# NC

## New Affs bad

#### Interp: The affirmative must disclose the plan text and advantage area if they break new 20 minutes in advance

Standard –

#### 1. Clash – having no idea what the debate will be about makes being neg impossible – the aff gets plan text choice and infinite prep to craft the most strategic case. No disclosure makes this impossible to overcome b/c it means the neg only gets 4 mins of prep to answer a strategy that the AFF had 5 months to prep. they’ll say generics, but their model of debate means the neg has no time to cut an update to their generics specific to the AFF and we’ll lose every debate.

#### 2. Discourages tricks – plan text disclosure discourages cheap shot aff’s. If the aff isn’t inherent or easily defeated by 20 minutes of research, the case should lose. The neg is entitled to some research time to make sure the AFF is inherent, topical, and controversial. Otherwise bad AFF’s can win on purely surprise factor, which is a bad model b/c it encourages finding the most fringe surprising case possible instead of a well researched and defensible aff.

#### Vote on substantive engagement: otherwise we’re speaking without debating and there’s nothing to separate us from dueling oratory. It also creates the most valuable long-term skills since we need to learn how to defend our beliefs in any context, like politics.

#### Drop the debater on new affs: Their lack of disclosure makes substance irreparable b/c our entire argument is that we did not have a basis to engage the aff to begin with.

#### Competing interps since reasonability invites arbitrary judge intervention based on preference rather than argumentation and encourages a race to the bottom in which debaters exploit a judge’s tolerance for questionable argumentation.

#### No RVIs:

#### They incentivize debaters to go all in in theory and bait it with abusive practices, killing substantive clash on other flows. B. They can run theory on me too if I’m unfair so 1) theory is reciprocal because we’re both able to check abuse and 2) also cures time skew because they can collapse in the 2ar to their shell.

## UHC CP

#### The member nations of the World Trade Organization ought to implement a universal single-payer healthcare system

#### UHC will solve COVID inequalities, structural violence, and has long-term impact on the healthcare system beyond COVID

Walcott MD PhD 4/21

David Alexander Walcott, (MD., Ph.D. MSc. Entrepreneur and Rhodes Scholar), 4-1-2021, "COVID-19 vaccine success can enable universal healthcare – here's how," World Economic Forum, <https://www.weforum.org/agenda/2021/04/covid-19-vaccine-success-enable-universal-healthcare/> // AW

For more than 200 years, human beings managed to avert widespread pestilence with vaccines. While not a silver bullet, vaccines provide us with the freedom to engage with the world without the fear of debilitating disease. As we reflect on the global relevance of vaccines during World Immunization Week, we quickly acknowledge that persistent societal disparities have affected our ability to equitably vaccinate, a phenomenon that has been illuminated by COVID-19. As we pursue systems designed to equal the playing field in the spirit of collective global welfare, we must consider whether immunizations are simply products of universal access, or are themselves are enablers of this global target. Global value of immunization diminished by health inequalities Despite the target for global equitable access to immunization by organizations such as GAVI and the World Health Organization, there remains a [huge gap](https://pubmed.ncbi.nlm.nih.gov/30646979/) in levels of vaccine accessibility at both national and global levels. Low and middle-Income CountrieS have notably reduced access to vaccines, and within countries, social factors such as like conflict and [destitution](https://pubmed.ncbi.nlm.nih.gov/19884162/) have detrimental effects on immunization. Despite the global successes we have achieved with elimination of smallpox and near-elimination of polio, inadequate access remains a challenge in many regions in the world. Up to [15% of the world’s children](http://www.who.int/news-room/fact-sheets/detail/immunization-coverage) have no access to immunization, and [millions of children](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4024226/) still die from infections, including pneumonia and diarrhoea, many cases of which could be prevented by vaccination. Data showing that COVID-19 mortality rates are higher among BIPOC communities. Global vaccine inequity has been seen even more starkly in the pandemic where low-income countries have struggled to get access to vaccines. As of 4 March 2020, [many such countries](https://www.sciencenews.org/article/covid-19-global-inequity-vaccines-deaths-economy-pandemic) had yet to administer a single dose while many of their larger contemporaries had enough doses to inoculate their populations several times over. Our pleasant illusions of equitable access were quickly supplanted by the harsh reality of the perennial global economic disparities, and their tangible effects on global health were impossible to ignore. Vaccines are not a simply a product of UHC, they also drive UHC Regarding global health inequities, it is clear that universal health care (UHC) is an enabler of widespread immunization given its inclusive mandate of bringing all under the net of healthcare access. Greater access to healthcare services inevitably translates into greater opportunities for immunization. Interestingly, one may argue that this relationship also exists in the reverse, where the pursuit of routine and universal immunization itself can serve as a potent platform towards enabling coverage for all. Immunization is one of the few platforms that bring most households into contact with healthcare systems [five or more times](https://www.gavi.org/sites/default/files/publications/Immunisation%20-%20a%20platform%20for%20universal%20health%20coverage.pdf) during the first year of a child’s life. This offers a clear opportunity for providing additional primary healthcare services at these touchpoints, and we must consider whether it can serve as a platform upon which additional healthcare outcomes can be built. Furthermore, vaccines have indirect effects on driving access to healthcare resources through influencing the distribution of healthcare services. Through averting preventable diseases which consume copious health resources, vaccines permit the deployment of capabilities towards those who need them most. Immunization programmes take pressure off healthcare systems, enabling allocation of resources to the underserved, particularly around non-communicable diseases which are now responsible for [over 70%](https://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases) of global mortality. This phenomenon is shown in the pandemic, where greater levels of vaccine uptake have finally allowed for the allocation of resources towards other socially valuable initiatives. Graph showing how vaccines have reduced the burden (and therefore spending) of certain infectious diseases (measles, mumps, rubella). Finally, considering that poverty is a key factor standing in the way of UHC, it is clear that immunization permits the maximization of our economic potential and drives poverty reduction. It has been projected that vaccines administered between 2016 and 2030 will [prevent 24 million](https://www.gavi.org/sites/default/files/publications/Immunisation%20-%20a%20platform%20for%20universal%20health%20coverage.pdf) people in 41 of the world’s low and middle-income countries from falling into poverty, and has been shown to drive [significant value-creation](https://www.gavi.org/sites/default/files/publications/Immunisation%20-%20a%20platform%20for%20universal%20health%20coverage.pdf) – with every $1 invested in immunization driving a return of $54 in social and economic value. Speed of vaccine development brings hope for UHC COVID-19 has been our most pressing challenge, and our world has managed the mammoth task of condensing several years of vaccine development into a single year. The global health community has never been more connected, engaged and collaborative, and levels of interest in supporting immunization services, vaccine development and effective procurement systems have never been higher. True to the theme of World Immunization Week, vaccines have indeed “brought us closer” to economic, social and psychological normality. Necessity has been the mother of invention and several of the assets developed through this pandemic – immunization programmes, embracing health technology, and greater public health awareness – will serve us well in the days to come. The spirit of collaboration demonstrated between competing companies such as Pfizer and BioNTech illustrate the potential unlocked through collaboration and the power of resolve. With the second wind of hope promised by our experience with vaccines, it is hoped that we will be able to solve the problems in vaccine development against more complex infections, such as malaria and HIV, which have seen substantial but modest success in recent times. Significant progress has also been made in vaccine development against many non-infectious diseases such as Alzheimers and diabetes, and [therapeutic cancer vaccines](https://clincancerres.aacrjournals.org/content/27/3/689) remain promising. Greater levels of prevention, treatment and access to care are expected in the days to come and vaccines will continue to offer opportunities for expanding our ability to influence global health. No arm left behind Though we face an uncertain future, the pandemic has reminded us that we now live in a global village and that no one is safe until there is safety for all. It is hoped that we are able to take our immunizations, our learnings and our resolve and maintain commitment to the Immunization Agenda 2030 and SDG3. True to the words of Tedros Adhanom Ghebreyesus, Director-General of the [World Health Organization](https://www.devex.com/organizations/world-health-organization-who-30562), “There is no health for all without vaccines for all…” As we move beyond the pandemic and reflect on the idea that vaccines have indeed “brought us closer” let us ensure that in the days to come there is no man, woman or arm left behind.

#### CP competes - IP protections incentivize innovation – our pandemic response would be hindered without innovation through strong IP systems

Van Etten 07-15

(Megan Van Etten; senior director of public affairs at PhRMA, responsible for leading the association’s public affairs efforts on international issues, including trade, intellectual property and access to medicines, was director of media and external communications at the U.S. Chamber of Commerce; (07-15-21) Promoting global vaccine equity while protecting innovation; Pharma; <https://catalyst.phrma.org/promoting-global-vaccine-equity-while-protecting-innovation>; CKD)

America’s biopharmaceutical companies have successfully researched, developed and distributed billions of doses of multiple vaccines and therapeutics to halt the spread of COVID-19. The availability of COVID-19 vaccines has shifted the trajectory of the pandemic and is undoubtedly saving lives. Further, the approval of the first ever mRNA vaccines has the potential to usher in an era of groundbreaking mRNA applications beyond COVID-19. But the transformative promise of these vaccines only extends as far as patients’ ability to access them. Equitable distribution worldwide is critical. Despite significant cross-sector and multi-stakeholder efforts like COVAX, we are still seeing vaccine access and distribution challenges across many regions of the world due to complex barriers. Unfortunately, [some have focused](https://catalyst.phrma.org/the-biden-administration-allows-politics-to-upend-a-pragmatic-pandemic-response) their attention on a short-sighted and misguided “solution” that seeks to waive international commitments to honor intellectual property (IP) rights for COVID-19 vaccines under the World Trade Organization (WTO) Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). The approach fails to examine and address the real barriers to equitable vaccine distribution and could undermine the global pandemic response. Biopharmaceutical manufacturers, governments and non-governmental organizations must work together to take urgent steps to further address this inequity by: Stepping Up Dose Sharing A handful of countries secured contracts for COVID-19 vaccines during the early research and development phases, and as a result, have a larger supply of vaccines than needed. Manufacturers and governments in these countries must continue to work together to urgently and responsibly redirect meaningful proportions of these doses to low- and middle-income countries through COVAX and other established mechanisms. Continuing to Optimize Production The vaccine manufacturing process depends on a complex global network of suppliers of raw materials and equipment. The scale and speed at which these vaccines must be produced to keep up with the current demand is unprecedented. To address this challenge, vaccine manufacturers must work with governments and suppliers to undertake all practicable efforts to maximize COVID-19 vaccine output without compromising safety and quality. Calling out Trade Barriers To ensure supply chains are globally integrated, and for distribution systems to work efficiently, officials must remove trade barriers. It is critical that governments, in coordination with the WTO, work to eliminate all trade and regulatory barriers standing in the way of vaccine distribution and the procurement of the raw materials and components needed for the manufacturing process. Supporting Country Readiness Serious gaps in readiness across a significant number of countries need to be swiftly addressed to ensure that supplied doses are used and not destroyed. We urgently need cross-stakeholder collaboration—particularly in low- and middle-income countries—that supports vaccine roll-out and ensures countries are ready and able to deploy vaccines as efficiently as possible. Driving Further Innovation While the development of COVID-19 vaccines has been a remarkable feat, stakeholders must continue to prioritize policies and legal mechanisms that foster a strong innovation ecosystem, supported by IP incentives. Without this commitment to continuous innovation, our ability to swiftly address emerging COVID-19 variants and future pandemics is hindered. The COVID-19 innovations available today would not have been possible without strong IP systems that encourage innovation, protect novel ideas, enable critical partnerships and incentivize continued progress against deadly diseases. To ensure that patients around the world can access and realize the benefits of this astonishing progress, governments, the biopharmaceutical industry and non-governmental organizations must invest in solutions that comprehensively address the real issues driving inequities in vaccine distribution. America’s biopharmaceutical companies are focused on saving lives. Right now, that means more vaccines in more arms in countries around the world – without sacrificing safety or endangering production supply chains.

## Africa Instability DA

#### No Africa war and no impact to instability

Scott Straus 12, professor of politics at the University of Wisconsin, “Wars Do End! Changing Patterns of Political Violence in Sub-Saharan Africa,” afraf.oxfordjournals.org/content/early/2012/03/01/afraf.ads015.full

The principal finding is that in the twenty-first century both the volume and the character of civil wars have changed in significant ways.5 Civil wars are and have been the dominant form of warfare in Africa, but they have declined steeply in recent years, so that today there are half as many as in the 1990s. This change tracks global patterns of decline in warfare.6 While some students of African armed conflicts, such as Paul Williams, note the recent trend,7 it is fair to say that the change in the prevalence of civil wars is not recognized by most Africanists and generalists. Equally important but even less noted is that the character of warfare in Africa has changed. Today's wars are typically fought on the peripheries of states, and insurgents tend to be militarily weak and factionalized. The large wars that pitted major fighting forces against each other, in which insurgents threatened to capture a capital or to have enough power to secede, and in which insurgents held significant territory – from the Biafra secessionists in Nigeria, to UNITA in Angola, RENAMO in Mozambique, the TPLF in Ethiopia, the EPLF in Eritrea, the SPLM in Sudan, the NRM in Uganda and the RPF in Rwanda – are few and far between in contemporary sub-Saharan Africa. Somalia's Al-Shabab holds territory and represents a significant threat to the Somali federal transitional government, but given the 20-year void at the centre of Somalia the case is not representative. In April 2011, rebel forces in Côte d'Ivoire captured Abidjan, but they did so with external help and after incumbent Laurent Gbagbo, facing a phalanx of domestic, regional, and international opposition, tried to steal an election.8 More characteristic of the late 2000s and the early 2010s are the low-level insurgencies in Casamance (Senegal), the Ogaden (Ethiopia), the Caprivi strip (Namibia), northern Uganda (the Lord's Resistance Army), Cabinda (Angola), Nigeria (Boko Haram), Chad and the Central African Republic (various armed groups in the east), Sudan (Darfur), and South Sudan, as well as the insurgent-bandits in eastern Congo (a variety of armed actors, including Rwandan insurgents) and northern Mali (al-Qaeda in the Maghreb). Although these armed groups are in some cases capable of sowing terror and disruption, they tend to be small in size, internally divided, poorly structured and trained, and without access to heavy weapons.9 Several of today's rebel groups have strong transnational characteristics, that is, insurgents move fluidly between states. Few are at present a significant military threat to the governments they face or in a position to seize and hold large swaths of territory.

### 1NC – Hydro-cycle

#### Instability key to African rainforests- key to solve the hydro-cycle

DeCapua, VOA News staff, 12

(Joe, "African Rainforests Continue to Face Challenges," Voice of America News, www.voanews.com/english/news/africa/decapua-africa-rainforests-6jan12-136821648.html, accessed 1-15-12, mss)

The African continent contains about 30 percent of the world’s global rainforests, second only to the Amazon. Scientists and conservationists met at Oxford University to discuss changes the forests are expected to undergo in the 21st Century. Africa’s tropical forests face challenges from deforestation, hunting, logging and mining, as well as climate change. “Climate change is a major issue for much of the world, but for Africa, in particular. And there’s much interest and concern around Africa’s forests, which is the second largest area of tropical forest in the world after the Amazon forest. And yet there’s been very little synthesis of the research that’s there. There’s much less known about both climate and forest and people and there interaction in Africa compared to many other regions of the world,” said Yadvinder Malhi is a professor of ecosystems science at Oxford University and director of Oxford’s Center for Tropical Forests. He said the conference brought together experts in climate change, ecology, social sciences, economics, anthropology and archeology to discuss Africa’s rainforests. “They’re important at an international level for many reasons. They hold a large amount of carbon. They seem to be absorbing carbon from the atmosphere, which is slightly **slowing down the rate of climate change**. In the case of Africa, the **recycling of water.** So water that falls in the Congo region gets taken up in the roots of trees and evaporated back into the atmosphere where it forms clouds and new rain,” he said. The clouds that form over the Congo Basin actually have **long range effects on water supplies** and weather patterns in parts of Asia and even North America. West and Central Africa There’s a big difference between the forests of the Congo Basin and West Africa. Malhi says there’s been extensive deforestation in West Africa. Much of the land has been cleared for agriculture over the last 20 to 30 years. “When we look at the Congo Basin we see a very different situation. That’s an area that is at the moment almost all intact forest and has had relatively low rates of deforestation. And the reasons why those rates have been low are varied from country to country. But in the largest area, the Democratic Republic, **it’s been political instability and poor infrastructure linked to that instability that has meant that this large forest reserve has not** currently really **faced** very **heavy pressure**, at least compared to forests of Asia or the Amazon,” Malhi said.

#### Hydrologic cycle key to prevent extinction

Abreu et al, 5

(Francisco de Assis Matos de Abreu, André Montenegro Duarte, Mário Ramos Ribeiro, Ana Rosa Carriço de Lima and Wellington de Jesus Sousa. “The Hydrologic cycle: an open or closed system?” Revista Geográfica 137 (Jan-June 2005): p109)

This paper deals with the Hydrologic Cycle, a vital element for the Earth as a whole, and especially for life, climatic conditions and the planet's dynamic equilibrium, presenting it, based on the fundamental concepts of Thermodynamics and on the new knowledge and discoveries of geosciences, under two distinct foci: 1) As a Closed System, in the form in which it is currently conceived; 2) As an Open System, in the form in which this article proposes it be understood. Introduction Water is present in the Universe (1) as a whole and in other planets of the Solar System, but, from the evidence seen so far, only on Earth it is present in the three physical states (solid, liquid and gaseous). This fact, which is absolutely imperative for the existence of life, as it is conceived of and known, is due to the existence of a system called the hydrologic cycle, in which water not only alters its physical state, but also mores, both vertically and horizontally, and, as a result of the physical changes and spatial movements, is recycled and produces effects in living creatures (flora and fauna), and in inanimate objects, such as rocks and soils. The existence and importance of this cycle are undeniable. Barron et al. (1989) have noted that the history of the Earth is strongly influenced by the water cycle, be it in terms of the temperature variations resulting from gas and energy flows in the planetary atmosphere, the erosion and transport of sediments and consequent formation of relief, and soil and vegetation covering. Water's property of being a universal solvent makes it an essential part of chemical reactions and geochemical cycles. Thus, in almost all the processes inherent of the Earth System, water, inserted in its cycle, is present. Barron et al (1989) also recommended that the Hydrologic Cycle, so vital for the functioning of the Earth System, should be the main field of research with regard to global changes.

## Safety

#### Removing IP would cause ineffective and unsafe vaccines

Brougher MPH 3/30/21

Joanna T. Brougher, Esq., Mph &amp; Andrew Kingsbury, 3-30-2021, "Calls for Compulsory Licensing and IP Waivers of COVID-19 Vaccines Ignore Technical Complexities," IPWatchdog, <https://www.ipwatchdog.com/2021/03/30/calls-compulsory-licensing-ip-waivers-covid-19-vaccines-ignore-technical-complexities/id=131617/> // AW

While seeking compulsory licensing or IP waivers may seem an attractive solution to address technological disparities across human populations, these mechanisms ignore some of the more technical hurdles to increasing accessibility to vaccination. This post will first briefly explain what compulsory licensing and IP waivers are and then examine three possible causes for why compulsory licenses and IP waiver are not a feasible solution to the current COVID-19 pandemic. Compulsory Licensing One of the agreements that countries must ratify upon joining the World Trade Organization (WTO) is the Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS). The TRIPS Agreement was negotiated in 1994 to harmonize intellectual property laws across different countries and to establish minimum standards for protecting and enforcing intellectual property rights for all WTO member countries. There are several provisions under TRIPS that allow governments to provide for limitations to intellectual property rights. In [Article 31](https://www.wto.org/english/res_e/publications_e/ai17_e/trips_art31_oth.pdf), for instance, TRIPS allows governments to order domestic manufacturers to make a patented product without permission from the patent holder. This practice is known as compulsory licensing. Article 31 permits countries to engage in compulsory licensing if there is a “case of a national emergency or other circumstances of extreme urgency,” or in cases of “public non-commercial use.” Under these circumstances, the country is first required to negotiate with, or seek approval from, the patent holder of the drug, but if the negotiations fail, is ultimately just permitted to manufacture patented products, such as essential medicines, for its domestic market. For countries that cannot manufacture drugs themselves, and who would thus not be able to issue compulsory licenses under Article 31, Article 31bis was created to permit a developed country to export a generic drug under a compulsory license to a less developed country. IP Waivers Contrary to compulsory licensing, IP waivers simply ask that countries be exempt from the provisions of TRIPS that require countries to protect and enforce patent rights to COVID-19 treatments and vaccines. In October 2020, [India and South Africa petitioned the WTO](https://www.ipwatchdog.com/2021/01/02/india-south-africas-covid-vaccine-proposal-wto-patent-waiver-must-considered-compulsory-licensing/id=128652/) for a temporary waiver from specific provisions of the TRIPS Agreement that could essentially put entire realms of existing intellectual property law on hold at the international level until widespread vaccination has become globally implemented. Perhaps unsurprisingly, this proposal was met with strong resistance from developed nations while developing and less developed nations were more welcoming towards it. In March 2021, the proposal failed to pass resolution at the WTO. Covid-19 Vaccines are New What these proposals fail to take into account is the nature of the Pfizer and Moderna vaccines. The efficacy of both of these proposals turns on a country’s internal technological capabilities to recreate and administer the vaccine. The Pfizer and Moderna vaccines, however, are not typical vaccines. Whereas traditional vaccines functioned by introducing parts of a virus — or a weakened form of a virus — Pfizer’s and Moderna’s vaccines use messenger RNA to cause host cells to produce the protein themselves. These are the [first vaccines to utilize this type of technology](https://www.abc27.com/news/health/coronavirus/vaccination-frustration/digital-original-how-do-covid-19-vaccines-compare-to-other-vaccinations/). The novelty of these vaccines potentially degrades the utility of a compulsory license or IP waiver. For instance, remdesivir received a great deal of focus early in the pandemic. Bangladesh managed to recreate the drug without Gilead Science’s approval because it is exempt from Article 31 of TRIPS, and Bangladesh [was able to produce a sufficient supply for the country by the summer of 2020](https://patentlyo.com/patent/2021/01/shortages-compulsory-licensing.html) because information about the drug was available. Given the fact that Pfizer’s and Moderna’s vaccines represent a new form of vaccine, lacking technical information on how to make this new form of vaccine could lead the countries to create entirely ineffective vaccine replicas. These issues may be compounded by the fact that many vaccine manufactures [rely on trade secret protection more heavily](https://www.jdsupra.com/legalnews/trade-secret-protection-the-covid-19-37383/) following the [Ass’n for Molecular Pathology v. Myriad Genetics, Inc](https://www.leagle.com/decision/insco20130613e08). decision. These trade secrets can withhold critical scientific know-how that might be necessary for replicating a vaccine. Thus, the new technology behind these messenger RNA vaccines and the lack of accessibility to the related know-how might deter countries from attempting to manufacture them. Lack of Information Yet another more fundamental problem exists for replicating these vaccines. Not only do these vaccines represent a new form of vaccine, but information about these particular vaccines is simply unavailable. Even if the Pfizer and Moderna vaccines do not utilize any trade secrets, the discovery of these vaccines is fundamentally different than remdesivir’s timeline, which resulted in Bangladesh’s recreation of the drug. [A patent for remdesivir was filed as early as 2015](https://patents.google.com/patent/US20170071964A1/en), and thus the information had been publicly available for years. While the technology underlying mRNA vaccines has been in development for decades, there are likely specific technological hurdles associated with, for instance, the coronavirus, mass production and scale up, and delivery mechanisms that needed to be developed for this specific application of the legacy technology. This additional information will not be found in scientific journals or magazine articles, nor can it be found in any patent application, yet. Patents, moreover, can take up to 18 months from filing to be published. BioNTech made an [F-1 filing with the SEC](https://www.sec.gov/Archives/edgar/data/1776985/000119312520195911/d939702df1.htm) on July 21, 2020, in which it acknowledged its partnership with Pfizer to develop the vaccine. If this filling is at all indicative of when a patent could have been filed, then this would mean the patent may not be available to the public until late-2021–mid-2022. With Novelty Comes Difficulty The newness of these vaccines also creates problems due to the complexity in how these types of vaccines function and how to produce them. According to a [Wall Street Journal report](https://www.wsj.com/articles/mrna-covid-19-vaccines-are-fast-to-make-but-hard-to-scale-11614776401), manufactures say that vaccine production is difficult both “because some steps are difficult to scale up quickly or because they simply haven’t been done before.” Even Pfizer is [having difficulty obtaining](https://www.wsj.com/articles/pfizer-slashed-its-covid-19-vaccine-rollout-target-after-facing-supply-chain-obstacles-11607027787) the necessary materials for vaccine production. Here, the complexity of these vaccines demonstrates the potential futility of a compulsory license or IP waivers. Even if other countries could compel manufactures to license the underlying intellectual property and provided them with the information about how to do so, the complexity of manufacturing these types of vaccines could be a particularly high barrier to overcome. It’s Complicated Countries face roadblocks for producing a viable vaccine candidate based on Pfizer’s and Moderna’s vaccines. The new technology that utilizes messenger RNA vaccines, coupled with the lack of public information about these vaccines and the vaccines’ complicated nature, present significant hurdles to seeking compulsory licenses or IP waivers.

#### The plan leads to uncontrolled use of patented technologies, which turns vaccine access, and causes dangerous health consequences.

Crosby and Diamond ‘21

(Daniel Crosby JD@Washington University of Law, Evan Diamond JD@Harvard Law School M.S. Biochemistry@UPenn, Isabel Fernandez de la Cuesta JD@Complutense University Madrid, Jamieson Greer JD@University of Virginia Law School, Jeffery Telep JD@University of Florida, Brian White JD@University of Virginia, “Group of Nearly 60 WTO Members Seek Unprecedented Waiver from WTO Intellectual Property Protection for Covid-related Medical Projects” <https://www.jdsupra.com/legalnews/group-of-nearly-60-wto-members-seek-2523821/>, March 05)

Waiver risks uncontrolled use of patented technologies, without improving vaccine access.Pharmaceutical companies can provide, and have provided, licenses to distribute or scale-up production of COVID-19 vaccines and therapies at reduced cost. Such license agreements allow for expanded access in low- and middle-income countries, while also setting reasonable parameters so that patents and other IP rights are used to address the specific medical needs of the COVID-19 pandemic at hand, and not for other purposes. License agreements also allow for orderly technology transfer, including of unpatented “trade secret” information and other critical “know-how,” that may be essential to efficiently producing and scaling-up safe and effective versions of technologically complex vaccines and biologic drug products. Under the present TRIPS waiver proposal, however, member countries could try to exploit an extraordinarily broad scope of IP and copy patented technologies so long as they are “in relation to prevention, containment or treatment of COVID-19.” For example, under an expansive reading of the proposed waiver language, a member country could try to produce patented pharmaceutical compounds that have other indicated uses predating COVID-19, if such compounds had later been studied or experimentally used for potential symptomatic relief or antiviral activity in COVID-19 patients. The same risks may be faced by manufacturers of patented materials or devices that have multiple uses predating COVID-19, but also may be used as “personal protective equipment” or components thereof, or in other measures arguably relating to COVID-19 “prevention” or “containment.”At the same time, it is unclear how the proposed TRIPS waiver could provide the technology transfer and know-how critical for making the complex molecules and formulations constituting the various COVID-19 vaccines. Vaccine manufacture undertaken by an unauthorized party without the proper processes and controls could result in a different product that is potentially ineffective or results in unwanted health consequences. And even if an unauthorized manufacturer could overcome those substantial hurdles to reverse-engineer and scale up a safe and effective vaccine copy, it would likely take substantial time and a series of failures to do so. Notably, several of the original COVID-19 vaccine developers have recently faced low product yield and other manufacturing challenges during pre-commercial scale-up efforts and the initial months of commercial production.

#### Any imperfection in LIC implementation leads to vaccine skepticism – low bar for offense and turns case

Trogen et al 20

Brit Trogen (Md, Ms1), David Oshinsky ( PhD), Arthur Kaplan (PhD) 1-28-2020, "Rushing a SARS-CoV-2 Vaccine: Potential for Harm," JAMA, <https://jamanetwork.com/journals/jama/fullarticle/2766651%20> // AW

As the SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) pandemic persists across the US and the world, the spotlight on vaccine science has never been more intense. Researchers across the globe are working rapidly to produce a potential vaccine, and 7 candidates are already in clinical trials.[1](https://jamanetwork.com/journals/jama/fullarticle/2766651%20#jvp200112r1) Operation Warp Speed, the vaccine development project announced by President Trump, has advocated for a vaccine to be made available in the US by the beginning of 2021.[1](https://jamanetwork.com/journals/jama/fullarticle/2766651%20#jvp200112r1) But for scientists and physicians, the term “warp speed” should trigger concern. Good science requires rigor, discipline, and deliberate caution. Any medical therapy approved for public use in the absence of extensive safeguards has the potential to cause harm, not only for COVID-19 prevention efforts and vaccine recipients, but also for public trust in vaccination efforts worldwide. Long before coronavirus disease 2019 (COVID-19), vaccine hesitancy and refusal were increasing.[2](https://jamanetwork.com/journals/jama/fullarticle/2766651%20#jvp200112r2) In 2019, the World Health Organization listed vaccine refusal as one of the top 10 global health threats.[3](https://jamanetwork.com/journals/jama/fullarticle/2766651%20#jvp200112r3) Pediatricians, in particular, frequently encounter resistance to childhood vaccinations, and as a result, outbreaks of measles and other vaccine-preventable illnesses, such as pertussis and influenza, have increased in recent decades.[4](https://jamanetwork.com/journals/jama/fullarticle/2766651%20#jvp200112r4) Much of the distrust of vaccines (and, by extension, the physicians and scientists who promote them) is driven by widespread misinformation from both online sources and skeptical communities.[2](https://jamanetwork.com/journals/jama/fullarticle/2766651%20#jvp200112r2),[4](https://jamanetwork.com/journals/jama/fullarticle/2766651%20#jvp200112r4) The belief that vaccines cause harmful adverse effects like autism has persisted despite carefully designed research studies that have refuted such claims. When physicians promote vaccines, they do so knowing that the benefits far outweigh the minimal risks, and that each vaccine has been studied extensively to establish its safety profile. Yet vaccine opponents frequently accuse physicians and researchers of failing in this respect, citing financial or political interests as the motivation for promoting vaccines. As the search for a SARS-CoV-2 vaccine accelerates, physicians and **scientists who wish to maintain the public’s trust must not promote a vaccine that has either bypassed established safety standards or is open to a serious charge of having done so. There is grim historical precedent** for allowing expediency to rule vaccine development. In 1955, the inactivated polio vaccine developed by Jonas Salk was declared “safe, potent, and effective” following the largest public health experiment in the nation’s history, involving more than a million schoolchildren.[5](https://jamanetwork.com/journals/jama/fullarticle/2766651%20#jvp200112r5) Within weeks, however, the miracle vaccine intended to end the scourge of polio stood accused of causing it. Years in development, the Salk vaccine had been rigorously tested in preparation for the massive trials. But the very success of these trials led to an understandable outcry for the immediate, but premature, public release of the vaccine. Five pharmaceutical companies were given Salk’s formula and left to produce the vaccine without significant oversight. As speed took precedence over caution, serious mistakes went unreported.[5](https://jamanetwork.com/journals/jama/fullarticle/2766651%20#jvp200112r5) One company, Cutter Laboratories, distributed a vaccine so contaminated with live poliovirus that 70 000 children who received that vaccine developed muscle weakness, 164 were permanently paralyzed, and 10 died.[6](https://jamanetwork.com/journals/jama/fullarticle/2766651%20#jvp200112r6) Not surprisingly, that incident forced the federal government to directly intervene. The legacy of this event is a regulatory landscape in which vaccines undergo thousands of tests to ensure their safety and effectiveness.[6](https://jamanetwork.com/journals/jama/fullarticle/2766651%20#jvp200112r6) Yet on rare occasions, this vital evidence-based process of vaccine development and testing has still been ignored. In 1976, concerns about the emergence of a new swine flu strain reminiscent of the lethal 1918 version led President Gerald Ford to convene a panel that recommended a government-backed mass vaccination program.[7](https://jamanetwork.com/journals/jama/fullarticle/2766651%20#jvp200112r7) Poorly conceived, the attempt to vaccinate the US population at breakneck speed failed in virtually every respect. Safety standards deteriorated as one manufacturer produced the incorrect strain. The vaccine tested poorly on children who, depending on the form of vaccine tested, either developed adverse reactions with high fevers and sore arms or did not mount an immune response at all. Reports emerged that the vaccine appeared to cause Guillain-Barré syndrome in a very small number of cases, a finding that remains controversial, but added to the early momentum of the antivaccine movement.[7](https://jamanetwork.com/journals/jama/fullarticle/2766651%20#jvp200112r7) Once again, the pressure to rapidly distribute a vaccine undermined the scientific integrity of the process and damaged public trust. COVID-19 has created intense concern and uncertainty in the US and throughout the world. There are immense public and political pressures to develop a new vaccine, a process that typically takes years, not months. But as history warns, these pressures must not supplant rigorous scientific practice. Proceeding stepwise through the phases of clinical trials is the ethical standard for investigations involving human research participants. Adherence to the scientific method is the only way to safeguard against a SARS-CoV-2 vaccine that is ineffective, or worse, carries unacceptable adverse effects. Failing to abide by standards of safety and scientific rigor during the COVID-19 crisis will fuel the argument that physicians and scientists cannot be trusted. Vaccination rates, which are declining due to widespread concern about visiting clinicians’ offices, could further decrease. The US could see resurgences of many vaccine-preventable illnesses, and inevitably, massive increases in avoidable deaths and irreversible outcomes. There are, however, reasons to hope that these scenarios will not come to pass. In response to past failures, vaccine development in the US is subject to increased regulatory oversight designed to protect against substandard practices. Technological advances permit the rapid communication of adverse events in clinical trials, and the understanding of the genetic factors influencing immunologic responses has increased. To proactively address safety concerns, these and other safeguards should be clearly communicated to the public during the vaccine development process. Both the public and the scientific community want an effective and safe intervention to prevent COVID-19. The morbidity, mortality, and societal and financial devastation that SARS-CoV-2 has caused throughout the world will have wide-reaching consequences for almost every aspect of life for years to come. Nothing should dampen the ardor of researchers worldwide in the aggressive search for effective treatments. In this unprecedented crisis, novel trial designs, such as those that include challenge studies, should be carefully considered.[8](https://jamanetwork.com/journals/jama/fullarticle/2766651%20#jvp200112r8) But what cannot and must not be allowed is for desperation to result in the suspension of scientific principles and ethical research values. Physicians should not administer inadequately vetted vaccines; researchers should not endorse them without sufficient data. The scientific community has only one chance at winning public acceptance of a SARS-CoV-2 vaccine. The likelihood of achieving that goal will depend on convincing evidence of vaccine safety and efficacy.

## Vac Dip CP

#### Text: The People’s Republic of China should offer Chinese developed vaccines and medical technology related to COVID-19 to the world for free

#### The CP massively ramps up Chinese “vaccine diplomacy” which solves the case

Juecheng and Yuwei 8-13-21

(Zhao and Hu, https://www.globaltimes.cn/page/202108/1231387.shtml)

One of China’s most valued contributions to the global fair accessibility to COVID-19 vaccines is to enable more developing countries to hone their ability to produce vaccines by themselves, Zha Daojiong, professor of International Political Economy from Peking University, who closely studies the global vaccine equitable allocation framework, told the Global Times in a recent exclusive interview. Sharing his insights on widely discussed “vaccine nationalism,” “wavering vaccine intellectual property,” and “COVAX operation challenges,” Zha believes that China is advocating negotiations among countries on equitable global distribution of vaccines from a humanitarian, and global perspective. China has vowed to make efforts to provide the world with 2 billion doses of COVID-19 vaccines this year and donate $100 million to COVAX to promote global vaccine provision. This commitment comes amid the rampaging Delta variant, which is bringing more challenges for developing countries to access vaccines and combat the pandemic while the West continues to drag its heels in fulfilling its promises. The promise was made at the first meeting of a forum on international cooperation on COVID-19 vaccines held on August 5. Zha suggested that the forum, alongside the Initiative for Belt and Road Partnership on COVID-19 Vaccine Cooperation, reflect China’s efforts to support long-term cooperation in the vaccine industry globally. However, some Western media have labeled China and Russia as the pioneers of the global "vaccine diplomacy" campaign. The choice of vaccines by countries has become the epitome of global geopolitics.   Foreign comments on China using "vaccine diplomacy" in a narrow geopolitical sense reflect the real competition among COVID-19 vaccine providers, Zha told the Global Times. Due to China’s mature vaccine technologies, longer shelf life and lower requirement for storage and transportation, Chinese made vaccines are a more preferable choice for many developing countries with relatively weak vaccination infrastructure . This has been reflected in the approval of Chinese vaccines in more than 100 countries. But the phenomenon of “vaccine nationalism” was never absent in the decision by governments to choose vaccines, Zha suggested. “For example, some countries and regions would include geopolitical factors in choosing vaccines. These countries would reject certain vaccines. Moreover, some media outlets refuse to accept the fact that the professional assessment of vaccine efficacy is also a scientific process. Instead, they made comments on potential vaccines based on their geopolitical interests. This is also a kind of “vaccine nationalism”. Voices blaming “vaccine nationalism” have long been present in developed countries. For instance, Zha recalled how, during the H1N1 pandemic of 2009 which affected more than 200 countries and regions for more than a year, certain developed countries bought out entire stocks of vaccines against H1N1 once they were developed. Though some of those countries had promised to donate vaccines to others after they met their vaccination needs, the virus had long disappeared before their donations were made. Therefore, many in other nations lost the opportunity of a timely vaccination. Providing assistance from one country to another in the field of infectious or non-infectious diseases is often referred to as "health diplomacy." Some international public health research literature support "health diplomacy" because cooperation in this field is conducive to the improvement of political, economic and diplomatic relations, Zha said. China has taken important steps to close the global vaccine gap, including the acceleration of large-scale production, boosting fair distribution, and licensing local production in more countries.

#### Successful vaccine diplomacy is key to overall Chinese Soft Power

Huang, PhD, 3-11-21

(YANZHONG HUANG is Senior Fellow for Global Health at the Council on Foreign Relations, a Professor at Seton Hall University’s School of Diplomacy and International Relations, and Director of the school’s Center for Global Health Studies. https://www.foreignaffairs.com/articles/china/2021-03-11/vaccine-diplomacy-paying-china )

Vaccines have had a place in diplomacy since the Cold War era. The country that can manufacture and distribute lifesaving injections to others less fortunate sees a return on its investment in the form of soft power: prestige, goodwill, perhaps a degree of indebtedness, even awe. Today the country moving fastest toward consolidating these gains may be China, under President Xi Jinping, who proclaimed last May that Chinese-made vaccines against COVID-19 would become a “global public good.” Since that time, top officials have promised many developing countries priority access to Chinese vaccines, and the Chinese Foreign Ministry has announced that the country is providing free vaccines to 69 countries and commercially exporting them to 28 more. China’s competitors worry that where Beijing’s inoculations go, its influence will follow. But the field of COVID-19 vaccination is still a largely uncharted one and scattered with barriers, whether logistical, scientific, psychological, or geopolitical. China’s path through this labyrinth is neither obvious nor assured. The country faces stiffening competition from Russia and India. Now the United States, too, has entered the global stakes for equitable distribution of safe and effective vaccines. China has yet to prove that it can fulfill the role it has taken on or win the trust of those it has offered to aid. CHINA'S STAKE The Chinese government dislikes the term “vaccine diplomacy.” The implication that China would distribute vaccine doses in order to broaden its global political influence is a “sinister” one, according to the official Xinhua News Agency. Rather, the Chinese government contends that “in promoting cooperation in combating the pandemic, China does not seek any geopolitical goals or have any economic interest considerations, and it has never attached any political strings.” Xi has further stressed that by distributing necessary goods in a crisis, China is merely acting as a responsible great power should. In this regard, China may seek to succeed with vaccines where it failed with masks: last spring, quality-control issues and clumsy propaganda tarnished the country’s efforts to supply medical products to the developed world. Now China is looking to showcase its global health leadership to lower- and middle-income countries, where it is distributing vaccines. But Beijing surely has additional foreign policy objectives in mind. China began its vaccine development projects early last spring, and state media made quite clear that through them, China hoped to demonstrate its technological prowess and the superiority of its authoritarian model of governance. “We are not lagging behind the United States as far as the technology is concerned,” a Chinese virologist told the state-backed Global Times. Another scientist highlighted China’s “system advantages”: “The United States is no match for China in terms of concentrating power to accomplish big things.” Indeed, unlike in the United States, vaccine development in China was a highly state-driven process. The Chinese government simultaneously pushed several technological approaches, including inactivated vaccines, mRNA vaccines, and adenovirus vector vaccines. It mobilized at least 22 institutes and firms to work on 17 vaccine development projects. And until last summer, China was leading the global race in vaccine development. It developed a vaccine (Ad5-nCoV) as early as February 2020, started Phase 1 clinical trials on March 16, and published results of the trials in late May. General Chen Wei, the face of China’s vaccine development operation, celebrated such achievements as “an embodiment of our country’s S&T progress, an embodiment of China’s great-power image and responsibility, and, even more, a contribution to humankind.” Behind such lofty goals lie commercial objectives, too. Health-related development assistance has long offered Chinese pharmaceutical companies a low-cost means of expanding their market share in the developing world. In March 2020, President Xi explicitly linked the shipment of medical supplies overseas to the “Health Silk Road,” now an important component of the Belt and Road Initiative. Xiaofeng Liang, a former deputy director of the Chinese Center for Disease Control and Prevention, has publicly called for prioritizing BRI countries for access to Chinese vaccines. But the opportunity hardly ends there. Prior to the COVID-19 pandemic, few Chinese pharmaceutical companies had received World Health Organization prequalification to supply medical products to international organizations and donor funds. In 2019, China’s share in the value of UN-procured medical products was only 1.9 percent, compared with 21.9 percent for India. Chinese media lamented that of the 155 WHO-prequalified vaccines, only four were from China, compared with 44 from India. Indeed, Indian pharmaceutical firms produced more than 60 percent of the vaccines sold worldwide. The huge global demand for COVID-19 vaccines and “vaccine nationalism” in wealthy nations have created a great opportunity for China to break into a market that Indian and Western pharmaceutical firms have long dominated. If the vaccine were priced at $10 per dose with a 40 percent net profit margin, even a 15 percent share of the vaccine market in lower- and middle-income countries would generate total sales of $10.8 billion and a profit of $4.32 billion for the Chinese economy. In reality, Chinese vaccines are often priced higher than $10.

#### Chinese leadership stops global secessionist conflict

Griffiths 16 **-** Senior Lecturer in the Department of Government and International Relations at the University of Sydney (Ryan, States, Nations, and Territorial Stability: Why Chinese Hegemony Would Be Better for International Order, Security Studies, 25:3, 519-545, DOI: 10.1080/09636412.2016.1195628)

I began the article by claiming that the Pax Sinica would be better for international order. In making this claim I define “better” in narrow terms emphasizing territorial stability, which can be assessed in several ways. How often do either external aggressors or internal separatists shift sovereign borders through violence? What is the frequency of secessionist civil war? How much international discord is there on the topic of secession and recognition? This is the ledger I use when comparing the Pax Sinica with the post-1945 American-led order. There are many other factors, to be sure, and critics might point to a number of ways in which Chinese hegemony would be worse. For example, they may question the support for human rights under Chinese leadership. I do not argue that Chinese hegemony would be better in all ways—there are pros and cons to any order—but I contend that there are net benefits where territorial stability is concerned. Analyzed under these terms the key differences between the American order and the imagined Chinese order have to do with the politics of secession and sovereign recognition. International order matters because it determines diplomatic practices and shapes behavior. It sets the rules of the game. The American-led order over the last seventy years has attempted to balance the norms of territorial integrity and self-determination by establishing rules for what nations are eligible for independence. But, as Fabry notes, that is an enormously challenging project because developing clear rules that separate the lucky from the unlucky requires that states derive agreed-upon criteria in a constitutive process.73 Given the politics and conflicting principles of international life (and the evolving nature of normative arguments), inconsistency, ambiguity, and accusations of hypocrisy are unavoidable. The resulting political space creates uncertainty for states and nationalist movements over when self-determination applies and when it should be subordinated to territorial integrity. Incidents like the Ukrainian crisis cast a shadow over separatist crises elsewhere. The leadership in Azerbaijan detects double standards in American policy, wondering why it “punishes Russia for annexing Crimea, but not Armenia for similar behavior in Karabakh.”74 Such uncertainly can makes states feel vulnerable, as it has in Azerbaijan, change the incentives for key actors, and increase the chance of conflict. Secessionist civil war is a common feature of contemporary times. Scholars estimate that at least half of the civil wars since 1945 have involved secessionism, and Barbara F. Walter argues that secessionism is the chief source of violence in the world today.75 Erica Chenowith and Maria Stephan find that secessionism is one of the few (if only) forms of political protest where violent tactics are more effective than nonviolent.76 Meanwhile, Tanisha Fazal and I identify fifty-five secessionist movements as of 2011 and record that many of these movements feel they have a reasonable chance of gaining independence in light of the somewhat flexible practices surrounding recognition.77 Given the strategic environment in which secessionists operate, where violence can be effective and where sovereignty is thought to be obtainable, it should come as no surprise that conflict is common. In regard to territorial stability, the concern of contemporary times is not traditional territorial conquest, but the threat posed by state fragmentation.78 This is where Chinese hegemony ought to improve international order.

## case

### WTO Collapse

#### Debate over vaccines is inconsequential to WTO cred- prefer other factors such as developed members avoiding obligations, the dysfunctional Appellate Body, and an inability to monitor trade

Grassley & Wyden 19 [Chuck Grassley, US Senator from Iowa and chairman of the Senate Finance Committee, and Ron Wyden, US Senator from Oregon and ranking member of the Senate Finance Committee. “The World Trade Organization is faltering. The US can’t fix it alone.” October 10, 2019. <https://www.cnn.com/2019/10/10/perspectives/world-trade-organization-grassley-reform/index.html>] AL

With the World Trade Organization Public Forum underway in Geneva, it is time for members to confront and address the problems that are eroding the WTO’s credibility and effectiveness. These are problems that, if left unresolved, will endanger the WTO’s future relevance. Today, the WTO is where nations negotiate the rules for international trade and resolve disputes that arise when a trading partner believes the rules aren’t being followed. This trading system has been critical to helping reduce global poverty rates, which have shrunk even while the global population has expanded. We support the WTO’s mission, but we are growing frustrated that the institution is not fully and effectively performing its intended functions. First, while the WTO was intended to be a forum for multilateral trade negotiations, it has proven difficult to come to agreements that give a fair shot to all nations, not just wealthier countries that can subsidize their industries. In addition, some WTO members that have advanced economies are claiming “developing country status” in order to avoid their trade obligations. For years, economic powerhouses, like China, have relied on this self-designation to shirk WTO commitments in critical areas such as agriculture and illegal subsidies. This hinders progress for members that want to expand trade and commerce and undermines the integrity of the WTO itself. This is why we support the US proposal to change the way the WTO treats developing countries, which is targeted at strengthening the negotiating function of the organization. Still, two ongoing projects offer the WTO a chance to get it right. Negotiations are underway to curtail the fish subsidies that have long promoted overfishing and unfair competition and to decrease barriers to e-commerce and digitally-supported trade. If concluded, these agreements would demonstrate that the WTO can still serve as the institution it was intended to be. Second, while the WTO serves as a forum to settle disputes among its members, we have serious concerns about the degree to which the system is working. The Appellate Body – the quasi-judicial review forum used to take a second look into dispute decisions – has long strayed off course from its original form and function. Our concerns about systemic and procedural problems with the Appellate Body are not new, nor are they partisan. US presidents on both sides of the aisle have taken issue with Appellate Body members addressing issues that were not raised by the parties to involved in the dispute, taking longer than 90 days to decide appeals, and creating new rights and obligations for WTO members – all against the terms of the Dispute Settlement Understanding. We see great value in having an institution like the Appellate Body that ensures dispute panels faithfully apply the rules to which we all agreed. However, the Appellate Body also needs to operate as the members agreed. Lastly, the WTO must improve its ability to monitor member states’ trade policies and practices. Some WTO members, like China, consistently fail to meet their obligations to accurately report the subsidies they provide to domestic industries. In other cases, members have failed to disclose measures that affect international trade, such as India’s ban on US agricultural products for alleged safety concerns, which the WTO ultimately found to be disguised protectionism, or China’s various cybersecurity requirements on information and communication technology. This is unacceptable. A number of countries regularly take advantage of other WTO members that comply with notification and transparency rules while ignoring their own obligations. The United States has advocated for measures that would incentivize the member states to abide by the rules by providing for consequences in cases of noncompliance, such as loss of privileges to chair WTO bodies.

### india

#### India COVID crisis has peaked w/out indo pak conflict – card 4 months old and proven wrong by the fact that there is still peace

Ellyatt 21

Holly Ellyatt, 7-21-2021, “After being ravaged by the delta Covid variant, how is India doing now?,” CNBC, [https://www.cnbc.com/2021/07/23/coronavirus-how-india-is-doing-now-after-delta-variant-spread.html //](https://www.cnbc.com/2021/07/23/coronavirus-how-india-is-doing-now-after-delta-variant-spread.html%20//) AW

The situation is still bad, data shows, but not as bad as it was when the second wave peaked in the country, when daily new cases were more than 400,000. On May 7, [India reported a staggering 414,188 new infections](https://www.cnbc.com/2021/05/14/india-covid-crisis-cases-rise-but-remain-below-may-7-peak.html) and several thousand deaths.

Fortunately, [cases have declined significantly since then](https://pib.gov.in/PressReleasePage.aspx?PRID=1737607). On Thursday, India reported 41,383 new coronavirus infections and 507 new deaths, the Indian Health Ministry tweeted.

### gen

#### Covid-19 is being brought under control now—vaccination efforts, immunity, etc

Byjillian **Kramer,** 8-06-20**21**,

"How will the pandemic end? The science of past outbreaks offers clues.," Science, <https://www.nationalgeographic.com/science/article/how-will-the-pandemic-end-the-science-of-past-outbreaks-offers-clues>

When the worldwide spread of a disease is brought under control in a localized area, it’s no longer a pandemic but an epidemic, according to the WHO. If COVID-19 persists globally at what the WHO judges to be “expected or normal levels,” the organization will then re-designate the disease “endemic.” At that stage, SARS-CoV-2 will become a circulating virus that’s “less consequential as we build immunity,” says [Saad Omer](https://medicine.yale.edu/yigh/profile/saad_omer/), an epidemiologist and director of the Yale Institute for Global Health. ([Read more about how we’ll live with COVID-19 as an endemic disease](https://www.nationalgeographic.com/science/article/covid-19-will-likely-be-with-us-forever-heres-how-well-live-with-it).) Only [two diseases](https://asm.org/Articles/2020/March/Disease-Eradication-What-Does-It-Take-to-Wipe-out) in recorded history that affect humans or other animals have ever been eradicated: smallpox, a life-threatening disease for people that covers bodies in painful blisters, and rinderpest, a viral malady that infected and killed cattle. In both instances, intensive global vaccination campaigns brought new infections to a halt. The [last confirmed case of rinderpest](https://www.theguardian.com/science/2010/oct/14/rinderpest-virus-eradicated) was detected in Kenya in 2001, while the [last known smallpox case](https://www.cdc.gov/smallpox/history/history.html) occurred in the U.K. in 1978. [Joshua Epstein](https://publichealth.nyu.edu/faculty/joshua-epstein), professor of epidemiology in the New York University School of Global Public Health and founding director of its Agent-Based Modeling Laboratory, argues that eradication is so rare that the word should be wiped from our disease vocabulary. Diseases “retreat to their animal reservoirs, or they mutate at low levels,” he says. “But they don’t typically literally disappear from the global biome.” There is no one definition of what the end of a pandemic means. RACHAEL PILTCH-LOEBHARVARD T.H. CHAN SCHOOL OF PUBLIC HEALTH Most causes of past pandemics are still with us today. More than [3,000 people caught the bacteria that cause both bubonic and pneumonic plague](https://www.who.int/en/news-room/fact-sheets/detail/plague) between 2010 and 2015, according to the WHO. And the virus behind the 1918 flu pandemic that ravaged the globe, killing at least 50 million people, ultimately morphed into less lethal variants, with its [descendants becoming strains of the seasonal flu](https://www.nejm.org/doi/full/10.1056/nejmp0904819). As with the 1918 flu, it’s likely the SARS-CoV-2 virus will continue to mutate, and the human immune system would eventually adapt to fend it off without shots—but not before many people fell ill and died. “Developing immunity the hard way is not a solution that we should be aspiring to,” Omer says. Finding ways to slow the spread of a disease and manage its effects is by far the safer path, experts say. Today, for instance, pest control and advanced hygiene keep the plague at bay, while any new cases can be treated with antibiotics. For other diseases, such as the flu, vaccines can also make a difference. The available COVID-19 vaccines are highly safe and effective, which means getting enough people vaccinated can end this pandemic faster and with lower mortality than natural infections alone. Why we need vaccines for all WHO Director Tedros Adhanom Ghebreyesus last week reinstated a goal of vaccinating at least 10 percent of every nation’s population by September, with the loftier goal of reaching 40 percent global inoculation by year’s end and 70 percent by mid-2022.

#### Tech transfer is key and not included under IP

Smith 05/05

(Laura Smith-Spark; Newsdesk Editor, CNN Digital; (05-05-21) Rich nations urged to share vaccine knowledge while WTO debates waiving patents; CNN; <https://www.cnn.com/2021/05/05/world/covid-19-vaccine-patents-wto-intl/index.html>; CKD)

Thomas Bollyky, director of the Global Health Program at the Council on Foreign Relations, told CNN on Friday that what's really needed to scale up global manufacturing of vaccines is technology transfer. "It's not just a matter of intellectual property. It's also the transfer of know-how," he said. "I don't think there's clear evidence that a waiver of an intellectual property is going to be the best way for that technology transfer to occur." Waiving patents will not work in the same way for vaccines as it has for drugs, Bollyky said. For HIV drugs, for example, manufacturers were more or less able to reverse engineer them without much help from the original developer. "It's very different for vaccines, where it's really a biological process as much as a product. It's hard to scale up manufacturing in this process for the original company, let alone another manufacturer trying to figure this out without assistance," he said. "It requires a lot of knowledge that's not part of the IP." The deal between AstraZeneca and the Serum Institute of India is a successful example of such technology transfer, Bollyky said, where the licensing of IP happened voluntarily. "The question is what can we do to facilitate more deals like the one between AstraZeneca and the Serum Institute of India to have this transfer," he said. Michael Head, senior research fellow in global health at the University of Southampton, in England, told CNN that increasing regional manufacturing capacity, particularly in the global south, was key -- and should be a focus between pandemics. "Sharing intellectual property during the pandemic is something that should happen but that doesn't resolve the issues," he said. "Manufacturing vaccines is hard. It's hard to rapidly set up a new site with all the equipment, infrastructure, all the vaccine ingredients, with suitable staff to produce a large number of high quality vaccine products." Philanthropist Bill Gates, a major supporter of [global Covid-19 vaccine equity](https://www.cnn.com/2021/02/05/world/covax-explainer-intl/index.html) through the Bill & Melinda Gates Foundation, also [told Sky News](https://news.sky.com/story/covid-19-bill-gates-hopeful-world-completely-back-to-normal-by-end-of-2022-and-vaccine-sharing-to-ramp-up-12285840) last month that he did not believe overriding IP rules was the answer. "There's only so many vaccine factories in the world and people are very serious about the safety of vaccines," he said. "The thing that's holding things back in this case is not intellectual property. There's not, like, some idle vaccine factory with regulatory approval that makes magically safe vaccines. You've got to do the trials on these things and every manufacturing process has to be looked at in a very careful way."

#### Aff doesn’t attack all of the root causes of disease spread- lack of materials, equipment, and facilities when faced with skyrocketed demands means solving IP protections alone isnt enough