Public Comments

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The data for facial coverings as a pandemic mitigation strategy has been low-quality, inconsistent, inconclusive, or downright shoddy since March and April 2020. I will spend a good chunk of this public comment linking to studies upon studies that show their use to be unhelpful, possibly even negative when factoring in the harm that can come from improper use. There have been a combined 22 months of mask wearing in Charles County and we are still at crisis-level spread and hospitalization use. Failing to look at that very explicit data is a failure of leadership and one must believe the Commissioners and Dr. Abney are the true data-deniers. (Please note that after each of the tables, I do provide quite a bit of personal commentary and would appreciate you reading it)

100 Years of Mask Data was discarded

We now know, thanks to a Freedom of Information Act request, that Dr. Anthony Fauci himself declared little use for masks as protection. He wrote to former HHS Secretary Sylvia Burwell, "Masks are really for infected people to prevent them from spreading infection to people who are not infected rather than protecting uninfected people from acquiring infection. The typical mask you buy in the drug store is not really effective in keeping out virus, which is small enough to pass through material. It might, however, provide some slight benefit in keep out gross droplets if someone coughs or sneezes on you."

He repeated this advice on March 8 and so did many public health officials. This week and last week, Dr. Leana Wen (former Baltimore City Health Officer) and Dr. Scott Gottlieb (former FDA chair) informed the public that cloth masks are no match for Omicron and truthfully, were never appropriate for an aerosolized respiratory virus.

Why did Dr. Fauci et al. tell people to forego masks in the beginning? That's because we already had almost 100 years of evidence that they don't really work against respiratory viruses. I will include a great number of pre-pandemic studies showing that masks were ineffective as either source control or protection from influenza, they were never considered for the H1N1 pandemic of 2009, they were found to be ineffective in the Spanish Influenza pandemic of 1918, and they were even controversial in the surgical theater.

MASK-INEFFECTIVENESS	
1) Effectiveness of Adding a Mask Recommendation to Other Public Health Measures to Prevent SARS-CoV-2 Infection in Danish Mask Wearers, Bundgaard, 2021	“Infection with SARS-CoV-2 occurred in 42 participants recommended masks (1.8%) and 53 control participants (2.1%). The between-group difference was −0.3 percentage point (95% CI, −1.2 to 0.4 percentage point; P = 0.38) (odds ratio, 0.82 [CI, 0.54 to 1.23]; P = 0.33). Multiple imputation accounting for loss to follow-up yielded similar results…the recommendation to wear surgical masks to supplement other public health measures did not reduce the SARS-CoV-2 infection rate among wearers by more than 50% in a community with modest infection rates, some degree of social distancing, and uncommon general mask use.”
2) SARS-CoV-2 Transmission among	“Our study showed that in a group of predominantly young male military recruits, approximately 2% became positive for SARS-CoV-2, as determined by qPCR assay, during a 2-week, strictly enforced quarantine. Multiple,

Marine Recruits during Quarantine, Letizia, 2020	independent virus strain transmission clusters were identified…all recruits wore double-layered cloth masks at all times indoors and outdoors."
3) Physical interventions to interrupt or reduce the spread of respiratory viruses, Jefferson, 2020	"There is low certainty evidence from nine trials (3507 participants) that wearing a mask may make little or no difference to the outcome of influenza-like illness (ILI) compared to not wearing a mask (risk ratio (RR) 0.99, 95% confidence interval (CI) 0.82 to 1.18. There is moderate certainty evidence that wearing a mask probably makes little or no difference to the outcome of laboratory-confirmed influenza compared to not wearing a mask (RR 0.91, 95% CI 0.66 to 1.26; 6 trials; 3005 participants)…the pooled results of randomised trials did not show a clear reduction in respiratory viral infection with the use of medical/surgical masks during seasonal influenza."
4) The Impact of Community Masking on COVID-19: A Cluster-Randomized Trial in Bangladesh, Abaluck, 2021 Heneghan et al.	A cluster-randomized trial of community-level mask promotion in rural Bangladesh from November 2020 to April 2021 (N=600 villages, N=342,126 adults. Heneghan writes: "In a Bangladesh study, surgical masks reduced symptomatic COVID infections by between 0 and 22 percent, while the efficacy of cloth masks led to somewhere between an 11 percent increase to a 21 percent decrease. Hence, based on these randomized studies, adult masks appear to have either no or limited efficacy."
5) Evidence for Community Cloth Face Masking to Limit the Spread of SARS-CoV-2: A Critical Review, Liu/CATO, 2021	"The available clinical evidence of facemask efficacy is of low quality and the best available clinical evidence has mostly failed to show efficacy, with fourteen of sixteen identified randomized controlled trials comparing face masks to no mask controls failing to find statistically significant benefit in the intent-to-treat populations. Of sixteen quantitative meta-analyses, eight were equivocal or critical as to whether evidence supports a public recommendation of masks, and the remaining eight supported a public mask intervention on limited evidence primarily on the basis of the precautionary principle."
6) Nonpharmaceutical Measures for Pandemic Influenza in Nonhealthcare Settings—Personal Protective and Environmental Measures, CDC/Xiao, 2020	"Evidence from 14 randomized controlled trials of these measures did not support a substantial effect on transmission of laboratory-confirmed influenza…none of the household studies reported a significant reduction in secondary laboratory-confirmed influenza virus infections in the face mask group…the overall reduction in ILI or laboratory-confirmed influenza cases in the face mask group was not significant in either studies."
7) CIDRAP: Masks-for-all	"We agree that the data supporting the effectiveness of a cloth mask or face covering are very limited. We do, however, have data from laboratory studies

for COVID-19 not based on sound data, Brosseau, 2020	that indicate cloth masks or face coverings offer very low filter collection efficiency for the smaller inhalable particles we believe are largely responsible for transmission, particularly from pre- or asymptomatic individuals who are not coughing or sneezing…though we support mask wearing by the general public, we continue to conclude that cloth masks and face coverings are likely to have limited impact on lowering COVID-19 transmission, because they have minimal ability to prevent the emission of small particles, offer limited personal protection with respect to small particle inhalation, and should not be recommended as a replacement for physical distancing or reducing time in enclosed spaces with many potentially infectious people."
8) Universal Masking in Hospitals in the Covid-19 Era, Klompas/NEJM, 2020	"We know that wearing a mask outside health care facilities offers little, if any, protection from infection. Public health authorities define a significant exposure to Covid-19 as face-to-face contact within 6 feet with a patient with symptomatic Covid-19 that is sustained for at least a few minutes (and some say more than 10 minutes or even 30 minutes). The chance of catching Covid-19 from a passing interaction in a public space is therefore minimal. In many cases, the desire for widespread masking is a reflexive reaction to anxiety over the pandemic…The calculus may be different, however, in health care settings. First and foremost, a mask is a core component of the personal protective equipment (PPE) clinicians need when caring for symptomatic patients with respiratory viral infections, in conjunction with gown, gloves, and eye protection…universal masking alone is not a panacea. A mask will not protect providers caring for a patient with active Covid-19 if it's not accompanied by meticulous hand hygiene, eye protection, gloves, and a gown. A mask alone will not prevent health care workers with early Covid-19 from contaminating their hands and spreading the virus to patients and colleagues. Focusing on universal masking alone may, paradoxically, lead to more transmission of Covid-19 if it diverts attention from implementing more fundamental infection-control measures."
9) Masks for prevention of viral respiratory infections among health care workers and the public: PEER umbrella systematic review, Dugré, 2020	"This systematic review found limited evidence that the use of masks might reduce the risk of viral respiratory infections. In the community setting, a possible reduced risk of influenza-like illness was found among mask users. In health care workers, the results show no difference between N95 masks and surgical masks on the risk of confirmed influenza or other confirmed viral respiratory infections, although possible benefits from N95 masks were found for preventing influenza-like illness or other clinical respiratory infections. Surgical masks might be superior to cloth masks but data are limited to 1 trial."
10) Effectiveness of personal protective measures in reducing pandemic influenza transmission: A systematic review and meta-	"Facemask use provided a non-significant protective effect (OR = 0.53; 95% CI 0.16–1.71; I_2 = 48%) against 2009 pandemic influenza infection."

analysis, Saunders-Hastings, 2017	
11) Experimental investigation of indoor aerosol dispersion and accumulation in the context of COVID-19: Effects of masks and ventilation, Shah, 2021	"Nevertheless, high-efficiency masks, such as the KN95, still offer substantially higher apparent filtration efficiencies (60% and 46% for R95 and KN95 masks, respectively) than the more commonly used cloth (10%) and surgical masks (12%), and therefore are still the recommended choice in mitigating airborne disease transmission indoors."
12) Exercise with facemask; Are we handling a devil's sword?- A physiological hypothesis, Chandrasekaran, 2020	"Exercising with facemasks may reduce available Oxygen and increase air trapping preventing substantial carbon dioxide exchange. The hypercapnic hypoxia may potentially increase acidic environment, cardiac overload, anaerobic metabolism and renal overload, which may substantially aggravate the underlying pathology of established chronic diseases. Further contrary to the earlier thought, no evidence exists to claim the facemasks during exercise offer additional protection from the droplet transfer of the virus."
13) Surgical face masks in modern operating rooms–a costly and unnecessary ritual?, Mitchell, 1991	"Following the commissioning of a new suite of operating rooms air movement studies showed a flow of air away from the operating table towards the periphery of the room. Oral microbial flora dispersed by unmasked male and female volunteers standing one metre from the table failed to contaminate exposed settle plates placed on the table. The wearing of face masks by non-scrubbed staff working in an operating room with forced ventilation seems to be unnecessary."
14) Facemask against viral respiratory infections among Hajj pilgrims: A challenging cluster-randomized trial, Alfelali, 2020	"By intention-to-treat analysis, facemask use did not seem to be effective against laboratory-confirmed viral respiratory infections (odds ratio [OR], 1.4; 95% confidence interval [CI], 0.9 to 2.1, p = 0.18) nor against clinical respiratory infection (OR, 1.1; 95% CI, 0.9 to 1.4, p = 0.40)."
15) Simple respiratory protection–evaluation of	"Results obtained in the study show that common fabric materials may provide marginal protection against nanoparticles including those in the size ranges of virus-containing particles in exhaled breath."

the filtration performance of cloth masks and common fabric materials against 20-1000 nm size particles, Rengasamy, 2010	
16) Respiratory performance offered by N95 respirators and surgical masks: human subject evaluation with NaCl aerosol representing bacterial and viral particle size range, Lee, 2008	"The study indicates that N95 filtering facepiece respirators may not achieve the expected protection level against bacteria and viruses. An exhalation valve on the N95 respirator does not affect the respiratory protection; it appears to be an appropriate alternative to reduce the breathing resistance."
17) Aerosol penetration and leakage characteristics of masks used in the health care industry, Weber, 1993	"We conclude that the protection provided by surgical masks may be insufficient in environments containing potentially hazardous sub-micrometer-sized aerosols."
18) Disposable surgical face masks for preventing surgical wound infection in clean surgery, Vincent, 2016	"We included three trials, involving a total of 2106 participants. There was no statistically significant difference in infection rates between the masked and unmasked group in any of the trials...from the limited results it is unclear whether the wearing of surgical face masks by members of the surgical team has any impact on surgical wound infection rates for patients undergoing clean surgery."
19) Disposable surgical face masks: a systematic	"From the limited results it is unclear whether wearing surgical face masks results in any harm or benefit to the patient undergoing clean surgery."

review, Lipp, 2005	
20) Comparison of the Filter Efficiency of Medical Nonwoven Fabrics against Three Different Microbe Aerosols, Shimasaki , 2018	"We conclude that the filter efficiency test using the phi-X174 phage aerosol may overestimate the protective performance of nonwoven fabrics with filter structure compared to that against real pathogens such as the influenza virus."
21) The use of masks and respirators to preventtransmission of influenza: a systematic review of thescientific evidence21) The use of masks and respirators to prevent transmission of influenza: a systematic review of the scientific evidence, Bin-Reza, 2012	The use of masks and respirators to preventtransmission of influenza: a systematic review of thescientific evidence"None of the studies established a conclusive relationship between mask/respirator use and protection against influenza infection. Some evidence suggests that mask use is best undertaken as part of a package of personal protection especially hand hygiene."
22) Facial protection for healthcare workers during pandemics: a scoping review, Godoy, 2020	"Compared with surgical masks, N95 respirators perform better in laboratory testing, may provide superior protection in inpatient settings and perform equivalently in outpatient settings. Surgical mask and N95 respirator conservation strategies include extended use, reuse or decontamination, but these strategies may result in inferior protection. Limited evidence suggests that reused and improvised masks should be used when medical-grade protection is unavailable."
23) Assessment of Proficiency of N95 Mask Donning Among the General Public in	"These findings support ongoing recommendations against the use of N95 masks by the general public during the COVID-19 pandemic.5 N95 mask use by the general public may not translate into effective protection but instead provide false reassurance. Beyond N95 masks, proficiency among the general public in donning surgical masks needs to be assessed."

Singapore, Yeung, 2020	
24) Evaluating the efficacy of cloth facemasks in reducing particulate matter exposure, Shakya, 2017	"Standard N95 mask performance was used as a control to compare the results with cloth masks, and our results suggest that cloth masks are only marginally beneficial in protecting individuals from particles<2.5 μm."
25) Use of surgical face masks to reduce the incidence of the common cold among health care workers in Japan: a randomized controlled trial, Jacobs, 2009	"Face mask use in health care workers has not been demonstrated to provide benefit in terms of cold symptoms or getting colds."
26) N95 Respirators vs Medical Masks for Preventing Influenza Among Health Care Personnel, Radonovich, 2019	"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."
27) Does Universal Mask Wearing Decrease or Increase the Spread of COVID-19?, Watts up with that? 2020	"A survey of peer-reviewed studies shows that universal mask wearing (as opposed to wearing masks in specific settings) does not decrease the transmission of respiratory viruses from people wearing masks to people who are not wearing masks."
28) Masking: A Careful Review of the Evidence, Alexander, 2021	"In fact, it is not unreasonable at this time to conclude that surgical and cloth masks, used as they currently are, have absolutely no impact on controlling the transmission of Covid-19 virus, and current evidence implies that face masks can be actually harmful."

29) Community and Close Contact Exposures Associated with COVID-19 Among Symptomatic Adults ≥18 Years in 11 Outpatient Health Care Facilities — United States, July 2020, Fisher, 2020	Reported characteristics of symptomatic adults ≥18 years who were outpatients in 11 US academic health care facilities and who received positive and negative SARS-CoV-2 test results (N = 314)* — United States, July 1–29, 2020, revealed that 80% of infected persons wore face masks almost all or most of the time.
30) Impact of non-pharmaceutical interventions against COVID-19 in Europe: a quasi-experimental study, Hunter, 2020	Face masks in public was not associated with reduced incidence.
31) Masking lack of evidence with politics, CEBM, Heneghan, 2020	"It would appear that despite two decades of pandemic preparedness, there is considerable uncertainty as to the value of wearing masks. For instance, high rates of infection with cloth masks could be due to harms caused by cloth masks, or benefits of medical masks. The numerous systematic reviews that have been recently published all include the same evidence base so unsurprisingly broadly reach the same conclusions."
32) Transmission of COVID-19 in 282 clusters in Catalonia, Spain: a cohort study, Marks, 2021	"We observed no association of risk of transmission with reported mask usage by contacts, with the age or sex of the index case, or with the presence of respiratory symptoms in the index case at the initial study visit."
33) Non-pharmaceutical public health measures for mitigating the risk and impact of epidemic and pandemic	"Ten RCTs were included in the meta-analysis, and there was no evidence that face masks are effective in reducing transmission of laboratory-confirmed influenza."

influenza, WHO, 2020	
34) The Strangely Unscientific Masking of America, Younes, 2020	"One report reached its conclusion based on observations of a "dummy head attached to a breathing simulator." Another analyzed use of surgical masks on people experiencing at least two symptoms of acute respiratory illness. Incidentally, not one of these studies involved cloth masks or accounted for real-world mask usage (or misusage) among lay people, and none established efficacy of widespread mask-wearing by people not exhibiting symptoms. There was simply no evidence whatsoever that healthy people ought to wear masks when going about their lives, especially outdoors."
35) Facemasks and similar barriers to prevent respiratory illness such as COVID-19: A rapid systematic review, Brainard, 2020	"31 eligible studies (including 12 RCTs). Narrative synthesis and random-effects meta-analysis of attack rates for primary and secondary prevention in 28 studies were performed. Based on the RCTs we would conclude that wearing facemasks can be very slightly protective against primary infection from casual community contact, and modestly protective against household infections when both infected and uninfected members wear facemasks. However, the RCTs often suffered from poor compliance and controls using facemasks."
36) The Year of Disguises, Koops, 2020	"The healthy people in our society should not be punished for being healthy, which is exactly what lockdowns, distancing, mask mandates, etc. do…Children should not be wearing face coverings. We all need constant interaction with our environments and that is especially true for children. This is how their immune system develops. They are the lowest of the low-risk groups. Let them be kids and let them develop their immune systems… The "Mask Mandate" idea is a truly ridiculous, knee-jerk reaction and needs to be withdrawn and thrown in the waste bin of disastrous policy, along with lockdowns and school closures. You can vote for a person without blindly supporting all of their proposals!"
37) Open Schools, Covid-19, and Child and Teacher Morbidity in Sweden, Ludvigsson, 2020	"1,951,905 children in Sweden (as of December 31, 2019) who were 1 to 16 years of age, were examined…social distancing was encouraged in Sweden, but wearing face masks was not…No child with Covid-19 died."
38) Double-Masking Benefits Are Limited, Japan Supercomputer Finds, Reidy, 2021	"Wearing two masks offers limited benefits in preventing the spread of droplets that could carry the coronavirus compared to one well-fitted disposable mask, according to a Japanese study that modeled the dispersal of droplets on a supercomputer."
39) Physical interventions to interrupt or reduce the spread of	"There was insufficient evidence to provide a recommendation on the use of facial barriers without other measures. We found insufficient evidence for a difference between surgical masks and N95 respirators and limited evidence to support effectiveness of quarantine."

respiratory viruses. Part 1 – Face masks, eye protection and person distancing: systematic review and meta-analysis, Jefferson, 2020	
40) Should individuals in the community without respiratory symptoms wear facemasks to reduce the spread of COVID-19?, NIPH, 2020	"Non-medical facemasks include a variety of products. There is no reliable evidence of the effectiveness of non-medical facemasks in community settings. There is likely to be substantial variation in effectiveness between products. However, there is only limited evidence from laboratory studies of potential differences in effectiveness when different products are used in the community."
41) Is a mask necessary in the operating theatre?, Orr , 1981	"It would appear that minimum contamination can best be achieved by not wearing a mask at all but operating in silence. Whatever its relation to contamination, bacterial counts, or the dissemination of squames, there is no direct evidence that the wearing of masks reduces wound infection."
42) The surgical mask is a bad fit for risk reduction, Neilson, 2016	"As recently as 2010, the US National Academy of Sciences declared that, in the community setting, "face masks are not designed or certified to protect the wearer from exposure to respiratory hazards." A number of studies have shown the inefficacy of the surgical mask in household settings to prevent transmission of the influenza virus."
43) Facemask versus No Facemask in Preventing Viral Respiratory Infections During Hajj: A Cluster Randomised Open Label Trial, Alfelali, 2019	"Facemask use does not prevent clinical or laboratory-confirmed viral respiratory infections among Hajj pilgrims."
44) Facemasks in the	"The existing scientific evidences challenge the safety and efficacy of wearing facemask as preventive intervention for COVID-19. The data suggest that both

COVID-19 era: A health hypothesis, Vainshelboim, 2021	medical and non-medical facemasks are ineffective to block human-to-human transmission of viral and infectious disease such SARS-CoV-2 and COVID-19, supporting against the usage of facemasks. Wearing facemasks has been demonstrated to have substantial adverse physiological and psychological effects. These include hypoxia, hypercapnia, shortness of breath, increased acidity and toxicity, activation of fear and stress response, rise in stress hormones, immunosuppression, fatigue, headaches, decline in cognitive performance, predisposition for viral and infectious illnesses, chronic stress, anxiety and depression."
45) The use of masks and respirators to prevent transmission of influenza: a systematic review of the scientific evidence, Bin-Reza, 2011	"None of the studies established a conclusive relationship between mask/respirator use and protection against influenza infection. Some evidence suggests that mask use is best undertaken as part of a package of personal protection especially hand hygiene."
46) Are Face Masks Effective? The Evidence., Swiss Policy Research, 2021	"Most studies found little to no evidence for the effectiveness of face masks in the general population, neither as personal protective equipment nor as a source control."
47) Postoperative wound infections and surgical face masks: A controlled study, Tunevall, 1991	"These results indicate that the use of face masks might be reconsidered. Masks may be used to protect the operating team from drops of infected blood and from airborne infections, but have not been proven to protect the patient operated by a healthy operating team."
48) Mask mandate and use efficacy in state-level COVID-19 containment, Guerra, 2021	"Mask mandates and use are not associated with slower state-level COVID-19 spread during COVID-19 growth surges."
49) Twenty Reasons Mandatory Face Masks are Unsafe, Ineffective and Immoral, Manley, 2021	"A CDC-funded review on masking in May 2020 came to the conclusion: "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… None of the household studies reported a significant reduction in secondary laboratory-confirmed influenza virus infections in the face mask group." If masks can't stop the regular flu, how can they stop SAR-CoV-2?"
50) A cluster	"First RCT of cloth masks, and the results caution against the use of cloth

randomised trial of cloth masks compared with medical masks in healthcare workers, MacIntyre, 2015	masks. This is an important finding to inform occupational health and safety. Moisture retention, reuse of cloth masks and poor filtration may result in increased risk of infection...the rates of all infection outcomes were highest in the cloth mask arm, with the rate of ILI statistically significantly higher in the cloth mask arm (relative risk (RR)=13.00, 95% CI 1.69 to 100.07) compared with the medical mask arm. Cloth masks also had significantly higher rates of ILI compared with the control arm. An analysis by mask use showed ILI (RR=6.64, 95% CI 1.45 to 28.65) and laboratory-confirmed virus (RR=1.72, 95% CI 1.01 to 2.94) were significantly higher in the cloth masks group compared with the medical masks group. Penetration of cloth masks by particles was almost 97% and medical masks 44%."
51) Horowitz: Data from India continues to blow up the 'Delta' fear narrative, Blazemedia, 2021	"Rather than proving the need to sow more panic, fear, and control over people, the story from India — the source of the "Delta" variant — continues to refute every current premise of COVID fascism...Masks failed to stop the spread there."
52) An outbreak caused by the SARS-CoV-2 Delta variant (B.1.617.2) in a secondary care hospital in Finland, May 2021, Hetemäki, 2021	Reporting on a nosocomial hospital outbreak in Finland, Hetemäli et al. observed that "both symptomatic and asymptomatic infections were found among vaccinated health care workers, and secondary transmission occurred from those with symptomatic infections despite use of personal protective equipment."
53) Nosocomial outbreak caused by the SARS-CoV-2 Delta variant in a highly vaccinated population, Israel, July 2021, Shitrit, 2021	In a hospital outbreak investigation in Israel, Shitrit et al. observed "high transmissibility of the SARS-CoV-2 Delta variant among twice vaccinated and masked individuals." They added that "this suggests some waning of immunity, albeit still providing protection for individuals without comorbidities." Again, despite use of personal protective equipment.
54) 47 studies confirm ineffectiveness of masks for COVID and 32 more confirm their negative health effects, Lifesi	"No studies were needed to justify this practice since most understood viruses were far too small to be stopped by the wearing of most masks, other than sophisticated ones designed for that task and which were too costly and complicated for the general public to properly wear and keep changing or cleaning. It was also understood that long mask wearing was unhealthy for wearers for common sense and basic science reasons."

te news staff, 2021	
55) Are EUA Face Masks Effective in Slowing the Spread of a Viral Infection?, Dopp, 2021	The vast evidence shows that masks are ineffective.
56) CDC Study finds overwhelming majority of people getting coronavirus wore masks, Boyd/Federalist, 2021	"A Centers for Disease Control report released in September shows that masks and face coverings are not effective in preventing the spread of COVID-19, even for those people who consistently wear them."
57) Most Mask Studies Are Garbage, Eugyppius, 2021	"The other kind of study, the proper kind, would be a randomised controlled trial. You compare the rates of infection in a masked cohort against rates of infection in an unmasked cohort. Here things have gone much, much worse for mask brigade. They spent months trying to prevent the publication of the Danish randomised controlled trial, which found that masks do zero. When that paper finally squeaked into print, they spent more months trying desperately to poke holes in it. You could feel their boundless relief when the Bangladesh study finally appeared to save them in early September. Every last Twitter blue-check could now proclaim that Science Shows Masks Work. Such was their hunger for any scrap of evidence to prop up their prior convictions, that none of them noticed the sad nature of the Science in question. The study found a mere 10% reduction in seroprevalence among the masked cohort, an effect so small that it fell within the confidence interval. Even the study authors couldn't exclude the possibility that masks in fact do zero."
58) Using face masks in the community: first update, ECDC, 2021	"No high-quality evidence in favor of face masks and recommended their use only based on the 'precautionary principle."
59) Do physical measures such as hand-washing or wearing masks stop or slow down the spread of respiratory viruses?, Cochrane, 2020	"Seven studies took place in the community, and two studies in healthcare workers. Compared with wearing no mask, wearing a mask may make little to no difference in how many people caught a flu-like illness (9 studies; 3507 people); and probably makes no difference in how many people have flu confirmed by a laboratory test (6 studies; 3005 people). Unwanted effects were rarely reported, but included discomfort."

60) Mouth-nose protection in public: No evidence of effectiveness, Thieme/ Kappstein, 2020	"The use of masks in public spaces is questionable simply because of the lack of scientific data. If one also considers the necessary precautions, masks must even be considered a risk of infection in public spaces according to the rules known from hospitals… If masks are worn by the population, the risk of infection is potentially increased, regardless of whether they are medical masks or whether they are so-called community masks designed in any way. If one considers the precautionary measures that the RKI as well as the international health authorities have pronounced, all authorities would even have to inform the population that masks should not be worn in public spaces at all. Because no matter whether it is a duty for all citizens or voluntarily borne by the citizens who want it for whatever reason, it remains a fact that masks can do more harm than good in public."
61) US mask guidance for kids is the strictest across the world, Skelding, 2021	"Kids need to see faces," Jay Bhattacharya, a professor of medicine at Stanford University, told The Post. Youngsters watch people's mouths to learn to speak, read and understand emotions, he said."We have this idea that this disease is so bad that we must adopt any means necessary to stop it from spreading," he said. "It's not that masks in schools have no costs. They actually do have substantial costs."
62) Masking young children in school harms language acquisition, Walsh, 2021	"This is important because children and/or students do not have the speech or language ability that adults have — they are not equally able and the ability to see the face and especially the mouth is critical to language acquisition which children and/or students are engaged in at all times. Furthermore, the ability to see the mouth is not only essential to communication but also essential to brain development."
63) The Case Against Masks for Children, Makary, 2021	"It's abusive to force kids who struggle with them to sacrifice for the sake of unvaccinated adults… Do masks reduce Covid transmission in children? Believe it or not, we could find only a single retrospective study on the question, and its results were inconclusive. Yet two weeks ago the Centers for Disease Control and Prevention sternly decreed that 56 million U.S. children and adolescents, vaccinated or not, should cover their faces regardless of the prevalence of infection in their community. Authorities in many places took the cue to impose mandates in schools and elsewhere, on the theory that masks can't do any harm. That isn't true. Some children are fine wearing a mask, but others struggle. Those who have myopia can have difficulty seeing because the mask fogs their glasses. (This has long been a problem for medical students in the operating room.) Masks can cause severe acne and other skin problems. The discomfort of a mask distracts some children from learning. By increasing airway resistance during exhalation, masks can lead to increased levels of carbon dioxide in the blood. And masks can be vectors for pathogens if they become moist or are used for too long."
64) Face Covering Mandates, Peavey, 2021	"Face Covering Mandates And Why They AREN'T Effective."
65) Do masks work? A Review of the evidence, Anderson, 2021	"In truth, the CDC's, U.K.'s, and WHO's earlier guidance was much more consistent with the best medical research on masks' effectiveness in preventing the spread of viruses. That research suggests that Americans' many months of mask-wearing has likely provided little to no health benefit and might even have been counterproductive in preventing the spread of the novel coronavirus."
66) Most	"New research reveals that cloth masks filter just 10% of exhaled aerosols, with

face masks won't stop COVID-19 indoors, study warns, Anderer, 2021	many people not wearing coverings that fit their face properly."
67) How face masks and lockdowns failed/the face mask folly in retrospect, Swiss Policy Research, 2021	"Mask mandates and lockdowns have had no discernible impact."
68) CDC Releases School COVID Transmission Study But Buries One of the Most Damning Parts, Davis, 2021	"The 21% lower incidence in schools that required mask use among students was not statistically significant compared with schools where mask use was optional... With tens of millions of American kids headed back to school in the fall, their parents and political leaders owe it to them to have a clear-sighted, scientifically rigorous discussion about which anti-COVID measures actually work and which might put an extra burden on vulnerable young people without meaningfully or demonstrably slowing the spread of the virus...that a masking requirement of students failed to show independent benefit is a finding of consequence and great interest."
69) World Health Organization internal meeting, COVID-19 – virtual press conference – 30 March 2020, 2020	"This is a question on Austria. The Austrian Government has a desire to make everyone wear a mask who's going into the shops. I understood from our previous briefings with you that the general public should not wear masks because they are in short supply. What do you say about the new Austrian measures?... I'm not specifically aware of that measure in Austria. I would assume that it's aimed at people who potentially have the disease not passing it to others. In general WHO recommends that the wearing of a mask by a member of the public is to prevent that individual giving the disease to somebody else. We don't generally recommend the wearing to masks in public by otherwise well individuals because it has not been up to now associated with any particular benefit."
70) Face masks to prevent transmission of influenza virus: a systematic review, Cowling, 2010	"Review highlights the limited evidence base supporting the efficacy or effectiveness of face masks to reduce influenza virus transmission.""None of the studies reviewed showed a benefit from wearing a mask, in either HCW or community members in households (H)."
71) Effective ness of N95 respirators versus surgical masks in	"Although N95 respirators appeared to have a protective advantage over surgical masks in laboratory settings, our meta-analysis showed that there were insufficient data to determine definitively whether N95 respirators are superior to surgical masks in protecting health care workers against transmissible acute respiratory infections in clinical settings."

protecting health care workers from acute respiratory infection: a systematic review and meta-analysis, Smith, 2016	
72) Effectiveness of Masks and Respirators Against Respiratory Infections in Healthcare Workers: A Systematic Review and Meta-Analysis, Offeddu, 2017	"We found evidence to support universal medical mask use in hospital settings as part of infection control measures to reduce the risk of CRI and ILI among HCWs. Overall, N95 respirators may convey greater protection, but universal use throughout a work shift is likely to be less acceptable due to greater discomfort…Our analysis confirms the effectiveness of medical masks and respirators against SARS. Disposable, cotton, or paper masks are not recommended. The confirmed effectiveness of medical masks is crucially important for lower-resource and emergency settings lacking access to N95 respirators. In such cases, single-use medical masks are preferable to cloth masks, for which there is no evidence of protection and which might facilitate transmission of pathogens when used repeatedly without adequate sterilization…We found no clear benefit of either medical masks or N95 respirators against pH1N1…Overall, the evidence to inform policies on mask use in HCWs is poor, with a small number of studies that is prone to reporting biases and lack of statistical power."
73) N95 Respirators vs Medical Masks for Preventing Influenza Among Health Care Personnel, Radonovich, 2019	"Use of N95 respirators, compared with medical masks, in the outpatient setting resulted in no significant difference in the rates of laboratory-confirmed influenza."
Effectiveness of N95 respirators versus surgical masks againstinfluenza: A systematic review and meta-analysis74) Masks Don't Work: A Review of Science Relevant to COVID-19 Social Policy,	The use of N95 respirators compared with surgical masks is not associated with alower risk of laboratory-confirmed influenza. It suggests that N95 respirators should not be rec-ommended for general public and nonhigh-risk medical staff those are not in close contact withinfluenza patients or suspected patients. "No RCT study with verified outcome shows a benefit for HCW or community members in households to wearing a mask or respirator. There is no such study. There are no exceptions. Likewise, no study exists that shows a benefit from a broad policy to wear masks in public (more on this below). Furthermore, if there were any benefit to wearing a mask, because of the blocking power against droplets and aerosol particles, then there should be more benefit from wearing a respirator (N95) compared to a surgical mask, yet several large meta-analyses, and all the RCT, prove that there is no such relative benefit."

Rancourt, 2020	
75) More Than a Dozen Credible Medical Studies Prove Face Masks Do Not Work Even In Hospitals!, Firstenberg, 2020	“Mandating masks has not kept death rates down anywhere. The 20 U.S. states that have never ordered people to wear face masks indoors and out have dramatically lower COVID-19 death rates than the 30 states that have mandated masks. Most of the no-mask states have COVID-19 death rates below 20 per 100,000 population, and none have a death rate higher than 55. All 13 states that have death rates higher 55 are states that have required the wearing of masks in all public places. It has not protected them.”
76) Does evidence based medicine support the effectiveness of surgical facemasks in preventing postoperative wound infections in elective surgery?, Bahli, 2009	“From the limited randomized trials it is still not clear that whether wearing surgical face masks harms or benefit the patients undergoing elective surgery.”
77) Peritonitis prevention in CAPD: to mask or not?, Figueiredo, 2000	“The current study suggests that routine use of face masks during CAPD bag exchanges may be unnecessary and could be discontinued.”
78) The operating room environment as affected by people and the surgical face mask, Ritter, 1975	“The wearing of a surgical face mask had no effect upon the overall operating room environmental contamination and probably work only to redirect the projectile effect of talking and breathing. People are the major source of environmental contamination in the operating room.”
79) The efficacy of standard surgical face masks: an investigation using “tracer particles, Ha’eri, 1980	“Particle contamination of the wound was demonstrated in all experiments. Since the microspheres were not identified on the exterior of these face masks, they must have escaped around the mask edges and found their way into the wound.”

80) Wearing of caps and masks not necessary during cardiac catheterization, Laslett, 1989	"Prospectively evaluated the experience of 504 patients undergoing percutaneous left heart catheterization, seeking evidence of a relationship between whether caps and/or masks were worn by the operators and the incidence of infection. No infections were found in any patient, regardless of whether a cap or mask was used. Thus, we found no evidence that caps or masks need to be worn during percutaneous cardiac catheterization."
81) Do anaesthetists need to wear surgical masks in the operating theatre? A literature review with evidence-based recommendations, Skinner, 2001	"A questionnaire-based survey, undertaken by Leyland' in 1993 to assess attitudes to the use of masks, showed that 20% of surgeons discarded surgical masks for endoscopic work. Less than 50% did not wear the mask as recommended by the Medical Research Council. Equal numbers of surgeons wore the mask in the belief they were protecting themselves and the patient, with 20% of these admitting that tradition was the only reason for wearing them."
82) Mask mandates for children are not backed by data, Faria, 2021	"Even if you want to use the 2018-19 flu season to avoid overlap with the start of the COVID-19 pandemic, the CDC paints a similar picture: It estimated 480 flu deaths among children during that period, with 46,000 hospitalizations. COVID-19, mercifully, is simply not as deadly for children. According to the American Academy of Pediatrics, preliminary data from 45 states show that between 0.00%-0.03% of child COVID-19 cases resulted in death. When you combine these numbers with the CDC study that found mask mandates for students — along with hybrid models, social distancing, and classroom barriers — did not have a statistically significant benefit in preventing the spread of COVID-19 in schools, the insistence that we force students to jump through these hoops for their own protection makes no sense."
83) The Downsides of Masking Young Students Are Real, Prasad, 2021	"The benefits of mask requirements in schools might seem self-evident—they have to help contain the coronavirus, right?—but that may not be so. In Spain, masks are used in kids ages 6 and older. The authors of one study there examined the risk of viral spread at all ages. If masks provided a large benefit, then the transmission rate among 5-year-olds would be far higher than the rate among 6-year-olds. The results don't show that. Instead, they show that transmission rates, which were low among the youngest kids, steadily increased with age—rather than dropping sharply for older children subject to the face-covering requirement. This suggests that masking kids in school does not provide a major benefit and might provide none at all. And yet many officials prefer to double down on masking mandates, as if the fundamental policy were sound and only the people have failed."
84) Masks In Schools: Scientific American Fumbles Report On Childhood COVID Transmission	"Masking is a low-risk, inexpensive intervention. If we want to recommend it as a precautionary measure, especially in situations where vaccination isn't an option, great. But that's not what the public has been told. "Florida governor Ron DeSantis and politicians in Texas say research does not support mask mandates," SciAm's sub-headline bellowed. "Many studies show they are wrong."If that's the case, demonstrate that the intervention works before you mandate its use in schools. If you can't, acknowledged what UC San Francisco hematologist-oncologist and Associate Professor of Epidemiology Vinay Prasad wrote over at the Atlantic:"No scientific consensus exists about the wisdom of

, English/ACSH, 2021	mandatory-masking rules for schoolchildren ... In mid-March 2020, few could argue against erring on the side of caution. But nearly 18 months later, we owe it to children and their parents to answer the question properly: Do the benefits of masking kids in school outweigh the downsides? The honest answer in 2021 remains that we don't know for sure."
85) Masks 'don't work,' are damaging health and are being used to control population: Doctors panel, Haynes, 2021	"The only randomized control studies that have ever been done on masks show that they don't work," began Dr. Nepute. He referred to Dr. Anthony Fauci's "noble lie," in which Fauci "changed his tune," from his March 2020 comments, where he downplayed the need and efficacy of mask wearing, before urging Americans to use masks later in the year. "Well, he lied to us. So if he lied about that, what else has he lied to you about?" questioned Nepute.Masks have become commonplace in almost every setting, whether indoors or outdoors, but Dr. Popper mentioned how there have been "no studies" which actually examine the "effect of wearing a mask during all your waking hours.""There's no science to back any of this and particularly no science to back the fact that wearing a mask twenty four-seven or every waking minute, is health promoting," added Popper."
86) Aerosol penetration through surgical masks, Chen, 1992	"The mask that has the highest collection efficiency is not necessarily the best mask from the perspective of the filter-quality factor, which considers not only the capture efficiency but also the air resistance. Although surgical mask media may be adequate to remove bacteria exhaled or expelled by health care workers, they may not be sufficient to remove the sub-micrometer-sized aerosols containing pathogens to which these health care workers are potentially exposed."
87) CDC: Schools With Mask Mandates Didn't See Statistically Significant Different Rates of COVID Transmission From Schools With Optional Policies, Miltimore, 2021	"The CDC did not include its finding that "required mask use among students was not statistically significant compared with schools where mask use was optional" in the summary of its report."
88) Horowitz: Data from India continues to blow up the 'Delta' fear narrative, Howorwitz, 2021	"Rather than proving the need to sow more panic, fear, and control over people, the story from India — the source of the "Delta" variant — continues to refute every current premise of COVID fascism...Unless we do that, we must return to the very effective lockdowns and masks. In reality, India's experience proves the opposite true; namely:1) Delta is largely an attenuated version, with a much lower fatality rate, that for most people is akin to a cold.2) Masks failed to stop the spread there.3) The country has come close to the herd immunity threshold with just 3% vaccinated.
89) Transmission of SARS-CoV-2 Delta Variant	While not definitive in the LANCET publication, it can be inferred that the nurses were all masked up and had PPE etc. as was the case in Finland and Israel nosocomial outbreaks, indicating the failure of PPE and masks to constrain Delta spread.

Among Vaccinated Healthcare Workers, Vietnam, Chau, 2021	
90) Aerosol penetration through surgical masks, Willeke, 1992	“The mask that has the highest collection efficiency is not necessarily the best mask from the perspective of the filter-quality factor, which considers not only the capture efficiency but also the air resistance. Although surgical mask media may be adequate to remove bacteria exhaled or expelled by health care workers, they may not be sufficient to remove the submicrometer-size aerosols containing pathogens to which these health care workers are potentially exposed.”
91) The efficacy of standard surgical face masks: an investigation using “tracer particles”, Wiley, 1980	“Particle contamination of the wound was demonstrated in all aexperiments. Since the microspheres were not identified on the exterior of these face masks, they must have escped around the mask edges and found their way into the wound. The wearing of the mask beneath the headgear curtails this route of contamination.”
92) An Evidence Based Scientific Analysis of Why Masks are Ineffective, Unnecessary, and Harmful, Meehan, 2020	“Decades of the highest-level scientific evidence (meta-analyses of multiple randomized controlled trials) overwhelmingly conclude that medical masks are ineffective at preventing the transmission of respiratory viruses, including SAR-CoV-2…those arguing for masks are relying on low-level evidence (observational retrospective trials and mechanistic theories), none of which are powered to counter the evidence, arguments, and risks of mask mandates.”
93) Open Letter from Medical Doctors and Health Professionals to All Belgian Authorities and All Belgian Media, AIER, 2020	“Oral masks in healthy individuals are ineffective against the spread of viral infections.”
94) Effective ness of N95 respirators versus surgical masks against influenza: A systematic	“The use of N95 respirators compared with surgical masks is not associated with a lower risk of laboratory-confirmed influenza. It suggests that N95 respirators should not be recommended for general public and nonhigh-risk medical staff those are not in close contact with influenza patients or suspected patients.”

review and meta-analysis, Long, 2020	
95) Advice on the use of masks in the context of COVID-19, WHO, 2020	"However, the use of a mask alone is insufficient to provide an adequate level of protection or source control, and other personal and community level measures should also be adopted to suppress transmission of respiratory viruses."
96) Farce mask: it's safe for only 20 minutes, The Sydney Morning Herald, 2003	"Health authorities have warned that surgical masks may not be an effective protection against the virus."Those masks are only effective so long as they are dry," said Professor Yvonne Cossart of the Department of Infectious Diseases at the University of Sydney."As soon as they become saturated with the moisture in your breath they stop doing their job and pass on the droplets."Professor Cossart said that could take as little as 15 or 20 minutes, after which the mask would need to be changed. But those warnings haven't stopped people snapping up the masks, with retailers reporting they are having trouble keeping up with demand."
97) Study: Wearing A Used Mask Is Potentially Riskier Than No Mask At All, Boyd, 2020 Effects of mask-wearing on the inhalability and deposition of airborne SARS-CoV-2 aerosols in human upper airway	"According to researchers from the University of Massachusetts Lowell and California Baptist University, a three-layer surgical mask is 65 percent efficient in filtering particles in the air. That effectiveness, however, falls to 25 percent once it is used."It is natural to think that wearing a mask, no matter new or old, should always be better than nothing," said author Jinxiang Xi."Our results show that this belief is only true for particles larger than 5 micrometers, but not for fine particles smaller than 2.5 micrometers," he continued."

Table source: *More than 150 Comparative Studies and Articles on Mask Ineffectiveness and Harms*, Paul Elias Alexander, Browstone Institute (https://brownstone.org/articles/more-than-150-comparative-studies-and-articles-on-mask-ineffectiveness-and-harms/)

I'd like to call special attention to #50 and #57 above.

In #50, we see the FIRST randomized control-trial of cloth masks in history and it was before the pandemic (2015). This sorted healthcare workers into clusters – surgical masks, cloth masks, and a control group (where there was a mix of mask-wearing and non-mask-wearing) DURING influenza season. The cohort wearing cloth masks were actually infected at a *higher* rate than those in either the surgical or control group. This suggested to the authors that cloth masks were actually vehicles for infection and were actually worse than potentially wearing nothing. The vast majority of masks that the community wears are cloth.

#57 references both randomized control-trials on mask-wearing that were actually conducted during the current pandemic. The DANMASK study was published in November 2020 and found that there was no

significant difference in transmission between the mask-wearing group and the control arm of the study. About the same number of people were infected with the virus in the end.

The Bangladesh study has now been completely debunked as a complete garbage study by multiple professionals. For laymen, however, I think the most important commentary to ferret out information is this blog post from a researcher named Ben Recht. He explains the real data implications of the Bangladesh study's results that the surgical masks resulted in a "10% reduction":

"In the Bangladesh Mask RCT, there were n_C=163,861 individuals from 300 villages in the control group. There were n_T=178,322 individuals from 300 villages in the intervention group. The main end point of the study was whether their intervention reduced the number of individuals who both reported covid-like symptoms and tested seropositive at some point during the trial. The number of such individuals appears nowhere in their paper, and one has to compute this from the data they kindly provided: There were i_C=1,106 symptomatic individuals confirmed seropositive in the control group and i_T=1,086 such individuals in the treatment group. **The difference between the two groups was small: only *20 cases* out of over 340,000 individuals over a span of 8 weeks."**

Do the Charles County Commissioners want to bet the livelihoods of their constituents and their own political careers on something that, when adjusted for population size might result in ~10 fewer people catching the virus? That's a huge maybe given our over 30% current positivity, our vaccination rate, and the huge population of infected-now-recovered with natural immunity.

Mask Mandates have made no difference

In real world data, if mask mandates work, then the difference in masked vs. unmasked states would be *easily* discernible as it relates to COVID-19 spread. Even masked vs. unmasked counties. However, there has never been any data that covers the *entire* pandemic which is supported with quality evidence that outcomes for counties or states with and without mask mandates has been any different.

MASK MANDATES	
1) Mask mandate and use efficacy for COVID-19 containment in US States, Guerra, 2021	"Calculated total COVID-19 case growth and mask use for the continental United States with data from the Centers for Disease Control and Prevention and Institute for Health Metrics and Evaluation. We estimated post-mask mandate case growth in non-mandate states using median issuance dates of neighboring states with mandates...did not observe association between mask mandates or use and reduced COVID-19 spread in US states."
2) These 12 Graphs Show Mask Mandates Do Nothing To Stop COVID,	"Masks can work well when they're fully sealed, properly fitted, changed often, and have a filter designed for virus-sized particles. This represents none of the common masks available on the consumer market, making universal masking much more of a confidence trick than a medical solution...Our universal use of unscientific face coverings is therefore closer to medieval superstition than it is to science, but many powerful institutions have too much political capital invested in the mask narrative at this point, so the dogma is perpetuated. The narrative says that if cases go down it's because masks succeeded. It says that if cases go up it's because masks succeeded in preventing more cases. The narrative simply assumes rather than proves that masks work, despite overwhelming scientific evidence to the contrary."

Weiss, 2020	
3) Mask Mandates Seem to Make CCP Virus Infection Rates Climb, Study Says, Vadum, 2020	"Protective-mask mandates aimed at combating the spread of the CCP virus that causes the disease COVID-19 appear to promote its spread, according to a report from RationalGround.com, a clearinghouse of COVID-19 data trends that's run by a grassroots group of data analysts, computer scientists, and actuaries."
4) Horowitz: Comprehensive analysis of 50 states shows greater spread with mask mandates, Horowitz, 2020 Justin Hart	"How long do our politicians get to ignore the results?... The results: When comparing states with mandates vs. those without, or periods of times within a state with a mandate vs. without, there is absolutely no evidence the mask mandate worked to slow the spread one iota. In total, in the states that had a mandate in effect, there were 9,605,256 confirmed COVID cases over 5,907 total days, an average of 27 cases per 100,000 per day. When states did not have a statewide order (which includes the states that never had them and the period of time masking states did not have the mandate in place) there were 5,781,716 cases over 5,772 total days, averaging 17 cases per 100,000 people per day."
5) The CDC's Mask Mandate Study: Debunked, Alexander, 2021	"Thus, it is not surprising that the CDC's own recent conclusion on the use of nonpharmaceutical measures such as face masks in pandemic influenza, warned that scientific "evidence from 14 randomized controlled trials of these measures did not support a substantial effect on transmission..." Moreover, in the WHO's 2019 guidance document on nonpharmaceutical public health measures in a pandemic, they reported as to face masks that "there is no evidence that this is effective in reducing transmission..." Similarly, in the fine print to a recent double-blind, double-masking simulation the CDC stated that "The findings of these simulations [supporting mask usage] should neither be generalized to the effectiveness ...nor interpreted as being representative of the effectiveness of these masks when worn in real-world settings."
6) Phil Kerpin, tweet, 2021 The Spectator	"The first ecological study of state mask mandates and use to include winter data: "Case growth was independent of mandates at low and high rates of community spread, and mask use did not predict case growth during the Summer or Fall-Winter waves."
7) How face masks	"Infections have been driven primarily by seasonal and endemic factors, whereas mask mandates and lockdowns have had no discernible impact"

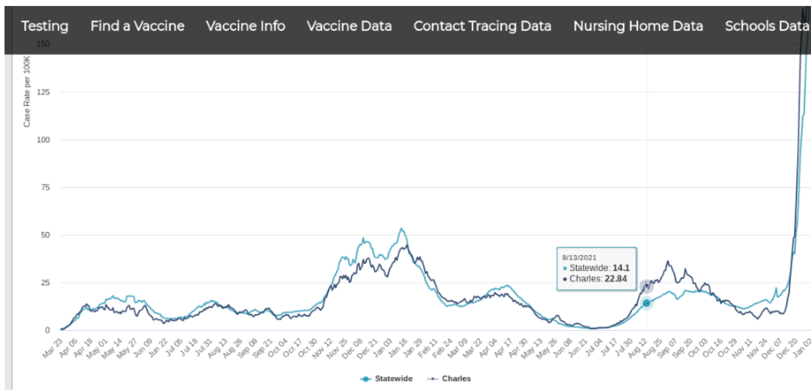
and lockdowns failed, SPR, 2021	
8) Analysis of the Effects of COVID-19 Mask Mandates on Hospital Resource Consumption and Mortality at the County Level, Schauer, 2021	“There was no reduction in per-population daily mortality, hospital bed, ICU bed, or ventilator occupancy of COVID-19-positive patients attributable to the implementation of a mask-wearing mandate.”
9) Do we need mask mandates, Harris, 2021	“But masks proved far less useful in the subsequent 1918 Spanish flu, a viral disease spread by pathogens smaller than bacteria. California’s Department of Health, for instance, reported that the cities of Stockton, which required masks, and Boston, which did not, had scarcely different death rates, and so advised against mask mandates except for a few high-risk professions such as barbers....Randomized controlled trials (RCTs) on mask use, generally more reliable than observational studies, though not infallible, typically show that cloth and surgical masks offer little protection. A few RCTs suggest that perfect adherence to an exacting mask protocol may guard against influenza, but meta-analyses find little on the whole to suggest that masks offer meaningful protection. WHO guidelines from 2019 on influenza say that despite “mechanistic plausibility for the potential effectiveness” of masks, studies showed a benefit too small to be established with any certainty. Another literature review by researchers from the University of Hong Kong agrees. Its best estimate for the protective effect of surgical masks against influenza, based on ten RCTs published through 2018, was just 22 percent, and it could not rule out zero effect.”

Table source: *More than 150 Comparative Studies and Articles on Mask Ineffectiveness and Harms*, Paul Elias Alexander, Brownstone Institute (https://brownstone.org/articles/more-than-150-comparative-studies-and-articles-on-mask-ineffectiveness-and-harms/)

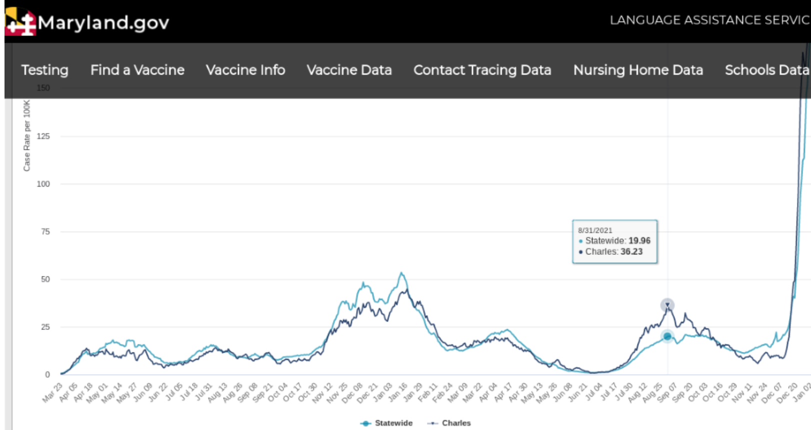
Throughout Charles County's illegal state of emergency and initial mask mandate, Dr. Abney repeatedly cited St. Mary's and Calvert County's case rate and positivity as "proof" that our mask mandate "was working". She, however, did not at all point to our continued case rate growth and positivity spike until August 31, 2021, declined for 2 weeks, then shot up again on September 15. By the way, the entire state hit their delta peak on September 15. Screenshots of the Covid-19 dashboard from Maryland Dept of Health.

The day the mask mandate was enacted (8.13.2021). Notice we were already halfway to peak.

Maryland.gov LANGUAGE ASSISTANCE SERVICE

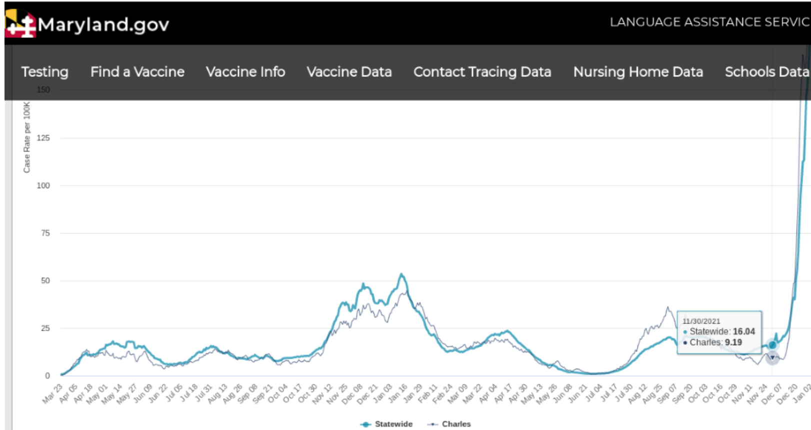


The day we hit peak:



Note: we follow the exact same directional rise, peak, and decline as the entire state. If our mask mandate "was working" it would differ considerably from the state average.

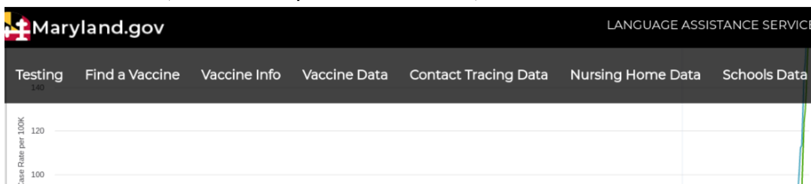
The day the mandate was finally lifted (11.30.2021):

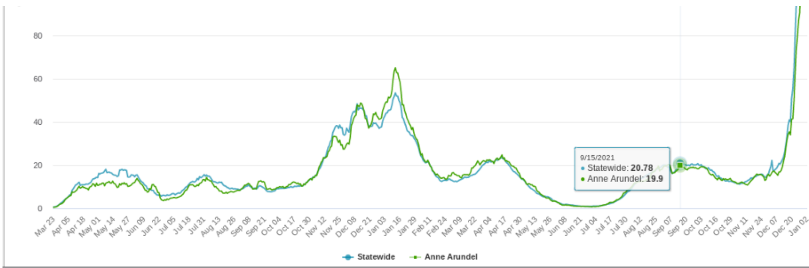


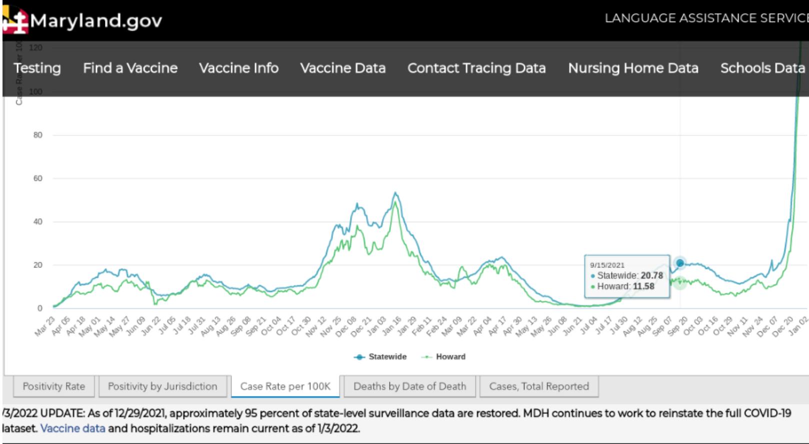
If the mandate was ever needed or justified, it ended after we hit the peak on Aug. 31. We were in an illegitimate and unnecessary mandate for 3 additional months.

Dr. Abney often presents data to the Commissioners and the public that "proves" our mask mandate "worked" and that our lack of masks are "causing" the next rise in cases. Can someone please explain to me how the rescinding of the mask mandate in Charles caused the subsequent spike in cases *for the entire state of Maryland*?

It cannot be ignored that cases were lower in the unmasked counties of Anne Arundel, Howard, and Harford during our previous mask mandate, a point that Dr. Abney excluded from her reports to the Commissioners (all screen captures from PEAK):

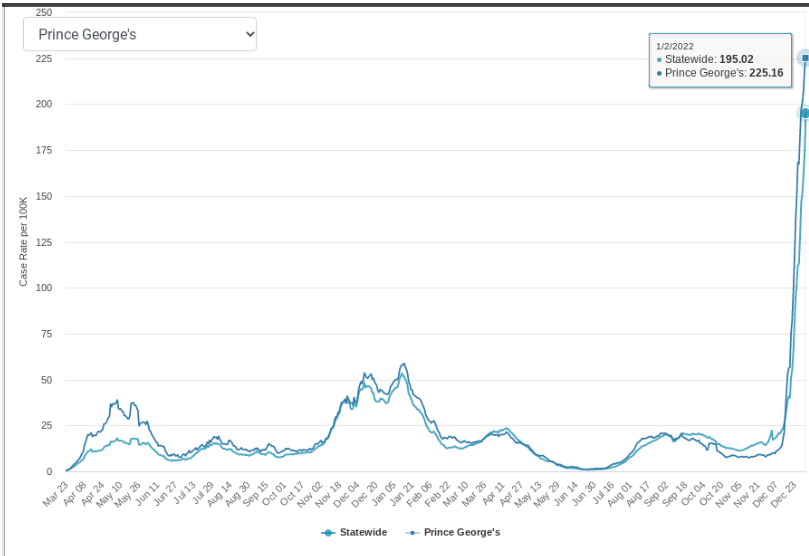






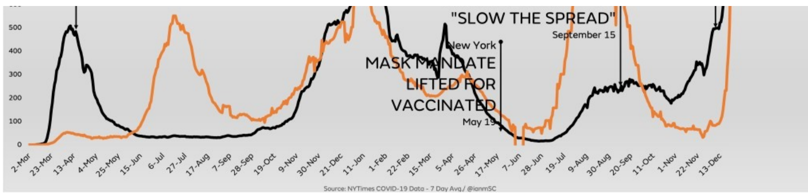
(Note: there seems to be a data deletion for 9/15 for Harford, so data is from 9/14)

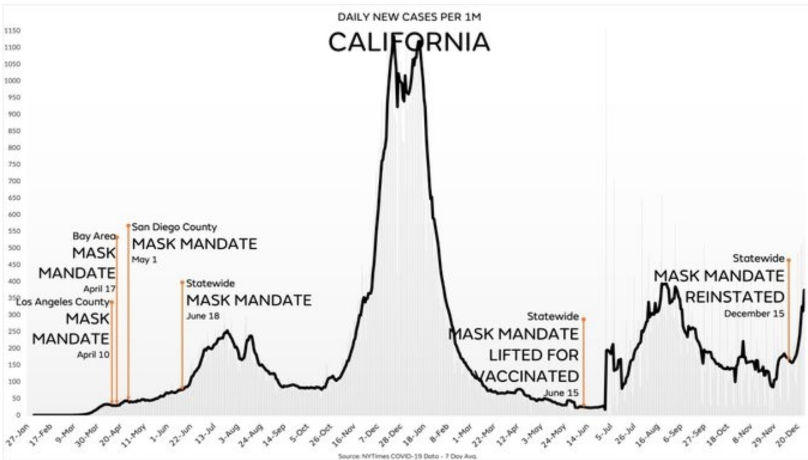
Lest I am told that those aren't contiguous counties to Charles, let's take a look at Prince George's County, mask mandate continuous since August, TODAY:

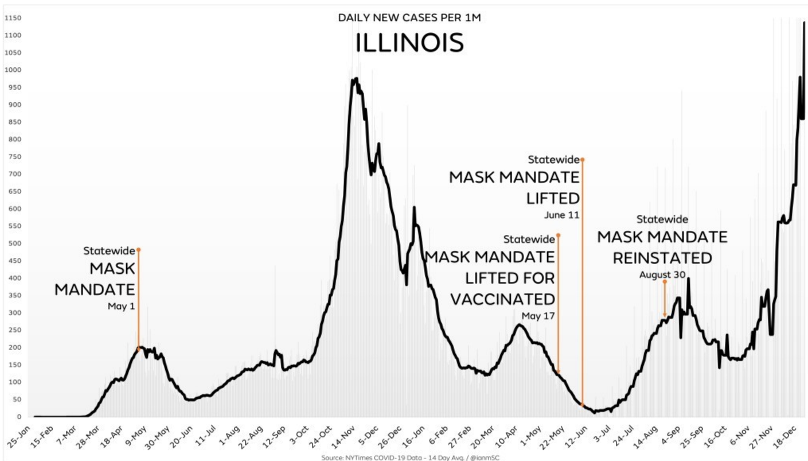


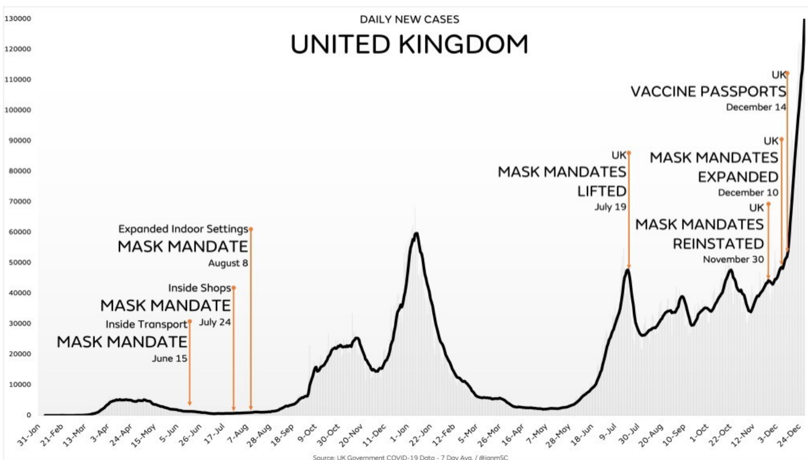
It is extremely worth noting that **today on the dashboard,** St. Mary's and Calvert are both showing case rates per 100K residents lower than Charles County (~210 and ~147, respectively). There is no mask mandate in place in any of the three Southern Maryland Counties.

However, if that was not relevant enough data to consider that mask mandates do not have an impact on transmission from one jurisdiction to another, here are some graphics worth considering:









Masks are harmful

Masks are absolutely not low-risk interventions. They carry with them many potential and real harms, from the potential to infect the wearer with the disease you are trying to prevent to exposure to harmful bacteria to the psycho-social harms to people with disabilities and children. Let's not also forget the harms to businesses when there is an unmasked alternative to go to as we do with unmasked Calvert, St. Mary's, and King George Counties.

Masks are harmful	
Dangerous Pathogens Found on Children's Masks Rational Ground, June 2021	A group of parents in Gainesville, FL, sent 6 face masks to a lab at the University of Florida, requesting an analysis of contaminants found on the masks after they had been worn. The resulting report found that five masks were contaminated with bacteria, parasites, and fungi, including three with dangerous pathogenic and pneumonia-causing bacteria. Although the test is capable of detecting viruses, including SARS-CoV-2, only one virus was found on one mask (*alcelaphine herpesvirus 1*). Click to view the mask reports.
Chemical cocktail found on face masks	Professor Michael Braungart, director at the Hamburg Environmental Institute and co-founder of the world-renowned Cradle to Cradle environmental standard has told *Ecotextile News* that mask wearers unwittingly run the risk of breathing in carcinogens, allergens and tiny synthetic microfibres by wearing both textile and nonwoven surgical masks for long periods of time.
Facemasks are not an 'inconvenience', Facemasks are not trivial: A List of Some of the Underappreciated and Hard-to-Articulate Reasons Forced Masking is So Distressing	The contention that "facemasks are just an inconvenience" amounts to abusive manipulation that steals the ability of the victims of forced masking to identify and articulate the suffering and harm they experience from forced mask wearing. To conclude, the quote at the top of this article from DA Henderson - widely credited with the eradication of smallpox - is very revealing: "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" It is hard to imagine a greater disruption to normal living than the highly visible and symbolic masks ubiquitously worn everywhere.
"Mask Mouth"	"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% of our patients are being impacted by this, [so] we decided to name it 'mask mouth' — after 'meth mouth.' " Wearing masks increases dryness, which leads to decrease in saliva. It is the saliva that fights bacteria. Result is decaying teeth, receding gum lines and seriously sour breath. Gum disease — or periodontal disease — will eventually lead to strokes and an increased risk of heart attacks."

World Health Organization Considerations for Face Mask Use	• "The likely disadvantages of the use of mask by healthy people in the general public include:
	    • potential increased risk of self-contamination due to the manipulation of a face mask and subsequently touching eyes with contaminated hands;
	    • potential self-contamination that can occur if non- medical masks are not changed when wet or soiled. This can create favourable conditions for microorganism to amplify;
	    • potential headache and/or breathing difficulties, depending on type of mask used;
	    • potential development of facial skin lesions, irritant dermatitis or worsening acne, when used frequently for long hours;
	    • difficulty with communicating clearly;
	    • potential discomfort;
	    • a false sense of security, leading to potentially lower adherence to other critical preventive measures such as physical distancing and hand hygiene;
	    • poor compliance with mask wearing, in particular by young children;
	    • waste management issues; improper mask disposal leading to increased litter in public places, risk of contamination to street cleaners and environment hazard;
	    • difficulty communicating for deaf persons who rely on lip reading;
	    • disadvantages for or difficulty wearing them, especially for children, developmentally challenged persons, those with mental illness, elderly persons with cognitive impairment, those with asthma or chronic respiratory or breathing problems, those who have had facial trauma or

	recent oral maxillofacial surgery, and those living in hot and humid environments.
Psychological Damage to Children	70 Belgian doctors begged for cancellation of mask mandate at school. “In recent months, the general well-being of children and young people has come under severe pressure. We see in our practices an increasing number of children and young people with complaints due to the rules of conduct that have been imposed on them. We diagnose anxiety and sleep problems, behavioral disorders and fear of contamination. We are seeing an increase in domestic violence, isolation and deprivation. Many lack physical and emotional contact; attachment problems and addiction are obvious. **‘The mandatory mouth mask in schools is a major threat to their development. It ignores the essential needs of the growing child. The well-being of children and young people is highly dependent on the emotional connection with others.** (…) The aim of education is to create an optimal context so that a maximum development of young people is possible. The school environment must be a safe practice field. **The mouth mask obligation, on the other hand, makes the school a threatening and unsafe environment, where emotional connection becomes difficult. ‘In addition, there is no large-scale evidence that wearing face masks in a non-professional environment has any positive effect on the spread of viruses, let alone on general health.’**

Masks harm businesses

Contrary to the many attempts by the County Attorney Wes Adams to make the case that businesses are not harmed by mask mandates, he has failed miserably. I will attempt to make this very brief as this public comment is superfluous in its evidence that masks are a horrible pandemic mitigation strategy.

Tax revenue - Mr. Adams felt so strongly that businesses were not harmed by mandates that rather than actually call business owners as witnesses to this fact either in court or to the Commissioner's meetings, he pointed to a huge surplus in tax revenue, implying it was sales tax that is leading to this surplus in the County coffers? Unless Mr. Adams believes that Charles County Government is a small business, perhaps someone can brief him on the understanding that property tax and income tax are the sources from which the county collects the majority of its revenue.

Business owners have told you – In my final affidavit in our lawsuit against the Commissioners, I testified to the fact that prior to the Nov. 16 renewal of the mask mandate, 632 citizens sent messages urging the Commissioners to end the state of emergency. The petitioners included 190 Charles County business owners, most of whom expressed losing business to neighboring regions or employee frustrations due to the mandate. You have those emails in your inboxes.

The people have told you - I receive many messages daily from Charles County Residents who complete their shopping out of county. I have submitted in my affidavit some of those anecdotal records. However, I personally as well as 2-3 other individuals even quantified in our affidavits just how much we are spending in neighboring counties or at businesses not enforcing the mask mandate (ie – those in the Town of La Plata). To pretend this isn't happening or dismiss it as insignificant is a huge mistake. It is neither.

The issue has been studied - First, I would like to state that I am embarrassed for you that you had Dr. Abney read a CNBC article from almost two years ago as evidence that mask mandates do not harm local businesses. It is very well demonstrated that information gathered early in the pandemic is not to be trusted (e.g. - the disease is primarily droplet spread vs. now knowing it is aerosolized; its fatality rate is as high as 3% vs. now knowing it is slightly higher than influenza; the vaccines stop transmission vs. now knowing they only protect against severe disease; fully vaccinated from covid means 2 shots vs. now knowing it could take multiple boosters to protect the most vulnerable). But beyond that, mask mandates were studied for their impact on businesses by the University of Utah. The results of the study are reported by this Forbes Article that Mr. Wes Adams continually uses as evidence. And yet the authors themselves conclude:

> **"Surprisingly, county-level mask mandates generally have the opposite effect, depressing economic activity. We argue that different unintended signaling effects can explain these differences in policy effects: households infer from county mask mandates that infection risks have increased in their local area and, therefore, socially distance more and spend less."**

You still lack the authority

Finally, even after all the evidence I've included in this treatise, our legal experts which we have retained still believe that you do not possess true authority to mandate masks.

1) The institution of criminal penalties seems to exceed your authority as the "Board of Health". Are you abandoning your role as Board of Health and instead are acting legislatively here? It seems you are as the municipalities of Indian Head, Port Tobacco, and La Plata are once again exempt.

2) This broad authority over individuals is reserved to the Governor during a declared Health Emergency only. Public Safety Section 14-3A-03 states clearly that it is the governor, or his designee, who may quarantine individuals, direct them to be tested, or direct them to undergo a medical treatment. The use of face masks on individuals restricts their freedom of movement, denies them entry to businesses, and would certainly be interpreted as submitting to a medical treatment since face masks are considered medical devices. The burden of proof that not only are face masks warranted for stopping the spread of a virus which has been circulating the planet for two years but that you have the authority to mandate them outside of a declared state of emergency from the governor himself is on you. The Public Safety Health Article is *extreme for a reason.* Its intention was to stop the carnage of a deadly disease agent like:
(1) anthrax, ebola, plague, smallpox, tularemia, or other bacterial, fungal, rickettsial, or viral agent, biological toxin, or other biological agent capable of causing extensive loss of life or serious disability;
(2) mustard gas, nerve gas, or other chemical agent capable of causing extensive loss of life or serious disability; or(3) radiation at levels capable of causing extensive loss of life or serious disability. (verbatim text of the MD Code).

"For people younger than 70 years old, the infection fatality rate of COVID-19 across 40 locations with available data ranged from 0.00% to 0.31% (median 0.05%); the corrected values were similar." According to the conclusions of John Ionniadis's review "Infection fatality rate of COVID-19 inferred from seroprevalance data" published January 2021 in the Bulletin of the World Health Organization.
As we can overwhelmingly defeat the idea that masks control transmission and the disease itself is not as deadly as ebola or anthrax, the use of face masks on individuals in public settings is a gross misuse of legislative process and policy.

3) Use of the Public Health Law as well as the Express Powers act that you often cite as authority to "contain disease" both direct the authorities to take actions which would prevent the worst outcomes of the biological agent or deadly disease: death. Since cloth masks do not stop transmission and neither do N95 masks (though we concede that N95 masks may protect the *wearer only* and are inappropriate source control), then one could not reasonably draw the conclusion that masks would stop people from dying. In fact, let's review the case fatality rate from the period of time last year and this year during which we had mask mandates IN Charles County (August 10, 2020-November 30, 2020 vs. August 10-November 30, 2021):

Time period	Cases	Deaths	Case Fatality Ratio
2020	2351	14	.59%
2021	3483	51	1.46%

Your mask mandate clearly did not protect the people of Charles from death. You cannot blame compliance without proof and you cannot claim victory. I've already demonstrated that your mask mandate did not prevent cases from climbing higher than unmasked Anne Arundel, Howard, or Harford and our lack of mask mandate is not making our cases climb higher than completely masked Prince George's County. The legal burden of proof that your mask mandate would be effective after it has failed previously is very high.

4) It would not be constitutional to mask a healthy population. Since the Express Powers code you cite gives you authority to "contain disease", you could *maybe* lawfully direct those who are carrying the disease to wear a face mask. There is no constitutional grounds for making healthy people wear a mask to contain a disease they do not have.

Conclusion

The COVID-19 pandemic has been a tragedy from beginning to end. The restrictions were an affront to our constitutionally protected rights from the start, but going on two years later they are nearly impossible to continue to follow perfectly. There is no better evidence of this phenomenon than examining the behaviors of you, the Board of Health/Commissioners, from August to November 30 when you thought no one was watching. On August 10, Commissioner Gilbert Bowling motioned to move all Commissioner meetings to a virtual format for the month of September. Mr. Bowling again voted for the State of Emergency to be renewed on September 10 and then held an in-person political fundraiser on September 12, even taking pictures with attendees in close proximity. Dr. Abney took a close range photo with fellow Charles County Government employees on September 11 during which she pulled her mask down to expose her smile. On September 20, the Animal Control Board held a hearing within the Charles County Government building and several members of the Board did not wear masks. On October 20, 2021, the Board of County Commissioners held an in-person meeting with representatives from the Maryland Department of Transportation during which most of the attendees did not wear masks, whether speaking or observing, and in fact do not have masks even in sight so as to put them on when finished presenting. On the very day of the third renewal of the State of Emergency, November 2, 2021, the Commissioners were at the Economic Development Fall Meeting in Indian Head and took pictures in close range of others with no masks on. Commissioner Bowling also posted on his Facebook page on November 13 that he was proud to participate in an event in Hughesville; again there are maskless participants. Mr. Bowling was also pictured at a Fraternal Order of Police Happy Hour with no mask on or in sight on November 4. **The community is expected to adhere to and in the case of business owners, enforce, a mask mandate that the Board of County Commissioners will not enforce in their own building, the events they attend, or in their personal excursions in the community. The $50/$100 fine for failing to wear one is especially insulting given the evidence we possess of you not following your own rules.**