# 1AC – New Version 9/17

### 1AC – Advantage

#### The advantage is global vaccination –

#### Experts agree current vaccination initiatives fail – Global South manufacturing capacity is key

Maxmen, Ph.D., 9/16 [Amy Maxmen, PhD, 9/16/21, Senior Reporter at Nature, “The fight to manufacture COVID vaccines in lower-income countries,” Nature, https://doi.org/10.1038/d41586-021-02383-z//lhs-ap]

Vaccines against COVID-19 are not reaching many people in the global south, despite donations from wealthy nations. Less than 1% of people in low-income countries are fully vaccinated, and just 10% are in lower-middle-income countries, compared with more than half in high-income countries.

Many researchers say the best way to ensure equitable access to COVID-19 vaccines is to enable countries in the global south to make their own. “Charity is good, but we can’t rely on charity alone,” says Peter Singer, an adviser to the director-general of the World Health Organization (WHO).

Since last year, health-advocacy organizations have been pressing pharmaceutical companies and governments that developed highly effective vaccines to share their patented knowledge and technology with drug manufacturers that could produce them for poorer countries. These vaccines include the messenger-RNA jabs created by Moderna in Cambridge, Massachusetts, and Pfizer in New York City and BioNTech in Mainz, Germany, and a viral-vector vaccine developed by Johnson & Johnson (J&J) in New Brunswick, New Jersey.

Calls to manufacture more vaccines in the global south have grown louder in advance of high-level pandemic discussions at the United Nations General Assembly, which began this week, and a US-led, Global COVID-19 Summit on 22 September. Advocates are clamouring for a variety of approaches. Some had pointed to the deployment of the Sputnik V vaccine as a model of pandemic diplomacy. Russia broadly licensed the jab to 34 drug companies outside its borders, including several in India and Brazil. But manufacturers are now saying that the second dose of the vaccine — which has a different composition than the first — is difficult to produce in large quantities.

In a letter signed by several Indian civil society groups — shared with Nature — advocates are urging US President Joe Biden to compel J&J to partner with drug companies in the global south, arguing that those making Sputnik V could easily pivot to the J&J vaccine because they rely on similar technologies. They estimate that the transition would take less than six months.

Achal Prabhala, an author on the letter and a coordinator at AccessIBSA, a medicines-access initiative in Bengaluru, India, thinks this switch would help to quickly protect people in places lacking vaccines (see ‘Protection divide’). He adds that partnerships with the companies that developed mRNA vaccines will also be crucial because of the shots’ effectiveness and adaptability. India, in particular, could help to tame the pandemic if the country was enabled to make more shots, he says, illustrated by its role in providing the majority of vaccines against other diseases to low- and lower-middle-income countries. “For 3.9 billion people, we are the bulwark of vaccine manufacturing. So, if there aren’t contracts here, the world suffers.”

Such calls have not yet gained traction. Outside of deals to bottle and package their vaccines, J&J has only one partnership with an Indian company, and Pfizer, BioNTech and Moderna have none in India, South America or Africa. Pharmaceutical companies have cited reasons including quality concerns and the time required to get new companies up to speed. Instead, they say they’re ramping up their own production, and they ask wealthy nations to increase vaccine donations to poorer ones. Prabhala calls their arguments “a useful canard that obscures the real barrier — an unwillingness on the part of western pharmaceutical companies to relinquish control over their patents and technology, even at the cost of millions of lives”.

Although the Biden administration supported a waiver on intellectual property surrounding COVID-19 vaccines that was proposed by India and South Africa at a World Trade Organization meeting last October, action has stalled. And the administration has not pushed US companies to partner with those in the global south. Germany, which funded the development of BioNTech’s mRNA vaccine, later licensed to Pfizer, remains opposed to patent waivers.

As months pass, some researchers have stopped hoping for partnerships to come to fruition. A group in South Africa has decided to try and re-create existing vaccines. Others argue that funds would be best spent on getting manufacturers in the global south prepared to pump out the next generation of vaccines currently in clinical trials. Most global health researchers agree that regional manufacturing is the only way to ensure worldwide vaccination in a crisis. Shahid Jameel, a virologist at the Trivedi School of Biosciences at Ashoka University in New Delhi, says, “We can’t fix vaccine inequalities until vaccine manufacturing is distributed.”

Low yields

Companies might produce an estimated 12 billion doses of COVID-19 vaccines this year, but many more are needed, says Andrea Taylor, a global health researcher who leads a vaccine-tracking project at Duke University in Durham, North Carolina. Many wealthy nations have purchased enough doses to cover their populations several times over while some countries have very few, she says. The type of vaccine in demand has shifted, too. China’s vaccines, made from inactivated SARS-CoV-2 coronaviruses, accounted for nearly a third of jabs in lower-income countries through August. But questions about the shots’ efficacy have some countries searching for other options. Meanwhile, demand for mRNA vaccines has soared because wealthy countries are recommending third doses to, in theory, boost their populations’ immunity (see ‘Dose distribution’).

Lacking mRNA options, many nations in the global south rely on viral-vector shots that use a harmless inactivated virus to deliver their payload to cells. Indeed, 88% of the people vaccinated in India have gotten viral-vector shots developed by the University of Oxford and AstraZeneca in the United Kingdom — and produced by the Serum Institute of India, the biggest vaccine manufacturer in the world. International organizations leading COVID-19 Vaccines Global Access (COVAX), a system to supply COVID-19 vaccines to low- and middle-income countries, expected the Serum Institute to provide a bulk of their of vaccines, but that plan fell short when the Indian government restricted exports in March when the country faced a deadly surge of COVID-19 and only 2% of its population had been vaccinated. Because of issues including the export pause and a lack of donations, COVAX has shifted its goal of delivering two billion doses from this year to 2022.

Russia’s Sputnik V vaccine can’t bolster COVAX’s supply because it isn’t authorized by the WHO, despite its authorization in India, Brazil and dozens of other countries. The organization has given the green light to J&J’s jab, however — another reason that advocates support a transition to that shot. Handing off Sputnik V wasn’t simple, but manufacturers say the technology transfer process is instructive. Russian scientists gave willing drug companies essential ingredients for the vaccine and lists of equipment and supplies, and they visited the plants to teach them the manufacturing process.

#### The key internal link is manufacturing capacity not vaccines – Only future production resolves increased travel and new variants

Gostin 6/10 [Lawrence O. Gostin, JD, Georgetown University Law Center; June 10, 2021; “9 Steps to End COVID-19 and Prevent the Next Pandemic: Essential Outcomes From the World Health Assembly,” JAMA Health Forum. 2021;2(6):e211852. doi:10.1001/jamahealthforum.2021.1852//lhs-ap]

Chronic vaccine shortages have resulted in skewed distribution, which if not remedied, will prolong the pandemic. As SARS-CoV-2 widely circulates in low- and middle-income countries, more variants of concern will emerge—some will be more transmissible or pathogenic, while others could evade current vaccine technologies. With international travel rebounding, variants may reseed epidemics in higher-income countries. Consequently, the world needs more capacity to produce vaccines. Vaccine-producing countries and manufacturers should provide voluntary licenses and the WTO should waive intellectual property protections. Manufacturers holding multiple patents impede vaccine discovery and production in low- and middle-income countries.

#### The vaccine shortage will worsen global political instability –

#### 1 – Increases the number and severity of violent protests

Labott 7/22 [Elise Labott, a columnist at Foreign Policy and an adjunct professor at American University’s School of International Service. July 22, 2021, “Get Ready for a Spike in Global Unrest,” Foreign Policy, https://foreignpolicy.com/2021/07/22/covid-global-unrest-political-upheaval//lhs-ap]

To call 2021 the summer of discontent would be a severe understatement. From Cuba to South Africa to Colombia to Haiti, often violent protests are sweeping every corner of the globe as angry citizens are taking to the streets.

Each country has different histories and realities on the ground, particularly in Haiti, where years of violence and government corruption culminated two weeks ago in the assassination of President Jovenel Moïse. But they all faced a perfect storm of preexisting social, economic, and political hardships, which fallout from the COVID-19 pandemic only inflamed further. And they are merely a foreshadowing of the post-coronavirus global tinderbox that’s looming as existing tensions in countries across the world morph into broader civil unrest and uprisings against economic hardships and inequality deepened by the pandemic.

The coronavirus pandemic was a once-in-a-century crisis that not only shocked countries’ existing health systems but also demanded a response that impacted—and was itself shaped by—economic, political, and security considerations. The efforts to contain it may have curbed fatalities in the short term but have inadvertently deepened vulnerabilities that laid the groundwork for longer-term violence, conflict, and political upheaval and should serve as a danger sign to world leaders as countries reopen—including in the United States.

History is full of examples of pandemics being incubators of social unrest, from the Black Death to the Spanish flu to the great cholera outbreak in Paris, immortalized in Victor Hugo’s Les Miserables. Underlying it all this time around is a pervasive inequality. COVID-19 has ripped open economic divides and made life harder for already vulnerable groups, including women and girls and minority communities.

It has also exposed weaknesses in food security and dramatically increased the number of people affected by chronic hunger. The United Nations estimates around one-tenth of the global population—between 720 million people and 811 million—were undernourished last year. The impacts of climate change and environmental degradation have only compounded the despair.

Take the Sahel, where, due to a toxic cocktail of conflict, COVID-19 lockdowns, and climate change, the scale and severity of food insecurity continues to rise. Countries such as Ethiopia and Sudan are among the world’s worst humanitarian crises, with catastrophic levels of hunger. Droughts and locusts are coming at a critical time for farmers ready to plant crops and are stopping herders in their tracks from driving their livestock to greener pastures.

The global vaccine shortage is fueling the instability. A majority of Africa is lagging far behind the world in vaccinations, meaning COVID-19 will continue to constrain national economies and, in turn, become a source of potential political instability. The same is true for much of Latin America and Asia, where countries don’t have enough vaccines to protect their populations and simmering sources of protest—such as rising living costs and deepening inequalities—are more likely to boil over.

The global risk firm Verisk Maplecroft has warned that as many as 37 countries could face large protest movements for up to three years. A new study by Mercy Corps examining the intersection of COVID-19 and conflict found concerning trends that warn of potential for new conflict, deepening existing conflict, and worsening insecurity and instability shaped by the pandemic response.

The group found a collapse of public confidence in governments and institutions was a key driver of instability. People in fragile states, already suffering from diminished trust in their government, have felt further abandoned as they face disruptions in public services, rising food prices, and massive economic hardships, such as unemployment and reduced wages. Supply chains disrupted during the pandemic have seen food prices skyrocket, while in the global recession humanitarian aid budgets are being slashed, bringing many countries to the brink of famine. For the first time in 22 years, extreme poverty—people living on less than $1.90 a day—was on the rise last year. Oxfam International estimates that “it could take more than a decade for the world’s poorest to recover from the economic impacts of the pandemic.”

#### 2 – Causes global terror networks including resurgent Boko Haram

Namayanja 6/10 [Rose Namayanja is a Ugandan lawyer and author. She is the former Uganda information minister and current Deputy Secretary General of the National Resistance Movement, the ruling party. She is a graduate of the Defence Academy of the United Kingdom. June 10, 2021, “ Lack of Vaccines Fuels Terrorism in Africa,” Foreign Policy, https://foreignpolicy.com/2021/06/10/vaccines-africa-terrorism-covid-19//lhs-ap]

Meanwhile, under the fog of COVID-19, the specter of conflict is rising. With African governments and their limited resources occupied by the pandemic, terrorist groups across the continent have become emboldened. We are already seeing a resurgence in attacks. Around Lake Chad, Boko Haram has revived itself, even though it had been largely defeated just a few years ago thanks to combined military efforts of the countries in the area. In northern Mozambique, Islamist militants’ attacks have sharply increased. And across the Sahel, a plethora of al Qaeda- and Islamic State-affiliated groups are terrorizing communities. These groups thrive on economic instability, profiting from poverty to turn desperate, starving people into recruits.

Without sufficient access to vaccines, instability can only worsen. Governments across Africa are reduced to blunt instruments, such as economically damaging lockdowns, to protect citizens. Subsequently, businesses and livelihoods are still stalled, severely impacting the economies of what are already some of the poorest countries in the world.

These nations risk becoming breeding grounds for militant and terrorist groups. And as groups with international affiliates strengthen their footholds on the continent, what were once localized problems become sources of sustenance to global networks of terror. All this will only make bad economic problems worse. The observation that conflict is bad for business is banal. But it could also rupture global supply chains. Costs for many extractives could rise, and given high tech’s reliance on minerals under the continent, this is worrying.

Even without factoring in conflict, the cost to the global economy if poor countries remain unvaccinated is vast. A recent study commissioned by the International Chamber of Commerce predicts the world could suffer losses exceeding $9 trillion, at least half of which would be absorbed by wealthy, vaccinated nations.

In short, if the vaccine dearth in Africa and low-income countries elsewhere is not urgently addressed, the cost for Western nations—both in terms of finance and security—will be considerably higher than sharing hoarded vaccines or investing in accelerated production. Frugality now only defers costs later. When conflict rears its head, as is the case in Africa, it is not only those directly involved that suffer the consequences. And as the president of Africa’s largest economy, Nigeria, wrote recently, “around the world, conflict and the coronavirus have never been far apart.”

#### Resurgent Boko Haram risks nuclear terrorism

Fyanka 20 [Bernard B. Fyanka Holds a Ph.D. in History and Strategic Studies from the University of Lagos, Akoka Lagos Nigeria. (2020): Chemical, biological, radiological and nuclear (CBRN) terrorism: Rethinking Nigeria’s counterterrorism strategy, African Security Review, DOI: 10.1080/10246029.2019.1698441//lhs-ap]

Boko Haram is one of the deadliest terrorist groups in the world. Since 2009, it has engaged with the Nigerian state in a lethal terrorism campaign aimed at toppling the secular structure and replacing it with an Islamist state. By May 2014 over 12,000 Nigerians had been killed in the insurgency,28 while one in five persons from Borno, Yobe and Adamawa states had been internally displaced. According to the 2017 Global Terrorism Index, Boko Haram ranks as the second deadliest terrorist group in the world, with an all-time high death toll of over 6000 in 2014 alone.29

With known ties to al-Qaeda, Boko Haram has an estimated annual income in excess of US $25 million.30 By 2017, Boko Haram had been forced to retreat from the large areas it had previously occupied in the north-east of Nigeria, driven back by the joint international military efforts of several countries in West and Central Africa. This created the need for them to reassert themselves. The likelihood of this group re-strategising and reconsolidating is high. Consequently, their acquisition of fissile material for the development and deployment of radiological ‘dirty bombs’ has increased in probability. The availability of this material on the continent and within Nigeria itself presents ominous opportunities for the group. Apart from large deposits of uranium ore found in Africa, several countries including South Africa, Morocco, Libya, Ghana, Egypt, the Democratic Republic of Congo (DRC) and Nigeria itself presently possess nuclear research reactors.31

The IAEA has reported no less than 12 incidents of natural uranium smuggling between 1995 and 2005 in Africa alone. In fact, illegal uranium mining at the Shinkolobwe mine in Katanga, DRC is presently a source of great concern. More importantly, this is where the source material for the Hiroshima and Nagasaki bombs was obtained.32 The proliferation of fissile material across the continent heightens the possibility of non-state actors like Boko Haram gaining access to it. Although there has only been one recorded theft of eight uranium fuel rods from a Kinshasa research reactor in 1997, the disturbing fact about this is that seven of the rods were never recovered.33

Within Nigeria itself, opportunities abound for terrorist groups like Boko Haram and other militant organisations to obtain fissile material for use in nuclear devices or dirty bombs. In 2004, Nigeria commissioned a 30-kW miniature neutron source reactor (NIRR-1) for the purpose of nuclear energy research.34 This nuclear facility is located at the Centre for Energy Research and Training at Ahmadu Bello University Zaria in the north of the country, where terrorist activities and Islamist extremism have been going on for centuries. The possibility of Islamist extremists infiltrating nuclear facilities and smuggling out fissile material has been an ongoing security concern for a number of years. An outright attack on a lightly secured facility is a second possibility that actually played out in 2007, when a nuclear research facility in Pelindaba, South Africa was raided by armed assailants, who breached its security perimeter and gained entry.35 Another concern is unsecured radioactive waste – namely 234 legacy sources presently located at the Ajaokuta Steel Company in Kogi State – that has not been disposed of and could easily be obtained by Boko Haram.36 To complicate matters further, the construction of a low to medium radioactive waste management facility at Nigeria’s Nuclear Technology Centre has been abandoned.37

Can Boko Haram build and use non-conventional weapons?

The poor state of nuclear security combined with the tenacity of Boko Haram makes Nigeria a prime location for the advent of nuclear terrorism. Knowhow on building a nuclear device is widely available, as is the key component, HEU, which can be found all over the world in dozens of military and civilian nuclear facilities – like the one at Ahmadu Bello University. Once Boko Haram has obtained enough HEU, a choice can be made between two types of nuclear device. The first is the gun-type mechanism, in which the HEU is smashed together to produce an explosion. The second type, which is more advanced, requires a chamber in which the HEU is compressed in a highly symmetrical manner in order to create an implosion. The gun-type mechanism is the more likely option for terrorist groups because it is simpler.38

In order to use the gun-type mechanism to activate a nuclear device, Boko Haram operatives would need to assemble a crude cannon that can smash HEU together – and the more highly enriched the uranium, the less advanced the weaponry that is needed. The viability of any terrorist group accomplishing such a task has been tested by US senator Joe Biden. In 2004 he asked scientists at three national laboratories to see if they could assemble the mechanical components of a gun-type bomb with commercially available equipment alone. A few months later, they reported back that they had succeeded.39 With over US$25 million in annual income, Boko Haram has the resources to obtain both the scientific knowhow and the materials needed to build and deploy a gun-type nuclear weapon.

Radiological dirty bombs

The threat of non-conventional weapons proliferation and terrorism goes beyond nuclear weapons – it also encompasses radiological dirty bombs. The raw materials used to create nuclear weapons are very dangerous; they contain highly radioactive substances that would pose a serious health hazard if dispersed in human populations using a detonation device. Plutonium and uranium could thus be weaponised in the form of a radiological dirty bomb, also known as a radiological dispersal device (RDD), which would cause widespread fatalities and cost billions of dollars in clean-up, evacuation and relocation operations.40

Terrorist groups like Boko Haram could easily build and use an RDD, given the widespread proliferation of fissile material – and more importantly given the dual-use materials that can produce the same radiological effects as fissile material from nuclear installations. Radiological dual-use materials from smoke alarms and medical services are among the most easily accessible; highly radioactive isotopes are in fact used in life-saving blood transfusions and cancer treatments in hospitals all around the world, including several in Nigeria. These isotopes

include cesium-137, cobalt-60 and iridium-192, which can easily be used as base materials for a bomb or an RDD.41 The challenge is that most of the medical, commercial and industrial groups that handle these materials are not adequately equipped to provide the security needed to prevent them from being stolen. On the other hand, the lack of regulatory controls in many countries has led to thousands of instances of missing or stolen radiological material that cannot be accounted for. Recently, the James Martin Center for Nonproliferation Studies found in an alarming study that 170 incidents where nuclear or radiological material was lost, stolen or outside regulatory control occurred in 2014 alone.42

RDDs are viable weapons for terrorist groups like Boko Haram to pursue – and terrorist states have also attempted to obtain them. On 28 March 2002, Abu Zubaydah – a key alQaeda operative – was captured in Pakistan. He is widely believed to have told US investigators that al-Qaeda was ‘interested’ in building or obtaining a dirty bomb. Further evidence emerged on 8 May 2002, when Federal Bureau of Investigation (FBI) agents arrested Abdullah al Muhajir on charges of planning a radiological attack in the US at the direction of al-Qaeda operatives.

States that sponsor and support terrorist groups are likely to pass on fissile and radiological material to them. Iraq under Saddam Hussein is known to have sought radiological material for this purpose. In 1987, Iraq tested a bomb weighing 1400 kg that carried radioactive particles derived from irradiated impurities in zirconium oxide. A further 100 prototypes were designed from the casings of Muthanna-3 aerial chemical bombs, which were then modified to a 400-kg weight so that aircraft could carry more of them. It is likely that only 25 of these prototypes were destroyed, and that the other 75 were sent to the Al Qa Qaa State Establishment, a massive Iraqi weapons facility; their current status and whereabouts remain unknown.43

#### Pandemic instability goes nuclear – Extinction

RECNA et al. 21 [Research Center for Nuclear Weapons Abolition, Nagasaki University (RECNA), Asia Pacific Leadership Network (APLN) & Nautilus Institute (2021) Pandemic Futures and Nuclear Weapon Risks: The Nagasaki 75th Anniversary pandemic-nuclear nexus scenarios final report, Journal for Peace and Nuclear Disarmament, 4:sup1, 6-39, DOI: 10.1080/25751654.2021.1890867//lhs-ap]

The relationship between pandemics and war is as long as human history. Past pandemics have set the scene for wars by weakening societies, undermining resilience, and exacerbating civil and inter-state conflict. Other disease outbreaks have erupted during wars, in part due to the appalling public health and battlefield conditions resulting from war, in turn sowing the seeds for new conflicts. In the post-Cold War era, pandemics have spread with unprecedented speed due to increased mobility created by globalization, especially between urbanized areas. Although there are positive signs that scientific advances and rapid innovation can help us manage pandemics, it is likely that deadly infectious viruses will be a challenge for years to come.

The COVID-19 is the most demonic pandemic threat in modern history. It has erupted at a juncture of other existential global threats, most importantly, accelerating climate change and resurgent nuclear threat-making. The most important issue, therefore, is how the coronavirus (and future pandemics) will increase or decrease the risks associated with these twin threats, climate change effects, and the next use of nuclear weapons in war.5

Today, the nine nuclear weapons arsenals not only can annihilate hundreds of cities, but also cause nuclear winter and mass starvation of a billion or more people, if not the entire human species. Concurrently, climate change is enveloping the planet with more frequent and intense storms, accelerating sea level rise, and advancing rapid ecological change, expressed in unprecedented forest fires across the world. Already stretched to a breaking point in many countries, the current pandemic may overcome resilience to the point of near or actual collapse of social, economic, and political order.

In this extraordinary moment, it is timely to reflect on the existence and possible uses of weapons of mass destruction under pandemic conditions – most importantly, nuclear weapons, but also chemical and biological weapons. Moments of extreme crisis and vulnerability can prompt aggressive and counterintuitive actions that in turn may destabilize already precariously balanced threat systems, underpinned by conventional and nuclear weapons, as well as the threat of weaponized chemical and biological technologies. Consequently, the risk of the use of weapons of mass destruction (WMD), especially nuclear weapons, increases at such times, possibly sharply.

The COVID-19 pandemic is clearly driving massive, rapid, and unpredictable changes that will redefine every aspect of the human condition, including WMD – just as the world wars of the first half of the 20th century led to a revolution in international affairs and entirely new ways of organizing societies, economies, and international relations, in part based on nuclear weapons and their threatened use. In a world reshaped by pandemics, nuclear weapons – as well as correlated non-nuclear WMD, nuclear alliances, “deterrence” doctrines, operational and declaratory policies, nuclear extended deterrence, organizational practices, and the existential risks posed by retaining these capabilities – are all up for redefinition.

A pandemic has potential to destabilize a nuclear-prone conflict by incapacitating the supreme nuclear commander or commanders who have to issue nuclear strike orders, creating uncertainty as to who is in charge, how to handle nuclear mistakes (such as errors, accidents, technological failures, and entanglement with conventional operations gone awry), and opening a brief opportunity for a first strike at a time when the COVID-infected state may not be able to retaliate efficiently – or at all – due to leadership confusion. In some nuclear-laden conflicts, a state might use a pandemic as a cover for political or military provocations in the belief that the adversary is distracted and partly disabled by the pandemic, increasing the risk of war in a nuclear-prone conflict. At the same time, a pandemic may lead nuclear armed states to increase the isolation and sanctions against a nuclear adversary, making it even harder to stop the spread of the disease, in turn creating a pandemic reservoir and transmission risk back to the nuclear armed state or its allies.

In principle, the common threat of the pandemic might induce nuclear-armed states to reduce the tension in a nuclear-prone conflict and thereby the risk of nuclear war. It may cause nuclear adversaries or their umbrella states to seek to resolve conflicts in a cooperative and collaborative manner by creating habits of communication, engagement, and mutual learning that come into play in the nuclear-military sphere. For example, militaries may cooperate to control pandemic transmission, including by working together against criminal-terrorist non-state actors that are trafficking people or by joining forces to ensure that a new pathogen is not developed as a bioweapon.

To date, however, the COVID-19 pandemic has increased the isolation of some nuclear-armed states and provided a textbook case of the failure of states to cooperate to overcome the pandemic. Borders have slammed shut, trade shut down, and budgets blown out, creating enormous pressure to focus on immediate domestic priorities. Foreign policies have become markedly more nationalistic. Dependence on nuclear weapons may increase as states seek to buttress a global re-spatialization6 of all dimensions of human interaction at all levels to manage pandemics. The effect of nuclear threats on leaders may make it less likely – or even impossible – to achieve the kind of concert at a global level needed to respond to and administer an effective vaccine, making it harder and even impossible to revert to pre-pandemic international relations. The result is that some states may proliferate their own nuclear weapons, further reinforcing the spiral of conflicts contained by nuclear threat, with cascading effects on the risk of nuclear war.

### 1AC – Plan

#### Plan: The member nations of the World Trade Organization ought to reduce intellectual property protections for medicines by implementing a COVID-19 vaccine waiver.

### 1AC – Solvency

#### Waiver accelerates vaccine production and innovation

Kavanagh et al. 7/1 [Matthew M. Kavanagh, PhD1,2; Lawrence O. Gostin, JD1; Madhavi Sunder, JD1; 1Georgetown University Law Center, Washington, DC; 2Department of International Health, Georgetown University, Washington, DC; July 1, 2021, “Sharing Technology and Vaccine Doses to Address Global Vaccine Inequity and End the COVID-19 Pandemic,” JAMA. 2021;326(3):219-220. doi:10.1001/jama.2021.10823//lhs-ap]

Waiving Intellectual Property

One important step is an intellectual property (IP) waiver. The Biden administration recently reversed US policy and was joined by France in endorsing a proposal by India and South Africa to temporarily waive countries’ World Trade Organization (WTO) obligations to enforce IP on COVID-19 technologies. The proposal still faces negotiations over its scope and opposition by certain high-income countries.

A WTO waiver would not remove US patents on vaccines. It would simply give governments the option to allow local manufacturers to produce, import, and export SARS-CoV-2 vaccines. Investments in production facilities could occur without concern about lawsuits or prosecution for IP infringement. Although countries have rights to issue compulsory licenses under the Trade-Related Aspects of Intellectual Property Rights (Article 31) agreement, the rules are legally complex. Messenger RNA (mRNA) vaccine technologies are covered by more than 100 patents, with many different patent holders.5 Procedures on importation of medical technologies for countries without manufacturing capacity are so cumbersome they have been used only once, by Canada and Rwanda, in a process that took years. A blanket waiver would eliminate complex regulations to facilitate vaccine manufacture.

There are some concerns that a waiver could threaten innovation. Yet COVID-19 vaccines were developed with significant public funding, also yielding high profits. Monopoly protection in every country is unnecessary for innovation. Patents have not incentivized companies to provide vaccines to LMICs. Intellectual property waivers could actually spur new discoveries and better vaccines, such as single-dose vaccines. Giving countries the freedom to produce vaccines could address both market and ethical failures.

With the pandemic escalating in LMICs, a broad, simple IP waiver that covers all IP, including patents and trade secrets, and extends to all COVID-19 technologies is urgent. Negotiators must avoid delay. Waiver negotiations among WTO members in 2003 took 9 months and governments have so far been slow in negotiating the current IP waiver proposal. Movement toward a waiver also might support voluntary action. Following President Biden’s announcement supporting an IP waiver, Moderna and Pfizer-BioNTech both pledged additional doses to LMICs, a welcome sign that waiver negotiations might incentivize sharing.

Sharing Technology and Expanding Manufacturing Capacity

On June 21, South Africa, the World Health Organization (WHO), and the Africa Centers for Disease Control (CDC) announced an important new hub for producing mRNA vaccines for the African continent and asked the US and Europe to share the technology to make these vaccines. Waiving IP removes legal barriers, but sharing knowledge on how to make vaccines, including ingredients, methods, sourcing, and technologies, is a justice-oriented move that would help LMIC manufacturers move quickly. When Moderna needed added manufacturing capacity, it contracted Swiss company Lonza and transferred technology confidentially. Production started within a few months, showing that arguments suggesting local manufacturing will take too long are unfounded. But exclusive contract manufacturing agreements limit access. Sharing technology more openly could enable manufacturers in Africa, Asia, and Latin America to make vaccines for themselves. WHO created a platform for such technology transfer; however, US-based companies have thus far not shared vital information.

The Biden administration has leverage to incentivize sharing, given extensive public funding. mRNA vaccines are a prime target for sharing because manufacturing advantages make them rapidly scalable.6 The Moderna mRNA vaccine was developed jointly with the National Institutes of Health, which also holds key patents. Operation Warp Speed allocated Moderna $2.5 billion, covering development and clinical trials. Public funding should come with ethical obligations to share knowledge for the global public good. If necessary, the Biden administration could use the Defense Production Act and government-owned patents to compel technology sharing or could pay companies to share technology.

If technology is shared, Senegal’s Pasteur Institute has plans to make hundreds of millions of viral vector doses. Companies in South Africa, Vietnam, Brazil, India, and other countries could make mRNA vaccines with appropriate support for specialized processes involved. A Thai government-run manufacturer, which could be a model, is already working on mRNA vaccine production. A Chinese company will produce BioNTech’s vaccine, although only for Chinese markets. Far more is achievable.

Quality control is critical, but arguments that LMIC producers cannot produce quality vaccines are misplaced. Many are global companies and government-run facilities with excellent records and strong oversight. WHO’s prequalification/emergency use process can help ensure quality.

Sharing technologies openly could also allow scientists worldwide to collaborate on innovations; for example, on mRNA vaccine formulations stored at room temperature for lower-resource settings.

#### No alt causes – Waiver includes broader information sharing, not just patent enforcement

Labonté 5/21 [Ronald Labonté, School of Epidemiology and Public Health, University of Ottawa, Ottawa, ON, Canada; Mira Johri, École de santé publique, Université de Montréal, Montréal, QC, Canada; Katrina Plamondon, School of Nursing, Faculty of Health & Social Development, University of British Columbia, Vancouver, BC, Canada; Srinivas Murthy, Faculty of Medicine, University of British Columbia, Vancouver, BC, Canada; 21 May 2021; Canada, global vaccine supply, and the TRIPS waiver. Can J Public Health 112, 543–547 (2021). https://doi.org/10.17269/s41997-021-00541-4//lhs-ap]

Will the TRIPS waiver increase vaccine supply?

Yes, if patent-holding companies are willing to share the technology and know-how associated with their vaccines. Early in the pandemic, the WHO’s COVID-19 Technology Access Pool was created to promote this, but no patent-holding manufacturers have joined, and its open-access intention was ridiculed for undermining their business model. There is now a proposal to create a ‘technology transfer hub’, with WHO calling specifically for an mRNA technology transfer hub since these vaccines show the most efficacy, the greatest likelihood of adaptation to variants, and a relative ease in scaling up production capacities. To be successful, “owners…of technology and/or intellectual property rights” of these vaccines must be “willing to contribute” their “know-how and technology” (WHO 2021b).

The proposed TRIPS waiver becomes leverage to incentivize such sharing. Without it, there would be little compulsion for current vaccine patent-holders to voluntarily share, given their reluctance to do so since the race for COVID-19 vaccine discovery began. It would allow governments that presently oppose the waiver to recognize its role less as a temporary denial of intellectual property rights than acknowledgement that the ‘warp speed’ development of COVID-19 vaccines was almost entirely funded or underwritten by public funds. It will also require governments that are home countries to vaccine patentee companies to persuade them to share, which could include some modest royalties but not the multi-billion-dollar profits some of them anticipate.

#### Yes production capacity – IP is the only barrier

Fatton, Jr., 9/6 [Robert, Department of Politics, University of Virginia, Charlottesville, VA; “The Paradoxes of the Pandemic and World Inequalities;” Soc. Sci. 2021, 10, 332. doi.org/10.3390/socsci10090332//lhs-ap]

Given such obdurate limitations to developing a modicum of equity, what is to be done? The best hope is compelling pharmaceutical giants to accept a temporary waiver of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) regulating the production of COVID-19 vaccines. The waiver, which has the support of over 100 countries would grant intellectual property (IP) exemption to potential producers until a majority of the world’s population had been immunized against Covid.105 In December 2020, wealthy nations hosting “big pharma” companies pressured the World Trade Organization (WTO to reject the waiver that South Africa and India had proposed. The waiver would allow countries like India, South Africa, Thailand, Bangladesh and Brazil to manufacture the vaccines themselves, thereby increasing global production and satisfying the unmet needs of the Global South.106 As of February 2021, “only 43 per cent of reported COVID-19 vaccine production capacity [was] being used for the approved vaccines. According to the People’s Vaccine campaign, the three biggest manufacturers in the world [were] only producing vaccines for about 1.5 per cent of the global population—much less than their total capacity if patents did not stand in the way”.107 Unless the IP waiver is granted, there is a danger that “it will take seven years for enough of the world to be vaccinated to prevent further transmission”.108

#### Public funding, not intellectual property, drives vaccine innovation

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The opponents of the TRIPS waiver also argue that IP is the incentive for innovation and if it is undermined, future innovation will suffer. However, most of the COVID-19 medical innovations, particularly vaccines, are developed with public financing assistance. Governments spent billions of dollars for COVID-19 vaccine research. Notably, out of $6.1 billion in investment tracked up to July 2021, 98.12 per cent was public funding.22 The US and Germany are the largest investors in vaccine R&D with $2.2 billion and $1.5 billion funding.

Private companies received 94.6 per cent of this funding; Moderna received the highest $956.3 million and Janssen $910.6 million. Moreover, governments also invested $50.9 billion for advance purchase agreements (APAs) as an incentive for vaccine development. A recent IMF working paper also notes that public research institutions were a key driver of the COVID-19 R&D effort—accounting for 70 per cent of all COVID-19 clinical trials globally.23 The argument is that vaccines are developed with the support of substantial public financing, hence there is a public right to the scientific achievements. Moreover, private companies reaped billions in profits from COVID-19 vaccines.

#### Waiver solves funding by incentivizing investment

Rajeesh Kumar is Associate Fellow at Manohar Parrikar Institute for Defence Studies and Analyses, New Delhi. 7/12/21 <https://www.idsa.in/issuebrief/wto-trips-waiver-covid-vaccine-rkumar-120721>

Another argument against the proposed TRIPS waiver is that a waiver would not increase the manufacturing of COVID-19 vaccines. Indeed, one of the significant factors contributing to vaccine inequity is the lack of manufacturing capacity in the global south. Further, a TRIPS waiver will not automatically translate into improved manufacturing capacity. However, a waiver would be the first but essential step to increase manufacturing capacity worldwide. For instance, to export COVID-19 vaccine-related products, countries need to ensure that there are no IP restrictions at both ends – exporting and importing. The market for vaccine materials includes consumables, single-use reactors bags, filters, culture media, and vaccine ingredients. Export blockages on raw materials, equipment and finished products harm the overall output of the vaccine supply chain. If there is no TRIPS restriction, more governments and companies will invest in repurposing their facilities.

#### Waiver precedent exempts vaccines during a pandemic from IP – That’s key to fast distribution

Lindsey, JD Harvard, 21

(Brink, <https://www.brookings.edu/blog/up-front/2021/06/03/why-intellectual-property-and-pandemics-dont-mix/>, 6-3)

Waiving patent protections is certainly no panacea. What is needed most urgently is a massive drive of technology transfer, capacity expansion, and supply line coordination to bring vaccine supply in line with global demand. Dispensing with patents in no way obviates the need for governments to fund and oversee this effort. Although focusing on these immediate constraints is vital, we cannot confine our attention to the short term. First of all, the COVID-19 pandemic is far from over. Although Americans can now see the light at the end of the tunnel thanks to the rapid rollout of vaccines, most of the world isn’t so lucky. The virus is currently raging in India and throughout South America, overwhelming health care systems and inflicting suffering and loss on a horrific scale. And consider the fact that Australia, which has been successful in suppressing the virus, recently announced it was sticking to plans to keep its borders closed until mid-2022. Criticisms of the TRIPS waiver that focus only on the next few months are therefore short-sighted: this pandemic could well drag on long enough for elimination of patent restrictions to enable new vaccine producers to make a positive difference. Furthermore, and probably even more important, this is almost certainly not the last pandemic we will face. Urbanization, the spread of factory-farming methods, and globalization all combine to increase the odds that a new virus will make the jump from animals to humans and then spread rapidly around the world. Prior to the current pandemic, the 21st century already saw outbreaks of SARS, H1N1, MERS, and Ebola. Everything we do and learn in the current crisis should be viewed from the perspective of getting ready for next time. THE NATURE OF THE PATENT BARGAIN When we take the longer view, we can see a fundamental mismatch between the policy design of intellectual property protection and the policy requirements of effective pandemic response. Although patent law, properly restrained, constitutes one important element of a well-designed national innovation system, the way it goes about encouraging technological progress is singularly ill-suited to the emergency conditions of a pandemic or other public health crisis. Securing a TRIPS waiver for COVID-19 vaccines and treatments would thus establish a salutary precedent that, in emergencies of this kind, governments should employ other, more direct means to incentivize the development of new drugs. Here is the basic bargain offered by patent law: encourage the creation of useful new ideas for the long run by slowing the diffusion of useful new ideas in the short run. The second half of the bargain, the half that imposes costs on society, comes from the temporary exclusive rights, or monopoly privileges, that a patent holder enjoys. Under U.S. patent law, for a period of 20 years nobody else can manufacture or sell the patented product without the permission of the patent holder. This allows the patent holder to block competitors from the market, or extract licensing fees before allowing them to enter, and consequently charge above-market prices to its customers. Patent rights thus slow the diffusion of a new invention by restricting output and raising prices. The imposition of these short-run costs, however, can bring net long-term benefits by sharpening the incentives to invent new products. In the absence of patent protection, the prospect of easy imitation by later market entrants can deter would-be innovators from incurring the up-front fixed costs of research and development. But with a guaranteed period of market exclusivity, inventors can proceed with greater confidence that they will be able to recoup their investment. For the tradeoff between costs and benefits to come out positive on net, patent law must strike the right balance. Exclusive rights should be valuable enough to encourage greater innovation, but not so easily granted or extensive in scope or term that this encouragement is outweighed by output restrictions on the patented product and discouragement of downstream innovations dependent on access to the patented technology. Unfortunately, the U.S. patent system at present is out of balance. Over the past few decades, the expansion of patentability to include software and business methods as well as a general relaxation of patenting requirements have led to wildly excessive growth in these temporary monopolies: the number of patents granted annually has skyrocketed roughly fivefold since the early 1980s. One unfortunate result has been the rise of “non-practicing entities,” better known as patent trolls: firms that make nothing themselves but buy up patent portfolios and monetize them through aggressive litigation. As a result, a law that is supposed to encourage innovation has turned into a legal minefield for many would-be innovators. In the pharmaceutical industry, firms have abused the law by piling up patents for trivial, therapeutically irrelevant “innovations” that allow them to extend their monopolies and keep raising prices long beyond the statutorily contemplated 20 years. Patent law is creating these unintended consequences because policymakers have been caught in an ideological fog that conflates “intellectual property” with actual property rights over physical objects. Enveloped in that fog, they regard any attempts to put limits on patent monopolies as attacks on private property and view ongoing expansions of patent privileges as necessary to keep innovation from grinding to a halt. In fact, patent law is a tool of regulatory policy with the usual tradeoffs between costs and benefits; like all tools, it can be misused, and as with all tools there are some jobs for which other tools are better suited. A well-designed patent system, in which benefits are maximized and costs kept to a minimum, is just one of various policy options that governments can employ to stimulate technological advance—including tax credits for R&D, prizes for targeted inventions, and direct government support. PUBLIC HEALTH EMERGENCIES AND DIRECT GOVERNMENT SUPPORT For pandemics and other public health emergencies, patents’ mix of costs and benefits is misaligned with what is needed for an effective policy response. The basic patent bargain, even when well struck, is to pay for more innovation down the road with slower diffusion of innovation today. In the context of a pandemic, that bargain is a bad one and should be rejected entirely. Here the imperative is to accelerate the diffusion of vaccines and other treatments, not slow it down. Giving drug companies the power to hold things up by blocking competitors and raising prices pushes in the completely wrong direction.