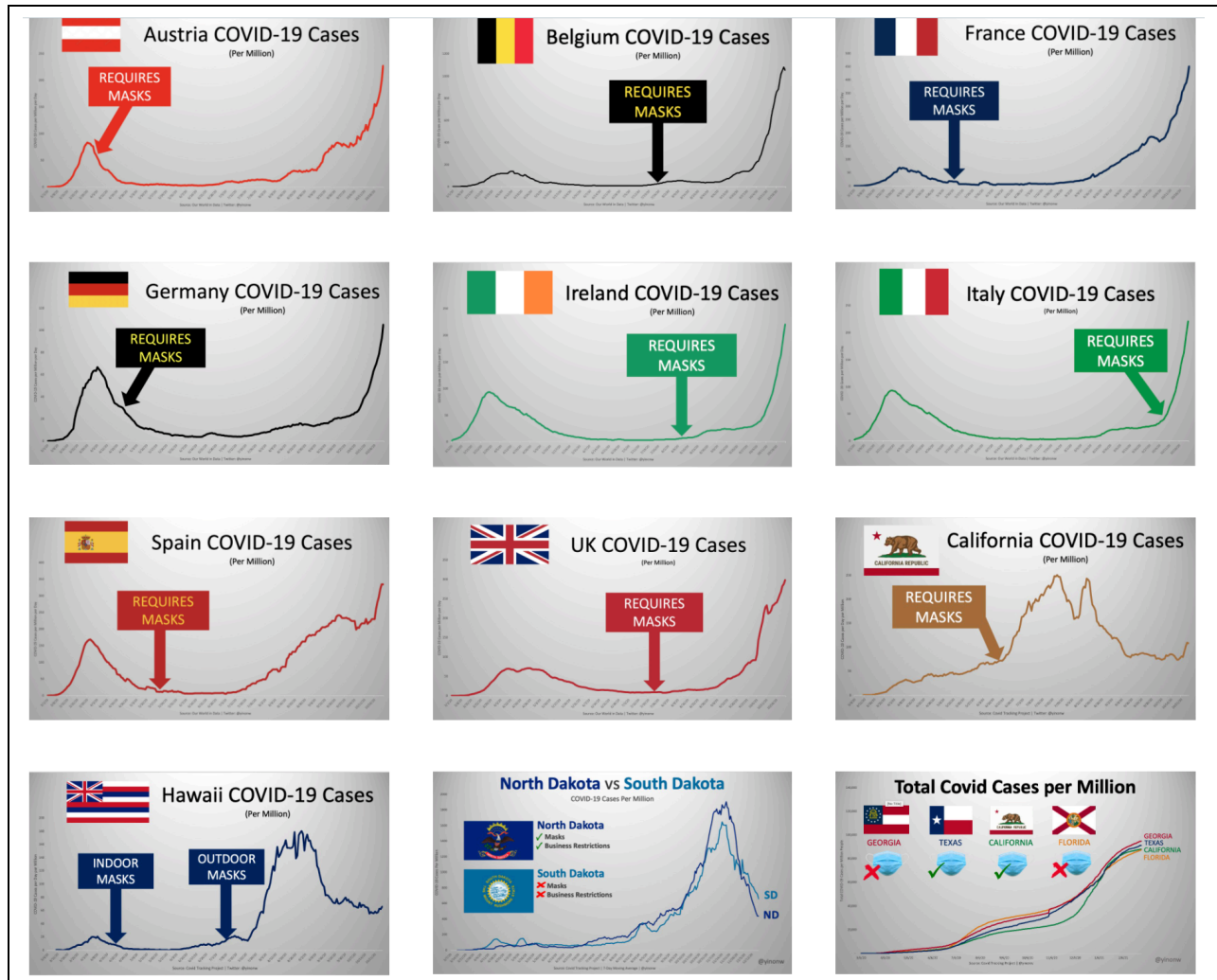
One final note before we examine the charts. As bad as the situations in these countries and states were even with the mitigation measures, **it is tempting to think they would have been much worse had they not implemented these mask mandates and lockdowns. That reasoning, however, does not comport with the charts that show absolutely zero correlation between the time of implementation of those measures and the number of cases, hospitalizations, or deaths.**

See Charts on the Next Page

Notice in the charts below that, regardless of the time during the pandemic at which the mask mandates were implemented, the curves look exactly the same. There is no way, if these charts were not labelled, that one would be able to guess when the mask mandate was implemented.

⁴² <https://www.msn.com/en-us/news/us/cdc-director-face-masks-offer-more-protection-than-a-vaccine/ar-BB196RpT>

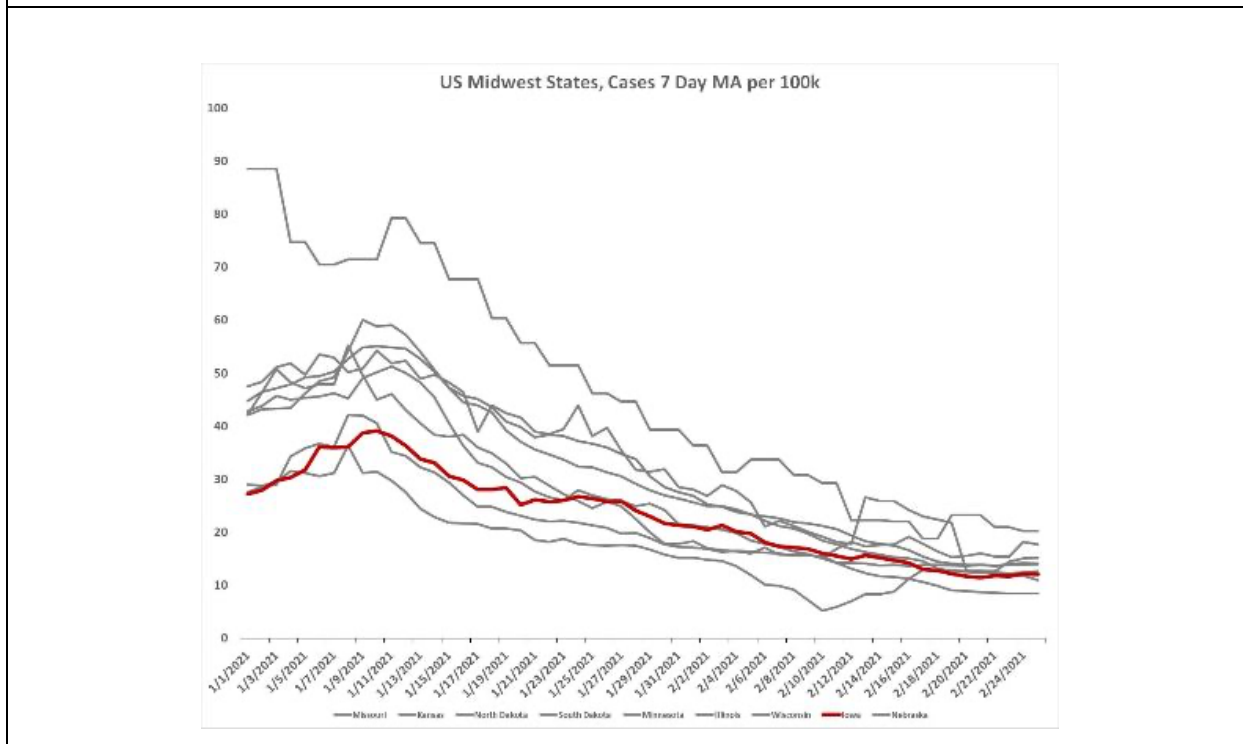
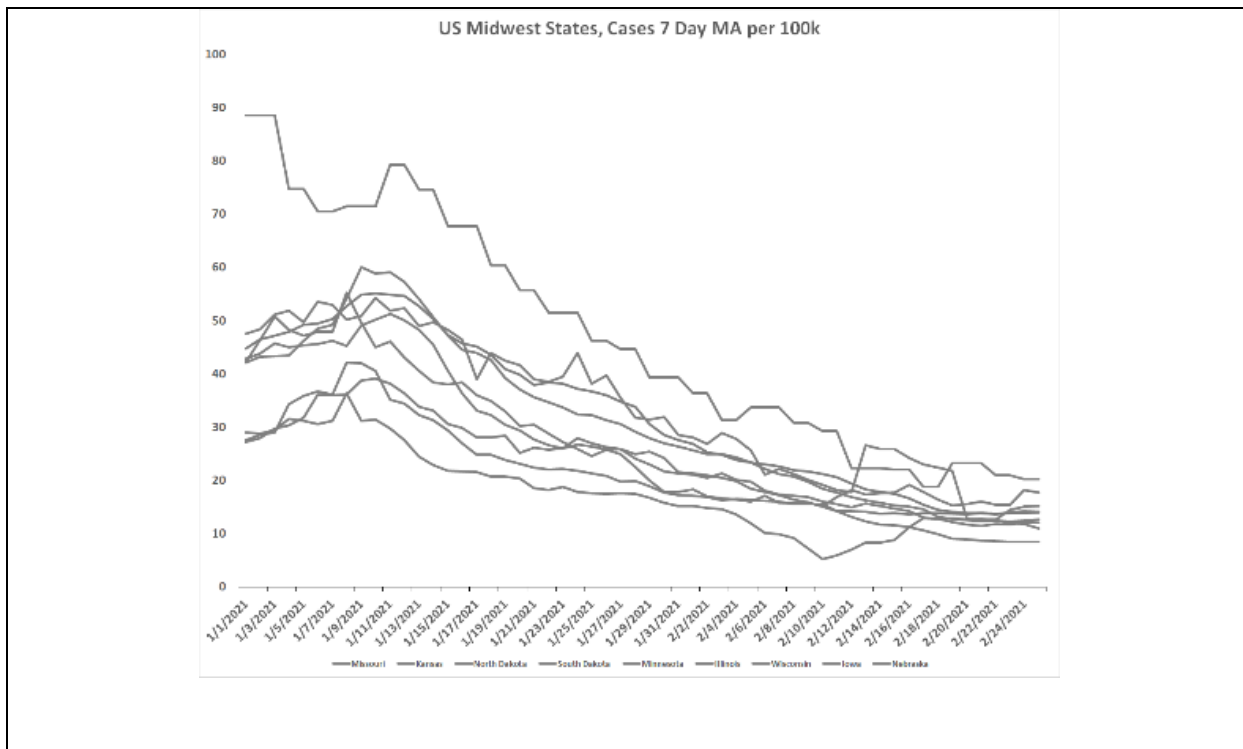
⁴³ <https://tomwoods.com>



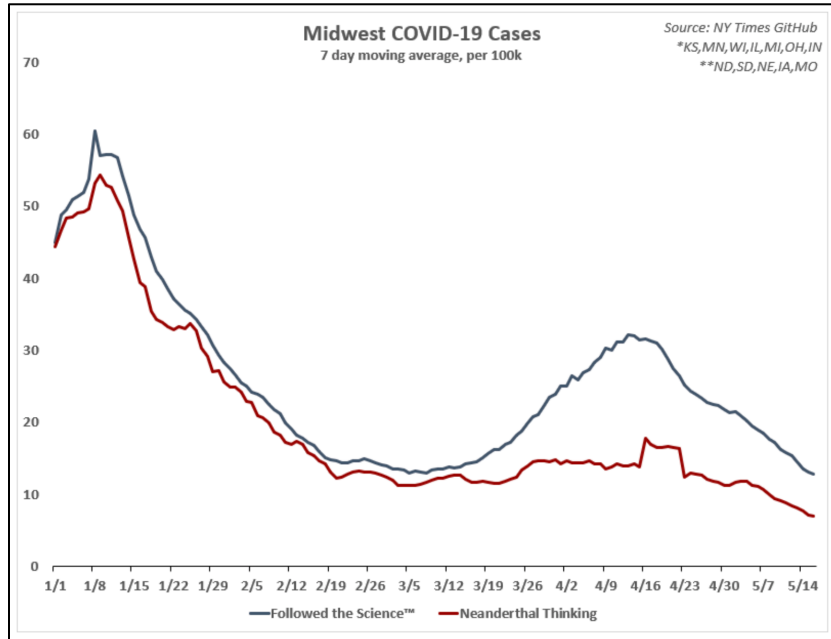
On February 7, Iowa dropped its mask mandate and its restrictions on businesses and gatherings. Three days later, the Post ran an article: “Welcome to Iowa, the State That Doesn't Care if You Live or Die.”⁴⁴

Below is a chart of the number of cases per 100,000 in the upper Midwestern states during this time. Can you guess which curve represents Iowa, the state that doesn't care if you live or die with its reckless dropping of its mask mandate? The answer is below it, highlighted in red.

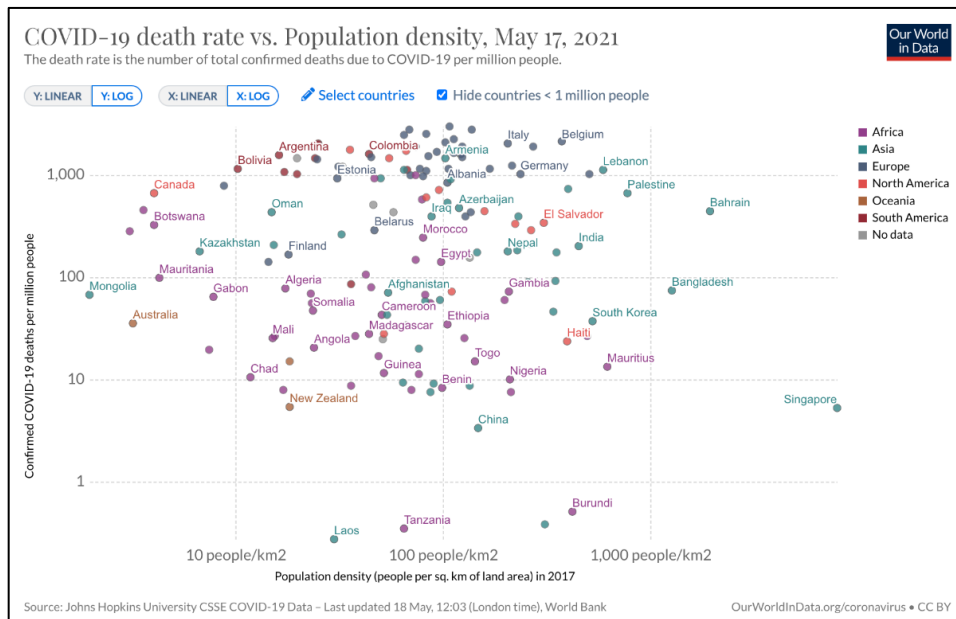
⁴⁴ <https://www.washingtonpost.com/outlook/2021/02/10/iowa-lift-all-restrictions/>



This chart comparing cases per 100K for Midwest state with and without restrictions speaks for itself.

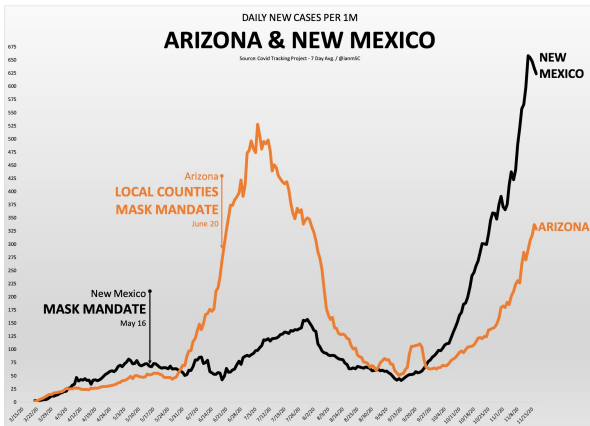


However, let us anticipate the objection that the blue states in the above graph fared worse because they have higher population density and therefore higher transmission rates. Below is a graph of COVID Deaths per Million People vs. Population Density for countries all over the world. Do you see a trend? There isn't one.

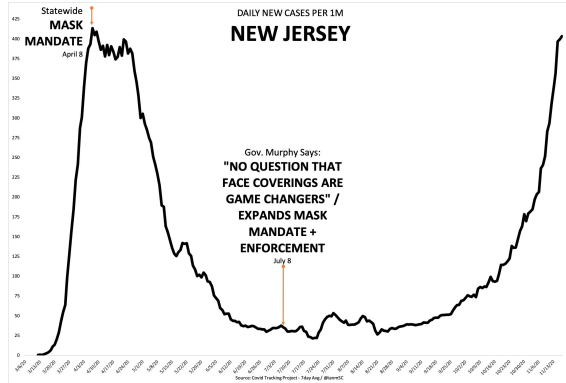


And, we continue...

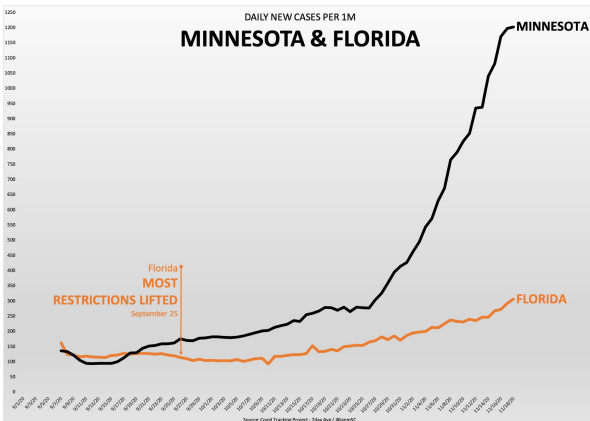
The CDC credited masks with bringing down Arizona's curve. Are they planning a follow-up statement now? And here's New Mexico as well, for good measure:



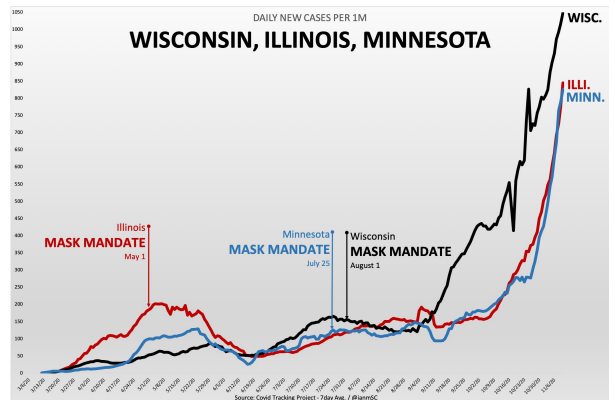
Here's New Jersey. The governor there said masks played a significant role in bringing their curve down. And it's true that *this is one of the rare charts* in which that story at least has a surface plausibility. The problem is that there's a right-hand side to that chart now:



Then there's Minnesota, which has had all kinds of crazy restrictions, and Florida, which was mostly open for a while before becoming completely open on September 25. Isn't it odd that their case counts are the opposite of what the hysteria would lead you to expect?

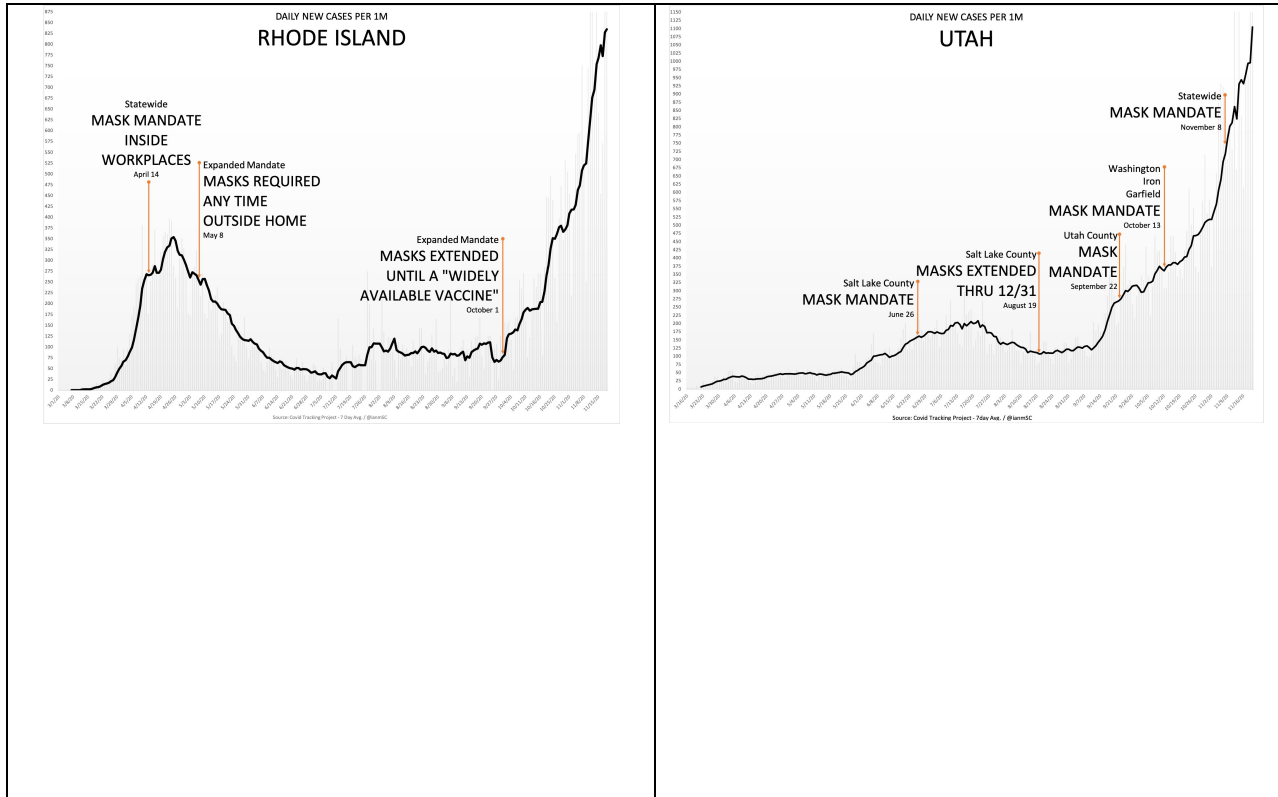


And finally, here are three states that believe in science! That's funny: I guess by an interesting coincidence they all just abandoned their sciency strategies at exactly the same time (because remember: rising case counts are always somebody's *fault!*):



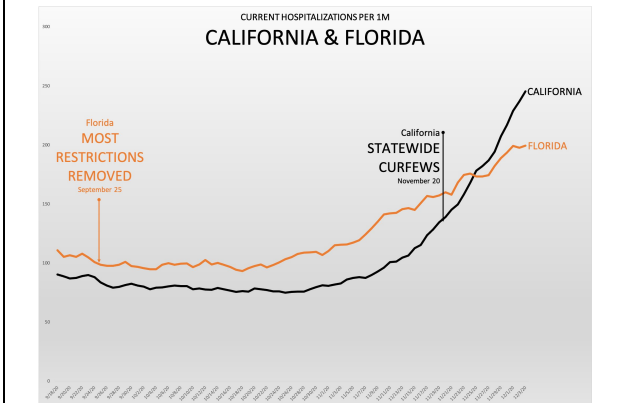
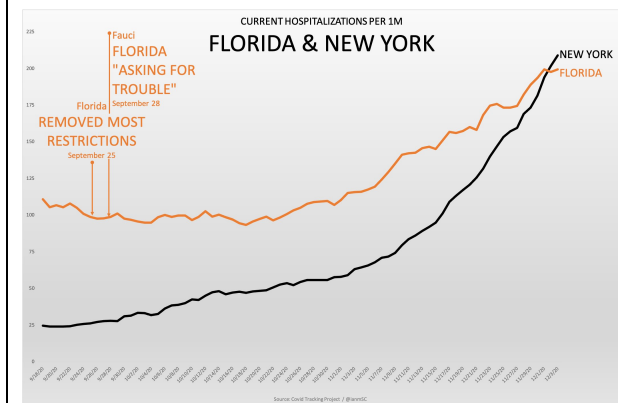
No correlation exists between the implementation of these mitigation measures and the number of cases.

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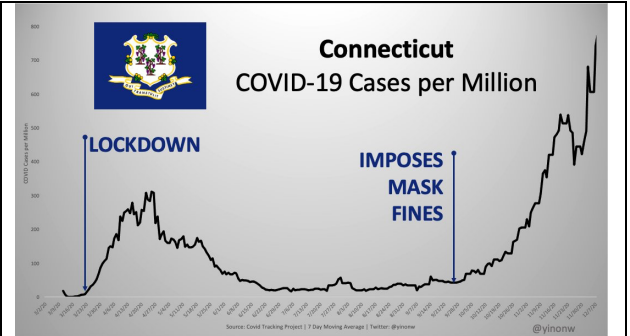
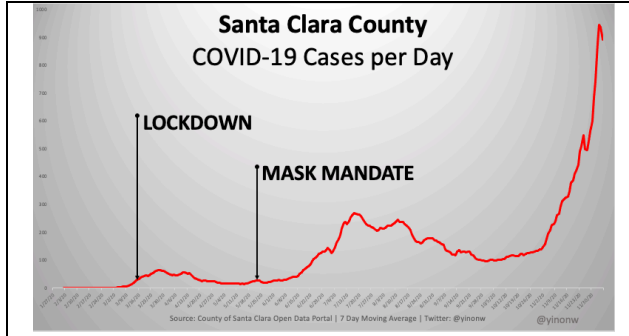
A quick comparison of New York, who “crushed the curve” and did the best job of managing the pandemic, according to Dr. Fauci, with reckless Florida.

Notice that the main difference between California and Florida is that CA has a much younger population that FL, and therefore less vulnerable. Otherwise, they are very comparable in terms of climate, number of Hispanics, etc.



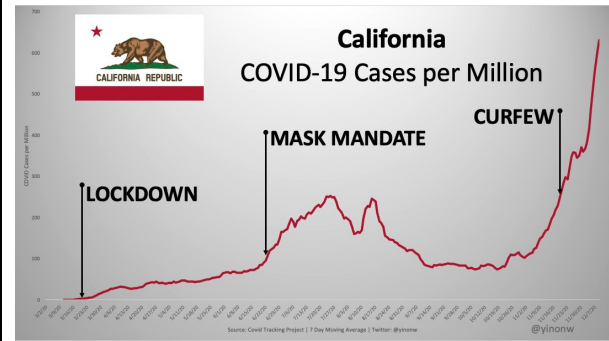
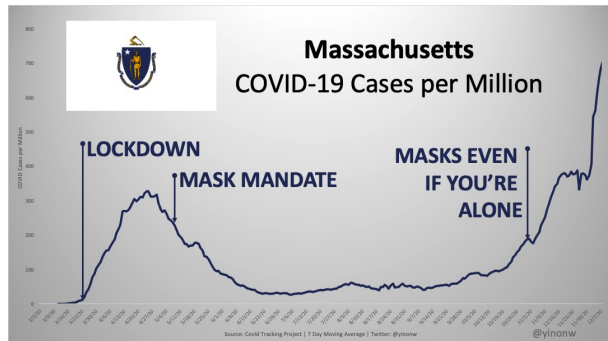
“Santa Clara County (CA) was the first in the US to lock down. They ‘followed the science’ with perhaps the longest lockdown in the world. Gyms never opened. Indoor dining *never* opened. How did that work out?”

“Connecticut is the home of Yale and many intellectuals, so surely they followed the science. Except now they have the highest per-capita case count in the country. What about all those masks, lockdowns, and the almighty #science?”



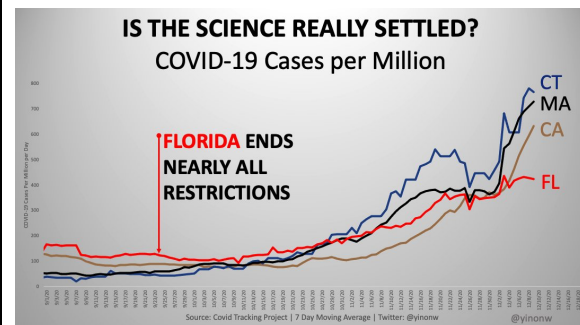
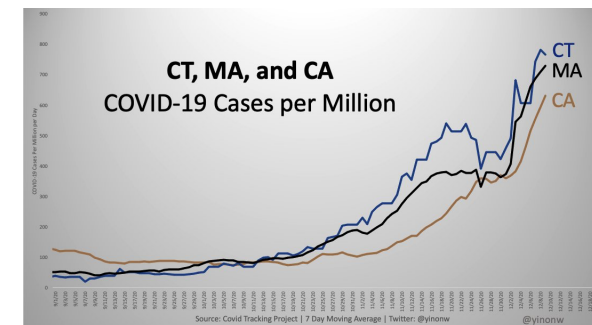
“Surely progressive Massachusetts, home to Harvard, MIT, and so many esteemed scientists, would follow the science. They used #science to require people to wear masks even if miles away from others in November. No schools, closed businesses, and a curfew. Surely that would work?”

“Let’s visit the West Coast where highly scientific California loves following the science! Remember all those beach closures? Curfews, no schools, and destroyed businesses are a high price to pay, but surely it’s worth it at the altar of #science. How is that working out?”

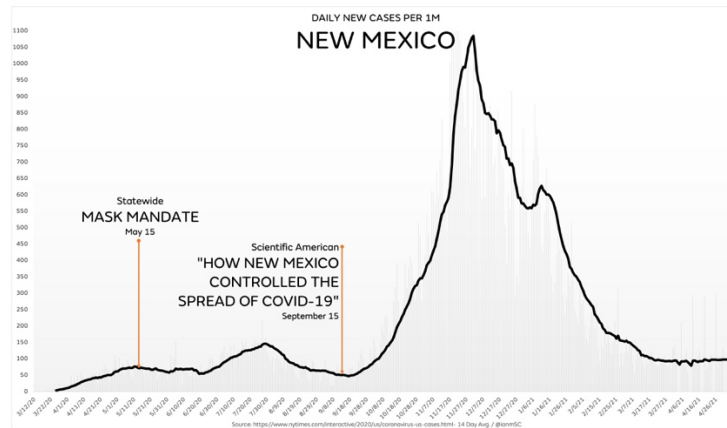


“But wait, maybe science was right and it’s the people’s fault! Even when separated by 2500 miles, the evil residents of CT, MA, and CA all decided to get lazy at the exact same time. So let’s not blame false idol scientists and clueless politicians. Let’s blame the people!”

“Ok ok, but it would be so much worse if they didn’t follow the #science, right? Let’s look at Florida, which effectively ended COVID restrictions on Sept 25th. Those crazies with their open schools, open business, and people who get to live their lives. Barbarians!”



“I don’t think I’ll ever get over that there was an article in what’s supposed to be a scientific publication about how New Mexico controlled Covid, cases immediately skyrocketed, and it’s received literally no media attention because it would challenge expert assumptions.” -- Ian Miller



One could reasonably make the **claim that these may be cherry-picked data.** However, consider the following two points:

- How many such graphs have you seen from the pro-masking CDC and other public experts? If they had such data, they would certainly share it, right? A new chart, every night, on CNN! Aside from a few studies cited in the previous section as “debunked,” and one case study of counties in Kansas with and without mask mandates,⁴⁵ they are totally silent. Why do you suppose that is?
- If masks were nearly as effective as is claimed, almost essential to our survival, do you not think that it would be the norm to find comparisons like this that showed correlation? Instead, it is the norm to find what is above. Most of these graphs were created by Ian Miller⁴⁶ and shared by Tom Woods. In an interview, Ian Miller⁴⁷ stated that even he was surprised that the public health experts got it wrong almost every single time. He doesn’t know ahead of time how these charts will come out but, much to his surprise, they contradict the authoritative narrative almost every single time!

I will end this section with an e-mail from Tom Woods on 2/25/2021:

Promoting his latest article on Twitter, he began: “As COVID-19 swept the American South over the past 12 months, our uninformed and selfish choices worsened the pandemic in

⁴⁵ <https://www.cdc.gov/mmwr/volumes/69/wr/mm6947e2.htm>

⁴⁶ <https://twitter.com/ianmsc>

⁴⁷ Tom Woods podcast No. 1851 at <https://tomwoods.com/search/ian+milller/>

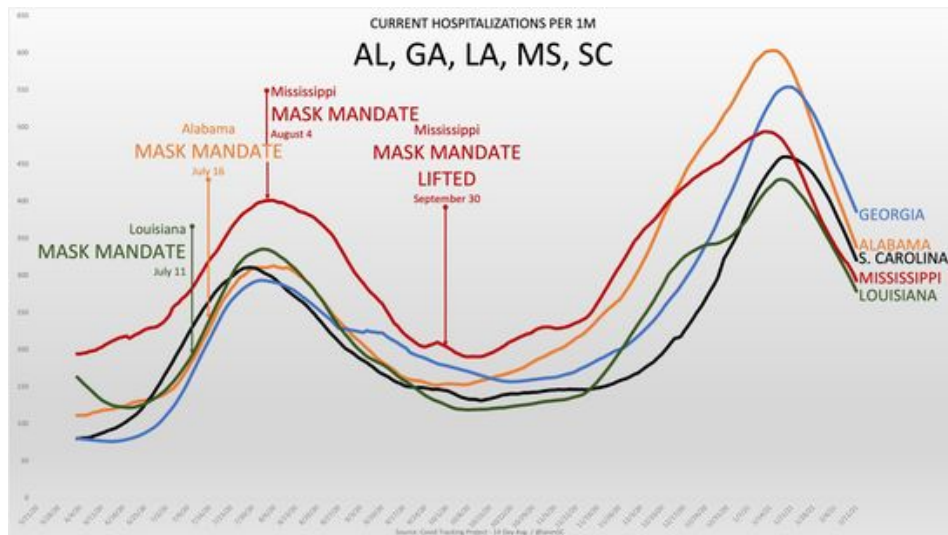
every way. We paid the price in lives.”

In other words, the usual line: you stupid rubes wouldn't listen to your “public health” experts, so the deaths are all your fault.

Well, Ian Miller, who compiles so many of the charts I share with you, happened to see this.

The result was a brutal, bloody beatdown.

Ian began: “Hey Brett, wondering if you can explain this to me...if behavior and rules are so important, why do all of these curves look the same?”

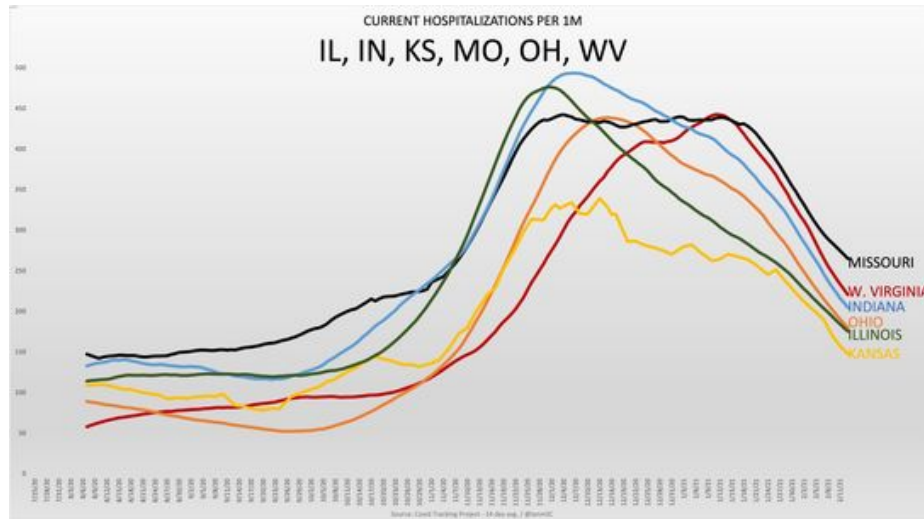


Ol' Brett came back with: “Short answer? Because the behavior was largely the same. My story covers 4 of these states, and in those states residents generally followed the same gathering patterns, resulting in similar infection curves.”

Ian wasn't about to let him get away with that.

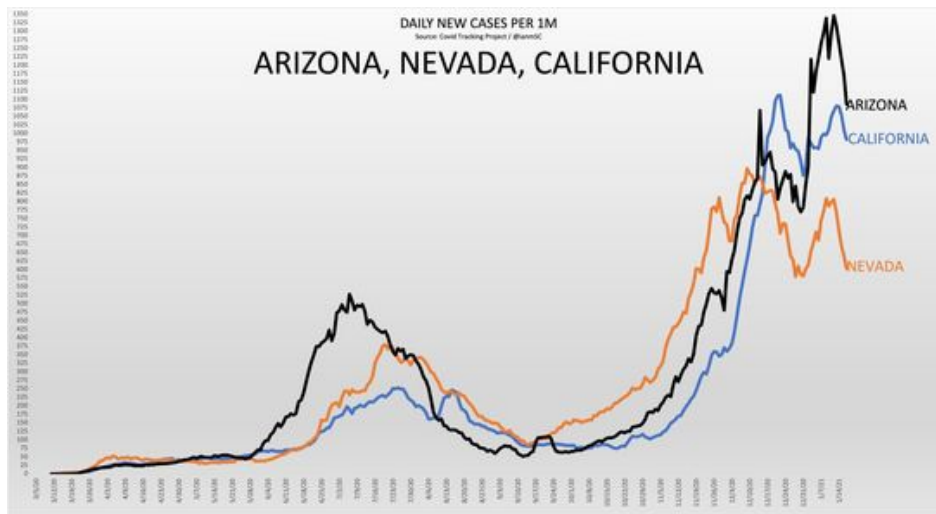
“You think people in South Carolina and Louisiana behaved the same way? Despite totally different rules and mandates? That's the explanation?”

“How about Kansas and Illinois and West Virginia, same behavior there too?”



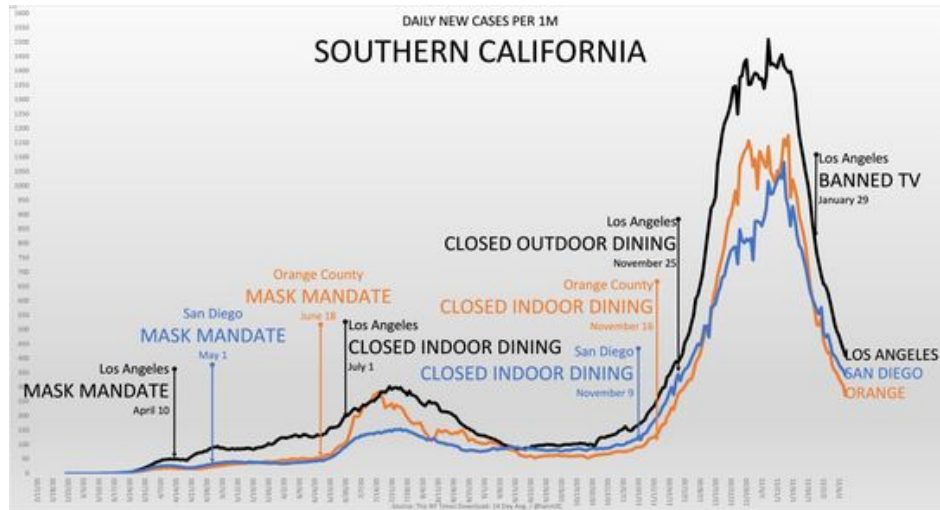
Ian keeps going.

“Nevada opened the largest casinos and hotels in the world last spring while California’s been one of the most closed states in the country since March. So we know the behavior’s been different there. What happened?”



Ian won't stop.

“Southern California counties have all had different rules at different times with wildly varying levels of compliance. Didn't matter here either. Ever thought that maybe behavior is an excuse used by politicians to explain why their policies aren't working?”



Kelman responded:

“Have I thought about it? Yes. I would like to look more at these charts you are posting, but not as Twitter screenshots. Mind sharing your source for these images?”

Ian proceeds to do so (they're listed at the bottom of each chart), with most of the data coming from the covidtracking.com site.

Kelman thanks him, and the exchange ends.

It is virtually certain that Kelman had never seen any of this. He had bought the “it's your fault” argument hook, line, and sinker.

The chart for Arizona, Nevada, and California is especially important, because the *LA Times* and the government of California are trying to take the credit for the decline in cases. But Arizona and Nevada didn't have such extreme lockdowns, and their curves are about the same.

If we had actual journalists, our “public health officials” (I cannot use that phrase except inside mocking quotation marks) would be mercilessly interrogated about all this on a daily basis.

What we have instead are curious, honest people like Ian Miller who report the truths we should be reading in the news.

4. A Note on Asymptomatic Transmission: Inasmuch as masks retard the expulsion of droplets, they can reduce transmission by droplets from people coughing and sneezing while they are COVID positive. This is an argument for wearing a mask while you are sick (though, as stated above, COVID primarily spreads by aerosols, not droplets), but the case for mandating that ALL people wear a mask stemmed from the fear of *asymptomatic spread*. Remember that Dr. Anthony Fauci said at the beginning of the pandemic that, asymptomatic spread, if it occurs at all, has historically never been the driver of

outbreaks.⁴⁸ He was correct; that has been the conventional epidemiological wisdom until COVID. We now have two solid studies debunking the myth that asymptomatic spread is driving this pandemic. The first was published in Nature Communications on 11/20/2020, in which no cases of asymptomatic transmission were found among 10,000,000 carefully contacted-traced individuals in Wuhan, China.⁴⁹ The second is a meta-analysis involving over 700,000 people published in JAMA on 12/14/2020 that found an asymptomatic transmission rate of 0.7% and a symptomatic transmission rate of 18.0% within households.⁵⁰ **Asymptomatic transmission can no longer be claimed as a reasonable justification for universal mask mandates.**

5. **Harms of Mask Mandates:** There appear to be some concerns with constant mask use (increased cases of bacterial pneumonia caused by rebreathing moist, bacteria laden air; possible hypoxia during strenuous exercise; constant inhaling of small fibers from the mask material, especially in allergy prone people; long-term psychological effects on young children whose brain development depends on facial recognition and the development of the ability to read facial expressions; the fear factor, that masks teach us to see one another primarily as vectors of infectious disease rather than people; the psychological effect on people with special needs such as autism; the concern that mask wearing is a psychological tool being used by public authorities to enforce compliance and maintain irrational fear of a disease with a 99.74% overall survival rate).

The American Institute for Economic Research has two articles which provide a well-documented overview of the science on the dangers of masks.^{51 52}

Various studies and articles that detail the research on these concerns are listed below.⁵³

1. **Preliminary report on surgical mask induced deoxygenation during major surgery:** Face mask side effects include lowered oxygen levels. This study shows that surgeons that wore a mask in surgery for

⁴⁸ <https://www.youtube.com/watch?v=vrAvjU2LBkg&t=2s>

⁴⁹ <https://www.nature.com/articles/s41467-020-19802-w>

⁵⁰ <https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2774102>

⁵¹ <https://www.aier.org/article/the-dangers-of-masks/>

⁵² <https://www.aier.org/article/medical-journal-warns-about-maskss-potentially-devastating-consequences/>

⁵³ This list, with the exception of the last item, was compiled by LifeSiteNews. See <https://www.lifesitenews.com/news/47-studies-confirm-ineffectiveness-of-masks-for-covid-and-32-more-confirm-their-negative-health-effects/>. Since it generally reports on news that is antithetical to the prevailing secular narrative, so-called "fact checking" sites have sought to discredit LifeSiteNews. However, I have found that they meticulously document their sources. Therefore, the authority and reliability of this list derives not from LifeSiteNews, but from the sources themselves, many of which are articles published in refereed journals.

an hour+ had significant reductions in blood oxygen saturation. This is relevant because most of us are being made to wear face masks at work for the whole shift, long journeys on public transport, and when we are in a public places doing shopping etc. and this requires a degree of exertion that is not taken into account. "Considering our findings, pulse rates of the surgeon's increase and SpO2 decrease after the first hour." Decreasing oxygen and increasing carbon dioxide in the bloodstream stimulates a compensatory response in the respiratory centers of the brain. These changes in blood gases result in increases in both frequency and depth of breaths. This exposes another risk – if your mask traps some virus you are breathing more hence increasing viral load and exposure.⁵⁴

2. **Impact of structural features on dynamic breathing resistance of healthcare face mask:** Face mask side effects include impeded breathing. Ask people if they have issues breathing in these masks. anecdotal or not, as everyone is different. "The results showed that each evaluation index was significantly different ($P < 0.05$) among different test masks."⁵⁵
3. **Respiratory consequences of N95-type Mask usage in pregnant healthcare workers-a controlled clinical study:** The benefits of using N95 mask to prevent serious emerging infectious diseases should be weighed against potential respiratory consequences associated with extended N95 respirator usage. "It is known that the N95 mask, if worn for hours, can reduce blood oxygenation as much as 20 percent, which can lead to a loss of consciousness, as happened to the hapless fellow driving around alone in his car wearing an N95 mask, causing him to pass out, crash his car and sustain injuries. I am sure that we have several cases of elderly individuals or any person with poor lung function passing out, hitting their head. This, of course, can lead to death...CONCLUSIONS: Breathing through N95 mask materials have been shown to impede gaseous exchange and impose an additional workload on the metabolic system of pregnant healthcare workers, and this needs to be taken into consideration in guidelines for respirator use."⁵⁶
4. **Headaches and the N95 face-mask amongst healthcare providers:** Face mask side effects include headaches. These headaches can force you to use added or unnecessary medications like painkillers that carry their own side effects. The theory as to why masks can trigger headaches is the RESTRICTION OF OXYGEN. What are the long-term health effects on Health Care Workers with headaches arising from impeded breathing? Here are several sources and studies that back up this claim.^{57 58 59}
5. **Use of surgical face masks to reduce the incidence of the common cold among health care workers in Japan: a randomized controlled trial:** "Of the 8 symptoms recorded daily, subjects in the mask group were significantly more likely to experience headaches during the study period." "Face mask use in health care workers has not been demonstrated to provide benefit in terms of cold symptoms or getting colds."⁶⁰
6. **Your Health Your Responsibility:** This video shows that even reading a book with a mask on decreases blood oxygen levels to your brain. what implications does this have for developing children forced to wear masks at school, etc.⁶¹
7. **Physiological impact of the N95 filtering facepiece respirator on healthcare workers:** "CONCLUSIONS: In healthy healthcare workers, FFR did not impose any important physiological burden during 1 hour of use, at realistic clinical work rates, but the FFR dead-space carbon dioxide and oxygen levels were significantly above and below, respectively, the ambient workplace standards, and elevated P(CO2) is a possibility." Remember in "healthy healthcare workers" even their carbon dioxide levels rose. Most of the wider public have at least one health problem. Even healthy people were shown to have elevated CO2 levels above the healthy guidelines.⁶²
8. **The adverse skin reactions of health care workers using personal protective equipment for COVID-19:** Face mask side effects include adverse skin reactions. The adverse skin reactions of health care workers using personal protective equipment for COVID-19.⁶³

⁵⁴ <https://www.sciencedirect.com/science/article/abs/pii/S1130147308702355?via%3Dihub>

Study article: <https://pubmed.ncbi.nlm.nih.gov/18500410/>

⁵⁵ <https://pubmed.ncbi.nlm.nih.gov/31280156/>

⁵⁶ <https://pubmed.ncbi.nlm.nih.gov/26579222/>

⁵⁷ <https://pubmed.ncbi.nlm.nih.gov/16441251/>

⁵⁸ <https://pubmed.ncbi.nlm.nih.gov/32232837/>

⁵⁹ <https://www.withcove.com/learn/migraine-triggers-mask>

⁶⁰ <https://pubmed.ncbi.nlm.nih.gov/19216002/>

⁶¹ <https://youtu.be/ul5E5BUrI14>

⁶² <https://pubmed.ncbi.nlm.nih.gov/20420727/>

⁶³ <https://pubmed.ncbi.nlm.nih.gov/32541493/>

9. **Your Mask May Be Causing Candida Growth in Your Mouth:** Face mask side effects include yeast infections.⁶⁴
10. **'Mask mouth' is a seriously stinky side effect of wearing masks:** Face mask side effects include dental issues. "We're seeing inflammation in people's gums that have been healthy forever, and cavities in people who have never had them before," says Dr. Rob Ramondi, a dentist and co-founder of One Manhattan Dental. "About 50 percent of our patients are being impacted by this, [so] we decided to name it 'mask mouth' — after 'meth mouth.'...While mask mouth isn't quite as obvious, if left untreated, the results could be equally harmful. Gum disease — or periodontal disease — will eventually lead to strokes and an increased risk of heart attacks," says Dr. Marc Sclafani, another co-founder of One Manhattan Dental."⁶⁵
11. **All That Mask-Wearing Could Be Giving You (Gasp!) Mouth Fungus:** Here's How to Deal With It.⁶⁶
12. **'Maskne' Is a Real Thing—Here's How to Stop Face Mask Breakouts:** Face mask side effects include acne.⁶⁷
13. **Improper use of medical masks can cause infections:** Face mask side effects include mould and infections. Masks can cause bacterial and fungal infections around the mouth, and in the mouth and lungs EVEN if you wash the cloth mask. Mould colonies were found in masks in as little as one day.⁶⁸
14. **Mould Colonization in Your Sinuses Could Be Holding You Back From Making a Full Recovery:** Information on mould and how it can affect your health.⁶⁹
15. **An investigation into the efficiency of disposable face masks:** What are the dangers of bacterial and fungal growths on a used and loaded mask? This study tested all kinds of disposable masks and proved they cause you to breathe back in your own crap.⁷⁰
16. **Can the Elastic of Surgical Face Masks Stimulate Ear Protrusion in Children?:** Disfiguration in children. Can masks stimulate ear protrusion in children? This is due to masks that are too tightly fitted. Tight masks can also cause tension headaches. Is this healthy for children long term?⁷¹
17. **When You Wear A Face Mask Every Day, This Is What Happens To Your Lungs:** Mask use can trigger allergies due to the mask collecting particles that stay on you for long periods of time.⁷²
18. **The physiological impact of wearing an N95 mask during hemodialysis as a precaution against SARS in patients with end-stage renal disease:** The physiological impact of wearing an N95 mask during hemodialysis as a precaution against SARS in patients with end-stage renal disease. And yet, we make sick people wear them. Even people without breathing issues, have lowered oxygen rates.⁷³
19. **Other Face Mask Side Effects and Health Implications to Consider:** There is a great potential for harm that may arise from public policies forcing mask use on the wider population. The following unanswered questions arise unanswered: Can masks shed fibers or micro plastics that we can breathe in? Do these masks excrete chemical substances that are harmful when inhaled? Can masks excrete chemicals or fumes when heated, either with body heat sunlight or other sources of heat? Clothing dye can cause reactions, so how do we know that the manufacturing process of these masks do not pose a risk to us? Because, in reality, we do not buy our masks from medical companies or facilities who operate in sterile environments.
20. **[Gaps in asepsis due to surgical caps, face masks, external surfaces of infusion bottles and sterile wrappers of disposable articles]:** "It is obvious that the surfaces of the boxes of sterile packed disposable instruments and infusion bottles are not sterile. The disposable surgical masks and surgical caps used for sterile clothing are delivered by the producers not sterile, either." AND THIS IS HOSPITAL EQUIPMENT.⁷⁴

⁶⁴ <https://www.everydayhealth.com/coronavirus/your-mask-may-be-causing-candida-growth-in-your-mouth/>

⁶⁵ <https://nypost.com/2020/08/05/mask-mouth-is-a-seriously-stinky-side-effect-of-wearing-masks/>

⁶⁶ <https://www.wellandgood.com/mouth-sores-from-wearing-masks/>

⁶⁷ <https://www.health.com/condition/skin-conditions/maskne-mask-acne-mechanica>

⁶⁸ <https://www.aa.com.tr/en/health/improper-use-of-medical-masks-can-cause-infections-/1766676>

⁶⁹ <https://moldfreeliving.com/2019/01/26/could-mold-colonization-in-your-sinuses/>

⁷⁰ <https://pubmed.ncbi.nlm.nih.gov/7440756/>

⁷¹ <https://pubmed.ncbi.nlm.nih.gov/32556449/>

⁷² <https://www.thelist.com/214073/when-you-wear-a-face-mask-every-day-this-is-what-happens-to-your-lungs/>

⁷³ <https://pubmed.ncbi.nlm.nih.gov/15340662/>

⁷⁴ <https://pubmed.ncbi.nlm.nih.gov/6099666/>

21. **Mask Production Video:** This is a “factory” that produces a lot of masks. Does this look like a sterile environment to you? This is what the majority of us are getting when we purchase online or in stores that sell them in bulk. Do you want that on your face?⁷⁵
22. **Allergies and the Immune System:** Can pathogen-laden droplets interact with environmental dust and aerosols captured on the mask? Can this elicit a greater reaction to viruses? For example, if you have a dust allergy your mask is collecting this thus causing inflammation to the wearer and lowering his or her immune system. “This can cause wheezing, itching, runny nose, watery or itchy eyes, and other symptoms” would that not facilitate spread and infection rate of viruses?⁷⁶
23. **Virus interactions with bacteria: Partners in the infectious dance:** Bacteria and viruses can interact and increase infection susceptibility.⁷⁷
24. **When viruses and bacteria unite!**⁷⁸
25. **An empirical and theoretical investigation into the psychological effects of wearing a mask:** Face mask side effects include altered behaviour. Are there negative social consequences to a masked society? This study implies that, yes, masks do cause people to adopt altered behaviours based on mask use.⁷⁹
26. **Mask mandates may affect a child’s emotional, intellectual development:** Face mask side effects stagnate a child’s natural intellectual development. It is well known that children find it hard to recognise faces up until a certain age. Mask use will further interfere with this. Is this healthy for a developing child?⁸⁰
27. **Disabled People and Masks Contributing Toward Mental Health Issues:** Face mask side effects and mental health. What about disabled people? Deaf /people hard of hearing rely on mouth reading. What are the implications for them? What about people who suffer cognitive and behavioural disorders like autism? This could cause them HUGE distress. Not just from wearing a mask, but seeing others in masks (because let’s face it – IT’S NOT NORMAL BEHAVIOUR). Can masks cause anxiety, or make other mental health disorders worse? Since masks CAN impede breathing, this can cause fainting and other bodily reactions that would otherwise be avoided if masks were not used. Here is a search engine link to prove that it is very common.⁸¹
28. **Maine study looks into long-term psychological effects of wearing face masks coronavirus, COVID-19 pandemic:** This is a study on the psychological effects of masks.⁸²
29. **Masks: Have You Been Captured by This Psyop?:** Are there negative psychological consequences to wearing a mask, as a fear-based behavioral modification? This can easily trigger fear as a mask is reminding you there’s a virus. The use of mask can also cause you to engage in risky behaviours due to a “false sense of security” because you feel protected.⁸³
30. **Masking the Truth – Face Masks, Empathy and Dis-inhibition**⁸⁴
31. **Covid-19 face masks: A potential source of microplastic fibers in the environment:** What are the environmental consequences of mask manufacturing and disposal? Proof of increased littering due to increased mask use. A quick engine search will tell you, people are dumping them EVERYWHERE – into our rivers, into greenland areas etc. Plastics like nylon leach chemicals are going into our environment.⁸⁵
32. **Why Masks Don’t Work Against COVID-19:** Can used and loaded masks become vectors of enhanced transmission for both the wearer and other people? (The evidence from studies suggests yes). Masks become useless after about 20 minutes due to the moisture in your breath. This moisture can become the droplets that viruses travel on. Can this not facilitate transmission? Can masks become collectors and retainers of pathogens that otherwise, could be avoided when breathing without a mask? (The evidence suggests yes.). Can large droplets trapped via a mask become atomized or aerosolized into breathable components? Even down to the virion size. (The evidence suggests yes).⁸⁶

⁷⁵ <https://youtu.be/8gyO9TSlC0Q>

⁷⁶ <https://www.hopkinsmedicine.org/health/conditions-and-diseases/allergies-and-the-immune-system>

⁷⁷ <https://journals.plos.org/plospathogens/article?id=10.1371/journal.ppat.1008234>

⁷⁸ <https://blogs.scientificamerican.com/lab-rat/when-viruses-and-bacteria-unite/>

⁷⁹ <https://strathprints.strath.ac.uk/43402/>

⁸⁰ <https://www.wishtv.com/news/mask-mandates-may-affect-a-childs-emotional-intellectual-development/>

⁸¹ <https://duckduckgo.com/?q=mask+anxiety&ia=web>

⁸² <https://www.msn.com/en-us/health/wellness/umaine-study-looks-into-long-term-psychological-effects-of-wearing-face-masks-coronavirus-covid-19-pandemic/ar-BB13EfiU>

⁸³ <https://kellybroganmd.com/masks-have-you-been-captured-by-this-psyop/>

⁸⁴ <https://podtail.com/fit/podcast/conspiracy-theoryology/masking-the-truth-face-masks-empathy-and-dis-inhib/>

⁸⁵ <https://pubmed.ncbi.nlm.nih.gov/32563114/>

⁸⁶ https://www.citizensforreespeech.org/why_masks_don_t_work_against_covid_19

33. **Corona Study on Children from Germany:** In this publication we report the results from the parents, who entered data on a total of 25,930 children. The average wearing time of the mask was 270 minutes per day. Impairments caused by wearing the mask were reported by 68% of the parents. These included irritability (60%), headache (53%), difficulty concentrating (50%), less happiness (49%), reluctance to go to school/kindergarten (44%), malaise (42%) impaired learning (38%) and drowsiness or fatigue (37%).⁸⁷

⁸⁷ <https://www.researchsquare.com/article/rs-124394/v2>