

The Great Barrington Declaration

Why a “targeted protection” approach is not safe or feasible
in the United States

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What is the Great Barrington Declaration?

- The Great Barrington Declaration is a strategy put forth by a VERY small population of scientists suggesting that the best way to curb the COVID-19 pandemic is to implement what they coin as “targeted protection.”
- This would apply COVID-19 restrictions ONLY to those who are at higher risk of developing severe COVID-19 disease and death while allowing everyone else to resume life as normal pre-COVID.



The Great Barrington Declaration was authored by [Sunetra Gupta](#) of the [University of Oxford](#), [Jay Bhattacharya](#) of [Stanford University](#), and [Martin Kulldorff](#) of [Harvard University](#). The costs were paid for by the [American Institute for Economic Research](#), a [libertarian](#) think tank that is part of a [Koch-funded network](#) of organizations associated with [climate change denial](#).

The false promise of herd immunity for COVID-19

Why proposals to largely let the virus run its course — embraced by Donald Trump’s administration and others — could bring “untold death and suffering”.

Christie Aschwanden

<https://www.nature.com/articles/d41586-020-02948-4>

What is the Great Barrington Declaration?

- This risk-based approach seeks to minimize the societal harm of a society wide lockdown by relying on individuals who are at a lower risk of death from COVID-19 developing **infection-acquired immunity**
 - Extended, restrictive lockdowns have been found in some studies to be associated with increases in substance use, increases in feelings of depression and anxiety, as well as other structural harms like food insecurity, job loss, etc.
- This **infection-acquired immunity** would serve to lower transmission rates until a vaccine could be administered to develop **vaccine-acquired immunity** among those at greater risk of death from the infection to achieve herd immunity.



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<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7234789/>

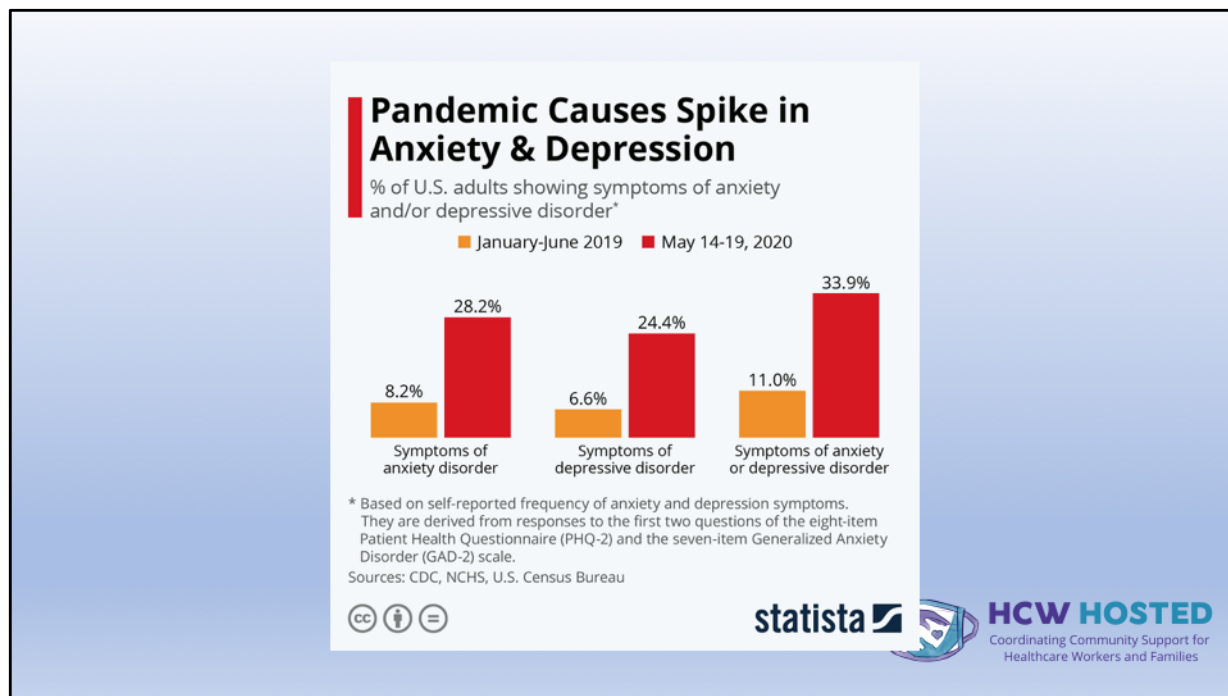
<https://www.nejm.org/doi/full/10.1056/NEJMp2008017/>

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<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7368647/>

<https://www.cdc.gov/mmwr/volumes/69/wr/mm6932a1.htm>

<https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2770975>

What is the Great Barrington Declaration?

- The societal harm that can occur as a byproduct of extended, restrictive lockdowns are very real; however, the Great Barrington Declaration (as well intentioned as it might be) possesses **critical** flaws.
- It does not advocate mandates such as [physical distancing](#) or the wearing of [masks](#), and does not promote [testing and tracing](#)
- The focus is on severe cases, not morbidity that may result in long debilitating symptoms that may follow months after a mild infection
- **THIS STRATEGY IS EXTREMELY DANGEROUS.** While it may seem like a simple solution that makes sense, remember, the COVID-19 pandemic is a complex problem and as such will require a complex solution.



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- “Those who are not vulnerable should immediately be allowed to resume life as normal. Simple hygiene measures, such as hand washing and staying home when sick should be practiced by everyone to reduce the herd immunity threshold,” reads the declaration.
- “Schools and universities should be open for in-person teaching. Extracurricular activities, such as sports, should be resumed. Young low-risk adults should work normally, rather than from home. Restaurants and other businesses should open. Arts, music, sport and other cultural activities should resume. People who are more at risk may participate if they wish, while society as a whole enjoys the protection conferred upon the vulnerable by those who have built up herd immunity.”



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Why is the Great Barrington Declaration dangerous?

- As appealing as it may sound, the declaration offers no guidance on how to actually protect those who are the greatest risk of death from COVID-19 or what to do if, and when there are surges without the using the “stay at home” orders they staunchly oppose.
 - How are those at higher risk of death to be protected?
 - How they are to be physically isolated?
 - How does this mitigate the social and psychosocial toll this will have on both those isolated and their loved ones?
- Without “stay at home orders,” what are communities supposed to do to mitigate surges or explosive super spreader events to prevent hospitals from being overwhelmed.



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Why is the Great Barrington Declaration dangerous?

1. The authors have assumed previously that a substantial reduction in the spread of COVID-19 can be reached when 10-20% of the population has had it.
 - There are couple problems with this assumption. First, this estimate is fundamentally flawed. We will show you how in a graphic on the next couple slides.
 - Second, this also appears to be based on the idea that once you catch COVID-19 you are immune *forever*. Current evidence suggests you might gain **some immunity, but that it likely only lasts for a shorter period of time** and is dependent on how severe your infection was originally.



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<https://www.medrxiv.org/content/10.1101/2020.04.27.20081893v3.full.pdf+html>

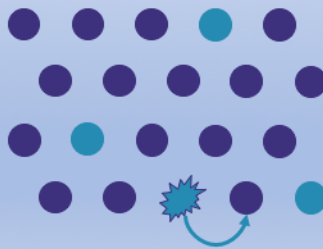
Why is the Great Barrington Declaration dangerous?

Let's look at why the 10-20% estimate is likely to be incorrect. With **current restrictions in place** the average person who is sick with COVID-19 will infect one additional person if they are not isolating.

● = Susceptible

☼ = Infected

● = Recovered



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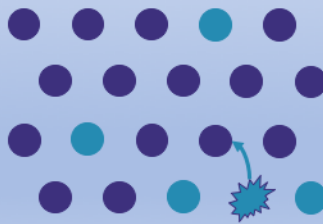
Why is the Great Barrington Declaration dangerous?

With our current restrictions, if only 10-20% of people in a population have had COVID-19, the likelihood that someone who has COVID-19 will be able to infect someone else is still fairly high. Over time more and more people will get COVID, including those at high risk.

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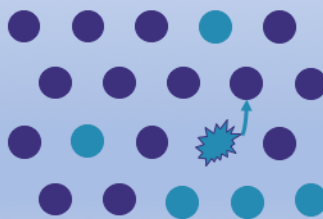
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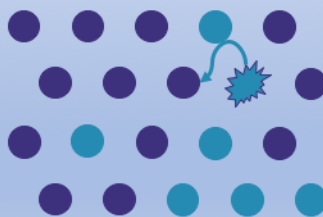
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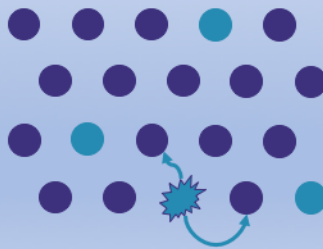
Why is the Great Barrington Declaration dangerous?

WITHOUT our current restrictions, it is estimated that a person with COVID infects 2-3 additional people. Suggesting we lift restrictions would result in a surge of COVID-19 cases which would overwhelm healthcare systems and public health.

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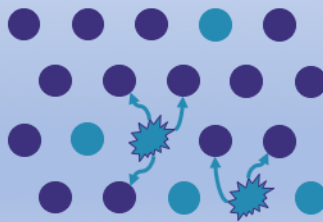
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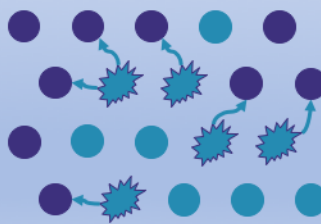
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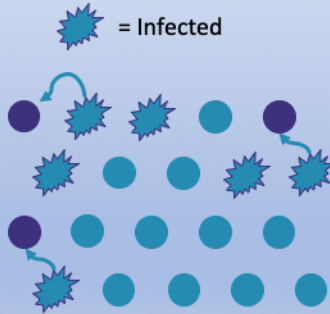
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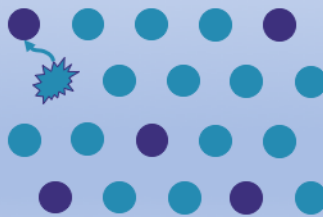
Why is the Great Barrington Declaration dangerous?

It is only at much greater levels, **such as the 60-70% that has been supported by the greater scientific and public health communities**, that transmission to people who have not had the illness becomes less likely.

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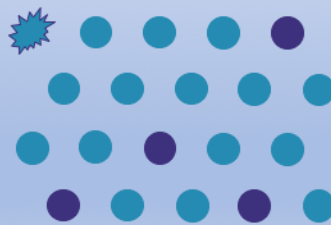
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Why is the Great Barrington Declaration dangerous?

- The Great Barrington Declaration is based on the assumption that if 10-20% of the population develops COVID-19, the spread of the infection will be significantly reduced because of some underlying level of immunity that is already present in the population.
- **The majority of research dedicated to understanding the spread of COVID-19 has shown that this is not the case.**
- Outbreaks of COVID-19 among jails and prisons have resulted in more than 70-80% of their inmate populations developing COVID-19
 - If a prevalence of 10-20% was enough to significantly reduce the spread of the virus, outbreaks in prison systems would not reach such a high level
 - This is further supported by the fact that some of these systems began mass testing 39 days after identifying their first case, signifying prolonged outbreaks.



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<https://www.cdc.gov/mmwr/volumes/69/wr/mm6933a3.htm>

Limitations to the previous example

- There is a spectrum of restrictions present across the US, so community spread is going to be different depending on what is currently in place.
 - A community that has more robust test, trace, and isolation programs in place will have a lower number of people an average person with COVID-19 will infect compared to a community with less effective responses.
- This example also does not consider the fact that current evidence suggests that **people who recover are not immune forever** after they have recovered.
 - In reality, the **infection-acquired immunity** that people have developed as a result of having the infection **will likely diminish over time making them susceptible to getting COVID-19 again some time after they have recovered.**
 - Reaching a level where 60-70% of the population is immune to the virus will not be a straight shot and will fluctuate as people's immunity wanes over time.



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Why is the Great Barrington Declaration dangerous?

- Even though younger individuals have been observed to experience severe illness less often than older individuals and those with other health conditions, **even those not at high risk can develop a severe COVID-19 illness.**
- Letting the infection course through a population perceived at a lower risk will still result in a **significant increase in hospitalizations and potentially deaths.**
 - Utah currently does not have enough space in their hospitals for all their COVID-19 patients because of the daily cases they are experiencing
- Furthermore, **evidence has suggested that a person's level of immunity is largely dependent on how severe their illness was.**
 - Those who have severe infections may be immune to re-infection for longer while those who only had a mild illness may only be immune for a short period.
 - Immunity among younger individuals could be very short-lived given the prevalence of mild infections in this population.



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Why is the Great Barrington Declaration dangerous?

2. The proposed plan focuses primarily on death and seems to overlook the chronic effects that have been observed with COVID-19.
- Individuals who have been able to recover from COVID-19 have been **observed to have lingering chronic symptoms following their initial illness.**
 - This includes chronic fatigue, difficult concentrating and impaired memory, and the development of new onset diabetes, among others.
- Trying to achieve herd immunity by letting the infection spread uncontrolled among those deemed as having a lower risk of death **could result in millions of previously healthy individuals developing chronic conditions** that might persist with them throughout the rest of their lives.



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Why is the Great Barrington Declaration dangerous?

3. The authors overlook just how many individuals are at high risk of developing severe illness or death from COVID-19.

- Obesity, increasing age, diabetes, and other cardiometabolic conditions are just a few of the factors that have been observed to be associated with an increased risk of severe COVID-19 illness and/or death.
 - In 2017-2018, **over 35% of the entire US population** (children and adults) were determined to be obese
 - Furthermore, it is estimated that 13% of the adult US population has diabetes.
 - This doesn't even take into account the percentage of US adults that have other pre-existing conditions that put them at greater risk of severe COVID-19.



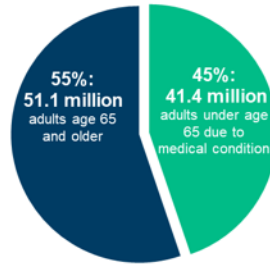
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Popkin, B.M., Du, S., Green, W.D., Beck, M.A., Algaith, T., Herbst, C.H., Alsukait, R.F., Alluhidan, M., Alazemi, N. and Shekar, M., 2020. Individuals with obesity and COVID-19: A global perspective on the epidemiology and biological relationships. *Obesity Reviews*.

Figure 1

Over 90 million of 246 million U.S. Adults are at Higher Risk of Serious Illness if Infected with Coronavirus

92.6 million adults at higher risk for serious illness if infected with coronavirus



NOTE: Data includes adults ages 18 and older; excludes adults living in nursing homes and other institutional settings.
SOURCE: KFF analysis of 2018 Behavioral Risk Factor Surveillance System.

KFF
HENRY J. KANDEL
FAMILY FOUNDATION



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Why is the Great Barrington Declaration dangerous?

4. The authors of the declaration state that current public health policies and recommendations place the brunt of the burden of the pandemic on the working-class individuals who are most vulnerable to COVID-19 and suggest that their “targeted protection” would reduce this burden.

In reality, their proposed plan could increase the impact of the pandemic on these individuals.



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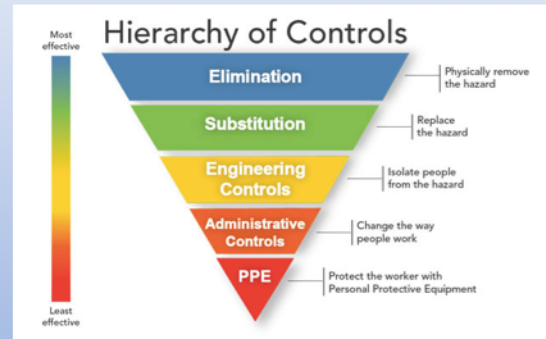
Why is the Great Barrington Declaration dangerous?

- The authors have acknowledged these individuals have not benefited from the ability to work from home to reduce their risk of exposure.
- “Opening up” society for everyone who is determined to not be at high risk would only increase the working-class’ risk of exposure. As more people are able to participate/utilize public services, working class individuals who are unable to work from home would be thrust into an environment in which their risk of exposure would greatly increase.
- Relaxing current restrictions wouldn’t reduce the burden that has already been placed on these at-risk individuals even if personal protective equipment were to be more readily available for them.



Why is the Great Barrington Declaration dangerous?

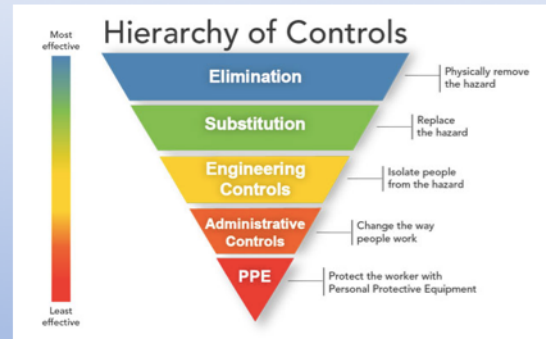
- When it comes to public health measures, reducing exposure is the most effective control we have to preventing the spread of COVID-19
- While PPE also plays an important role, it only reduces the risk of COVID-19 to an extent less than that of isolating and limiting exposure to potentially COVID-19 positive individuals.



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Why is the Great Barrington Declaration dangerous?

- In the case of the Great Barrington Declaration, **an increase in PPE availability would not be able to make up for the increase in exposure the at-risk working class would experience as a result of lifting restrictions.**
- The “targeted protection” would actually lead to an increase in the already present disproportionate burden placed on the working class.



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Why is the Great Barrington Declaration dangerous?

5. For a “targeted protection” plan to succeed, robust basic epidemic response methods such as testing, tracing, isolating, masking and physically distancing need to already be in place.

In the US, we don’t have robust, effective responses regarding testing, tracing, isolating, or masking



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Why is the Great Barrington Declaration dangerous?

- **A targeted protection strategy will only work if:**

1. Communities have robust testing programs that enable them to detect individuals who have the infection before they are symptomatic or while they are asymptomatic
2. Large scale contact tracing efforts exist to quickly track down the contacts of each individual person who tests positive
3. Individuals who test positive and individuals who are notified they have been exposed adhering to, and having the ability to, isolation recommendations to prevent spread of infection (a core tenet of our mission in HCW HOSTED)
4. There is community wide support and adherence to masking
5. There is adequate PPE available to protect those that are still working on the front lines in essential services



<https://www.covidexitstrategy.org/>

Why is the Great Barrington Declaration dangerous?

- The COVID Exit Strategy has been tracking each State's performance on these criteria over time as a way of determining when we've established sufficient pandemic responses.

State	CDC Criteria: Downward Trajectory Over 14 Days	CDC Criteria: Downward Trajectory Over 14 Days With Stable or Increasing Volume	CDC Criteria: Downward trajectory of ILI reported over a 14-day period	CDC Criteria: Test availability such that percentage of positive tests is $\leq 20\%$ for 14 days
Alabama	Yes 7 day streak	No 35 day streak	No 5 day streak	No 15 day streak
Alaska	No 83 day streak	Yes 1 day streak	No 1 day streak	Yes 245 day streak
Arizona	No 33 day streak	No 29 day streak	No 4 day streak	Yes 88 day streak
Arkansas	No 27 day streak	No 47 day streak	No 6 day streak	Yes 217 day streak
California	No 27 day streak	No 26 day streak	No 4 day streak	Yes 208 day streak
Colorado	No 56 day streak	No 147 day streak	No 16 day streak	No 1 day streak
Connecticut	No 83 day streak	No 57 day streak	No 14 day streak	Yes 174 day streak
Delaware	No 68 day streak	No 21 day streak	Yes 3 day streak	Yes 171 day streak
District of Columbia	No 33 day streak	No 17 day streak	No 5 day streak	Yes 168 day streak



HOW TO GET IT
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<https://www.covidexitstrategy.org/>
<https://www.cdc.gov/coronavirus/2019-ncov/downloads/php/CDC-Activities-Initiatives-for-COVID-19-Response.pdf>

Why is the Great Barrington Declaration dangerous?

- No State in the US has a sufficient pandemic response/infrastructure to safely implement a “targeted protection” approach at this point in time.
- With rising cases across the US, the likelihood they will have sufficient responses any time soon is extremely low.

STATE NAME	14-DAY TREND OF COVID+	LAST 14 DAYS OF COVID+ (ROLLING)	% OF TEST TARGET (INCIDENCE ADJUSTED)	ICU OCCUPIED	NEW CASES PER MILLION PER DAY	CONTACT TRACING POSSIBLE?	COVID+ RATE IS
United States	48% Increasing	62.9k → 92.9k	42%	N/A Not Available	280	Extremely Difficult Resource intensive	7.2% Increasing
Alabama	-5% Decreasing	1.5k → 1.4k	16%	84% Constrained	292	Unlikely Positivity high	19.4% Decreasing
Alaska	67% Increasing	22k → 37k	226%	72% Elevated	518	Possible Positivity low	1.3% Decreasing
Arizona	61% Increasing	914 → 1.5k	24%	55% Normal	502	Unlikely Positivity high	12.7% Increasing
Arkansas	16% Increasing	942 → 1.1k	27%	71% Elevated	362	Unlikely Positivity high	11.3% Increasing
California	25% Increasing	3.5k → 4.5k	90%	69% Normal	115	Difficult Positivity makes it challenging	3.4% Increasing
Colorado	110% Increasing	1.2k → 2.5k	34%	72% Elevated	432	Extremely Difficult Resource intensive	8.8% Increasing



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<https://www.covidexitstrategy.org/>

Why is the Great Barrington Declaration dangerous?

- Given the willingness of US communities to disregard the current evidence-supported mitigation measures such as wearing masks, the United States does not have the infrastructure and/or the support for the basic epidemic response mechanisms necessary for a “targeted protection” approach to be safe or effective.
- **Therefore, any pandemic management strategy relying upon immunity from natural infections for COVID-19 is flawed**



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Why is the Great Barrington Declaration dangerous?

- An increase in transmission among younger people risks **significant** morbidity and mortality across the whole population, not just among those at high risk.
 - In addition to the human cost, **this would impact the workforce as a whole**
 - It would also overwhelm the ability of healthcare systems to provide acute and routine care
 - Furthermore, there is no evidence for lasting protective immunity to SARS-CoV-2 following natural infection
- **The endemic transmission that would be a result of waning immunity from a “targeted protection” approach would present a risk to vulnerable populations for the indefinite future**



Scientific consensus on the COVID-19 pandemic: we need to act now

www.thelancet.com Published online October 14, 2020

[https://doi.org/10.1016/S0140-6736\(20\)32153-X](https://doi.org/10.1016/S0140-6736(20)32153-X)

In support of the John Snow declaration

What percentage of the population would need to develop **infection-acquired** or **vaccine-acquired immunity** to achieve herd immunity?

- Given its transmissibility, the World Health Organization (WHO) estimates that 65% to 70% of a population would need to be immune to the virus before it would burn itself out
 - That would mean between 131 million and 230 million Americans would need to either get COVID-19 or receive a vaccine for the virus.
- Currently, the U.S. has a case fatality rate of about 2.5%, based on 234,937 deaths and 9.6 million known cases; however, the true infection fatality rate is likely lower since most asymptomatic infections aren't detected. It has been estimated that the true fatality rate is likely between 0.25% and 2.5% in the US.
 - **Using a previous estimate from the CDC of a fatality rate of 0.65%, that could result in an additional 851,500 to 1,495,000 deaths from COVID-19 in the US.**



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Following a targeted protection approach would cause irreparable harm to the healthcare systems we all depend on

- Stress on the nation's hospitals would be tremendous.
 - Thus far, about 370,000 Americans have been hospitalized with COVID-19. If we assume that, for each case diagnosed so far, five cases occurred without symptoms or diagnoses, that leads to a hospitalization rate of about 1%.
- With 230 million infections, then, about 2.3 million could be expected to end up hospitalized.
- Those hospitalizations come with a cost, of course. Studies have yielded a wide range of median or average costs, from just over \$10,000 to more than \$70,000. If for simplicity we assume it averages \$30,000, the total hospital bill to achieve herd immunity is about \$80 billion.



The Cost of Herd Immunity in the U.S.

— Likely involves more than a million deaths; "That cannot be our price"

<https://www.medpagetoday.com/infectiousdisease/covid19/88401>

Why is the Great Barrington Declaration dangerous?

- We understand the want to return to life as pre-COVID; however, we need to balance the risks associated with each plan proposed to get us back to life with some resemblance of our pre-COVID normal.
- The Great Barrington Declaration and its “targeted protection” overlook crucial factors of the pandemic and COVID-19 and is based on assumptions that are not supported by our current scientific evidence.
 - Furthermore, the authors’ proposed plan lacks evidence-based alternatives to the public health measures currently in place.
- When considering their plan of action using metrics and estimates that have been vetted and accepted by the overwhelmingly majority of public health researchers, it becomes clear that the risks associated with it FAR outweigh the potential benefits.



The John Snow Memorandum

- You have likely heard of a response to the Great Barrington Declaration titled the **John Snow Memorandum**.
- The John Snow Memorandum advocates for continued evidence-based restrictions and disease mitigation strategies.
 - Signers believe this will lower viral spread to very low levels where testing and contact tracing can be utilized to eliminate outbreaks.
 - Furthermore, the authors advocate for the development and implementation of social programs to minimize the harms of necessary restrictions.
- This strategy would continue until an effective vaccine, which it predicts will occur in the coming months, is widely distributed and herd immunity is achieved through **vaccine-acquired immunity**.



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The John Snow Memorandum

- While the John Snow Memorandum is evidence-based, it is too not without its limitations.
- In the US, there exists decentralized state-wide COVID-19 policies and poor leadership.
 - Because of this, Americans face scattershot policies on containing the virus with some states embracing strict new rules around social gatherings and mask wearing and others having very weak policies or none at all.
- In addition, there are insufficient social programs in place to offset unemployment resulting in people losing their livelihood and homes, putting them at greater risk of acquiring COVID-19.



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The John Snow Memorandum

- Regarding the pandemic response infrastructures currently in place, limited support exists to support those who need to isolate after being exposed to COVID-19 or when ill so as not to expose others.
- Confusion, misinformation, and disinformation regarding vaccine safety and other public health guidelines has also decreased the efficacy of existing public health mitigation strategies.
- However, in light of these limitations, **we know that this strategy does work if lockdowns are used effectively to build up pandemic response capacity.**
 - Japan, Vietnam, and New Zealand have all been effective when utilizing this approach.



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Sweden

A real-world example that highlights the dangers of an approach like the Great Barrington Declaration in a small country of 10.3 million people



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Sweden and its “targeted protection” approach

- During the COVID-19 pandemic early on in 2020, many governments tried to contain the spread of the virus by legally restricting social life or even by imposing national lock-downs.
 - The Swedish government, on the other hand, appealed to the individual’s self-responsibility to behave according to specific containment recommendations published by the Public Health Agency
 - In the first phase of the disease, the government had a light touch. Although it banned large groups and issued plenty of health advice, it rejected blanket lockdowns.
- In short, liberty-loving Swedes pursued a mask-free, lockdown-light strategy meant to slow the spread of the pandemic without bankrupting the economy and causing undue harm by compulsory, restrictive lockdown measures



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Sweden and its “targeted protection” approach

The core of Sweden’s strategy was to:

1. Mitigate the spread of the infection rather than suppress it
2. Protect those at greater risk of severe illness or death due to COVID-19
3. Safeguard other health determinants
4. Ensure that medical and healthcare resources remained available
5. Ensure that society was able to continue functioning

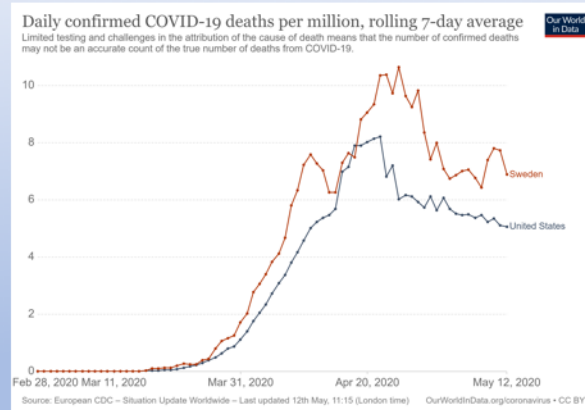


<https://onlinelibrary.wiley.com/doi/10.1111/apa.15582>

<https://www.bmj.com/content/370/bmj.m3031>

Lessons from Sweden

- However, come end-March Sweden began to experience a significant uptick in cases and deaths from COVID-19, **despite their more substantial public health infrastructure compared to the US.**
- Mid-May, the Scandinavian nation's daily death toll per 1 million people was 8.71 compared to the United States' 4.59.
- The majority of these deaths occurred in elder care facilities or as a result of home care of elderly individuals.

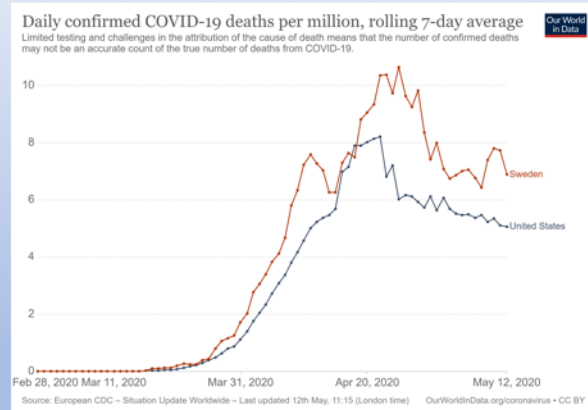


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https://www.theguardian.com/world/2020/aug/19/sweden-records-highest-death-tally-in-150-years-in-first-half-of-2020?CMP=fb_gu&utm_medium=Social&utm_source=Facebook&fbclid=IwAR3aeBRC0W0x7dmMCGSjVih7du5lkPiFqrvd9c6abyN-ZCyZITc34eI_Mxs#Echobox=1597877507

Lessons from Sweden

- Sweden has recorded its highest tally of deaths in the first half of 2020 for 150 years
- **COVID-19 claimed about 4,500 lives in the period to the end of June – a number that has now risen to 5,800 in August – a much higher percentage of the population than in other Nordic nations, though lower than in Britain and Spain.**



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https://www.theguardian.com/world/2020/aug/19/sweden-records-highest-death-tally-in-150-years-in-first-half-of-2020?CMP=fb_gu&utm_medium=Social&utm_source=Facebook&fbclid=IwAR3aeBRC0W0x7dmMCgSjVih7du5lkPiFqrvd9c6abyN-ZCyZITc34eI_Mxs#Echobox=1597877507

Lessons from Sweden

- The high infection rate across the country was the underlying factor that led to a high number of those becoming infected in care homes.
- Of the 6,034 deaths in Sweden, 45% of those have occurred in elderly care homes.
- 87% of which had illnesses so severe that they were not admitted to the hospital for advanced COVID-19 treatment measures as those would have had little chance of keeping them alive.



Kamerlin, S.C. and Kasson, P.M., 2020. Managing COVID-19 spread with voluntary public-health measures: Sweden as a case study for pandemic control. *Clinical Infectious Diseases*.

https://time.com/5899432/sweden-coronavirus-disaster/?fbclid=IwAR0VmgRnwCdPNpqzjpv-g_9l8yzi2FFPx6wLjNFvjTiCMNW2EK2tplZuCBM

<https://www.svt.se/nyheter/snabbkollen/fa-som-dott-med-covid-pa-aldreboende-fick-sjukhusvard?cmpid=del%3Afb%3A20200807%3Afa-som-dott-med-covid-%E2%80%A61/1>

Table 1. Cases, fatalities and testing numbers expressed as absolute numbers and also as per million population as of 23 June 2020 for Scandinavian countries (Sweden, Denmark, Norway and Finland) and for the UK.

Country	Total cases	Total deaths	Cases pmp	Deaths pmp	Tests per 1000	Date first death
UK	307,682	43,011	4,534	637	64	5 March
Sweden*	60,837	5,161	6,026	511	38	11 March
Denmark	12,561	603	2,169	104	156	12 March
Norway	8,772	248	1,621	45	54	12 March
Finland	7,155	327	1,292	59	42	20 March

Data from the E-CDC; Johns Hopkins COVID-19; Our World in Data websites.

*2366 COVID-19 patients have been in intensive care as of 23 June, which also includes fatalities and patients who have recovered and been discharged.



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Changes in Sweden's COVID-19 policy as a result lessons learned from their previous approach

- **Sweden's phase one approach to COVID-19 control was not a particularly successful approach.** Sweden has a fatality rate of around 60 deaths per 100,000 individuals, ten times that of Finland and Norway, which did institute lockdowns and followed approaches like that proposed in the John Snow Memorandum
 - As of October 13th, Sweden's [per capita death rate](#) is 58.4 per 100,000 people
 - **Sweden and the U.S. are the only countries with high overall mortality rates that have failed to rapidly reduce as the pandemic has progressed**



<https://www.economist.com/leaders/2020/10/10/the-real-lessons-from-swedens-approach-to-covid-19?fsrc=scn/fb/te/bl/ed/landofthemaskfreetherealle...>

Changes in Sweden's COVID-19 policy as a result lessons learned from their previous approach

- Sweden's new strategy for the second phase converges with Germany's.
 - One that now relies on rapid large-scale testing and contact-tracing to identify and suppress outbreaks early and instituting lockdowns when necessary to curb spread.
 - Aka a "targeted lockdown" or "flashlight" approach
- The lesson from the new Swedish policy is not that it is libertarian, but that the government weighs up the trade-offs of each restriction:
 - When someone tests positive, the entire household must go into quarantine, but schoolchildren are exempt—because their government has determined that the harm to their education is greater than the benefit of keeping them in isolation
 - Likewise, their quarantine only lasts five to seven days, reasoning that the risk of spreading COVID-19 in that second week is small and shrinking, but the harm to mental health of extended isolation is growing.



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<https://www.economist.com/leaders/2020/10/10/the-real-lessons-from-swedens-approach-to-covid-19?fsrc=scn/fb/te/bl/ed/landofthemaskfreetherealle...>

Similarities with the Great Barrington Declaration

- Sweden's initial approach to the COVID-19 pandemic is very similar to the Great Barrington Declaration, but was conducted in much safer way.
 - Sweden has a much more robust public health infrastructure and universal healthcare systems.
- However, even in a smaller population than that of the US, and with more robust ability to test, trace, and isolate, the approach had severe impacts to their high-risk populations.
- Proponents of the Great Barrington Declaration also herald Sweden's approach at maintaining in person instruction in schools, citing the rate of cases in school children and their parents.
 - However, individuals citing this overlooking the significant impact this had on their teachers' health.



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Sweden's initial approach had a substantial impact on teachers

- **At the onset of the pandemic, Swedish upper secondary schools moved to online instruction while lower secondary school remained open.**
 - This allows for a comparison of parents and teachers differently exposed to open and closed schools, but otherwise facing similar condition
- Parents of children who attended in-person schools had only a slight increase in the odds of developing the infection compared to parents of children who completed online classes [OR 1.15; CI95 1.03-1.27].
- Among lower secondary teachers who taught in-person classes, the odds of developing COVID-19 was double that of teachers who taught online classes [OR 2.01; 95% CI 1.52-2.67].



Vlachos, J., Hertegard, E. and Svaleryd, H.B., 2020. School closures and SARS-CoV-2. Evidence from Sweden's partial school closure. *medRxiv*.

Sweden's initial approach had a substantial impact on teachers

- This increased risk in teachers also spilled over to the partners/spouses.
 - Partners of secondary teachers who taught in-person classes also had a higher odds of infection compared to partners of teachers who taught online courses (OR 1.30; 95% CI 1.00-1.68)
- While this suggests that keeping schools open had little effect on the risk of COVID-19 in parents, this DOES NOT suggest that keeping schools open would also have minor consequences on transmission within the community.
- Teachers are also members of the community, and their increased risk of infection would also impact the rate of transmission within the greater community.



Vlachos, J., Hertegard, E. and Svaleryd, H.B., 2020. School closures and SARS-CoV-2. Evidence from Sweden's partial school closure. *medRxiv*.