## Framing:

#### The standard is maximizing expected wellbeing.

#### 1] Actor specificity: util is the best for governments, which is the actor in the rez. Governments must aggregate since every policy benefits some and harms others, which also means side constraints freeze action. Aspec comes first since different agents have different ethical standings. Takes out util calc indicts since they’re empirically denied and link turns them because the alt would be no action.

#### 2] Only consequentialism explains degrees of wrongness—if I break a promise to meet up for lunch, that is not as bad as breaking a promise to take a dying person to the hospital. Only the consequences of breaking the promise explain why the second one is much worse than the first. Intuitions outweigh—they’re the foundational basis for any argument and theories that contradict our intuitions are most likely false even if we can’t deductively determine why.

#### 3] Extinction first – a) Forecloses future improvement – we can never improve society because our impact is irreversible, b) Moral uncertainty – if we’re unsure about which interpretation of the world is true – we ought to preserve the world to keep debating about it, c) Moral obligation – allowing people to die is unethical and should be prevented because it creates ethics towards other people, d) Objectivity – body count is the most objective way to calculate impacts because comparing suffering is unethical, e) Turns suffering – mass death causes suffering because people can’t get access to resources and basic necessities

## Plan:

#### Plan Text - Resolved: The member nations of the World Trade Organization ought to reduce intellectual property protections for vaccines and injections.

#### The Reductions: I will be defending that the patents for vaccines will be reduced to 9 months, so essentially it is a waiver for most of the current COVID vaccines.

#### Reducing Intellectual Property Rights Made It Easier to Vaccinate People during Polio and AIDs, Neuberger 21

(Ami Neuberger, 1-20-2021, accessed on 7-27-2021, The Conversation, "The big barriers to global vaccination: patent rights, national self-interest and the wealth gap", https://theconversation.com/the-big-barriers-to-global-vaccination-patent-rights-national-self-interest-and-the-wealth-gap-153443) [Lynbrook MD]

We will not be able to put the COVID-19 pandemic behind us until the world’s population is mostly immune through vaccination or previous exposure to the disease. A truly global vaccination campaign, however, would look very different from what we are seeing now. For example, as of January 20, many more people have been immunised in Israel (with a population less than 10 million) than in Africa and Latin America combined. Notwithstanding recent questions about the effectiveness of the initial single dose of the vaccine, there is a clear disparity in vaccine rollouts internationally. That is a problem. As long as there are still existing reservoirs of a propagating virus it will be able to spread again to populations that either cannot or would not vaccinate. It will also be able to mutate to variants that are either more transmissible or more deadly. Counterintuitively, an increase in transmissibility, such as has been found with the new UK variant, is worse than the same percentage increase in mortality rate. This is because increased transmissibility increases the number of cases (and hence the number of deaths) exponentially, while an increase in mortality rates increases only deaths, and only linearly. Evolutionary pressure on the virus will inevitably favour mutations that make the disease more transmissible, or the virus itself more vaccine-resistant. It is clear, therefore, that every nation’s interest is in universal vaccination. But this is not the trajectory we are on. Fortunately, in the countries already vaccinating, the vaccine is (mostly) not allocated by wealth or power, but by prioritising those facing the highest risk. At a country level, however, national wealth is determining vaccine roll out. Yet in the past we have managed to eradicate diseases worldwide, including small pox, a viral infection with much higher death rates than COVID-19. There are two barriers that prevent us from rapidly pursuing a similar goal for the current pandemic: big pharma is profit-driven and therefore keeps a tight lid on the intellectual property it is developing in the new vaccines; countries find it difficult to see beyond their national interest; not surprisingly, politicians are committed only to their own voters. At this point, we don’t have a global system to confront either of these problems. Each vaccine’s patent is owned by its developer, and the World Health Organisation (WHO) is too weak to be the world’s Ministry of Health. Overcoming big pharma’s profit motive has been achieved before, however. In 1955, Jonas Salk announced the development of a polio vaccine in the midst of a huge epidemic. The news initially met with scepticism. Even employees of his own laboratory resigned, protesting that he was moving too fast with clinical experimentation. When a huge placebo–controlled clinical trial involving 1.6 million children proved him right, however, he declared that in order to maximise the global distribution of this lifesaving vaccine his lab would not patent it. Asked who owned the patent, he famously replied: Well, the people I would say. There is no patent. Could you patent the sun? In an echo of the current moment, Israel (then a new state) was also experiencing a rapidly spreading polio epidemic. Efforts to purchase vaccines from the US were unsuccessful, as not all American children were yet vaccinated. So a scientist named Natan Goldblum was sent to Salk’s laboratory to learn how to make the new vaccine. No lawyers were involved and no contracts signed. The young Dr Goldblum spent 1956 setting up manufacturing facilities for Salk’s vaccine in Israel and by early 1957 mass vaccination was underway. Israel, a small and relatively poor country in the 1950s, became the third country in the world (after the US and Denmark) to produce the vaccine locally and eventually eradicate polio. It took a handful of scientists, a modest budget and, most importantly, no patenting. Like Salk, Goldblum was aware viruses have complete disregard for political borders. He was also involved in a very successful Palestinian polio vaccination campaign in Gaza. More recently, a highly successful international campaign in the early 2000s saw AIDS treatments distributed in poorer countries. Pharmaceutical companies that owned the patented drugs were forced to supply them at cost or for free, not at market prices set in the rich countries. This was achieved through public pressure and the willingness of governments to support the required policies. A temporary withdrawal of the patenting rights to the successful COVID-19 vaccines, with or without compensation for the developers, seems a small price to pay for an exit strategy from this global and incredibly costly crisis. Overcoming national interest is perhaps more complicated. Clearly, countries have an interest in vaccinating their most vulnerable populations first. But at some point, well before everyone is vaccinated, it becomes more efficient for countries to start vaccinating their neighbours (the countries they are most exposed to through movements of people and trade). Disappointingly, rich countries today behave as though they will reach 100% vaccination rates before they give away a single dose, with many having bought well in excess of what is needed for 100% coverage. The COVAX plan to distribute vaccines in poorer countries has so far been an under-funded effort that has not yet delivered a single dose of vaccine. Even if COVAX were to be fully funded, it mostly aims to donate an insufficient number of vaccine doses to the poorest countries, rather than really bring about a universal vaccination programme. Nevertheless, overcoming the profit-maximising interest of big pharma and the national focus of governments is not a pipe dream. The world has done it before.

#### IP rights reduction solves Pandemics, Erfani et al., 21

Published 03 August 2021, Parsa Erfani, Fogarty global health scholar, Agnes Binagwaho, vice chancellor, Mohamed Juldeh Jalloh, vice president, Muhammad Yunus, chair, Paul Farmer, professor5, Vanessa Kerry, asscoiate professor, “Intellectual property waiver for covid-19 vaccines will advance global health equity” BMJ 2021; 374 :n1837 doi:10.1136/bmj.n1837, <https://www.bmj.com/content/374/bmj.n1837> [Lynbrook MD]

By late June 2021, 46% of people in high income countries had received at least one dose of the covid-19 vaccine compared with 20% in middle income countries and only 0.9% in low income countries.1 This inequity has been driven by a global political economy that has permitted some countries to purchase more vaccine than they require while others have very limited supplies. Canada, for example, with a gross domestic product (GDP) of $46 000 (£32 000; €39 000) per head has vaccines for 434% of its population, whereas Jordan, which has twice the incidence of covid-19 and a GDP of $4400 per head, has secured doses for only 6% of its people.2 As covid-19 variants are already showing some ability to evade the current vaccines, it is evident that without global vaccine equity and immunity, our efforts against covid-19 are in jeopardy. Equitable vaccine distribution to the world’s highest risk populations requires a multipronged approach that includes vaccine development and approval; scaling manufacturing; streamlining shipment, storage, and distribution; and building vaccine confidence. International collaborations have helped tackle several of these fundamentals. However, the global community remains deeply divided on how to overcome the scarcity of supply. Pharmaceutical trade associations claim that supply is not a problem as manufacturers can supposedly provide 10 billion doses by the end of 2021.3 But as suppliers consistently fall short in achieving manufacturing targets, production is clearly a bottleneck to global vaccination.3 Indeed, at the current global vaccination rate, it will take years to achieve the needed level of global immunity.4 The barrier to adequate vaccine supply today is not lack of vaccine options, nor even theoretical production capacity; the problem is the intellectual property (IP) protection governing production and access to vaccines—and ultimately, the political and moral will to waive these protections in a time of global crisis. Without such liberty, there will not be enough vaccine fast enough to prevent the spread of variants, the avoidable deaths, and the continued choking of low and middle income countries (LMICs) through poor health. As covid-19 became a pandemic, global efforts emerged to help ensure vaccines would be delivered across the globe to the highest risk populations. One of the first was Covax, a risk sharing mechanism in which countries, tiered by means, contribute to collectively source and equitably distribute vaccines globally. The effort, however laudable in intent, has been undercut by vaccine scarcity and underfunding. Covax aims to vaccinate 20% of the population in 92 low and middle income countries by the end of 2021. At the end of April, however, it had shipped only one fifth of its projected estimates and lacked critical resources for distribution.3 LMICs are wary about participating in well worn dynamics of global health aid. Instead, they are mobilising to overcome the fundamental paucity of available vaccines by challenging established global IP rules. At issue is the 1995 Trade Related Aspects of Intellectual Property Rights (TRIPS) Agreement, which established minimum protection standards for IP—including patents, industrial designs, trade secrets, and copyright—that all 164 members of the World Trade Organization (WTO) must respect.5 Subsequent rulings (such as the Doha declaration) have strived to clarify safeguards on patents, including compulsory licensing, which allows governments to license patents to a third party without consent (table 1).6 Today, these rules provide strong IP protection for vaccine technologies and affect the quantity and location of vaccine production and availability. In October 2020, South Africa and India submitted a proposal to the WTO to temporarily waive certain provisions of the TRIPS agreement for covid-19 health products and technologies. The waiver would prevent companies that hold the IP for covid-19 vaccines from blocking vaccine production elsewhere on the grounds of IP and allow countries to produce covid-19 medical goods locally and import or export them expeditiously (table 1). Although the proposed IP waiver is supported by over 100 countries, WTO has not reached a consensus on the proposal because of opposition and filibustering by several high income countries, including the UK, Germany, and Japan.7 Waiver opponents argue that the limited capacity of LMICs to produce complex covid-19 vaccines safely is the true barrier to global production, not IP. They suggest that the TRIPS waiver would penalise drug companies, stifle biomedical innovation, and deter future investments in research and development—in sum, that it would reduce returns on investment and dismantle an IP system that provided the goods needed to end the pandemic. Others are concerned that an IP waiver would fuel supply chain bottlenecks for raw materials and undermine ongoing production. Moreover, policy makers argue that a waiver is unnecessary as company driven voluntary licensing—in which companies decide when and how to license their technologies—and existing TRIPS flexibilities (such as country determined compulsory licensing) should suffice in establishing production in LMICs (table 1). They suggest that waiving IP for covid-19 vaccines would provide no meaningful progress, but the data do not support this. Contrary to detractors’ concerns about the possible effect of a temporary TRIPS waiver, global health analyses suggest that it will be vital to equitable and effective action against covid-19. LMIC’s manufacturing capabilities have been underestimated, even though several LMICs have the scientific and manufacturing capacity to produce complex covid-19 vaccines. India, Egypt, and Thailand are already manufacturing viral vector or mRNA-based covid-19 vaccines,8910 and vaccine production lines could be established within months in some other LMICs,11 offering substantial benefit in a pandemic that will last years.11 Companies in India and China have already developed complex pneumococcal and hepatitis B recombinant vaccines, challenging existing vaccine monopolies.12 The World Health Organization launched an mRNA technology transfer hub in April 2021 to provide the logistical, training, and know-how support needed for manufacturers in LMICs to repurpose or expand existing manufacturing capacity to produce covid-19 vaccines and to help navigate accessing IP rights for the technology.13 Twenty five respondents from LMICs expressed interest, and South Africa was selected as the first hub, with plans to start producing the vaccine through the Biovac Institute in the coming months.14 Removing IP barriers through the waiver will facilitate these efforts, more rapidly enable future hubs, engage a greater number of manufacturers, and ultimately yield more doses faster. Moreover, as the waiver facilitates vaccine production, demand for raw materials and active ingredients will increase. Coupled with pre-emptive planning to anticipate and expand raw material production, the waiver—which encompasses the IP of all covid-19 vaccine-related technology— can offer a path to overcome bottlenecks and expand production of necessary vaccine materials. Voluntary licences have not and will not keep pace with public health demand. Since companies determine the terms of voluntary licences, they are often granted to LMICs that can afford them, leaving out poorer regions.10 For example, in South Asia, AstraZeneca has voluntarily licensed its vaccine to the Serum Institute of India, even though the region has multiple capable vaccine manufacturers.9 Many covid-19 vaccine developers have not taken steps towards licensing their technologies, simply because there is limited financial incentive to do so.11 To date, none have shared IP protected vaccine information with the WHO Covid-19 Technology Access Pool (C-TAP) established last year.15 Relying on the moral compass of companies that answer to shareholders to voluntarily license their technologies will have limited effect on vaccine equity. Their market is driven by profit margins, not public health. Compulsory licensing by LMICs will also be insufficient in rapidly expanding vaccine production, as each patent licence must be negotiated separately by each country and for each product based on its own merit. From 1995 to 2016, 108 compulsory licences were attempted and only 53 were approved.6 The case-by-case approach is slow and not suitable for a global crisis that requires swift action. In addition, TRIPS requires compulsory licences to be used predominantly for domestic supply, limiting exports of the licensed goods to nearby low income countries without production capacity.5 Although a “special” compulsory licence system was agreed in the Doha declaration to allow for expeditious exportation and importation (formalised as the article 31bis amendment to TRIPS in 2017), the provision is limited by cumbersome logistical procedures and has been rarely used.16 Governments may also be hesitant to pursue compulsory licences as high income countries have previously bullied them for doing so. Since India first used compulsory licensing for sorafenib tosylate in 2012 (reducing the cancer drug’s price by 97%), the US has consistently pressured the country not to use further compulsory licences.17 During this pandemic, Gilead sued the Russian government for issuing a compulsory licence for remdesivir.18 Furthermore, while compulsory licences are primarily for patents, covid-19 vaccines often have other types of IP, including trade secrets, that are integral for production.19 The emergency TRIPS waiver removes all IP as a barrier to starting production (not just patents) and negates the prolonged time, inconsistency, frequent failure, and political pressure that accompany voluntary licensing and compulsory licensing efforts. It also provides an expeditious path for new suppliers to import and export vaccines to countries in need without bureaucratic limitations. Finally, there is no compelling evidence that the proposed TRIPS waiver would dismantle the IP system and its innovation incentives. The waiver is restricted to covid-19 related goods and is time limited, helping to protect future innovation. It would, however, reduce profit margins on current covid-19 vaccines. With substantial earnings in the first quarter of 2021, many drug companies have already recouped their research and development costs for covid-19 vaccines.20 However, they have not been the sole investors in vaccine development, and they should not be the only ones to profit. Most vaccines received a substantial portion of their direct funding from governments and not-for-profit organisations—and for some, such as Moderna and Novavax, nearly all.21 Decades of publicly funded research have laid the groundwork for current innovations in the background technologies used for vaccines.22 Given that companies were granted upfront risk protection for covid-19 vaccine research and development, a waiver that advances global public health but reduces vaccine profits in a global crisis is reasonable. An IP waiver for covid-19 vaccines is integral to boosting vaccine supply, breaking vaccine monopolies, and making vaccines more affordable in LMICs. It is, however, only a first, but necessary, step. Originator companies must transfer vaccine technology and share know-how with C-TAP, transfer hubs, or individual manufacturers to help suppliers begin production.23 In addition, governments must leverage domestic law, private sector incentives, and contract terms with pharmaceutical companies to compel companies to cooperate with such transfers.24 If necessary, governments can require technology transfers in exchange for continuing enterprise in a country or avoiding penalties. Politicians and leaders are at a critical juncture: they will either take the necessary steps to make vaccine technology available to scale production, stimulate global collaboration, and create a path to equity or they will protect a hierarchical system based on an economic bottom line. The former will not only build a vaccination trajectory that puts equal value on the lives of the rich and the poor, but will also help stem the pandemic’s relentless momentum and quell the emergence of variants. We are in the middle of one of the largest vaccination efforts in human history. We cannot rely on companies to thread the needle of corporate social and moral responsibility with shareholder and stock value returns nor expect impacted governments to endure lengthy bureaucratic licensing processes in this time of crisis. It will be a legacy of apathy and unnecessary death. As the human impact of the proposed IP waiver becomes clear, consensus behind it is growing. Countries that previously opposed the waiver—such as the US and Brazil—now support written text based negotiations.7 Opposing countries must stop blocking the waiver, engage in transparent text negotiations, and commit to reaching consensus swiftly. The longer states stall, the more people die needlessly. Covid-19 has repeatedly shown that people without access to resources such as strong health systems, health workers, medicines, and vaccines will preferentially fall ill and die. For too long, this cycle has been “other people’s” problem. It is not. It is our problem.

## Advantages:

#### Advantage 1:

#### Poorer Countries need COVID vaccines, only patent waivers can make it possible, Goodman et al., 21

 (Peter S. Goodman, Apoorva Mandavilli, Rebecca Robbins, and Matina Stevis-Gridneff, Peter S. Goodman is a London-based global economic correspondent. He was previously a national economic correspondent in New York during the Great Recession. He has also worked at The Washington Post as Shanghai bureau chief. , Apoorva Mandavilli is a reporter focusing on science and global health. She is the 2019 winner of the Victor Cohn Prize for Excellence in Medical Science Reporting., Rebecca Robbins joined The Times in 2020 as a business reporter focused on covering Covid-19 vaccines. She has been reporting on health and medicine since 2015., Matina Stevis-Gridneff is the Brussels correspondent for The New York Times, covering the European Union. She joined The Times after covering East Africa for The Wall Street Journal for five years., 5-15-2021, accessed on 7-27-2021, The New York Times, "Why Vaccinating the World Against Covid-19 Will Be Hard", https://www.nytimes.com/2021/05/15/world/americas/covid-vaccine-patent-biden.html) [Lynbrook MD]

In delivering vaccines, pharmaceutical companies aided by monumental government investments have given humanity a miraculous shot at liberation from the worst pandemic in a century. But wealthy countries have captured an overwhelming share of the benefit. Only 0.3 percent of the vaccine doses administered globally have been given in the 29 poorest countries, home to about 9 percent of the world’s population. Vaccine manufacturers assert that a fix is already at hand as they aggressively expand production lines and contract with counterparts around the world to yield billions of additional doses. Each month, 400 million to 500 million doses of the vaccines from Moderna, Pfizer and Johnson & Johnson are now being produced, according to an American official with knowledge of global supply. But the world is nowhere close to having enough. About 11 billion shots are needed to vaccinate 70 percent of the world’s population, the rough threshold needed for herd immunity, researchers at Duke University estimate. Yet, so far, only a small fraction of that has been produced. While global production is difficult to measure, the analytics firm Airfinity estimates the total so far at 1.7 billion doses. The problem is that many raw materials and key equipment remain in short supply. And the global need for vaccines might prove far greater than currently estimated, given that the coronavirus presents a moving target: If dangerous new variants emerge, requiring booster shots and reformulated vaccines, demand could dramatically increase, intensifying the imperative for every country to lock up supply for its own people. The only way around the zero-sum competition for doses is to greatly expand the global supply of vaccines. On that point, nearly everyone agrees. But what is the fastest way to make that happen? On that question, divisions remain stark, undermining collective efforts to end the pandemic. Some health experts argue that the only way to avert catastrophe is to force drug giants to relax their grip on their secrets and enlist many more manufacturers in making vaccines. In place of the existing arrangement — in which drug companies set up partnerships on their terms, while setting the prices of their vaccines — world leaders could compel or persuade the industry to cooperate with more companies to yield additional doses at rates affordable to poor countries. Those advocating such intervention have focused on two primary approaches: waiving patents to allow many more manufacturers to copy existing vaccines, and requiring the pharmaceutical companies to transfer their technology — that is, help other manufacturers learn to replicate their products. The World Trade Organization — the de facto referee in international trade disputes — is the venue for negotiations on how to proceed. But the institution operates by consensus, and so far, there is none. The Biden administration recently joined more than 100 countries in asking the W.T.O. to partially set aside vaccine patents. In this fractious atmosphere, the W.T.O.’s leaders are crafting their proceedings less as a push to formally change the rules than as a negotiation that will persuade national governments and the global pharmaceutical industry to agree on a unified plan — ideally in the next few months. The Europeans are banking on the notion that the vaccine makers, fearing patent waivers, will eventually agree to the transfers, especially if the world’s richest countries throw money their way to make sharing know-how more palatable. Many public health experts say that patent waivers will have no meaningful effect unless vaccine makers also share their manufacturing methods. Waivers are akin to publishing a complex recipe; tech transfer is like sending a master chef to someone’s kitchen to teach them how to cook the dish. “If you’re to manufacture vaccines, you need several things to work at the same time,” the W.T.O. director-general, Ngozi Okonjo-Iweala, told journalists recently. “If there is no transfer of technology, it won’t work.” Even with waivers, technology transfers and expanded access to raw materials, experts say it would take about six months for more drug makers to start churning out vaccines. The only short-term fix, they and European leaders say, is for wealthy countries — especially the United States — to donate and export more of their stock to the rest of the world. The European Union allowed the export of hundreds of millions of doses, as many as it kept at home, while the United States held fast to its supply. But boosting donations and exports entails risk. India shipped out more than 60 million doses this year, including donations, before halting vaccine exports a month ago. Now, as a wave of death ravages the largely unvaccinated Indian population, the government is drawing fire at home for having let go of doses. The details of any plan to boost vaccinations worldwide may matter less than revamping the incentives that have produced the status quo. Wealthy countries, especially in the West, have monopolized most of the supply of vaccines not through happenstance, but as a result of economic and political realities. Companies like Pfizer and Moderna have logged billions of dollars in revenue by selling most of their doses to deep-pocketed governments in North America and Europe. The deals left too few doses available for Covax, a multilateral partnership created to funnel vaccines to low- and middle-income nations at relatively low prices. While the partnership has been hampered by multiple problems — most recently India’s blocking exports amid its own crisis — the snapping up of doses by rich countries was a crucial blow. “We as high-income countries made sure the market was lopsided,” said Mark Eccleston-Turner, an expert on international law and infectious diseases at Keele University in England. “The fundamental problem is that the system is broken, but it’s broken in our favor.” Changing that calculus may depend on persuading wealthy countries that allowing the pandemic to rage on in much of the world poses universal risks by allowing variants to take hold, forcing the world into an endless cycle of pharmaceutical catch-up. “It needs to be global leaders functioning as a unit, to say that vaccine is a form of global security,” said Dr. Rebecca Weintraub, a global health expert at Harvard Medical School. She suggested that the G7, the group of leading economies, could lead such a campaign and finance it when the members convene in England next month. The argument over Covid vaccines harkens back to the debate over access to antiretroviral drugs for H.I.V. in the 1990s. The U.S. Food and Drug Administration approved the first powerful H.I.V. drug therapy in 1995, resulting in a plunge in deaths in the United States and Europe, where people could afford the therapy. But deaths in sub-Saharan Africa and Asia continued to climb. In 2001, the W.T.O. ruled that countries could allow local companies to break patents for domestic use given an urgent need. The ruling is still in place. But without technology transfers, few local drug makers would be able to quickly replicate vaccines. In 2003, the W.T.O. took a crucial further step for H.I.V. drugs, waiving patents and allowing low-income countries to import generic versions manufactured in Thailand, South Africa and India, helping contain the epidemic. With Covid, the request for a patent waiver has come from the South African and Indian governments, which are seeking to engineer a repeat of that history. History also challenges industry claims that blanket global patent rights are a requirement for the creation of new medicines. Until the mid-1990s, drug makers could patent their products only in the wealthiest markets, while negotiating licenses that allowed companies in other parts of the world to make generic versions. Even in that era, drug companies continued to innovate. And they continued to prosper even with the later waivers on H.I.V. drugs. “At the time, it rattled a lot of people, like ‘How could you do that? It’s going to destroy the pharmaceutical industry,’” recalled Dr. Anthony S. Fauci, President Biden’s chief medical adviser for the pandemic. “It didn’t destroy them at all. They continue to make billions of dollars.” Leaders in the wealthiest Western nations have endorsed more equitable distribution of vaccines for this latest scourge. But the imperative to ensure ample supplies for their own nations has won out as the virus killed hundreds of thousands of their own people, devastated economies, and sowed despair. The drug companies have also promised more support for poorer nations. AstraZeneca’s vaccine has been the primary supply for Covax, and the company says it has sold its doses at a nonprofit price. In January, Pfizer announced that it was joining Covax, agreeing to contribute 40 million doses at a not-for-profit price. So far only 1.25 million of those doses have been shipped out, less than what Pfizer produces in a single day. Whether the world possesses enough underused and suitable factories to quickly boost supply and bridge the inequities is a fiercely debated question. During a vaccine summit convened by the W.T.O. last month, the body heard testimony that manufacturers in Pakistan, Bangladesh, South Africa, Senegal and Indonesia all have capacity that could be quickly deployed to produce Covid vaccines. One Canadian company, Biolyse Pharma, which focuses on cancer drugs, has already agreed to supply 15 million doses of the Johnson & Johnson vaccine to Bolivia — if it gains legal permission and technological know-how from Johnson & Johnson.

#### Failure to Vaccinate the World means Deadly Variants and Economic Costs

**Gammon, 21** (Katharine Gammon, 2-13-2021, accessed on 7-29-2021, MIT Technology Review, "Why a failure to vaccinate the world will put us all at risk", https://www.technologyreview.com/2021/02/13/1018259/why-a-failure-to-vaccinate-the-world-will-put-us-all-at-risk/) [Lynbrook MD]

Even if the developed world gets its citizens vaccinated in a year, virus mutations and economic instability will roil unvaccinated countries for years—and end up costing everyone. Isabel Rodriguez-Barraquer currently works remotely from Colombia. As an epidemiologist, she has been watching from afar as her colleagues back at the University of California, San Francisco, have started receiving vaccines available to lab workers. The situation is very different where she now lives. Colombia is suffering a massive covid-19 outbreak and is still waiting to see the first doses of vaccine arrive this month: 50,000 doses of the Pfizer and AstraZeneca vaccines are expected in February, and a couple hundred thousand in March. The country has been cutting deals directly with drug makers, including China’s Sinovac, and working through international partnerships to obtain more. But Rodriguez-Barraquer fears it will be too late. The coronavirus vaccination programs for the world's richest countries are now in full swing. Almost one-quarter of the UK's adult population has now had a first dose. The US, while not quite at that pace, has now given at least one dose to more than 35 million people. But for low-income countries around the globe, the picture is very different—and may be for some time. Many of the world’s poorest are still waiting for the first doses to reach them. Estimates by the Economist Intelligence Unit suggest that some 85 countries in the developing world may not be fully vaccinated until 2023 at the earliest. For example, in January, the World Health Organization warned that the West African nation of Guinea was the only low-income country on the continent to have started vaccinating: but only 25 people (all senior government officials, the AP reported) out of the country's population of almost 13 million had received a dose at that point. One of the big problems is there isn’t yet any global rollout, only talk of it, says Chris Dickey, who directs the global and environmental public health program at New York University’s Global Health School. Rodriguez-Barraquer agrees. "The burden of illness and death could be prevented if there was more global coordination in vaccine supply," she says. This imbalance won't just lead to more deaths. It will cause a raft of economic, social, and health effects—not just in the nations affected, but throughout the rest of the world. The supply to poorer countries is low mostly because the majority of the available vaccines have been purchased or promised to richer countries in North America and Europe. To address this vaccine inequity, a coalition of international organizations, including the World Health Organization and governments, created a nonprofit called Covax in April 2020. The idea was to create a global supply of vaccines for 92 low- and middle-income countries. In December, the nonprofit announced that it had secured access to some 2 billion doses for 2021 through donations and commitments from some manufacturers, but it is unclear how many of those will actually be delivered this year. The problem becomes more complicated because many countries are both working through Covax and trying to secure deals with drug makers themselves—making it more challenging for Covax to make deals with those manufacturers at the same time. The group aims to vaccinate about 20% of the people in the world, focusing on hard-to-reach populations in Africa, Latin America, and Asia. To do so, it needs another $4.9 billion in addition to the $2.1 billion it has already raised. But there are other problems. The cheaper and easier-to-transport vaccines like the ones pledged by AstraZeneca have been slower to gain regulatory approval. Meanwhile, other companies seem less interested in pitching in: Doctors Without Borders found that only 2% of Pfizer’s global supply had been granted to Covax, and Moderna is still “in talks” with the organization. “Covax is a critical starting point that—without a commitment from President Biden—had a high probability of failure. It’s looking better now, but could still fail if it doesn’t get money and vaccines,” says Barry Bloom, a global health researcher at the Harvard T.H. Chan School of Public Health. Biden officially directed the US government to join Covax in late January. If it can succeed, the international program has many upsides. It establishes a mechanism of fairness that doesn’t depend on colonial mentalities of quid pro quo, says Bloom. It also absolves individual rich countries from having to determine which countries get what percentage of the vaccines. “This is a way of saying somebody else will take the rap, especially for the delivery time,” he says. The motive for getting the vaccine to poorer countries more quickly is not just altruism: evolution will punish any delays. SARS-CoV-2 [COVID] has already mutated into several worrying new variants, and this process will continue. If countries with large populations wait to be vaccinated for years, the virus will keep mutating—potentially to the point that the first available vaccines lose effectiveness. That will be bad for everyone, but poorer countries, with less access to updated vaccines, will again feel more of the impact. “We get more mutants and they get more deaths,” says Bloom. Judd Walson, a global health researcher at the University of Washington, worries more about the indirect effects of the pandemic in the developing world, where in many places covid-19 doesn’t even rank in the top 20 causes of death. Health systems have directed a lot of personnel and resources to dealing with the pandemic—setting up quarantine centers, doing surveillance, and more. In addition, funders and ministries have been diverted away from diarrhea, malaria, and other killers. As a result, those other programs are suffering: rates of immunization for diseases such as measles, diphtheria, tetanus, and whooping cough are declining, both for lack of supplies and personnel and because people fear going to health centers. “All those other things that are killing people are being neglected, so not providing a covid vaccine stops governments from shifting back to their priorities before the pandemic,” says Walson. And while virus variants can travel fast in a highly connected world, so can economic instability. That’s one takeaway from a recent paper published by the nonprofit National Bureau of Economic Research. Sebnem Kalemli-Özcan, an economist at the University of Maryland, and colleagues analyzed how delays in global vaccine distribution would affect the economies in countries whose populations had already been vaccinated. They found that a world where poorer countries have to wait to be vaccinated would see a global economic loss of about $9 trillion this year, with wealthy countries absorbing nearly half of those losses in declining trade and fractured supply lines. Ensuring equitable distribution is actually in the best interests of advanced economies. “Their hit will come back and hit you,” says Kalemli-Özcan. Yes, when the majority of the population in richer countries is vaccinated, restaurants and gyms may bounce back to life. But there are many sectors of the economy that buy from emerging markets—for example, retail, automotive, textiles, and construction. All will all be hurt by a slowdown in those markets. Also, those countries are often customers. “If the US improves and Europe improves and they want to sell goods, if those countries they want to sell to are still sick, they are not going to buy those goods,” says Kalemli-Özcan. “No economy is an island, and no economy recovers until every economy recovers.” Even though globalization amplified the pandemic, it is also the only solution to the pandemic, Kalemli-Özcan argues. Rich countries cannot prevent economic pain by hoarding vaccines; rather, they must invest in initiatives to increase the supply and reinforce distribution. Canada, for example, has placed an order for five times more doses than its population needs. The country is considering donating the excess to Covax, but it’s not clear how those vaccines will be given back if unused. The research assumed that wealthy countries would be vaccinated in 2021 and others would wait until 2022—but if the gap grows to several years, the economic pain will be much greater. Vaccine nationalism, as hoarding doses for one country is known, would be likely to backfire politically as well as economically. People around the world are watching to see when vaccines are available. And what that means for the political perception of the US in the world is really important, says Walson: “Vaccine nationalism is going to fuel a tremendous sense that we are only out for ourselves, and that only adds fuel to the already-burning fire by some against the West," he says. "I think there will be long-standing consequences to not addressing these inequities.” Funding Covax is the most immediate solution. There are also opportunities to license vaccine tech or ease intellectual-property rights so emerging countries can develop the capacity to either produce their own vaccines or complete the final steps of production, known as “finish and fill.” “I don’t see why South Africa and Kenya can’t produce vaccines and why Ethiopia and Botswana can’t finish and fill,” says Bloom. He says that early in the pandemic, there were only two places on the African continent that had the capacity to do covid-19 testing—and within a month, there were 11. African countries even joined forces to create a center for disease control for the whole continent, sharing information and best practices on covid-19 in a way that isn’t even done across all 50 US states. But time is of the essence. At the current rate of transmission, probably 50% of Colombia will be infected by the time mass vaccinations start. Rodriguez-Barraquer fears what that means for the country where she grew up: “The worry is that it will be too little, too late, and the epidemic is running its course.”

#### More Variants + Disease = Extinction, Yu 9

(Victoria Yu, Dartmouth Journal of Undergraduate Science, “Human Extinction: The Uncertainty of Our Fate”, 5-22-09 <http://dujs.dartmouth.edu/spring-2009/human-extinction-the-uncertainty-of-our-fate>) [Lynbrook MD]

A pandemic will kill off all humans. In the past, humans have indeed fallen victim to viruses. Perhaps the best-known case was the bubonic plague that killed up to one third of the European population in the mid-14th century (7). While vaccines have been developed for the plague and some other infectious diseases, new viral strains are constantly emerging — a process that maintains the possibility of a pandemic-facilitated human extinction. Some surveyed students mentioned AIDS as a potential pandemic-causing virus. It is true that scientists have been unable thus far to find a sustainable cure for AIDS, mainly due to HIV’s rapid and constant evolution. Specifically, two factors account for the virus’s abnormally high mutation rate: 1. HIV’s use of reverse transcriptase, which does not have a proof-reading mechanism, and 2. the lack of an error-correction mechanism in HIV DNA polymerase (8). Luckily, though, there are certain characteristics of HIV that make it a poor candidate for a large-scale global infection: HIV can lie dormant in the human body for years without manifesting itself, and AIDS itself does not kill directly, but rather through the weakening of the immune system. However, for more easily transmitted viruses such as influenza, the evolution of new strains could prove far more consequential. The simultaneous occurrence of antigenic drift (point mutations that lead to new strains) and antigenic shift (the inter-species transfer of disease) in the influenza virus could produce a new version of influenza for which scientists may not immediately find a cure. Since influenza can spread quickly, this lag time could potentially lead to a “global influenza pandemic,” according to the Centers for Disease Control and Prevention (9). The most recent scare of this variety came in 1918 when bird flu managed to kill over 50 million people around the world in what is sometimes referred to as the Spanish flu pandemic. Perhaps even more frightening is the fact that only 25 mutations were required to convert the original viral strain — which could only infect birds — into a human-viable strain (10).

#### Advantage 2:

#### Measles Deaths Top 200,000 In One Year, Shapiro 20

(Nina Shapiro, I'm the Director of Pediatric Otolaryngology and Professor of Head and Neck Surgery at the David Geffen School of Medicine at UCLA. I've been in academic medicine for over two decades, setting the record straight about the latest health fads and misconceptions. As someone who's had their feet firmly planted in both clinical and academic work, I help patients and families make decisions every day about their health. Living in times filled with suspicion, I find myself dispelling a lot of myths in response to swarms of information triggering fear or unnecessarily pushing us to change our habits overnight, 11-16-2020, accessed on 8-21-2021, Forbes, "Measles Deaths Top 200,000 In One Year: Vaccines Would Prevent That", https://www.forbes.com/sites/ninashapiro/2020/11/16/measles-deaths-top-200000-in-one-year-vaccines-would-prevent-that/) [Lynbrook MD]

As the world eagerly waits for positive news about a vaccine to prevent Covid-19 infections, other vaccine-preventable illnesses are raging. Last year, there were close to 900,000 cases worldwide of measles. Over 200,000 of these patients died. The 2019 global measles outbreak led to a rise in measles-related deaths by over 50%, and over 1,200 cases of measles were reported in the United States alone. Preventable measles outbreaks are not new to the U.S. In 2015, a measles outbreak stemming from cases at Disneyland spread to several states and Mexico within a few weeks. This came as no surprise at the time, as vaccination rates in parts of California and other states had plummeted to single digit percents, mainly due to parental concerns regarding risks of vaccines being associated with the rise autism spectrum disorders, as well as increasing mistrust of both the pharmaceutical industry as well as physicians. In pre-vaccination days, measles was considered to be a rite of passage in childhood. Millions of children would develop the infection, leaving many with permanent deficits such as hearing loss, brain damage, or lung disease. Thousands of children would die each year. The advent of the measles vaccine in 1963, now given in combination with the mumps and rubella and occasionally varicella immunization (MMR or MMRV, measles, mumps, rubella, varicella), first at age 12-15 months and a booster at age 4-5 years, provides over 97% percent protection from the measles virus. Lauding 90% efficacy from Pfizer’s coronavirus vaccine is great, but measles vaccine efficacy has always been better, especially when compared to many vaccines such as the influenza vaccine, clocking in at 40-60% efficacy each year. Measles is preventable. Once more for the people in the back: the measles vaccine is over 97% effective in prevention of measles infections. The vaccine is so effective, that in 2000, measles was declared eliminated in the United States, due to nearly four decades of widespread vaccination efforts. In the decades following the new millenium, the anti-vaccination movement changed that. In order for the measles vaccine’s efficacy to get to that coveted 97%, two things need to happen: 1) Two doses must be given to each person; 2) At least 95% of the population needs to receive those two doses. Herd immunity for vaccines such as measles works, given the combination of high efficacy and high percents of the population being immunized. The current issue and controversy over herd immunity when it comes to Covid-19 not being feasible at this time is because herd immunity from SARS-Cov2 as a result of infections would mean that literally billions would need to be infected, with resultant increased deaths on the order of hundreds of millions. Perhaps some positive news in the early months of 2020 was that we saw a decline in measles cases. But as soon as the Covid-19 pandemic surged worldwide, close to 100 million children were precipitously put at risk for missing their measles vaccinations, as vaccination campaigns around the world were halted. In early November 2020, the CDC, the WHO, UNICEF, the American Red Cross, and the United Nations Foundation partnered to ensure improved provision of worldwide measles vaccinations to those who need vaccine provision and delivery, especially in countries where outbreaks are continuing. The sharp drop in childhood immunization rates has not been limited to developing countries with poor access to medical care. In the U.S., by early summer 2020, childhood immunization schedules were set back by several months, as families chose to delay routine pediatric care. Despite pediatricians and the American Academy of Pediatrics strongly recommending that infants and children stay on schedule for vaccinations, including MMR or MMRV, many states reported anywhere from 50-60% reduction in childhood immunization rates comparing April 2019 to April 2020. Elizabeth Cousens, president and CEO of the United Nations Foundation, spoke with Infectious Disease Special Edition this week: “The fact that measles outbreaks are occurring at the highest levels we’ve seen in a generation is unthinkable when we have a safe, cost-effective and proven vaccine. No child should die from a vaccine-preventable disease. We are proud to chart a bold way forward with partners to close gaps in access to immunization and rapidly respond to outbreaks so everyone, everywhere can live healthy lives.” In these dismal days of the coronavirus pandemic raging on, with the faintest ray of light barely visible, whereby a vaccine may exist at the end of this long treacherous tunnel, public health efforts to prevent diseases that are, indeed, preventable need to remain at the forefront of healthcare advocacy. our heads from spinning from overwhelming rapid-fire health information.

#### Prices and High levels of protections limit access to medicines, Oxfam America

(Oxfam America, No Date, accessed on 8-22-2021, Oxfamamerica, "Intellectual property and access to medicine", https://www.oxfamamerica.org/explore/issues/economic-well-being/intellectual-property-and-access-to-medicine/) [Lynbrook MD]

Today, more than two billion people across the developing world lack access to affordable medicines, including many patients in countries negotiating in the Trans-Pacific Partnership (TPP) free trade agreement. Two critical factors limit access to treatment: the high prices of medicines, particularly those that are patent-protected, and the lack of medicines and vaccines to treat neglected diseases, a consequence of lack of R&D. Intellectual property (IP) has different forms; in the case of access to medicines, we are talking about patents. Patents are a public policy instrument aimed at stimulating innovation. By providing a monopoly through a patent—which gives inventors an economic advantage—governments seek to provide an incentive for R&D. At the same time, the public benefits from technological advancement. This trade-off underpins patent systems everywhere. Governments need to maintain an appropriate balance between incentivizing innovation, on the one hand, and, on the other, ensuring that new products are widely available. High levels of IP protection in developing countries exacerbate, rather than help solve, the problem of access to affordable medicines. Extensive patent protection for medicines delays the onset of generic competition. And because generic competition is the only proven method of reducing medicine prices in a sustainable way, such high levels of IP protection are extremely damaging to public health outcomes.

#### Without action on vaccines, more and worse measles outbreaks are imminent, Berkley 15

Seth Berkley, President and CEO of GAVI Vaccine Alliance, December 1, 2015 “Measles Outbreaks are a sign of bigger problems”, The Atlantic, <https://www.theatlantic.com/health/archive/2015/12/measles-elimination-vaccine/418155/>] [Lynbrook MD]

This year was supposed to mark the point when measles—one of the most infectious diseases on the planet—was finally under control. As a step in its plan to eliminate measles worldwide by 2020, the World Health Organization set a target to reduce the number of cases by 95 percent between 2000 and 2015. The effect has been significant: Measles deaths have fallen from more than 700,000 in 2000 to around 115,000 last year. But for a disease that's easily preventable, 115,000 deaths—the majority of them children under 5 years old—is still too high. And as the WHO [reported](http://www.who.int/mediacentre/news/releases/2015/measles-vaccination/en/) in November, progress has flat-lined over the past five years, and outbreaks are still common. What, exactly, went wrong? At first glance, it seems impossible to pinpoint just one reason for all the various outbreaks around the world. In the Nuba mountains of Sudan, a key factor is the lack of access to humanitarian aid for people trapped in conflict zones; in West Africa, a measles resurgence can be attributed largely to the Ebola epidemic’s crippling effect on local health systems. And in California, the blame rests squarely on the shoulders of anti-vaccine groups for whipping up unfounded fears about the safety of measles-mumps-rubella (MMR) vaccines. However, all of these seemingly disparate cases—and all other measles outbreaks, for that matter—still have a common underlying cause. Whenever measles strikes, it’s more than just an outbreak of a single disease, or an indication that children aren’t receiving their measles shots; it’s also a warning that immunization coverage in general, for all vaccine-preventable diseases, is lower than it should be. To put it another way: When rates of routine vaccination—children receiving all their shots on schedule, as a preventive measure rather than a reaction to an outbreak—start to fall, the first sign is usually a measles outbreak. In global-health security terms, these outbreaks are the proverbial canaries in the coal mine. Measles is considered such an integral part of the global-health agenda for precisely that reason: Its contagious nature makes it a good proxy for assessing immunization levels for all vaccine-preventable diseases. But in light of the WHO’s recent report about global progress towards eliminating measles—or, perhaps more accurately, the lack thereof—it’s clear the current approach isn’t working as well as it should be. Because measles is so infectious compared to other diseases—so contagious, in fact, it’s possible to catch it just by entering a room, hours after an infected person has been there—a much higher level of immunization coverage is required in order to achieve herd immunity. For many common infectious diseases, herd immunity kicks in when 80 to 85 percent of the population has been immunized. But for measles, an outbreak can occur as soon as coverage drops below 90 percent. Such a high level of contagion means it’s futile to attempt to eliminate the disease from each affected region in isolation. At the beginning of the 21st century, health authorities in the Western Hemisphere came close, reducing the number of cases in the region by 99 percent from where they’d been in 1990—but high levels of immunity weren’t maintained, and the Americas saw new outbreaks a few years later as the virus made its way over from other parts of the world. In general, though, elimination efforts have generally relied on region-by-region mass measles-vaccination campaigns. These campaigns are often too reactive to be effective over the long term, treating the symptom of a measles outbreak rather than the broader cause: a lack of routine immunizations. While mass vaccination against a single disease is certainly an effective tool in helping health officials respond to outbreaks, it can also draw attention and resources away from more farsighted efforts to increase routine immunization coverage. As a result, it can inadvertently increase the risk of future outbreaks of measles and other infectious diseases.

#### Vaccine Costs for Measles Are Soaring

**Rosenthal, 14** (Elisabeth Rosenthal, 7-3-2014, accessed on 8-22-2021, The New York Times, "The Price of Prevention: Vaccine Costs Are Soaring", https://www.nytimes.com/2014/07/03/health/Vaccine-Costs-Soaring-Paying-Till-It-Hurts.html) [Lynbrook MD]

Likewise she buys vials, rather than syringes, for the measles, mumps, rubella vaccine to lower the cost to $51.20 a dose. In 2002, the same vaccine was $27.70 for private doctors. Because some companies require that each physician sign a legal agreement not to disclose the price he or she paid, there is little informed shopping. “I was kind of aghast, I didn’t think it could be legal, but it is,” said Dr. Gary L. Freed, a pediatrician at the University of Michigan School of Public Health who has studied vaccine purchases. “And it’s certainly a very inefficient market since it means physicians don’t have information to bargain.”

## Underview

#### [1] Theory:

#### [a] 1AR theory is DTD because 4 minutes is too short to call out an abusive NC and go for substance – 1AR time skew proves that affirming is already harder

#### [b] No neg RVIs because they can collapse to a 6 minute voter in the 2NR which aff can’t do

#### [c] Neg can only get DTA on bidirectional shells since the aff speaks in the dark in the 1AC, violating countless unpredictable interps

#### [d] All theory spikes violations are DTD, prevents moot of the 1AC offense and helps account for 1ar time skew

#### [e] No new 2n responses to u/v, destroys AC theory leverage and skews aff strategy, they have cross to know implications of my underview.

#### [f] And I get 1ary theory or the neg can be infinitely abusive in the 1nc

#### [2] Condo and Dispo advocacies are voting issues, they force the 4 minute 1AR to refute multiple advocacies while the 6 minute 2N can go for just 1 under covered world, irreciprocal because I can’t just kick out of my plan in the 1ar because it’s literally my sole advocacy. Kills education by spreading ourselves thin on multiple worlds. Kills real world education because it doesn’t reflect what policy makers do in real life since they don’t abandon their advocacies minutes after presenting it.

#### [3] Reasonability and drop the arg on T – a) competing interps means that affirming is impossible because neg can always give a counter-definition and get risk of offense, b) authors can’t agree on one definition, don’t hold me to their random interps, c) key to resolving time skew, justifying even a normal aff takes valuable 1ar time.

#### [4] PICs are a voting issue – they moot aff offense with minute policy changes, shifting debates from the core of the literature to its margins, undermining both topic specific education and strategic options. Creates a 13:7 time skew in the 1AR. DAs solve content education since if there are questions like their PIC, reading it as DA presents an actual debate between whether the advantage is worth the disad.

#### [5] No counterplan fiat:

#### a) They already benefit from fiating the plan as the aff since they read disads against it

#### b) Kills fairness since the aff has very few options due to topic restraints and the neg basically has an infinite amount of options, solvency advocates doesn’t check since I contend that they have almost no restraints but I have to stay T

#### c) The aff has to disclose the plan before the round but the neg can break a new counterplan at any time so that kills fairness on reciprocity

#### d) It would kill education since it distracts from the debate over the goodness or badness of the plan