**Fall 2021 Starter Evidence Packet**

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Resolved: When in conflict, the United States' obligation to protect public health outweighs the preservation of individual freedom.

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# A Brief Topic Introduction

By Katie Humphries

This topic selection should come as no surprise given the state of current events. Though not explicitly stated, this resolution certainly has significant implications for COVID-19 and vaccines (frequently discussed in current events) in particular. In this topic essay, we are going to discuss some core areas for both sides of the debate, important terms to define and understand, and important background information.

What does “public health” mean? The definition of public health can be expansive and encompass many concepts or policies. [The World Health Organization](https://www.euro.who.int/en/health-topics/Health-systems/public-health-services) defines public health as,

“Public Health is defined as “the art and science of preventing disease, prolonging life and promoting health through the organized efforts of society” (Acheson, 1988; WHO).” In general, the concept of public health is referring to any policy (in the context of the resolution, passed by the United States) that affects the health of a society at large. For the negative, the concept of “individual freedom” seems fairly intuitive – a core ideology engrained in American government. As a general recommendation, I would encourage debaters not to get bogged down in notions of what is or isn’t freedom. Any restriction of action or rights/liberty violations is almost definitively recognized as a restriction on freedom by the core literature base.

If those definitions of public health and individual freedom sounds broad – it is. But the fact that these terms incorporates so many different elements allow debaters the unique opportunity to argue many different areas. Affirmative debaters could choose to discuss areas like climate change, mental health, common diseases like cardiovascular disease or diabetes, pandemics, and epidemics, and more – all of which (arguably) have disparate impacts on health at a systemic level. In fact, various (though more specific) areas include restrictions on smoking/vaping, gun laws, drug control, and more. Negative debaters can discuss dozens of types of violations of freedom, and their implications. Core negative ground includes evidence regarding how voluntary/autonomy-based healthcare is more effective. There is also a lot of data to demonstrate that health restrictions and requirements are often discriminatory in nature or application. Another strong area for negative teams to explore are how such restrictions affect democracy and the state of rights in a country. Given the circumstances of COVID-19, there is a lot of literature that discusses how expansion of government power may have negative effects on the state of democracy in that nation. Overall, I would encourage debaters to get creative with their case writing – this topic has a vast amount of ground and hundreds of different subtopics and examples to explore!

# Background Information

## Modern disease control and regulation primarily began with the HIV/AIDs epidemic and vaccinations

#### Ronald Bayer 07, Ronald Bayer is a Professor of Sociomedical Sciences and Co-Chair and Professor at the Center for the History and Ethics of Public Health, all at Columbia's Mailman School of Public Health., “The continuing tensions between individual rights and public health. Talking Point on public health versus civil liberties” US National Library of Medicine, December 2007, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2267241/

The breadth of powers that public health authorities had enjoyed remained virtually unchallenged through most of the twentieth century, but finally came under increasing scrutiny during the last decades of that era. The development of a robust jurisprudence of privacy, and the “due process revolution”, which extended rights to prisoners, mental patients and others under the authority of the state, ultimately questioned the long-held assumptions that had protected public health from constitutional scrutiny. The groundwork for this profound change was laid in the transformations that occurred in American politics, law and culture during the 1960s and 1970s. But it was the HIV/AIDS epidemic that forced a fundamental rethinking of the dominant ideology of public health. The methods of mandatory screening and examination, reporting the names of those who were sick or infected to public health registries and the imposition of quarantine once again became the subject of controversy and dispute (Bayer, 1989). **The debates that raged during the 1980s when HIV/AIDS emerged in the USA revealed the profound influence that political and historical contexts had had on the enforcement of public health. In the early years of the epidemic, a broad coalition of gay rights' activists and advocates of civil liberties were largely successful in their efforts to put the protection of privacy and individual rights at the forefront of the public health agenda.** Fierce battles ensued when proposals were made to mandate the reporting of people infected with HIV to public health registries, and it was not until many years later that such reporting became universal. Intense controversy also surrounded the efforts to preserve the right of individuals to determine whether they would be tested for HIV infection. **Newly adopted policies required exacting and specific informed consent for testing, and it was not until the 1990s that significant support among physicians emerged to help relax these standards.** Finally, every attempt to use the power of quarantine to control those whose behaviour might place their sexual partners at risk provoked extensive debate about the counterproductive impact of recourse to coercion. The HIV/AIDS epidemic provided the occasion to articulate a new paradigm of public health. Given the biological, epidemiological and political factors that shaped the public policy discussion, proponents and defenders of civil liberties were able to assert that no tension existed between public health and civil liberties, that policies that protected the latter would foster the former and that policies that intruded on rights would subvert public health. What was true for HIV/AIDS was also true for public health generally. **Indeed, the experience of dealing with HIV/AIDS provided the opportunity to rethink the very foundations of public health and to re-examine the legacy of compulsory state powers**. Even when some elements of the privacy- and rights-based approaches to HIV/AIDS were modified in the 1990s as the epidemic ‘normalized', the core values of privacy and civil liberties that had taken hold retained their influence. But is it true that there is no tension between public health and civil liberties? Public health surveillance for both infectious and non-infectious diseases is crucial in order to understand the patterns of diseases, and for the planning and execution of remedial action. This is true for tuberculosis, as it is true for cancer (Fairchild et al, 2007). Surveillance, to be effective, necessitates that either physicians or laboratories comply with public health mandates that clearly intrude on privacy. Only if we acknowledge this fact can we determine whether the public health benefits of surveillance justify this price. **Mandatory immunization of school children clearly intrudes on or burdens parental autonomy. Yet, both the protection of children from infectious disease and the ensuing ‘herd immunity' by high-level vaccination coverage, which protects those who cannot be vaccinated, depend on such mandates.** Various outbreaks of measles and pertussis (whooping cough) underscore the toll that we have to pay when we privilege parental choice; it might be a cost worth bearing but we will only know if we are forced to acknowledge the trade-offs involved.

## The history of federal and state nonconsensual disease prevention powers

#### Adam Klein and Benjamin Wittes 2020, Adam Klein chairman of the Privacy and Civil Liberties Oversight Board & Benjamin Wittes editor in chief of Lawfare and a Senior Fellow in Governance Studies at the Brookings Institution,“The Long History of Coercive Health Responses in American Law”, 4/13/2020, Lawfare, https://www.lawfareblog.com/long-history-coercive-health-responses-american-law

Second, **state and federal laws continue to authorize compulsory quarantine or isolation of disease carriers. States’ powers of quarantine and isolation derive from their inherent police power to protect public health. In Gibbons v. Ogden, the Supreme Court listed “quarantine laws” and “health laws of every description” as within the reserved police powers of the states, whose legitimate exercise, even when applied to interstate commerce, is not precluded by the Commerce Clause.** Modern hygiene, sanitation, vaccination and other public health measures have made infectious disease outbreaks far less common. But they never disappeared altogether, and **state laws have continued to provide health authorities with disease-related detention powers.** Until recently, the most commonly used isolation laws were tuberculosis-control statutes. (Coronavirus-related orders will probably exceed TB-control orders by orders of magnitude.) **TB-control laws authorize the detention of recalcitrant carriers whose refusal to comply with mandated courses of treatment can spread the disease and create drug-resistant strains. Most states have TB-control statutes specifically authorizing public health authorities to isolate carriers in their homes or in hospitals under such circumstances.** **The authority to restrain continues until it is determined that the person is no longer infectious or otherwise ceases to be a danger to the public health, such as by voluntarily complying with his or her treatment regime.** California’s law, for example, permits authorities to detain TB carriers who present a substantial likelihood of transmitting the disease to others, including those who refuse to take medication or follow infection control precautions. On a recent episode of the Lawfare podcast, Josh Sharfstein discussed his experience ordering people detained under Maryland’s TB-control law during his tenure as Baltimore’s health commissioner. State courts have upheld these statutes—imposing additional procedural safeguards in some cases but finding the detentions themselves substantively unproblematic. **Some states have analogous statutes authorizing the preventive isolation of HIV-infected persons who repeatedly refuse to take steps to avoid transmitting the virus.** This is far more controversial than TB isolation, however, largely because HIV is much more difficult to transmit. **These statutes have been seldom used; one survey found only 10 instances nationwide in a nine-year period.** **The federal government’s quarantine powers derive from its power to regulate interstate and foreign commerce.** **Section 361 of the Public Health Service Act grants federal officials the authority “to prevent the introduction, transmission, or spread of communicable diseases from foreign countries into the States or possessions, or from one State or possession into any other state or possession.” This authority extends to a list of communicable diseases specified by Executive Order 13295. 42 U.S.C § 264(d) also provides for the “apprehension and examination of persons” when the following factors are present: The person is “reasonably believed to be infected” with a communicable disease in a communicable or precommunicable stage, and the person is moving between states or is a probable source of infection to persons likely to move between states.** This federal detention authority was used only once between 1963 and 2011, when our article was published, to detain Andrew Speaker, the Atlanta lawyer who traveled with drug-resistant TB in 2007. Despite this limited use, the federal government’s Commerce Clause powers nonetheless provide a capacious source of independent public-health authority, including for compelled quarantines and isolation if needed. In theory, the states, being the repository of plenary police powers, might be expected to have primacy in responding to disease epidemics. Historically, that was true. But the prevalence of interstate travel in modern life, the fact that international and interstate travel are the vectors by which pandemic diseases spread geographically, and the federal government’s greater resources make an increased federal role consistent with the federal government’s enumerated constitutional powers and inevitable as a practical matter. Third, **Supreme Court precedent makes clear that the Constitution allows nonconsensual measures to stop an epidemic.** **In a 1905 case, Jacobson v. Massachusetts, the Supreme Court upheld compulsory vaccination during a smallpox outbreak. It explained that “the liberty secured by the Constitution of the United States to every person within its jurisdiction does not import an absolute right in each person to be, at all times and in all circumstances, wholly freed from restraint. There are manifold restraints to which every person is necessarily subject for the common good…. Upon the principle of self-defense, of paramount necessity, a community has the right to protect itself against an epidemic of disease which threatens the safety of its members.”** Courts continue to rely on Jacobson to uphold compelled quarantines. **Most recently, during the 2014-2016 West Africa Ebola outbreak, two federal district courts relied on Jacobson to uphold involuntary quarantines of travelers returning from affected countries.** In Hickox v. Christie, the judge explained that New Jersey officials were “entitled to some latitude in its prophylactic efforts to contain what is, at present, an incurable and often fatal disease.” In Liberian Community Association of Connecticut v. Malloy, the court held that Connecticut’s temporary quarantine, “limited in duration to the incubation period of a virus responsible for an epidemic that killed over 11,000 individuals, was not objectively unreasonable.”

# Pro Evidence

## Prioritizing freedom backfires – it incentivizes governments to opt for stronger, more restrictive measures to contain disease

#### Raisa Patel 20, Writer and producer with CBC’s Parliamentary Bureau, “Failing to self‐isolate could put civil liberties in ’jeopardy,’ Hajdu warns.” CBC News, 03/21/2020, https://www.cbc.ca/news/politics/not-isolating-could-threaten-freedoms-hajdu-says-1.5505767

#### Health Minister Patty Hajdu gave a stern warning to Canadians defying self‐isolation orders Saturday, saying that a failure to follow public health guidelines to limit the spread of COVID‐19 could ”put our civil liberties in jeopardy.” ”It makes governments have to look at more and more stringent measures to actually contain people in their own homes,” Hajdu said during a news conference attended by other cabinet ministers. ”Our freedoms around the measures that we’re taking right now depend on people taking them seriously.” Hajdu urged Canadians to work together to contain the spread of COVID‐19, which surpassed 1,200 confirmed cases across the country on Saturday. The federal government has advised Canadians to stay at home and limit their contact with others if they have been diagnosed with the virus, exposed to someone who has or if they travelled outside the country within the past 14 days. The minister said that if people fail to abide by those recommendations, politicians and governments could be forced to consider stronger measures. ”I would encourage Canadians to think about that and to think about their obligation to act collectively right now,” Hajdu urged. ”Right now is your chance.”

## Freedom from disease takes precedent over other freedoms during health emergencies

#### Graham Mooney 20, Graham Mooney is an associate professor at the Johns Hopkins University School of Medicine. He studies the history of public health in the 19th and 20th centuries, “Pandemic.” The Atlantic, 04/19/2020, https://www.theatlantic.com/ideas/archive/2020/05/freedom-pandemic-19th-century/611800/

**So far, COVID-19 has killed more than 90,000 Americans—at least that's the official count. More than 1.5 million have been infected, and every day another 25,000 or so test positive.** Despite this, across the country there is an increasing push to ease social-distancing restrictions. Florida, Wisconsin, and many other states are moving to reopen. Most public-health experts say it is too soon, and that easing restrictions will lead to a spike in transmissions. **Many of the people pushing to reopen see the issue in terms of freedom. They argue that quarantine and government-mandated closures infringe on their individual rights to do as they please, to make their own choices about health risks**. The United States was founded on the idea that individual liberty—for white men, at the time—is inviolable, and for many of its residents this argument resonates deeply. But there is more than one way to understand freedom—something public-health reformers in England 150 years ago found made all the difference. Their approach could provide a powerful blueprint for how to effectively counter the “my body, my choice” anti-quarantine arguments of today. **In the 19th century, public-health officials weren’t facing just one infectious disease, but many: scarlet fever, diphtheria, typhus, cholera, tuberculosis, and smallpox, which together killed tens of thousands every year. Epidemics were common, and doctors could do almost nothing to stop them.** Vaccination was available for just one disease, smallpox; testing didn’t exist, nor did many effective treatments other than rest and hydration; and doctors had little understanding of what caused these diseases. For much of the century, the leading theory was that they were triggered by “miasma,” mysterious vapors from rotting vegetation and organic matter. Over decades, a group of pioneering scientists, doctors, and government officials realized that isolation, disinfection, contact tracing, and other now-familiar public-health strategies had the potential to decrease the spread of many diseases. Scientists such as Robert Koch and Louis Pasteur developed the germ theory of disease, which showed that infectious illness was caused by microbes passed from person to person. This idea provided more evidence for the measures advocated by the reformers. But, just as today, **a significant minority strongly resisted, arguing that these measures impinged on their freedom.** For instance, in 1890,16,000 people in Nottingham signed a petition against mandatory hospitalization for those sick with infectious diseases. The petition described isolation in the hospital as a "prison [that] deprives us of our right to nurse our sick and claim our dead." Sometimes resistance to such measures became violent: During a cholera epidemic in 1832, riots broke out in Liverpool and other English cities when people rebelled against doctors’ attempts to move patients from their homes to hospitals. Widespread rumors claimed that these patients would be killed and their bodies dissected for medical research. A variety of civic groups formed, such as the Vigilance Association for the Defence of Personal Rights and the Anti-Compulsion Society. The names have an ornate 19th-century quality, but their point of view is recognizable to anyone following the current anti-quarantine protests. One prominent voice in this movement was Charles Bell Taylor, a wealthy ophthalmic surgeon from Nottingham. “Local government has become a curse,” he wrote in the Nottingham Journal in 1883. “The meddlesome philanthropist and compulsory fanatic have been enabled secretly to undermine the constitution, and set at naught the just rights and legal liberties of the people … There is no evil so great as loss of liberty; nothing can ever compensate us for.” The language may be old-fashioned, but the sentiment feels utterly familiar. In response to these vehement appeals to individual freedom, public-health leaders in London, Liverpool, Manchester and elsewhere developed a powerful counterargument. **They too framed their argument in terms of freedom—freedom from disease. To protect citizens’ right to be free from disease, in their view, governments and officials needed the authority to isolate those who were sick, vaccinate people, and take other steps to reduce the risk of infectious disease.** One of the most important reformers was George Buchanan, the chief medical officer for England from 1879 to 1892. He argued that cities and towns had the authority to take necessary steps to ensure the communal “sanitary welfare.” He and other reformers based their arguments on an idea developed by the 19th-century English philosopher John Stuart Mill, who is, ironically, remembered largely as a staunch defender of individual liberty. Mill articulated what he called the “harm principle,” which asserts that while individual liberty is sacrosanct, it should be limited when it will harm others: “The sole end for which mankind are warranted, individually or collectively, in interfering with the liberty and action of any of their number, is self-protection,” Mill wrote in On Liberty in 1859. Public-health reformers argued that the harm principle gave them the authority to pursue their aims.

## Federal travel restrictions key to stopping the spread of infectious diseases, and saves federal resources

M. Robynne **Jungerman 2017**, Laura A. Vonnahme, Faith Washburn, Francisco Alvarado-Ramy, All authors work for Quarantine and Border Health Services, Division of Global Migration and Quarantine, US Centers for Disease Control and Prevention, Atlanta, GA, United States 2017, “Federal travel restrictions to prevent disease transmission in the United States: An analysis of requested travel restrictions”, Travel Medicine and Infectious Disease, August 2017, https://doi.org/10.1016/j.tmaid.2017.06.007

**Since their inception in May 2007, federal public health travel restrictions have continued to be requested by domestic and foreign public health officials as a mechanism to prevent travel related spread of communicable diseases. CDC periodically reviews epidemiologic data to assess transmission risk aboard commercial aircraft. These data along with level of morbidity and mortality are analyzed to decide whether threat justifies a travel restriction.** As an example, based on data analyzed during an interstate outbreak of mumps, CDC concluded there was no evidence of transmission during air travel [3]. This along with its morbidity profile make it an unsuitable disease for a travel restriction. An earlier report analyzing federal travel restrictions data reported that in the first year after the processes were implemented, there were 42 requests for placement, and 33 of those individuals (78%) met criteria and were placed on DNB and PHLO, representing an average of approximately three requests for placement and one actual addition per month [7]. **Since the report was published in 2008, the average number of requests for travel restrictions has been increasing each year, and California and Texas have maintained the greatest number of requests.** This increase in consultation requests may be due to increased awareness of federal travel restrictions because of outreach and training by CDC staff and experiences shared among state health departments. **A person may meet the infectiousness criterion for use of federal travel restrictions without laboratory confirmation if the state or local health department provides strong clinical evidence pointing to the suspicion that the individual has an active, infectious communicable disease, particularly TB, for which laboratory confirmation may be slow.** Our review of data for people with suspected infectious TB who were placed on travel restrictions but later determined not to have infectious TB showed that, at time of DNB/PHLO placement, all were suspected of having infectious TB; final culture or molecular diagnostic testing results were unavailable or pending, so that a TB diagnosis could be not be confirmed or ruled out. **The use of travel restrictions in approximately 6% of these patients who turn out not to have infectious TB appears reasonable when there is evidence that up to a fifth of patients with a clinical diagnosis of TB do not have bacteriologic evidence** [12,13]. Nonetheless, in the context of travel restrictions, these patients present a negligible risk of transmission. The median time an individual was on travel restrictions was significantly shorter for those who had been removed than for those who remained on the list at the end of the analysis period, as the majority who remained on the list had been lost to follow up. CDC staff conduct regular case reviews and works with health departments to determine whether individuals are no longer infectious and can be removed from travel restrictions. **Individuals on federal travel restrictions who are lost to follow up are maintained on the DNB and PHLO until they can be located, often through attempted travel, and can provide medical documentation to conclude that they are no longer infectious.** Previous analyses have shown that those who are intercepted during travel across a land border are removed from the DNB/PHLO quicker than those who are not intercepted [14]. **Our analysis also showed that the majority of travelers who were intercepted, either before boarding a commercial flight or at a land port of entry, achieved noninfectious status after a single interception event.** **This suggests that interception during travel provides a re-entry point to the public health system and an opportunity to reinitiate treatment and follow-up care by underscoring the importance of addressing their condition and protecting others.** CDC periodically reviews federal public health travel restriction processes and works with federal and state partners to address potential gaps. During the analysis period, six individuals were able to obtain boarding passes and fly on commercial aircraft despite being on the DNB list; all but one were detected during travel and intercepted at the arrival airport. Implementation of the Transportation Security Agency's (TSA) Secure Flight [15], an airline passenger prescreening program, in 2009 has resolved some issues identified in these instances. In addition, CDC works with state and local health departments to ensure all known aliases and identifiers are added to an individual's DNB and PHLO records to minimize the likelihood of evasion. When people have imminent travel scheduled while the DNB and PHLO additions are being processed, CDC and DHS staff work with state and local health departments to intercept them before flight departure even if they have already been issued a boarding pass or boarded an aircraft. Efforts to improve the travel restrictions process have also included the use of a secure, web-based platform to request DNB and PHLO actions. Since incorporation of this tool, administrative processing has been streamlined, improving data security and reducing the processing time for DNB/PHLO actions despite an increase in the number of requests and actions. Timely processing of DNB and PHLO actions ensures that travel is restricted only as long as necessary. A limitation of this analysis was the inconsistent documentation in QARS of certain variables, specifically around treatment outcomes. The inconsistency was especially pronounced during the early years of the implementation of the DNB and PHLO tools, before a dedicated module was created in QARS to document these cases. CDC continues to address data quality and validity by refining the variables in the QARS database, by training staff to ensure accurate documentation of federal travel restrictions, and by evaluating the travel restrictions data collection and processes. In addition, the QARS cohort is limited to those cases of TB reported to CDC quarantine stations, generally by state and local health departments; thus the number of individuals prevented from traveling is small in comparison to the prevalence of TB both in the U.S. and globally [16]. Public health officials should be aware of the availability of federal public health travel restrictions and their advantages, such as finding individuals who need treatment for TB but have been lost to follow up and are suspected of traveling on commercial flights or crossing borders. **For the cohort of individuals in our analysis who were placed on travel restrictions, any risk of transmission of infectious disease by these individuals during commercial air travel to the travel public was virtually eliminated** (>99%); previous literature supports that infectious travelers have caused disease in other travelers [1e6]. Similarly**, travel restrictions may have saved federal and local resources used to conduct investigations of passengers with potential exposures when individuals fly while infectious with a communicable disease.** More data needs to be collected and further analysis completed to determine the specific resource and cost savings and exact number of exposures prevented in the traveling public. CDC should continue to assess the use of federal travel restrictions, including evaluating the process and the impact these tools have on reducing communicable disease transmission.

## Empirics show that government interventions during pandemics saved millions of lives

Seth **Flaxman et al 20,** Department of Mathematics, Imperial College London,Swapnil Mishra, Axel Gandy, H. Juliette T. Unwin, Thomas A. Mellan, Helen Coupland, Charles Whittaker, Harrison Zhu, Tresnia Berah, Jeffrey W. Eaton, Mélodie Monod, Imperial College COVID-19 Response Team, Azra C. Ghani, Christl A. Donnelly, Steven Riley, Michaela A. C. Vollmer, Neil M. Ferguson, Lucy C. Okell & Samir Bhatt, Theresa Machemer- freelance writer based in Washington DC, June 15 2020, “Estimating the effects of non-pharmaceutical interventions on COVID-19 in Europe”, Nature, 06/08/2020, https://www.nature.com/articles/s41586-020-2405-7

Estimated effect of interventions on deaths Extended **Data Table 1 shows total deaths forecast from the beginning of the epidemic up to and including 4 May 2020** under our fitted model and under the counterfactual model, **which predicts what would have happened if no interventions were implemented** (and Rt = R0; that is, the initial Rt estimated before interventions came into effect). By comparing the deaths predicted under the model with no interventions to the deaths predicted **in our intervention model, we calculated the total deaths averted in our study period. We find that across 11 countries 3.1 (2.8–3.5) million deaths have been averted owing to interventions since the beginning of the epidemic;** Extended Data Fig. 5 compares the actual total deaths to the counterfactual total deaths. The counterfactual model without interventions is illustrative only, and reflects the assumptions of our model. We do not account for changes in behaviour; in reality, **even in the absence of government interventions we would expect Rt to decrease and therefore would overestimate deaths in the no-intervention model.** Conversely, we do not consider the effect on the infection fatality rate as a result of an overwhelmed health system in which patients may not be able to access critical care facilities, which would underestimate the number of counterfactual deaths. In the Supplementary Information, we show further counterfactual estimates under differing assumptions of the generation distribution and onset-to-death distribution and all scenarios broadly show the same trends. Given this agreement across differing scenarios, we believe our estimates for the counterfactual deaths averted to be plausible.

## **Research shows that mandating individuals wear masks significantly reduces the spread of disease – COVID-19 proves**

Wei **Lyu and** George L. **Wehby 20,** Wei Lyu is a research associate in the Department of Health Management and Policy, College of Public Health, University of Iowa, in Iowa City, Iowa. George L. Wehby is a professor in the Department of Health Management and Policy, College of Public Health, University of Iowa, and a research associate at the National Bureau of Economic Research, “Community Use Of Face Masks And COVID-19: Evidence From A Natural Experiment Of State Mandates In The US,” 08/2020, doi:10.1377/hlthaff.2020.00818

Discussion Around the world, governments have been fighting COVID-19 spread through a mix of policies and mitigation measures such as school and nonessential business closures and shelter-in-place orders. Some countries have also recommended or mandated widespread community use of facial masks as a mitigation measure. However, the effectiveness of this measure is highly debated. The debate and uncertainty are fueled by the limited direct empirical evidence on the magnitude of effects of widespread face mask use in public on COVID-19 mitigation. There is a critical need for empirical evidence on the magnitude of these effects from natural experiments.8 This evidence is especially relevant as governments reopen their economies and loosen social distancing restrictions at times while new infections continue without a vaccine or widely accessible and effective treatments in sight. The study provides direct evidence on the effectiveness of widespread community use of face masks from a natural experiment that evaluates effects of state government mandates in the US for face mask use in public on COVID-19 spread. Fifteen states plus DC in the US have mandated this use between April 8 and May 5. Using an event study that examines daily changes in county-level COVID-19 growth rates, the study finds that mandating public use of face masks is associated with a reduction in the COVID-19 daily growth rate. Specifically, we find that the average daily county-level growth rate decreases by 0.9, 1.1, 1.4, 1.7, and 2.0 percentage-points in 1–5, 6–10, 11–15, 16–20, and 21+ days after signing, respectively. These estimates are not small and represent nearly 16–19% of the effects of other social distancing measures (school closures, bans on large gatherings, shelter-in-place orders, and closures of restaurants, bars, and entertainment venues) after similar periods from their enactment.21 The estimates suggest increasing effectiveness and benefits from these mandates over time. By May 22, the estimates suggest that as many as 230,000–450,000 COVID-19 cases may have been averted based on when states passed these mandates. Again, the estimates of averted cases should be viewed cautiously as these are sensitive to assumptions and different approaches for COVID-19 4 Health Affairs August 2020 39:8 Downloaded from HealthAffairs.org on June 16, 2020. Copyright Project HOPE—The People-to-People Health Foundation, Inc. For personal use only. All rights reserved. Reuse permissions at HealthAffairs.org. transforming the changes in the daily growth rate estimates to cases. The early declines in the daily growth rate over 5 days after signing the order are broadly consistent with timing of effects of other social distancing measures such as business closures.21 While the median incubation period is estimated to be around 5 days,26 there is a wide range from 2.2 (2.5th percentile) days to 11.5 days (97.5th percentile) suggesting that for many individuals symptoms may appear relatively early. Further, individuals may become aware of the mandates early through the governors’ briefings and related media reports or may be anticipating them. There is no evidence of differential pre-mandate COVID-19 trends with respect to issuing these mandates. The estimates represent the intent-to-treat effects of the statewide face cover mandates as passed, conditional on other national and local measures. In that way, the effects are independent of the CDC national guidance to wear facial masks issued on April 3. These effects are robust to several model checks. The study provides evidence from a natural experiment on effectiveness of mandating public use of face masks in mitigating COVID-19 spread. We find no evidence for effects of states mandating employee face mask use, perhaps because many businesses themselves have been requiring their employees to wear masks.27,28 In that sense, mandating employee mask use may be reinforcing what many businesses are already choosing to do on their own.

## Empirics show that social distancing reduced deaths by around 600,000 and freedom restrictions lowered deaths by 2%

Mark **Siedner et al. 20**, Mark J. Siedner- Associate Professor at Massachusetts General Hospital, Guy Harling is a Senior Research Associate at University College London, Zahra Reynolds is a Public Health Research Manager at Massachusetts General Hospital, Rebecca F. Gilbert is a Project Coordinator at Massachusetts General Hospital, Sebastien Haneuse is a Member of the Harvard-MIT Health Sciences and Technology Faculty, “Social Distancing to Slow the US COVID-19 Epidemic: Longitudinal Pretest–Posttest Comparison Group Study,” 08/2020, PLOS Medicine Journals, vol. 17, no. 8, p., doi:10.1371/journal.pmed.1003244

A complete list of dates of statewide social distancing measures, by type of measure and state, is contained in Table A in S1 Text. During March 10–25, all 50 states and the District of Columbia implemented at least 1 statewide social distancing measure (Fig A in S1 Text). **The most widely enacted measures on the first date of implementation were cancellations of public events** (34/51 [67%]) **and closures of schools** (26/51 [51%]). The first social distancing measures were implemented when the median statewide epidemic size was 35 cases (interquartile range [IQR] 17–72). Fig 1A shows the mean daily COVID-19 case growth rate mapped against the date of the first statewide social distancing measures. At the date of implementation of the first social distancing measure, states had a mean daily case growth rate of 30.8% (95% CI 29.1–32.6; Table 1), corresponding to a doubling of total cases every 3.3 days. From 14 days prior to, and through 3 days after, implementation of the first social distancing measure, the mean daily case growth rate did not change (−0.2% per day; 95% CI −0.6% to 0.3%; P = 0.51). **Beginning 4 days after implementation of the first statewide social distancing measure, the mean daily case growth rate decreased by an additional 0.9% per day** (95% CI −0.4% to −1.4%; P < 0.001). This estimate corresponds to a mean daily case growth rate that had declined to 26.5% (doubling of total cases every 3.8 days) by day 7 after enactment of the first statewide social distancing measures, to 19.6% (doubling time of 5.1 days) by day 14, and to 12.7% (doubling time of 7.9 days) by day 21. As of May 1, nearly all (45 [90%]) states had implemented statewide restrictions on internal movement. These restrictions on internal movement were implemented a median of 11 days (IQR 8–15) after the first statewide social distancing measure was implemented in the respective states, when the median statewide epidemic size was 937 cases (IQR 225–1,414). The mean daily case growth rate was already declining, at a mean rate of −0.8% per day, during the 14 days prior to implementation of statewide restrictions on internal movement (95% CI −0.9% to −0.7%; P < 0.001) (Table 1; Fig 1B). There was a drop detected 3 days after statewide restrictions on internal movement were implemented (−3.1%; 95% CI −4.7% to −1.5%; P < 0.001), but no statistically significant difference in the rate of change before versus after implementation (0.1% per day; 95% CI −0.04% to 0.3%; P = 0.14). As discussed in more detail below, there is substantial difficulty in disentangling the unique associations with statewide restrictions on internal movement from the unique associations with the first social distancing measures. In the analysis of the secondary outcome, change in daily COVID-19-attributed deaths, given the uncertainty in the hypothesized lag between implementation of social distancing and observed changes (if any) in daily COVID-19-attributed deaths, we explored a range of lag times. As shown in Table 2, **by 7 days after implementation of the first statewide social distancing measure, the mean daily growth rate in COVID-19-attributed deaths decreased by 2.0% per day** (95% CI −3.0% to −0.9%; P < 0.001). By 14 days, the estimated association was no longer statistically significant (−1.0% per day; 95% CI −0.2% to 0.1%; P = 0.09). No additional statistically significant benefit was found after 7 days after implementation of statewide restrictions on internal movement. Sensitivity analyses suggested our estimates were not sensitive to inclusion of additional covariates, did not differ by the size of the epidemic at implementation, and were consistent with the known incubation period (Tables B, C, and D in S1 Text). In the event study specification, mean daily case growth was negative by day 4, and the estimates were statistically significant by day 8, consistent with the primary analysis (Fig B in S1 Text). The event study analysis for change in daily COVID-19-attributed deaths also produced estimates qualitatively similar to the primary analysis, although with slightly larger CIs given the smaller number of events (Fig C in S1 Text). Discussion In this longitudinal pretest–posttest comparison group study, we found that implementation of social distancing measures was associated with a reduction in the mean daily growth rate of COVID-19 cases and in the mean daily growth rate of COVID-19-attributed deaths. Our estimates imply a more than doubling in the doubling time (from 3.8 days to 8.0 days) by 3 weeks following the implementation of social distancing measures. Assuming a cumulative epidemic size of 4,125 reported cases (equivalent to the cumulative number of cases in the US at the time of implementation in each state), the reduction in growth rate we estimated corresponds to a difference between 26,281 reported cases with no social distancing versus 24,625 reported cases with social distancing, at 7 days after implementation; a difference between 158,518 reported cases with no social distancing versus 102,223 reported cases with social distancing, at 14 days after implementation; and a difference between 904,773 reported cases with no social distancing versus 283,161 reported cases with social distancing, at 21 days after implementation. Stated differently, our model implies that social distancing reduced the total number of reported COVID-19 cases by approximately 1,600 cases at 7 days after implementation, by approximately 56,000 reported cases at 14 days after implementation, and by approximately 621,000 reported cases at 21 days after implementation. It can be inferred that earlier implementation of social distancing measures would likely have reduced morbidity and mortality even further. **These results are consistent with both the theoretical effect of social distancing on epidemic spread [6] and the historical benefit observed with the implementation of such interventions during prior epidemics of communicable diseases** [28]. They also are largely in keeping with recent data on the impacts of social distancing measures in the US on both mobility [7,8] and case growth rates [9–11], with generally similar effect sizes. Our study extends this literature by further examining COVID-19-attributed mortality as an outcome. The association between social distancing and case growth rate was most apparent at the lower bound of the incubation period that has been estimated based on publicly available data, with some evidence that the change in growth rate may have started even earlier. We suspect that this observation may have resulted from self-imposed social distancing, which reportedly occurred prior to government-issued mandates [33].

## Climate change causes a laundry list of health problems from disease to infection

Justin Chapman 21, Michelson Medical Research Foundation Contributor, “Climate Change is a Direct Threat to Human Health and Immunology — Michelson Medical Research Foundation,” Michelson Medical Research Foundation, 8/2/2021, https://www.michelsonmedicalresearch.org/news/climate-change-direct-threat-human-health-immmunology

**Climate change impacts every disease, every organ system, and every sector of the world’s population,** according to scientists and experts in a July 28 program sponsored by Michelson Philanthropies. Additionally, **those who contribute the least to greenhouse gas emissions suffer the most negative health impacts.** Produced by the American Association for the Advancement of Science, the webinar focused on the threat climate change poses to the human immune system and featured [Dr. Gwen W. Collman](https://www.sciencemag.org/custom-publishing/webinars/healthy-planet-healthy-people-how-climate-change-impacts-human-immunology#2506743) from the National Institute of Environmental Health Sciences, [Dr. Marcelo Korc](https://www.sciencemag.org/custom-publishing/webinars/healthy-planet-healthy-people-how-climate-change-impacts-human-immunology#2506744) from the Pan American Health Organization, and [Dr. Sheri Weiser](https://www.sciencemag.org/custom-publishing/webinars/healthy-planet-healthy-people-how-climate-change-impacts-human-immunology#2506745) from UC San Francisco. The panel was moderated by [Dr. Sean Sanders](https://www.sciencemag.org/custom-publishing/webinars/healthy-planet-healthy-people-how-climate-change-impacts-human-immunology#2352129) of Science/AAAS. [Watch the full webinar here](https://urldefense.proofpoint.com/v2/url?u=https-3A__view6.workcast.net_-3Fcpak-3D7762152668074449-26pak-3D8998616626589056&d=DwMGaQ&c=euGZstcaTDllvimEN8b7jXrwqOf-v5A_CdpgnVfiiMM&r=tyUJMd7od_WA98E4pHwYP_SgNtfYm9V3Bj1kj59vchA&m=nZadtG7xuqEePmr_o3uFr9PMoWDS9q1wRUZBKtaqIB8&s=nk1mchMh-bNAgONV9OmrT_9sbKQVj7T1gqUWHbIaiVU&e=). Michelson Philanthropies and Science are also partnering to launch the [Michelson Philanthropies & Science Prize for Immunology](https://www.sciencemag.org/michelson-philanthropies-science-prize-immunology). The international prizes consist of a $30,000 grand prize and a $10,000 runner up award for recent transformative research by scientists 35 years of age or younger that will have a significant impact on vaccine and immunotherapy development with trans-disease applications. The deadline to [apply](https://www.sciencemag.org/michelson-philanthropies-science-prize-immunology) is October 1. “It has now become more than apparent that the human immune system is involved in almost all human disease,” said Dr. Gary K. Michelson, founder and co-chair of Michelson Philanthropies. “Whatever your area of research, and regardless of your nominal field of study, if it relates to the immune system—and almost all medical research does—we are interested in you.”

**“Harnessing the immune system, including the development of new vaccines, will be critical to mitigate the negative health impacts of climate change.”** **Dr. Wayne C. Koff “Climate change is not just a future threat,”** said Dr. Wayne C. Koff, president and CEO of the [Human Vaccines Project](https://www.humanvaccinesproject.org/), which coordinates the [Michelson Prizes](https://www.humanvaccinesproject.org/michelsonprizes/), annual $150,000 research grants for early career investigators focusing on immunology and vaccine research, including a focus on climate. “For our global health, it’s already a harmful reality with a profound effect on the human immune system. **Harnessing the immune system, including the development of new vaccines, will be critical to mitigate the negative health impacts of climate change.**” Climate change also affects food insecurity in many ways, including crop loss from drought and flooding from rising sea levels. Weiser pointed out that **climate change can also alter the nutrient content in food as well as the quality and safety of food and water, not to mention the economic impacts of climate change such as poverty and unemployment.** “And on top of all that, we see that the stability of the entire food system is in question because of rising food prices, political instability, and conflict brought about by food insecurity,” Weiser said. **“Food insecurity is a very important driver of migration.** Both food insecurity and migration have lots of negative health impacts.” Weiser has been researching the impacts of food insecurity on the HIV cascade of care for many years and she found that food insecurity negatively affects people from disease acquisition to death. “It drives chronic disease and poor mental health,” she said. “**Migration also has a host of negative health impacts from infectious disease outbreaks to increased risk of gender-based violence and sexually transmitted infections to chronic disease because of lifestyle and diet changes. And all of these things interconnect to worsen health in many different disease categories.”** Collman pointed out the increasingly extreme weather events related to climate change, such as hurricanes, wildfires, floods, and drought. Part of the solution to mitigate the impacts of those events involves being prepared ahead of time. “**Making sure people have access to food and communities can be prepared with food banking and distribution services is part of the research and implementation programs that we should be developing, both in the United States and around the world, in order to reduce the health impacts that we know will come from these weather events,”** Collman said. These extreme weather events, in addition to human activity, are altering soil biodiversity, Weiser added, which in turn has a negative effect on human microbiomes. “**There are risks of all sorts of diseases from an altered microbiome, such as autoimmune diseases and other inflammatory diseases, cardiometabolic and even neurologic, and mental health problems because of the activation of our immune system,”** she said. “If we’re thinking about how climate change affects the immune system, there are the direct impacts including heat stress, wildfires, UV radiation, and there’s a lot of literature on how air pollution blunts immune responses. **All of those things could directly blunt our immune response.”** Dr. Sheri Weiser Collman said these viruses and bacterial agents can also change and become more transmissible to humans. She added that climate change results in a “complicated and complex web of causes” and wondered which comes first. “Climate affects food and security, and security affects population mobility and demography,” she said. “And we also have to remember that there are vulnerable parts of our population: pregnant women, young children, the elderly. When we talk about people who are most impacted by climate change in any area, no matter what your socio-economic status is, no matter whether you’re in a high-income country or a low-income country, these are vulnerable groups that we have to both study and protect. We have to make sure that they have appropriate services if they are impacted by a negative climate event.” Korc agreed that infectious diseases and climate change are connected. He credited the environmental movement with encouraging data sharing between governments related to the environment and health. “That’s a major step, because if there’s no dialogue between the environment sector and the health sector, what can we expect?” he said. “Within the health sector, in the effort to control and prevent infectious diseases, the word ‘environment’ is very seldomly mentioned. They don’t have that integrated approach. So first we need to start in our own home, in the health house. And from there we can have a good understanding to move forward, and to work together with the environment sector. Otherwise, we’re going to fail.”

## The climate crisis is undermining healthcare infrastructure

Gianna Melillo 21, Aassociate Editor of The American Journal of Managed Care “Effects of Climate Change, COVID-19 Spell Concern for Embattled US Health System ,” AJMC, 8/4/2021, <https://www.ajmc.com/view/effects-of-climate-change-covid-19-spell-concern-for-embattled-us-health-system>

Health Impacts of a Changing Climate According to The Lancet Countdown on Health and Climate Change’s [Policy Brief](https://www.dropbox.com/s/0sv7no8q41qyqm1/Lancet%20Countdown%20Policy%20Brief%20USA_ENG.pdf?dl=0) for the United States of America, published in December 2020, the 6 warmest years in recorded history occurred between 2014 and 2019, while Alaska, Georgia, and North Carolina all experienced record high temperatures in 2019. “Eight out of the 10 highest ranking years of heatwave exposure among older adults, a population especially vulnerable to heat, have occurred since 2010 in the United States,” the report reads**. “In the past 2 decades, heat-related mortality for older persons has almost doubled,** reaching a record high 19,000 deaths in 2018.” **All the negative health outcomes associated with increased**[**heat**](https://www.cdc.gov/mmwr/volumes/70/wr/mm7029e1.htm)**,**[**pollution exposure**](https://www.pbs.org/newshour/health/wildfires-are-increasing-health-risks-of-already-polluted-regions-of-the-u-s-experts-warn?)**, and natural disasters call into question whether existing infrastructure—and particularly health care systems—will be equipped to handle the rising demand for care.** Throughout the past 18 months, American hospitals have been struggling to cope with the influx of COVID-19 patients and those suffering from conditions exacerbated by the pandemic. In a [survey](https://www.ajmc.com/view/report-documents-grim-current-status-and-future-of-us-hospitals) conducted in February 2021—prior to the passage of the [American Rescue Plan](https://www.ajmc.com/view/this-week-in-managed-care-march-12-2021)— **responses from 320 hospitals across the country laid bare challenges wrought by the pandemic and the crisis’ implications in the years to come.** The report detailed officials’ fears of worsening quality of care provided to current and future patients due largely to financial struggles and staffing shortages, while administrators worried that patients who delayed care due to fears of contracting SARS-CoV-2 could result in higher hospitalization rates and increased demand for more complex care in the future. **Staff shortages resulted in administrators assigning more patients to staff, and this higher ratio can lead to mistakes as less attention is given to each patient.** For example, one hospital network found an increase in central-line infections—which can be life-threatening—that they attributed to a lack of sufficient staff. **All these factors contribute to individuals deciding to retire early or seek jobs outside of the health care industry, all the while discouraging individuals from pursuing a career in the medical field.** “We can’t overstate the staffing gap that exists now that’s likely to get worse over the next few years,” an administer stressed. As the delta variant continues to spread among the nation’s unvaccinated, and states begin to report challenges of dealing with a [fourth wave of cases](https://apnews.com/article/health-coronavirus-pandemic-michael-brown-4732ad26ef9ce4dd580dd96c23c95fd4?), it seems the pandemic is far from over in the United States. “What if we have a COVID-19 surge while we have a prolonged heatwave?” LaRocque posited, noting this combination of factors poses a double stressor on the health system. “I am very concerned that we are going to be in a consistent reactive position to a series of crises, and each time it will get harder and harder to respond.” **Some report that the influx of patients with heat-related conditions admitted to hospitals in the past months do resemble case spikes seen in the early stages of the pandemic.** “It felt very much like what happened in the initial days of trying to deal with the original outbreak [of the coronavirus],” Steve Mitchell, MD, FACEP, medical director of the emergency department at Harborview Medical Center, told [The Seattle Times](https://www.seattletimes.com/seattle-news/health/heat-wave-deaths-rise-across-pacific-northwest-including-11-more-in-king-county/?). **“We got to the point where facilities were struggling with basic equipment, like ventilators.”** During the first heat wave in late June, [Washington state](https://apnews.com/article/wa-state-wire-canada-washington-heat-waves-3b76aad7eac38f6f203d32f3bf7c22b5?) reported a death toll of 78. In comparison, the state saw just 39 heat-related deaths between 2015 and 2020. **In**[**Montana,**](https://www.washingtonpost.com/weather/2021/07/19/heat-west-fires-smoke-drought/?)**temperatures are averaging 15 to 20 degrees above normal, increasing the risk for heat-related illnesses.** With time, the situation is expected to deteriorate. “I'm terrified by 130-degree temperatures in the west. Humans cannot live in those types of temperatures. I'm terrified by unbreathable air in my backyard,” LaRocque said. In Boston, in July “we could smell wildfire smoke from the west; the air was hazy, and the air quality index was in the dangerous level. I've lived in Boston for more than 20 years, and I've never seen anything like that. My children could smell smoke when they stepped out of the house. If that's not an emergency, I don't know what is.” **In addition to increased susceptibility to viruses resulting from air pollution, this exposure, along with stratospheric ozone depletion and rising heat, also contributes to rising rates of**[**other conditions**](https://medsocietiesforclimatehealth.org/wp-content/uploads/2017/03/gmu_medical_alert_updated_082417.pdf)**—one of which is skin cancer**. “Because the human population has doubled in last 50 years, the critical pressures of climate change act as force multipliers, increasingly magnifying the health impact of those pressures,” explained Eva R. Parker, MD, FAAD, an assistant professor of [dermatology](https://www.ajmc.com/view/a-complex-web-of-factors-causes-climate-change-to-increase-the-risk-and-burden-of-skin-cancer) at Vanderbilt University Medical Center, during a panel at the American Academy of Dermatology Virtual Meeting Experience this year. In her talk, Parker outlined how the United States already sees 5 million cases of skin cancer annually but is experiencing a steady upward trend in melanoma incidences, coinciding with increasing rates around the globe. “**As the planet continues to warm, there’s the possibility that rising temperatures could amplify the induction of skin cancer by UV radiation, further driving increased rates of skin cancer,**” she said. Not only will climate change increase rates of physical health ailments like cancer, but more natural disasters at increased frequency could result in an uptick of mental health conditions in repeatedly exposed populations. According to [The Atlantic](https://www.theatlantic.com/health/archive/2020/07/mental-health-aftermath-california-wildfires/608656/), **data show between 10% and 30% of wildfire survivors develop diagnosable mental-health conditions, including posttraumatic stress disorder (PTSD) and depression.** Although another 50% may suffer from serious subclinical effects that fade with time, investigations found rates of substance abuse and domestic violence both increase after natural disasters. LaRocque notes that just the sheer depletion of the natural world around us will also lead to adverse mental health effects. “Loss of the natural world is a profoundly spiritually taxing experience for human beings and children in particular. It is very hard to comprehend, witnessing mass extinction,” she said. Cognitively, increased heat will also result in negative outcomes. “Criminal activity worsens when it's hot. Children don't learn as well when it's hot. **There are very profound impacts. It crosses all kinds of areas of health and humanity.” The mental health impact of climate change is “definitely increasing,” Sarfaty noted. “Around the country, people who are displaced by storms often have long lasting anxiety, depression, PTSD.** It's showing up in kids.” She continued, “Then you have young people who are just becoming increasingly distressed about what this means for the future, for their own ability to enjoy life, and have a family eventually.” What Can Be Done? Both LaRocque and Sarfaty agree cutting carbon emissions is paramount to reduce the impact of climate change on human health. “There is a need for urgent decarbonization of our entire economy, which is a huge undertaking,” said LaRocque. “And that requires a focused commitment from our leaders at all levels and I'm not sure we have that yet.”

## Restrictions on smoking and vaping key to reducing smoking and vaping

#### Kai-Wen Cheng et al. 2019, Department of Health Administration, Governors State University and Health Policy Center, Institute for Health Research and Policy, University of Illinois at Chicago, Frank J. Chaloupka, Ce Shang, Anh Ngo, Geoffrey T. Fong, Ron Borland, Bryan W. Heckman, David T. Levy, Michael Cummings, “Prices, use restrictions and electronic cigarette use— evidence from wave 1 (2016) US data of the ITC Four Country Smoking and Vaping Survey”, Society for the Study of Addiction, 1/28/2019, https://doi.org/10.1111/add.14562

We conducted a sensitivity analysis by including daily smokers and weekly smokers as current cigarette smokers. Similarly, daily vapers and weekly vapers were de fined as current NVP users. The results are consistent with the results that included monthly smokers and vapers. Our study uncovered some interesting substitution and complementarity relationships between NVP and cigarette use. First, **our study found that costs of vaping, both explicit (NVP prices) and implicit costs (vaping restrictions in public places), may play an important role in explaining NVP use and cigarette and NVP concurrent use. Higher NVP prices and vaping restrictions in public places were associated with less NVP use and less concurrent use.** Secondly, we did not find that NVPs could potentially act as a substitute for cigarette smoking in response to higher cigarette prices, as there were no consistent patterns observed in the influences of cigarette prices on NVP use or completely switching. **Thirdly, we found potential complementarity between cigarette and NVP use. Those who reported that vaping was allowed in the smoke-free areas were significantly more likely to be cigarette and NVP concurrent users. Similarly, those who reported their work-places restricted vaping inside were less likely to report concurrent use.** By tackling the relationships between NVPs and cigarettes and the extent to which NVPs could potentially act as a substitute for or a complement to cigarettes, our study provides significant implications for the design and implementation of policy. Previous studies have estimated the demand for NVPs and analyzed the impact of prices and smoke-free regulations on NVP demand either using aggregate sales data or individual-level data [20–22]. However, previous studies did not explore whether NVPs could serve as a substitute for or complement to cigarettes by gauging the impact of costs of vaping, NVP prices and vaping restrictions in public places on changes in use patterns between cigarettes and NVPs. Furthermore, previous studies relied on respondents’ self-reported reasons for NVP use, reflecting on either NVPs as a substitute away from cigarettes or concurrent use to conquer smoking restrictions [23,24]. Other studies have investigated the relationships between concurrent use and smoking cessation [17,25]. **Our study contributes to the current literature by investigating whether increased cigarette price is associated with increased likelihood of using NVPs to substitute away from cigarettes** (i.e. substitution) and whether allowing vaping in smoke-free areas is associated with increased likelihood of NVP and cigarette concurrent use to facilitate nicotine demand anywhere to conquer smoking restrictions (i.e. complementarity). Our study is subject to some limitations associated with the use of Nielsen Scanner Track data. First, these data are gathered from participating retailers of convenience stores, food, drug and mass-merchandise stores, and may not reflect the prices from other retailer types such as internet, tobacco shops and vape shops. In addition, for those using ‘roll-your-own (RYO)’ cigarettes instead of the manufactured cigarettes, cigarette prices obtained from Nielsen data do not reflect the prices paid by those RYO smokers. Indeed, only approximately one-third of NVP sales were taking place in retail locations such as supermarkets, gas stations, convenience stores and drug stores, while vape shops and internet account for two-thirds of the sales [26]. Self-reported NVP prices from ITC 4CV1 data indicate that price variations are larger with a wider range, while NVP prices provided by Nielsen Scanner Track have less variation with a narrower price range (the authors’ calculation), as these price sources mainly come from conventional retailers. Future studies will benefit from obtaining NVP price information from various purchasing locations, such as internet, vape shops and tobacco shops, to fully capture NVP prices from all purchasing locations. Secondly, as a Nielsen market consists of groups of counties centered on a major city, our sample using prices from Nielsen Scanner Track data under-represents the population in rural areas. Thirdly, our vape-free measures, having seen anyone vaping in smoke-free areas and self-reported vaping restriction in the work-place, may not fully capture all vaping regulations and may contain measurement errors. In addition, this self-reported measure may be endogenous, such that a particular subgroup which is more inclined to vape may be more aware of vaping restrictions, causing endogeneity between these two variables. Fourthly, using the cross-sectional data, we cannot make any causal inferences on the relationships between prices, use restrictions and behaviors of concurrent use and complete switch. Further, using cross-sectional data, we cannot explain whether and to what extent concurrent use will ultimately lead to complete switch [27]. Finally, a smaller sample size of the survey data may provide insufficient power to detect price effects on NVP use, concurrent use and complete switch. Future studies may benefit from using large-scale and longitudinal data to explore the impact of prices and use restrictions on changes in use patterns between cigarettes and NVPs and studying whether these use patterns may ultimately lead to abstinence. Despite these limitations, **our results imply that cost of vaping may play an important role in explaining use patterns between cigarettes and NVPs. Policies raising retail NVP prices, such as taxes, have the potential to reduce NVP use and concurrent use of cigarettes and NVPs. State and local governments may consider restricting NVP use in their current smoke-free venues to decrease the potential complementary behaviors between cigarettes and NVPs.**

## Smoking restrictions save lives and money, and should be enacted by the federal government

#### Garrett R. Beeler Asay et al. 17, Office of the Associate Director for Policy, Centers for Disease Control and Prevention, David M. Homa, Erin M. Abramsohn, Xin Xu, Erin L. O,Connor, Guijing Wang, “Reducing Smoking in the US Federal Workforce: 5-Year Health and Economic Impacts From Improved Cardiovascular Disease Outcomes”, Public Health Reports, 10/26/2017 <https://doi.org/10.1177%2F0033354917736300>

**As the largest employer in the nation, the federal government has policies in place that can influence a large number of employees and potentially serve as an example for the nation. At a 5% reduction in smoking prevalence, our model predicted substantial reductions in myocardial infarction and stroke hospitalizations, deaths, and associated medical and productivity costs. Even at a 1% reduction in smoking prevalence** (moving from 13% to 12% prevalence of smoking in the federal workforce**), we estimated potential reductions per federal employee of $6.10 in medical costs, $12.00 in productivity costs, and $32.30 in absenteeism costs, yielding a potential total cost offset of $50.40 per employee during a 5-year period. These costs accrue to insurers and employees through fewer hospitalizations and to the federal government through fewer missed workdays. Two potential options for reducing federal workforce smoking rates are (1) increasing awareness of tobacco cessation benefits provided through federal health insurance and (2) implementing a federal campus-wide tobacco-free policy.** Since 2011, the US Office of Personnel Management has required insurance carriers in the Federal Employees’ Health Benefits Program to provide a comprehensive, evidence-based tobacco cessation package. Through this coverage, federal employees and their dependents receive individual, group, and telephone counseling and the 7 US Food and Drug Administration–approved cessation medications with no copay or co-insurance. The coverage includes at least 2 quit attempts per year, with a minimum of 4 counseling sessions of at least 30 minutes for each attempt.34 Although federal employee health benefits provide a minimum of 4 counseling sessions, meta-analyses show a significant dose–response relationship, whereby people who have more sessions have better rates of abstinence.35 According to a 2013 Office of Personnel Management survey, only 10% of federal employees who were current tobacco users were aware of this health insurance benefit.34 Further promotion of this benefit could enhance awareness and uptake of cessation benefits among federal employees. **Implementing tobacco-free policies could encourage more smokers to quit and prevent secondhand aerosol exposure from electronic cigarettes** (also known as electronic nicotine delivery systems). **Secondhand aerosol exposure from electronic nicotine delivery systems can expose others to harmful constituents.**36 More than 475 colleges and universities have implemented tobacco-free policies.37 **Only 3 federal departments have a tobacco-free policy** (ie, the US Department of Health and Human Services, the Federal Trade Commission, and the Department of Transportation). Most federal agencies have implemented a 1997 executive order that bans cigarette smoking within federally owned and operated facilities.38 This policy was updated in 2009 by an additional General Services Administration policy that extended the smoking restrictions to eliminate all remaining indoor smoking areas and to prohibit smoking in courtyards and within 25 feet of doorways and air intake ducts on outdoor spaces under the jurisdiction, custody, or control of the General Services Administration.39 However, **smoke-free policies do not cover other forms of tobacco use and do not extend restrictions on tobacco use to entire campuses, including outdoor grounds.** In 2012, the National Prevention Council, which comprises 20 federal departments and is chaired by the US Surgeon General, established a shared commitment to increase tobacco-free environments across the federal government.40 Limitations This study had several limitations. First, because of data limitations, we did not include the US Postal Service, military, intelligence services, contractors, and non–full-time-equivalent fellows. Inclusion of these groups would have increased the magnitude of our results. Second, although we did not model additional costs of diseases associated with smoking, such as cancers, chronic obstructive pulmonary disease, complications from pregnancy, and health impacts associated with exposure to secondhand smoke, adding these costs would have increased the magnitude of our results. Third, we were not able to distinguish smokers by duration of smoking. Duration of smoking would allow us to further estimate a smoker’s risk of acute myocardial infarction or stroke. Fourth, we did not model cost implications beyond 5 years, which would have increased potential averted productivity losses and medical costs. Fifth, although our model relative risks represented pooled risks from studies that included age groups outside the 35-64 age range, these studies could be generalized to US adults aged 35-64. Finally, we did not account for potential lower wages of smokers compared with nonsmokers; a lower wage would decrease averted productivity losses and absenteeism costs. Despite these limitations, **our analyses showed impacts for different what-if scenarios, providing a range for potential reductions in smoking prevalence and corresponding health and economic benefits.** Conclusion **Reducing the number of smokers in the federal workforce would improve the cardiovascular health of employees through fewer hospitalizations and deaths attributed to myocardial infarction and stroke, as well as decrease medical costs, productivity losses from premature death, and missed workdays. The federal government can leverage tobacco-free policies** and promote current federal employee tobacco cessation benefits **to encourage employees to quit smoking.**

## Smoking restrictions in schools can prevent youths from smoking, this is key to preventing the rise of e-cigarettes

#### Jayani Jayawardhana 19, College of Pharmacy University of Georgia, Haley E. Bolton Emory Healthcare, Monica Gaughan School of Human Evolution and Social Change Arizona State University, “The Association Between School Tobacco Control Policies and Youth Smoking Behavior”, International Society of Behavioral Medicine, 2019, https://link.springer.com/article/10.1007/s12529-019-09825-z ]

Much has changed in the United States since 1994. Most noteworthy relative to this research is the continuing spread of no smoking policies throughout the United States. **These no smoking policies affect many kinds of public and private spaces and infringe on smoking in substantive ways that were unimaginable in 1994. From that perspective, this research— on the effect of smoking bans at the beginning of the period on a particular segment of the US population—adds support to the wisdom of making smoking difficult in as many contexts as possible. This makes smoking unattractive, reduces exposure to smoking “role models,” and makes it harder to get access to tobacco and tobacco products. Together, these are going to make it ever more unlikely that adolescents will start smoking in the first place. We note that a critically important recent period factor is the rise of electronic cigarettes in the youth population.** The federal government has only recently introduced a ban on sales of e-cigarettes to youth under 18. This will certainly help reduce access, but it is also the case that e-cigarettes are easy to conceal, even in no-smoking environments. Research is only just emerging about the e-cigarette threat to youth, but it must continue. The gains in recent years of youth smoking must not be lost to new methods of introducing youth to nicotine addiction, which initiates a process that is not well controlled with a simple ban. It is noteworthy that extant studies of smoking bans have been completed in high-income countries. We end this manuscript by considering how smoking bans have the potential to improve health and well-being throughout the world. The WHO Framework Convention on Tobacco Control (2005) encourages countries to adopt a number of tobacco control policies, including those known to reduce youth smoking. Forty-nine countries have passed comprehensive indoor smoking bans; these countries represent only one-third of the signatories to the treaty and only one-quarter of all countries [23]. Youth in low- and middle-income countries—where the majority of the world’s people live—are especially unlikely to live in policies with smoking bans [23]. Furthermore, policies do not translate into implementation and enforcement; in 2009, only 2% of the world’s population was estimated to live under high-compliance smoking ban regimes [24]. The findings of this research indicate that smoking bans—particularly those targeting youth environments—reduce the incidence of youth tobacco use. Sustainable Development Goals—and the Millennium Development Goals before them—are bringing unprecedented numbers of boys and girls into educational systems; the implications of this are that youth well-being will be furthered by the adoption and implementation of smoking bans, particularly in educational settings. An important implication of this work is the need to expand our focus beyond high-income countries to settings where the majority of youth smoking occurs, and about which the public health community knows little. Finally, **the findings also suggest that policy makers should focus their attention on family and community factors that affect youth behavior related to tobacco use. Reducing smoking among adults is likely to result in lower youth smoking rates overall since living around smokers and smoking have such big effects on maintaining smoking for adolescents.** Turning again to the WHO Framework Convention on Tobacco Control, we note that a number of policy mechanisms are designed to reduce smoking prevalence. Policies that make it difficult to start smoking (such as the ones we focus on here) are not the same as those that make it easier to quit an addiction once it has become established. Article 14 calls for providing services to reduce nicotine dependence, but only a slight majority of signatories do so, while low and middle income countries (LMIC) have made little progress [23]. There is generally a lack of access and coverage for effective pharmacological interventions, an issue that affects LMICs as well as wealthy countries such as the United States that lack coverage for medication management. Effective national cessation programs include short- and long-term interventions through the clinical system, as well as consistent messaging and support from the public health sector [23]. Therefore, it is important to conduct research to assess how policies related to smoking cessation can be extended, as these types of interventions are most effective in reducing smoking among adults. **Total school smoking bans are effective control policies for preventing youth smoking and will help reduce youth smoking rates in the country if implemented properly across all school districts. Thus, it is crucial for policy makers to understand the effectiveness of school tobacco control policies on youth smoking behavior. This study brings our attention to this important policy discussion and highlights the importance of implementation of effective policies in curbing smoking among adolescents.**

# Con Evidence

## Public health restrictions disproportionately harm the most vulnerable populations – COVID-19 proves

Molly **Kinder and** David M. **Rubenstein 20**, Fellow sat Brookings Metropolitan Policy Program, “Reopening America: Low-Wage Workers Have Suffered Badly from COVID-19 so Policymakers Should Focus on Equity”, Brookings Institute, 6/23/2020, https://www.brookings.edu/research/reopening-america-low-wage-workers-have-suffered-badly-from-covid-19-so-policymakers-should-focus-on-equity/

As leaders across the country seek opportunities to put laid-off workers back to work, their decisions will have an outsized impact on lowwage workers and people of color, who shoulder some of the most severe financial and health burdens associated with the coronavirus and will be some of the first workers called back to the job site. Leaders must create the conditions for a more equitable next phase of the pandemic so that low-income and minority workers are not forced to make an impossible choice between surviving financially or surviving the virus. COVID-19 JOB LOSSES HIT LOW-WAGE WORKERS AND PEOPLE OF COLOR THE HARDEST **Low-wage workers in America have suffered the worst economic pain of the pandemic. Social distancing measures taken in response to COVID-19 resulted in massive job loss concentrated among lower-wage workers**. Retail and leisure/hospitality, which typically offer lower wages than other industries, took the hardest hits. **In April, retail posted a 17.1 percent unemployment rate, totaling 3.2 million people**. In leisure/hospitality, the unemployment rate was a staggering 39.3 percent, totaling 4.8 million people. **Workers with the least education have suffered the most. In April, unemployment rose to 21.2 percent for those with less than a high school degree—more than twice as high as the 8.4 percent unemployment rate for those with a bachelor’s degree or higher**. **Financial shocks and unemployment are widespread, but Black and Latino or Hispanic workers are disproportionately affected.** **One of the reasons low-wage workers have suffered disproportionate job losses is their limited ability to telework. Low-wage workers are six times less likely to be able to work from home than high-income workers**. Fewer than 10 percent 31 of leisure and hospitality workers can telework, while a majority of workers in higher-paid fields such as the finance, business, professional, and information sectors can. **The vast majority of workers who held jobs just a few weeks ago in restaurants, bars, gyms, salons, movie theaters, and malls could not perform those jobs from home once the pandemic started and were laid off as social distancing requirements caused many of those establishments to close.** Low-wage workers in America have suffered the worst economic pain of the pandemic. Social distancing measures taken in response to COVID-19 resulted in massive job loss concentrated among lower-wage workers. As cities and regions across the country start to reopen businesses, millions of laid-off, low-wage workers face a dual dilemma. To earn a paycheck, the vast majority will have to show up physically to work, risking exposure to the coronavirus. But their pay could be less than the already low wages they earned before, and even less than what they were collecting through enhanced unemployment insurance at the beginning of the pandemic. Servers may return to half-empty restaurants and far smaller tips, for instance, and hours for low-paid retail and leisure workers may be cut. As their eligibility for unemployment benefits expires, many may find themselves in the difficult position of choosing between their health and their (potentially even smaller) paychecks.

## Restrictions on freedoms and liberty disproportionately affect minority communities

Gabby **Bush and** Kobi **Leins 20**, University of Melbourne, “WHEN TOOLS FOR A HEALTH EMERGENCY BECOME TOOLS OF OPPRESSION Surveillance technology deployed to combat COVID-19 can quickly be used against civil freedoms”, The University of Melbourne, 6/8/2020, https://pursuit.unimelb.edu.au/articles/when-tools-for-a-health-emergency-become-tools-of-oppression/

**What was previously called surveillance now passes as ‘contact tracing’ for public health purposes**. Yet the risks regarding the use of people’s data gathered in this way remain. At the Centre for AI and Digital Ethics (CAIDE) we wrote in April warning that **freedoms could be put at risk by the need to combat COVID-19.** **Our concern then was that once surveillance is implemented it can be very hard to get rid of.** Surveillance measures that were once necessary and promised as only temporary actions can quickly be redefined and redeployed for very different purposes, in the absence of strong government mechanisms that regulate and restrict surveillance. **Just over two months later, the concerns raised around the world about the dangers of surveillance have come to a head in Minnesota.** The Minnesota Public Safety Commissioner, John Harrington, made a statement that **the state government would be using background checking analogous to contact tracing on people arrested during the protests that have been sparked by the death of African-American George Floyd.** His comments have stoked concerns about contact tracing and other public health measures being repurposed or their scope extended. Other reports have indicated that the Minneapolis police have been trialing facial recognition technology, including Clearview AI, giving them the capacity to deploy facial recognition software on protestors. The use of an unarmed predator drone circling above the protesters in Minneapolis only exacerbated these concerns. PROTECTIONS UNDER EMERGENCY MEASURES While legislation should protect citizens, the unprecedented volume of data, coupled with the increased capabilities of computing to process images, voice, social media data and other data paves the way for potential misuse should security situations rapidly escalate, the way it has in the United States. It is easy to see how COVID-19 has given rise to the next economic crisis but experts have also been predicting that COVID-19 could sow the seeds of political revolutions. **State of emergency laws give governments extraordinary powers. With the development of contact tracing measures, many governments now have access to data and location information in ways they didn’t have before COVID-19.** Things can change exceptionally quickly and while legislation may be in place, state of emergency laws mean that governments can bring in new legislation very quickly, allowing them to adapt – from tackling a pandemic to tackling civil unrest. While many states of America have declared states of emergency and enacted new laws in response to protests, deploying surveillance technologies similar to those used for a public health crisis, raises even more concerns. The US’s much touted first amendment gives people the right to protest but doesn’t include a clause exempting them from facial recognition technology. **Privacy activists across the world fear that increased surveillance capabilities will inevitably infringe on participation in political demonstrations.** TRANSPARENCY IN SURVEILLANCE PRACTICES Regardless of the situation that technology is being used to respond to, the surveillance techniques will be similar whether it is being used to control pandemics or control civil unrest. The Australian government has made a huge effort to be transparent with its COVIDSafe app. But the same safeguards don’t exist for policing purposes. In February, Vox published an article about the New York Police Department refusing to disclose details of their surveillance technology despite it being known that they are using historical data to predict future crime with AI. While many liberties have been curtailed during COVID-19, all modifications to existing rights are required, under law, to be legal, necessary and proportionate. They need to come to an end. Several researchers, including University of Melbourne’s Associate Professor Ben Rubinstein and now-independent privacy researcher, Chris Culnane, have analysed the Privacy Impact Assessment of COVIDSafe and found that authorities have the ability to decrypt the provided data and contact those who have tested positive as well as monitor their usage. Research has also shown that further risks arise with the tracking of Bluetooth data that provides far more information than necessarily required for tracking COVID19 –in late May the Guardian reported that the app had so far identified only one case. If governments can deploy this technology while being transparent, what is to stop governments that have no interest in transparency deploying even more invasive technology and utilising it against citizens? SURVEILLANCE AND TRUST While Australia has sunset clauses in place on COVIDSafe, the rate of downloads has been very low. Downloads are sitting at around 6 million, with the rate flattening after the initial hype when the app was first launched. Research done by the Guardian has credited this to the lack of trust in government stating that it was “hardly surprising. After all, this is the same government that has deployed technology to raid reporters’ homes, harangue welfare recipients and crash the census”. The Black Lives Matter protests in the US cut to the heart of the very issue that contact tracing creates. When we give our data to governments, even with legislative protections, we do so in good faith. But for many citizens around the world, this requires trust in government. **For many, institutionalised racism, massive income inequality, lack of legal support or protections, and violence at the hands of police, makes contact tracing measures frightening and dangerous. Increased surveillance will disproportionately affect the safety and privacy of minority communities the world over**. Pandemics and other disasters call for measures that are permitted by law, and which require sunset clauses that expire when emergencies pass. Governments have released these apps in response to extraordinary circumstances. However, **consideration of privacy and the rights of all, especially minority and persecuted groups are paramount**, not just in the initial disaster but because one disaster can easily perpetuate another. **The changes we make during crises need to ensure that rights are protected or they risk embedding values that may not be those that represent the society we wish to be – particularly for those most at risk of exploitation and abuse.**

## Infringements of freedom in the name of public health often come at the expense of people with physical or mental disabilities

Amy **Swiffen 20**, Assistant Professor of Law and Society in the Department of Sociology and Anthropology at Concordia University, Montreal, “The One vs the Many: When Public Health Conflicts with Individual Rights”, Constitutional Studies, 5/14/2020, https://www.constitutionalstudies.ca/2020/05/the-one-vs-the-many-when-public-health-conflicts-with-individual-rights/

These cases reflect a precedent of courts deferring to public health priorities when they come into conflict with individual rights. However, it is recognised that authorities responsible for adopting public health measures must make an effort to balance individual rights with the public good. The World Health Organization’s International Health Regulations refer to the importance of respecting basic individual rights.[12] Article 3(1) stipulates that the implementation of the “[r]egulations shall be with full respect for dignity, human rights and fundamental freedoms of persons.”[13] Article 42 stipulates that public health measures should be “applied in a transparent and non-discriminatory manner.”[14] Free and informed consent and information privacy are also mentioned. Public Health in an Emergency **In an emergency situation, such as a pandemic, establishing a precedent of deference to individual interests in favour of collective interests is potentially a dangerous one. For example, a recent analysis of emergency triage protocols found people with physical or mental disabilities were systematically excluded or de-prioritised**.[15] **In some cases, it was because the disability negatively affected the likelihood treatment would succeed. In other cases, it was because they needed more time to recover and had a more limited long-term prognosis**. These exclusions are seen as value-neutral in a public health context because they involve an empirical evaluation of an individual’s health condition, and not a subjective interpretation of quality of life. However, **these types of interventions can involve significant infringement to individual rights and freedoms.** Conclusion The tensions between the need to protect public health as a collective interest while at the same time protecting individual rights play out differently depending on the seriousness of the public health situation. The tendency to consistently trade off individual rights in the face of collective threats begs the question of what happens in a prolonged public health emergency? How can the law both help protect the life of the population, and at the same time protect the individual against the powers the state takes upon itself to engage that task?

## Discrimination affects society at large, including the economy

David **Salisbury** **19**, Associate Professor of Geography and the Environment at the University of Richmond, “Bigotry is Bad for the Economy”, California Review Management, 1/9/2019, https://cmr.berkeley.edu/2019/01/bigotry/

In an age where white supremacy has made a meager but still troubling comeback; politicians fear-monger their way into office by framing immigration as a national threat; and said politicians in power have tossed out Obama-era guidelines for race-based university admissions, everyone could use a solid reminder that America is great because of growing diversity. **In fact, diversity’s positive effect on the country’s social fabric directly affects economic quality.** **A 2016 University of Chicago & Stanford study attributes one quarter of GDP growth from 1960-2010 to declining social barriers that have allowed women and non-white people into job recruitment pools formerly exclusive to white men.** In 1960, 94 percent of doctors and lawyers were white men. By 2010, the fraction was just 62 percent. Similar changes in other highly-skilled occupations have occurred throughout the U.S. economy over the last fifty years. Given that innate talent for these professions is unlikely to differ across groups, the occupational distribution in 1960 suggests that a substantial number of innately talented people were not pursuing their comparative advantage. **By including other previously underused demographics, the level of talent in the job market increased.** Common sense tells us that allowing people who are innately talented in certain fields to pursue work in those fields should increase our nation’s productivity. Thus, would accepting talented foreigners who want to add their skills to the American job market be good for America? All the signs point to yes. **Decreased Job Performance & Mental Health Multiple studies indicate that exposure to racism is detrimental to job performance due to impact on attitudes, mental and physical health, and organizational behavior**. In fact, an Australian study found **that stress due to racism and exclusionary environments accounts for a 3% GDP loss today**. This research also shows direct associations between racism and a range of mental illnesses, including depression and anxiety. **By addressing racism, companies will see improved job performance.** Two studies on the relationship between diversity and productivity found that, at worst, diversity had no overall impact on team performance. In other words, you have nothing to lose by diversifying your work force. However, **these studies also show that diverse regions enjoy better productivity and hence higher wages.** [8] These benefits are again largely due to diversity providing a variety of skills and a wider talent pool.

## A rights and freedom approach to public health is effective and protects the interests of frequently marginalized groups

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In this perspective, we seek first to explore the development of human rights under international law and the implementation of health-related human rights through public health policies. We then examine the contemporary operationalization of human rights in public health efforts, through which human rights standards seek to provide normative clarity in health policy and legal accountability for public health outcomes. Addressing APHA’s unfolding efforts to mainstream human rights in public health practice, we recognize the importance of professional organizations in building capacity for a rights-based public health workforce. It will be crucial to extend this model across health-related disciplines in responding to contemporary health and human rights threats. This ends by examining the threat that the populist radical right poses to the advances of the past 70 years, concluding that the public health workforce must deepen engagement with human rights-based approaches to health in responding to these existential threats to health and human rights. Developing health-related human rights Human rights offer a universal framework to advance justice in public health, elaborating the freedoms and entitlements necessary to realize dignity for all. With international law evolving to address threats to health, a rights-based approach transforms the power dynamic that underlies public health. Rather than passive recipients of governmental benevolence, individuals are recognized as rights-holders, with human rights imposing corresponding obligations on governmental duty-bearers.1 Human rights law is now understood to be central to public health policies, programs, and practices. International human rights standards have been shown repeatedly to play a key role in public health over the past 70 years, framing health concerns within a legal context, integrating core principles into policy debates, and facilitating accountability for realizing the highest attainable standard of health.2 In developing human rights law for public health promotion through the United Nations (UN), the WHO Constitution conceptualized for the first time that “the enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being,” defining health positively to include “a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity.”3 With human rights framing a healthier world out of the ashes of the Second World War, nations adopted the UDHR on December 10, 1948, embracing within it a set of interrelated economic and social rights by which: [e]veryone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widow-hood, old age or other lack of livelihood in circumstances beyond his control.4 Seventy years ago, the UN proclaimed the UDHR as “a common standard of achievement for all peoples and all nations,” holding that the human right to health includes both the fulfillment of necessary medical care and the realization of underlying determinants of health—including food, clothing, housing, and social services.5 However, the rapidly escalating Cold War would limit international opportunities to advance human rights for health in the UN system, with the 1966 International Covenant on Economic, Social and Cultural Rights providing only for “the right of everyone to the enjoyment of the highest attainable standard of physical and mental health.”6 From the human rights system to global health governance, WHO would work with advocates in the 1970s to revitalize health-related rights in its “Health for All” campaign, which culminated in a rights-based approach to “primary health care” in the 1978 Declaration of Alma-Ata.7 Extending these human rights advancements in the years after the Cold War, the UN Committee on Economic, Social and Cultural Rights formally clarified state obligations regarding the right to health in 2000, finding that the right to health depends on a wide variety of interdependent and interrelated human rights through public health systems—including both preventive and curative health care and encompassing underlying social, political, and economic determinants of health.8 Given the dramatic development of these health-related human rights, the human rights system has now shifted from the development of human rights under international law to the implementation of those rights through national governance. Policy makers have been pressed to implement rights through national policies, assuring that determinants of health are available, accessible, acceptable, and of sufficient quality.9 Each country has codified a unique set of constitutional obligations, laws, and regulations that implement international law through national policy, with contextually specific social movements rallying to assure that “health is a human right.” Even in the United States, which has long resisted international human rights obligations—especially for economic, social, and cultural rights—there are expanding areas where health policies reflect human rights norms and increasing calls to realize the right to health.10 Go to: Operationalizing human rights in public health The operationalization of these human rights standards has provided normative clarity in public health policy and legal accountability for public health outcomes. Reversing a political neglect for human rights during the Cold War and a policy focus on medical care within WHO, the global response to AIDS in the 1980s clarified the inextricable linkages between human rights and public health, as scholars and advocates looked explicitly to human rights in framing HIV prevention, care, and support.11 Where governments responded to an emerging AIDS crisis through traditional public health policies—including compulsory testing, named reporting, travel restrictions, and isolation or quarantine—human rights activism both questioned intrusive infringements on individual liberties and revealed the inadequacy of government responses.12 **Focusing on the individual and structural factors underlying HIV transmission,** activists demanded a public health response that recognized the inherent dignity of people living with HIV, recognizing the importance of human rights protection to public health promotion **and giving birth to a “health and human rights” movement.**13 With the advent of antiretroviral treatment in the 1990s, **human rights thereafter framed demands for access to medicines—in the streets and in the courts—establishing the normative, and in many settings judicially enforceable, socioeconomic right to health**.14 A global movement mobilized human rights to challenge the patent system and secure access to generic medicines in the Global South, driving down the cost of HIV treatments by up to 99%.15 This human rights framework—which demanded agency, dignity, and access—has since been expanded far beyond the HIV/AIDS response. **Into the 21st Century, this movement has brought human rights to bear in the context of disease prevention and health promotion efforts throughout the world**. Litigation to enforce health-related rights has extended across tuberculosis in prisons in South Africa, maternal mortality in Uganda, the health insurance system in Colombia, and the regulation of medicines in India.16 In the United States, activists have utilized the right to health to frame health policy reforms in Vermont.17 While some have questioned whether a rights-based framework is too individualistic to address public health, the right to health has been seen to bring about lasting societal improvements, with empirical evidence beginning to show how countries that implement human rights see a benefit to population health.18 This national implementation of human rights in public health provides a basis to facilitate accountability for the progressive realization of health-related human rights. As governments have implemented human rights in health policy, scholars, practitioners, and advocates have sought to create accountability mechanisms to assess the progressive realization of rights, with these mechanisms committing governments to health-related rights, maximizing available resources through health policy, and improving programmatic results in health outcomes through: Political advocacy: Social movements engage in political advocacy to analyze and assess public policy; to shape public awareness on national policies; and to press governments to comply with their health-related human rights obligations (whether by advocating human rights principles or by “naming and shaming” recalcitrant governments).[19] Litigation: With individuals enforcing human rights obligations through the courts, litigation empowers the judiciary to remedy rights violations—setting legal precedents to define government health obligations—and provides rights-based accountability in national, regional, and international courts and quasi-judicial bodies.[20] Treaty monitoring: UN human rights treaty bodies monitor national implementation of treaty obligations—reviewing periodic reports, engaging in “constructive dialogue,” and issuing concluding observations—with these treaty bodies complemented in the past decade by the Universal Periodic Review, through which the UN Human Rights Council assesses the human rights performance of all UN member states.[21]

**Being overly intrusive backfires, discouraging communities from seeking treatment for health issues**

Christina **Farr 18**, Christina Farr was a technology and health reporter for CNBC.com in San Francisco, “The Covid-19 response must balance civil liberties and public health — experts explain how”, CNBC, 04/18/2020, https://www.cnbc.com/2020/04/18/covid-19-response-vs-civil-liberties-striking-the-right-balance.html

Violating civil liberties can backfire **Undermining our individual rights might not even help public health in achieving its goals**, some experts have noted. **Tools that are overly intrusive to people’s civil liberties can backfire**. **During the HIV/AIDS epidemic of the 1980s and 1990s**, for instance, Bayer argued in his research papers that public health and privacy rights did not need to be in opposition. Because of the stigma surrounding the disease, he explained, “good public health respects civil liberties, and anything that advances human rights and civil liberties would advance public health.” **One of the big issues at the time was the idea of doctors reporting the names of HIV patients to the states**. **Some states refused to accept name-based reporting so for years because they feared that it would discourage people from getting tested.** Another controversial topic was the effort around so-called contact tracing, which is being proposed as way to fight Covid-19 today. In many cases, **public health officials would notify an HIV patient’s past sexual partners that they may have been in contact with somebody who had the disease,** but never identified or named them. **“We learned that if you intrude on privacy you will be counter productive in terms of controlling the epidemic,”** Bayer recalled. He stressed that officials made decisions they thought were “necessary” for public health, not just those they thought might feasibly slow the spread of the disease. These lessons remain relevant today. **One present-day example comes from South Korea, which introduced an electronic system that sends out an automatic alert to people living nearby a known Covid-19 case**. Reports found that the information includes age, gender, a log of their whereabouts, and in some cases credit card transactions. Sharing that level of detail could help friends and neighbors pinpoint the specific individual with the virus. **As such, many medical experts worry that people with symptoms will choose not to get tested because of the potential for stigma in their community.** Consent is key Modern approaches to contact tracing can be designed to protect privacy. For instance, Google and Apple are working to develop a system to do that uses a Bluetooth-based approach, which aims to prevent governments or the companies providing the technology from identifying any one person who might be sick. Users must opt-in to participate. Here’s how the Electronic Frontier Foundation, a privacy-focused organization, describes it:

## **Liberty restrictions are counterproductive – they emphasize punishment, which undercuts public confidence and trust in health officials**

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Lessons Forgotten Unfortunately, past lessons appear to have been forgotten. In the post-9/11 climate, public health policy has increasingly been viewed through the prism of, and indeed as a part of, law enforcement and national security. **Rather than focusing on how government can work with individuals and their communities to be healthy, public health policymakers now often emphasize the need to take tough, coercive actions against the very people they are charged to help**. **This approach not only targets people as the enemy instead of the disease, but also encourages health officials to believe that government cannot do much to help people in an epidemic.** Little thought is therefore given to what society can and should do to help people prevent and mitigate epidemics. **In effect, individuals are viewed as personally responsible for the spread of illness as well as for their own care.** **This law enforcement/national security strategy shifts the focus of preparedness from preventing and mitigating an emergency to punishing people who fail to follow orders and stay healthy.** While there have been and probably always will be a few people with contagious diseases who, unwittingly or deliberately, behave in ways that expose others to infection, existing state laws provide health officials with the tools they need to respond to such situations, for example, by confining such persons to hospitals. Such cases, however, are the exceptions to the rule. **Americans generally do not want to spread disease to others and are generally capable of controlling their behavior to avoid infecting others.** However, **the law enforcement/national security approach converts the exception into the rule by treating everyone in the general population as a potential threat who warrants coercive treatment.** Examples of the Push to Expand Law Enforcement Powers Examples of the law enforcement/national security approach are easy to find. **For example, after 9/11, the Bush Administration’s Centers for Disease Control and Prevention (CDC) supported a Model State Emergency Health Powers Act** (sometimes termed a “miniPatriot Act”) which purported to clarify and update the already broad coercive powers available to state governments in the event of a “public health emergency.” **The Act used fear to justify methods better suited to quelling public riots than protecting public health.** The premise of the Act was that every outbreak of disease could be the beginning of some horrific epidemic, requiring the suspension of civil liberties For example, Section 502 of the model as originally proposed authorized mandatory medical examinations and testing: Any person refusing to submit to the medical examination and/or testing [required by a public health official] is liable for a misdemeanor…the public health authority [may subject the refusing person] to isolation or quarantine… Any …[health care provider] refusing to perform a medical examination or test as authorized herein shall be liable for a misdemeanor….an order of the public health authority…shall be immediately enforceable by any peace officer. Section 504 provides for compulsory treatment, something that has been soundly repudiated in the decades since at least 60,000 Americans were forcibly sterilized in the early 20th Century9 : Individuals refusing to be vaccinated or treated shall be liable for a misdemeanor. [The refusing person] may be subject to isolation or quarantine… An order of the public health authority given to effectuate the purposes of this Section shall be immediately enforceable by any peace officer. The Bush CDC’s recommended law would have returned us to the late 19th and early 20th centuries when state “police powers” in health were sometimes enforced by police officers, and people who were sick were frequently treated as if they had committed a crime. But the CDC’s plan would have set us back even further. It applied its penalties to people who did not have any contagious disease and to people who would never expose anyone else to disease. Moreover, it included provisions to make all public health personnel, and those acting under their orders, immune from liability for any injury—even if forced vaccination or other mandated treatments killed the “patient.” **At the same time, the Act ignored effective steps that states could take to mitigate an epidemic, such as reinvigorating their public health infrastructure and increasing access to health care.** Although state public health departments saw some budget increases following 9/11, most of that money was for bioterrorism preparedness activities, leaving public health agencies even more resource-starved. As a result, although some states now have new laws that more precisely specify their power to isolate or quarantine people during an emergency, they are less capable than ever of actually helping people or controlling an epidemic. These proposals were modified and the criminal sanctions removed in response to public protest. But at least one state, Florida, enacted the “model” law nonetheless, and went even further, authorizing forced treatment of an individual if the state had no quarantine facility available for confinement. Despite criticism by public health lawyers, the Bush CDC nonetheless continues to recommend that all states “update” their laws to provide for mandatory surveillance, examination, isolation, and quarantine. In the real world, of course, **laws that equate medicine and public health with law enforcement severely undercut public confidence in public health and are likely to lead people to avoid public health officials rather than to seek out and follow their guidance.** Recent Examples of the Counterproductive Law Enforcement Approach Two recent cases involving individuals with drug-resistant tuberculosis (TB)10 exemplify the dangers of a purely coercive, law enforcement approach to stopping the spread of disease. One case occurred in the spring of 2007 when the CDC issued its first domestic isolation order in 40 years against Atlanta attorney Andrew Speaker. Speaker was diagnosed with multi-drug resistant tuberculosis (MDR-TB) in May 2007 and planned to seek highly specialized treatment in Denver after his impending wedding. Although he was advised by county health officials not to travel abroad for his honeymoon, he was not forbidden from doing so.

## Vaccine mandates restriction freedom and empirically harm voluntary compliance – prolonging health concerns and costs

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Opposition to coronavirus vaccination stubbornly persists across the globe. Even in Israel — the world leader in vaccinating its population — the fraction vaccinated appears to have hit a plateau with one-third of the population unvaccinated. In the United States, some states are facing gluts of vaccine doses. One common response to this is mandatory vaccination. The California university systems, and 1 in 10 U.S. universities and colleges, almost all in blue states, have announced that vaccination would be required for anyone attending in the fall. Even where demand for vaccination exceeds supply, vaccinations are being made mandatory. In March, the government of Galicia in Spain required vaccinations for adults, subjecting violators to substantial fines. Italy has mandated vaccinations for care workers. Mandating vaccination may be unavoidable in some cases. But our new evidence from Germany suggests that it could hurt voluntary compliance, prolonging the pandemic and raising its social costs. Survey evidence from Germany shows growing resistance to enforced vaccination We looked at the attitudes of a representative sample of 2,653 Germans surveyed during the first and second German lockdowns, in April-May and in October-November of 2020. Respondents were asked: “If there is an approved vaccine against the coronavirus: To what extent would you agree to be inoculated yourself if: … vaccination is strongly recommended by the government but remains voluntary? … vaccination is made mandatory and checked by the government?” More than two-thirds of respondents supported (either fully or somewhat) voluntary vaccination in both waves. But the fraction fully supporting vaccinations if they were enforced dropped from 44 percent to 28 percent over the same period, even though the infection rate had increased 15-fold between the two waves of our survey. Trust in government and in science is critical for vaccination acceptance The most important factor predicting vaccine willingness (and how it changed between the two waves) was whether the respondent trusted public institutions. We measure this by averaging respondents’ expressed trust in the federal government and specifically in its information about coronavirus, as well as trust in state governments, science and the media. We found that the fall in support for enforced vaccination was disproportionately high among those whose public trust had also declined. The effect is substantial, accounting for a large fraction of the observed reduction in support for enforced vaccinations. But the growing opposition to enforced vaccination was not a result of increased skepticism about the vaccine itself, or a general reduction in trust, neither of which changed on average between the two waves. About as many people became more trusting as lost trust. Our survey evidence, instead, points to increased opposition to enforcement itself because it “restricts your freedom.” Mandated vaccinations may provoke distrust There are three reasons that we think may explain why a government mandate may make people more resistant to vaccinations. First, people resist being manipulated. Behavioral experiments have shown that positive incentives (carrots) and controlling or negative incentives (sticks) often backfire — producing the opposite of their intended result — because they provoke what economists term “control aversion.” Second, people may be affected by what psychologists call “moral disengagement.” This happens when people think that the decision is predetermined by explicit rules or incentives, so that their own ethical convictions are not relevant. This is one of the reasons traffic engineers now consider traffic lights to be more hazardous than roundabouts. The political scientist Elinor Ostrom described how good citizenship can get crowded out when the government takes responsibility for doing the right thing. Something like this may be happening with vaccination, with enforced vaccination crowding out altruistic motivations. In the second wave of our survey, those who were more altruistic (they said they were “willing to help others”) were also more likely to support voluntary but not enforced vaccinations. Finally, enforcement may crowd out intrinsic motivation by diminishing trust. Citizens may take enforced vaccination as evidence that the government thinks people would not get the vaccine if they have a free choice. This may suggest either that there is something wrong with the vaccine, or that the state does not trust its citizens to respect a social norm of protecting others by getting vaccinated. The citizen’s tit-for-tat response to being distrusted may be to oppose the government’s vaccination program. Effective vaccination policies can exploit herd behavior to achieve herd immunity Resistance to mandated vaccinations could lead to a downward spiral. Initial public distrust could limit the numbers willing to be vaccinated, prompting mandatory vaccination, kindling further distrust of government and science. Alternatively, if the government were to start off by mandating vaccinations, our results suggest that this might squander a substantial initial willingness to be vaccinated if it were voluntary, forcing a more expansive vaccine mandate and further heightening public distrust. In other words, implementing a policy may change citizens’ beliefs and preferences in ways that undermine the policy. The officials in charge of vaccines face a specific version of this problem: Mandates may reduce vaccine willingness. And voluntary policies may be sufficient even if initial vaccine willingness is limited. In our recent PNAS article, we model how herd behavior can propel a population from vaccination hesitancy to a herd immunity target.

## Consideration for rights increases the likelihood of cooperation with health mandates

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Main body The case for ethics and human rights considerations in public health The ethical principles such as reciprocity, transparency, non-discrimination, accountability, non-maleficence, equity, and others have been recommended to guide any implementation of restrictive and burdensome public health measures[19, 20]. It has also been observed that these ethical principles bear intrinsic value and are important in ensuring the effectiveness of the adopted measures [16, 20]. However, in designing and implementing public health measures including during PHEs such as the COVID-19 pandemic, there is a likelihood of regarding ethics and human rights considerations as of secondary importance. This is more probable in severely resource-limited settings like Uganda and other similar contexts in LMICs. The reasons are evident: since there is usually no sufficient time and resources to facilitate careful ethical deliberations in these circumstances [16], focus should exclusively be on implementing measures with prima facie potential effectiveness. This is what some claims in the media in Uganda have revealed in response to some of the potentially morally controversial measures adopted by the Government to contain the spread of COVID-19 [21]. However, the measures’ inherent potential to achieve a public health goal, and the extent to which such measures satisfy basic ethics and human rights criteria, play complementary roles in ensuring uptake and actual effectiveness of the adopted measures [22,23,24,25,26, 20]. Therefore, to contain pandemics such as COVID-19, ethical assessment of contemplated measures and their mode of implementation are as critical as their prima facie potential for effectiveness [27, 16, 20]. The assumption of the assertion of complementarity is that **many public health measures adopted to reduce, and eventually stop the spread of human-to-human infections,** largely depend on voluntary compliance by the public, and the simplicity of their enforcement. These two factors depend on the ethical legitimacy of such measures, which in turn depends on the extent to which those measures satisfy certain ethics and human rights criteria. A careful look at such criteria intuitively reveals that ‘ethically legitimate public health measures are easier to voluntarily comply with and/or enforce’. Consequently, it has been advised that when alternative potentially effective measures are identified, the principles of ethics and human rights should be applied to hone them and make them just, fair, non-discriminatory and acceptable [28] (emphasis added). We take as axiomatic a contention that it is this inherent acceptability of measures which is crucial for inducing voluntary compliance and facilitating their enforcement. However, the concept of acceptability itself presupposes a number of other specific ethical criteria, which lead to the public’s perception of the measures’ legitimacy. Some of such criteria can be seen in a recommendation in reference to the COVID-19 pandemic, that containment, mitigation, and suppression plans must be as inclusive and equitable as possible, or else they risk undermining response efforts [27]. The case for explicitly integrating ethical considerations in public health policy and program evaluation has been articulated as a complement to traditional ‘evidence’. The motivating concern for this view is that the traditional concept of ‘evidence’ exclusively focuses on the potential effectiveness of alternative policy measures without reflecting on how the ensuing actions will impact ethical-related goals of public health. Hence, this position is based on the need to capture some of the common but mostly implicit ethical goals of public health – ‘doing good’, ‘avoidance of harm’, ‘preventing or reducing avoidable health disparities (health equity), among others. This suggests a need for going beyond the traditional and mechanistic approach to health policy evaluation that relies on ‘evidence’ per se, to a more holistic one that captures the ethical-related goals of public health [20]. It is important to appreciate that in uncertain situations where there are overwhelming burdens on health systems such as those presented by the COVID-19 pandemic, it is extremely difficult to implement public health measures that are free of ethical controversy [18]. This is even more difficult in severely resource-limited countries like Uganda. This is so because, as it has been cautioned in reference to responses to the H1N1 influenza pandemic, in similar circumstances, minimalist measures are likely to be ineffective, while maximalist, disproportionate ones pose potential long-lasting negative effects on community trust, public services, social order, and the economy [29]. Generally, ethical controversies about public health measures can result from perceived deception in the form of deliberate under-reporting of statistics of the pandemic [30] or exaggeration of the same statistics; compulsory institutional quarantines at one’s own cost [7,8,9], or judicial detention of potentially infectious patients who are uncooperative [31]. It should be noted that some ethically controversial measures usually come with seemingly robust pragmatic justifications. However, their failure to satisfy ethics and human rights criteria will jeopardize their effectiveness. **For example, deception in the form of deliberate under-reporting of the magnitude of the pandemic may be justified by the goal of staving off the devastating psychological impact of truthful reporting on the economy. On the other hand, such deception will lead to false low-risk perceptions among the public, which directly compromise public’s voluntary compliance with** highly restrictive safety measures or complicate their enforcement. **Such measures will be wrongly perceived as disproportionate, unnecessary and unreasonable in the circumstances; therefore, they will increase the spread of the infection.** The reverse is true for deception in the form of exaggeration of the statistics – unnecessary speculations may devastate the economy and lead to the adoption of highly restrictive measures, thus unnecessarily limiting and derogating human rights. Furthermore, it is natural that **perceptions of discrimination in the form of privilege-like exemptions for some people from compliance with highly burdensome measures such as institutional quarantine** – inequitable imposition of burdens – will generally weaken a sense of obligation for voluntary compliance among the public and even make enforcement largely unsuccessful, or unnecessarily violate people’s rights. The emerging insight is that the importance of explicitly integrating ethics and human rights considerations into the choice of effective policies and measures cannot be overstated. Our contention is that **public health policies and measures chosen following a more holistic approach that combines ‘evidence’ and ‘ethics and human rights considerations’ as its criteria has better chances of success than a mechanistic one which relies on ‘evidence’ alone**. Hence, if ‘evidence’ is the only input for such decisions, then there is a strong case for revisiting the traditional concept of ‘evidence’ as it applies to public health, to include the potential ethical and human rights impact of alternative policies, programs and measures.

## Governments should avoid restrictions of personal liberty – voluntary measures are more effective

**Human Rights Watch 20**, Human Rights Watch is an international non-governmental organization that conducts research and advocacy on human rights. “Human Rights Dimensions of COVID-19 Response” BMC Medical Ethics, 03/19/2020, https://www.hrw.org/news/2020/03/19/human-rights-dimensions-covid-19-response

Recommendations: Governments should avoid sweeping and overly broad restrictions on movement and personal liberty, and only move towards mandatory restrictions when scientifically warranted and necessary and when mechanisms for support of those affected can be ensured. A letter from more than 800 public health and legal experts in the US stated, “Voluntary self-isolation measures [combined with education, widespread screening, and universal access to treatment] are more likely to induce cooperation and protect public trust than coercive measures and are more likely to prevent attempts to avoid contact with the healthcare system.” When quarantines or lockdowns are imposed, governments are obligated to ensure access to food, water, health care, and care-giving support. Many older people and people with disabilities rely on uninterrupted home and community services and support. Ensuring continuity of these services and operations means that public agencies, community organizations, health care providers, and other essential service providers are able to continue performing essential functions to meet the needs of older people and people with disabilities. Government strategies should minimize disruption in services and develop contingent sources of comparable services. Disruption of community-based services can result in the institutionalization of persons with disabilities and older people, which can lead to negative health outcomes, including death, as discussed below.

Health emergencies undermine democracy, allowing governments to expand power, undermine freedom, and harm fair elections for the sake of public health

**Freedom House 20**, Freedom House is a non-profit non-governmental organization that conducts research and advocacy on democracy, political freedom, and human rights. “NEW REPORT: Democracy under Lockdown - The Impact of COVID-19 on Global Freedom”, Freedom House, 10/2/2020 https://freedomhouse.org/article/new-report-democracy-under-lockdown-impact-covid-19-global-freedom

**The COVID-19 pandemic has deepened a crisis for democracy around the world**, **providing cover for governments to disrupt elections, silence critics and the press, and undermine the accountability needed to protect human rights** as well as public health, according to Democracy under Lockdown, a new Freedom House report produced in partnership with the survey firm GQR. **Since the coronavirus outbreak began, the condition of democracy and human rights has worsened in 80 countries,** with particularly sharp deterioration in struggling democracies and highly repressive states, according to the experts surveyed by the project. More than 60 percent of the respondents predicted that the pandemic’s impact on political rights and civil liberties in their countries of focus would be mostly negative for the next three to five years.“What began as a worldwide health crisis has become part of the global crisis for democracy,” said Michael J. Abramowitz, president of Freedom House. **“Governments in every part of the world have abused their powers in the name of public health, seizing the opportunity to undermine democracy and human rights.”** “The new COVID-era laws and practices will be hard to reverse,” said Sarah Repucci, vice president for research and analysis at Freedom House and a coauthor of the report. **“The harm to fundamental human rights will last long beyond the pandemic**.” The country experts surveyed as part of the project identified four problems as the most acute during the COVID-19 pandemic: lack of government transparency and information on the coronavirus, corruption, lack of protection for vulnerable populations, and government abuses of power. **The pandemic is accelerating a global decline in freedom of expression**. Restrictions on the news media as part of the response to COVID-19 occurred in at least 91 countries. Governments enacted new legislation against spreading “fake news” about the virus. They also limited independent questioning at press conferences, suspended the printing of newspapers, and blocked websites.This report is the most in-depth effort to date to examine the condition of democracy during the pandemic. Freedom House conducted its research from January to September 2020. The work included an online survey by GQR, conducted from July 29 to August 15, 2020, in which 398 experts reported on the state of democracy in 105 countries and territories. In addition, Freedom House consulted its global network of analysts, bringing the total number of countries examined to 192. “Our survey found that governments’ responses to the pandemic are eroding the pillars of democracy around the world,” said Repucci. “The blatant obfuscation of facts by governments is always harmful, but it is especially egregious at a time when so many people’s lives are at stake.” Authoritarian and democratically elected leaders alike have failed to be candid about the impact of the coronavirus. In the survey, 62 percent of the respondents said they distrust what they are hearing about the pandemic from the national government in their country of focus. Among the experts on countries that the annual Freedom House report Freedom in the World classifies as Not Free, 77 percent distrust such information, indicating that lack of transparency is most common in countries with weak protections against abuses of power. **Governments are also using the outbreak as a justification to grant themselves special powers beyond what is reasonably necessary to protect public health**. They have exploited new emergency authority to interfere in the justice system, impose unprecedented restrictions on political opponents, and sideline crucial legislative functions. As one respondent said of Turkey, “Coronavirus was used as an excuse for the already oppressive government to do things that it has long planned to do but had not been able to.” Some governments have applied lockdown measures in an openly discriminatory manner or used marginalized populations as scapegoats. Muslims in India and Sri Lanka were accused of being “superspreaders,” while in Serbia, one respondent said, “migrants were portrayed as possible carriers of the virus.” In Kuwait, authorities imposed tighter restrictions on noncitizen neighborhoods. At the same time, parliaments have been hamstrung by health restrictions and emergency laws, and at times they have been manipulated for political purposes. One respondent on Singapore noted that the most disturbing development has been the “passage of laws that curb freedom but claim to curb the virus.” Government abuses are also affecting elections. Authorities delayed or otherwise disrupted national elections in nine countries, as well as a larger number of regional and local votes in other settings, between January and August 2020. Some of these election changes failed to meet democratic standards,either because new elections were not scheduled promptly or because officials set new dates without making adequate preparations for safe and secure voting**. The issue extends to the United States. Local election authorities across the country appear to be ill-prepared for nationwide balloting in November, given increased demand for voting by mail, likely staffing shortfalls, and last-minute changes to electoral rules—all related to the pandemic. The Trump administration has created a fog of misinformation around the pandemic, regularly making false or misleading statements that put lives at risk and undercut the broader government response.** “The US administration unfortunately is not alone in its failure to be candid about the impact of the coronavirus,” said Sarah Repucci, vice president of research at Freedom House. “Leaders around the world who fear public condemnation for their handling of the crisis have diverted attention by scapegoating marginalized groups, attacking their critics, or downplaying the severity of the health situation.” In Hong Kong, the government cited the pandemic as a reason to delay legislative elections by an entire year, but the move was widely seen as part of a broader effort by Beijing to cement its elimination of Hong Kong’s remaining freedom and autonomy. The endurance of protest movements is a possible bright spot. Though 158 countries have placed new restrictions on demonstrations, significant protests have taken place in at least 90 countries since the outbreak began, the research shows. “The persistence of public protests, under every type of regime, shows that citizens remain willing to challenge authorities, even as governments use the crisis to try to increase their own powers,” said Amy Slipowitz, research manager at Freedom House and a coauthor of the report. “The erosion of political rights and civil liberties began long before the pandemic, but people in every region of the world are clearly committed to reclaiming their freedom.”

## **Restrictive health policies, like lockdowns, lead to an increase in support for authoritarianism**

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To obtain a balanced panel of average survey outcomes across regions and days, we use Bayesian multilevel modeling with post-stratification [23, 33]. Post-stratifying the data allows us to address any imbalance in the panel resulting from the fact that due to random sampling, we are not surveying respondents from all (small) regions every survey day, and to simultaneously adjust for demographic differences between our sample and the population. See Materials and Methods for details on the post-stratification procedure. Figure 2 reports our main results. Beginning with panel (A), we find mixed evidence for the effects of lockdown policies on the three scales measuring support for democracy. **On the political system scale**, which captures preferences over regime types, **we see that increasingly severe lockdown policies raise support for autocracy** (here and below, we report the posterior poster probability p that the effect is smaller than zero: p < 0.02). The effect, however is small: **each additional point up the Lockdown Index** (e.g., going from no restriction on event size to limiting events to 10 or fewer people) **leads to an increase in support for autocracy by 1% of a standard deviation.** For both satisfaction with democracy and the government, we find, on average, small positive effects—roughly 0.5% of standard deviation—but we cannot reliably conclude that these effects are positive (p = 0.15 and 0.11, respectively). Together, these results suggest that the restrictive measures introduced at the height of the first wave of the COVID-19 pandemic had only marginal effects on support for democracy. We now turn to three measures of attitudes reflecting the health of a civic culture: authoritarianism, generalized trust, and hostility toward outgroups. **The analysis reveals that increasingly strict lockdown policies fuelled authoritarian attitudes. The estimates allow us to confidently conclude that this effect is positive (p < 0.01) and substantively meaningful: the estimates suggest that going from no restrictions to a full lockdown, e.g., as occurred in France, increases authoritarian values by 10.2% of a standard deviation.** We do not find any reliable effects on the other two measures of the attitudinal foundations of democracy. For both generalized trust and relative outgroup hostility, the estimated effects of restrictive policies are centered at zero. The final panel of Figure 2 presents the results of a manipulation check that supports the validity of our difference-in-differences design. We estimate the effect of lockdown policies on the rate at which citizens report that current government policies restrict their movement. If our design works as intended, we would expect restrictive policies to have a strong positive effect on this outcome. Such a pattern is already visible in the bottom row of Figure 1; our formal estimate confirms this relationship. The analysis indicates that an additional restrictive policy increases the share of citizens reporting a restriction by about 3.5 percentage points (p < 0.01).

## Democracy is key as it empirically improves health outcomes – the stronger the democracy, the better the health outcomes

#### Thomas Bollyky et al. 2019, Council on Foreign Relations, Tara Templin Department of Health Research and Policy Stanford University School of Medicine, Matthew Cohen Council on Foreign Relations, Diana Schoder Council on Foreign Relations, Joseph L Dieleman Institute for Health Metrics and Evaluation, University of Washington, Simon Wigley Department of Philosophy, Bilkent University, “The relationships between democratic experience, adult health, and cause-specific mortality in 170 countries between 1980 and 2016: an observational analysis” The Lancet, http://dx.doi.org/10.1016/

**Our first analysis showed that**, controlling for HIV/AIDS, **the average life expectancy at age 15 years increased after 10 years in the countries that underwent a democratic transition by 3%** (p=0·001), relative to the synthetic counterfactual of no transition (figure 1). **The improvement in adult health after the transition to democracy is immediate** (an average of 0·3% in the first year**) and continues to build over time.** The improvements are statistically different from the counterfactual of no democratisation from the first year after the transition (p=0·02; figure 1). **Our second analysis found that democratic experience explained the largest portion of the variation in mortality for cardiovascular diseases (22·27%) and transport injuries (17·78%)**: nearly a quarter of country-specific variation (figure 2). **Democratic experience explains more of the variation in mortality within country than GDP for cardiovascular diseases (22·27% vs 11·83%), transport injuries (17·78% vs 6·65%), cancers (9·50% vs 6·07%), cirrhosis (6·14% vs 2·18%), and other noncommunicable diseases (12·68% vs 9·14%), such as congenital heart disease and congenital birth defects.** The importance of democratic experience in explaining the variation in mortality from cardiovascular diseases and transport injuries within a country has increased over time, from 14·40% in 1995 to 25·23% in 2015 for cardiovascular diseases (figure 3) and from 22·12% to 28·12% for transport injuries (appendix) over the same period. However, these factors combined still explain only 50·48% (39·29% on average across all years, ranging from 22·65% in 1995 to 50·48% in 2015) of the total observed variance for cardiovascular disease in 2015. Further, democratic experience explained little of the variation in the mortality within a country from some leading communicable causes of death such as HIV (2·82%) and malaria and neglected tropical diseases (4·18%), but also did not explain much of the variation in mortality from diabetes (0·44%), mental health (0·45%), or musculoskeletal disorders (0·33%; figure 2). **Our third analysis identified the pathways by which democratic experience is associated with changes in cause-specific mortality and estimates the magnitude of those associated effects.** Those effects can be direct, via the effect of democratic experience itself, and indirect, through the effect of democratic experience on other measurable factors, such as increased government health spending and economic growth, which in turn might affect mortality. **Our results show that a onepoint increase in democratic experience had significant direct and indirect effects on reducing mortality over 20 years from cardiovascular disease (–1·97%, 95% CI –1·31 to –2·64), other non-communicable diseases (–1·87%, –0·87 to –2·87), including congenital heart diseases and birth defects, and tuberculosis (–1·83%, –0·42 to –3·23; figure 4).** **Democracy also had significant indirect effects on mortality over 20 years from transport injuries (–1·94%, –0·90 to –2·99).** Government health expenditure and GDP per capita were the primary indirect pathways by which that 20-year mortality reduction occurred for cardiovascular diseases (–0·81% [–1·22 to –0·40] and –0·20% [–0·40 to 0·00], respectively), transport injuries (–1·19% [–1·82 to –0·57] and –0·18% [–0·46 to 0·12], respectively), and tuberculosis (–0·40% [–1·6 to 0·26] and –0·40% [–0·85 to 0·05], respectively); the indirect effects of democracy for other non-communicable diseases were mostly limited to government health expenditure (–0·97%, –1·54 to –0·40). The median country observed a 4·88-point increase in democratic experience from 1995 to 2015 (appendix). Government health expenditure is also the pathway by which democratic experience had a modest, but significant, indirect effect on reducing mortality from cancers (–0·44%, 95% CI –0·69 to –0·19) and violence (–0·66%, –1·13 to –0·19). Democratic experience had a modest direct effect on reducing mortality from cirrhosis (–0·92%, –1·83 to –0·01), and neurological disorders (–0·25%, –0·52 to 0·03), and on increasing deaths from violence (0·77%, –0·12 to 1·66). Democratic experience had an indirect effect on increasing mortality from diarrhoeal diseases (0·47%, 0·00 to 0·95), but that result might be misleading. Mortality from diarrhoeal diseases has declined dramatically in poor non-democracies relative to the already very low mortality from that cause in wealthy democratic nations. Democratic experience did not have a statistically significant total effect on mortality from HIV (–1·77%, –61·80 to 58·26), other communicable diseases (0·54%, –0·51 to 1·59), digestive disease (–0·00%, –0·74 to 0·73), unintentional injuries (–0·49%, –1·14 to 0·16), respiratory diseases (0·54%, –0·51 to 1·59), maternal diseases (0·70%, –0·67 to 2·07), mental disorders (0·16%, –1·50 to 1·81), musculoskeletal disorders (0·86%, –0·60 to 2·31), or diabetes (–0·12%, –1·24 to 1·00).

## **Suppressing the public in the name of public health is a race to the bottom – there will always be a new disease to justify violating more rights**

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The Daniels and Speaker cases are cautionary tales that illustrate the counterproductive nature of a punitive, law enforcement approach to preventing the spread of disease. Instead of recognizing these dangers, however, both Congressional leaders and the media presented these cases as demonstrating a need for even tougher new laws that permit aggressive and punitive action against individuals. In so doing, they did not note the futility of stopping a disease as widely prevalent as tuberculosis by detaining one single traveler, nor did they recognize the need to develop more rapid and accurate diagnostic tests and more effective TB treatments. Nor did they mention that existing treatments are not currently available to everyone with the disease. Rather, the spotlight remained on the alleged need to enact new laws to provide officials with more power to “get tough” with individual patients. This is unfortunate because: • It’s ineffective. **The law enforcement approach has not and cannot prepare us for serious epidemics. Effective public health efforts, whether aimed at pandemic influenza or more common diseases such as TB and HIV/AIDS, are neither cheap nor glamorous. They are costly and difficult.** These efforts require working with rather than against communities, providing communities with as healthy an environment as possible, health care if they need it, and the means to help themselves and their neighbors. Most importantly, **to protect public health, public health policies must aim to help, rather than to suppress, the public**. • It’s dangerous for civil liberties. **The law enforcement approach to public health offers a rationale for the endless suspension of civil liberties**. The “Global War on Terror” may go on for a generation, but **the war on disease will continue until the end of the human race. There will always be a new disease, always the threat of a new pandemic.** **If that fear justifies the suspension of liberties and the institution of an emergency state, then freedom and the rule of law will be permanently suspended**. • It’s usually unjustly applied. The law enforcement/national security approach is unlikely to affect everyone uniformly. While blatantly racist public health policies, such as those instituted by San Francisco in 1900, are unlikely today, we should not assume that the new law enforcement approach to public health will be applied in a fair and equal manner, especially at our borders. Already anti-immigrant advocates mix fears of terrorism and disease as reasons for cracking down on immigrants. Should a new disease outbreak arise, a public health policy that emphasizes coercion and the dangerousness of the sick will most assuredly fall disproportionately on those who already face discrimination and/or are least able to protect themselves.

## Respecting freedom and human rights is positively correlated with economic growth

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In this study, we have tried to answer the following questions: 1) Can a causal relation between economic growth and freedom and participation rights be documented empirically? 2) Can freedom and participation rights contribute positively to economic growth or does a trade-off exist between the two? 3) Does the effect of freedom and participation rights on growth affect some intermediate factors which in turn affect economic growth? 4) Does the effect of freedom and participation rights on growth differ depending on which region of the world one is looking at? In order to answer these questions, we have made use of econometric methods. First, we examined the direction of causality between freedom and participation rights and economic growth by means of a Granger causality test. Next, we formulated a global panel data model in order to estimate the long-run relationship between freedom and participation rights and economic growth. Furthermore, we examined whether this relationship differs across regions. Can a causal relation between economic growth and freedom and participation rights be documented empirically? **Our analysis shows that the direction of causality is strongest from freedom and participation rights to economic growth rather than in the opposite direction.** The causality only exists when accounting for the past development of freedom and participation rights, i.e. the rights inherent in the Empowerment Rights Index cause growth in a long-run perspective. Moreover, when looking at the subindicators, **the causality is also strongest from the individual rights to growth.** This gives an indicative answer to our first question – **freedom and participation rights seems to affect growth positively. Our initial reflections indicated a likely explanation, namely that freedom and participation rights would further accountability of power which in turn would enhance predictability and trust, and through these, positive social achievements and economic growth.** Our analysis has not underpinned these hypothetical statements in any detail, but the analysis has confirmed that it is worth pursuing such potential explanations analytically. Can freedom and participation rights contribute positively to economic growth or does a trade-off exist between the two? **The analysis shows that the strengthening of freedoms and the right to participate can actually be the ’smart thing to do’ as we find a positive long-run effect on economic growth at the macroeconomic level. The main drivers are freedom of speech, freedom of assembly and association, and electoral selfdetermination. These rights dimensions are also those, which may contribute to promoting the accountability of power holders. At a macroeconomic level, therefore, we find no evidence of a trade-off between freedom and participation rights and economic growth. Instead, freedom and participation rights seem to contribute positively to growth over the long run** (question 2). **Thereby there might be an actual cost to inaction, since a lack of or a deterioration in the status of these civil and political rights may be detrimental to economic growth.** Does the effect of freedom and participation rights on growth affect some intermediate factors which in turn affect economic growth? Answering this question, we find weak indications that economic factors such as trade, investment, productivity and employment might be intermediate factors of the long-run relationship. A population that feels empowered by the freedom of speech, freedoms to assemble and to associate and by electoral self-determination may be more productive and motivated to contribute positively to the economy. Additionally, strong freedom and participation rights may promote predictability and transparency that encourage trade and investment that furthermore contribute to growth. Moreover, we find some indications that government effectiveness and control of corruption are possible intermediate factors. Freedom and participation rights such as freedom of speech, freedom of assembly and association, and electoral self-determination may also enforce accountability and transparency of a government and thereby government effectiveness and control of corruption that form a basis for strong institutions, which has also been shown to affect growth positively. This answers our third question, as we find a hint of indications that the causal relation between freedom and participation rights and growth partly runs indirectly through economic and institutional factors, but these results could benefit from a further country study analysis, to understand the interlinkages more in depth. On the other hand we control for the effect of regime type, conflict, education and health. We find that though these covariates might have an impact on economic growth, they do not serve as intermediate factors, as they do not influence the result of freedom and participation rights on economic growth.