

Week 2 Demo Debate

1AC

1AC (Plan/Inherency) — 1/5

Plan: The United States federal government should establish a single-payer healthcare system.

Contention 1 is Inherency

Healthcare is a human right, but the U.S. system is broken. Reform is critical to save lives.

Sanders 2023 (Bernie, U.S. Senator from Vermont. It's Time To Guarantee Healthcare To All Americans As A Human Right. The Guardian. May 18, 2023.
<https://www.theguardian.com/commentisfree/2023/may/18/healthcare-us-human-right-medicare-for-all-bernie-sanders>)

Let's be clear. The current healthcare system in the United States is totally broken, dysfunctional and cruel. It is a system which spends twice as much per capita as any other major country, while 85 million Americans are uninsured or underinsured, one out of four Americans cannot afford the cost of the prescription drugs their doctors prescribe, and where over 60,000 die each year because they don't get to a doctor on time. It is a system in which our life expectancy is lower than almost all other major countries and is actually declining, a system in which working-class and low-income Americans die at least ten years younger than wealthier Americans. It is a system in which some 500,000 people go bankrupt because of medically related debt. It is a system in which large parts of our country are medically underserved, where rural hospitals are being shut down, and where people, even with decent insurance, have to travel hours in order to find a doctor. It is a system in which, in the midst of a major mental health crisis, Americans are unable to find the affordable mental health treatment they need. It is a system where, despite our huge expenditures, we don't have enough doctors, nurses, dentists, mental health professionals, pharmacists and other healthcare professionals – and where we spend less than half as much of our healthcare dollars on primary care as do most other countries. It is a system in which, while we are desperately in need of more health professionals, young people are graduating medical school, dental school or nursing school, hundreds of thousands of dollars in debt; a system in which Black, Latino and Native American doctors and nurses are grossly underrepresented as medical professionals. It is a system in which healthcare for most Americans remains attached to employment. Incredibly, during the pandemic when millions lost their jobs, they also lost their healthcare. It is a system in which the quality of care you receive in this country is dependent on the generosity of your employer or whether you have a union. Not surprisingly, workers at McDonald's do not receive the same quality care as executives on Wall Street. All of that has got to change. The function of a rational and humane healthcare system is to provide quality care for all as a human right. It is not to make tens of billions of dollars every year for the insurance companies and the drug companies.

1AC (Pandemics ADV – Inherency/Uniqueness) – 2/5

Contention 2 is the Pandemics Advantage

Future pandemics Are inevitable; we must prepare to prevent disaster

Buchler 2025 (Emily Gaines, Senior Writer At Johns Hopkins University. Are We Ready For The Next One? Johns Hopkins Magazine. Spring 2025. <https://hub.jhu.edu/magazine/2025/spring/ready-for-next-pandemic/>)

Although the scientific community lacks consensus on whether COVID-19 originated in the Wuhan market or elsewhere, **most scientists agree** on another matter: **We can expect more pandemics** to come, owing to factors like climate change, mass migration, globalization, and human encroachment on wildlife and insect ecosystems. According to the center's director Tom Inglesby, who served in COVID-related advisory roles during the pandemic at the White House and in the Department of Health and Human Services, **"as temperatures change, people are moving around the world** more rapidly than ever before ... and intruding into ecosystems that used to be made up entirely of animals or insects." **This**, in turn, **creates opportunities for humans to get infected by new diseases** and disease strains. **Another factor** contributing to the likelihood of future pandemics **are** the concentrations of **people living in megacities** like Tokyo, Delhi, and Shanghai—to name three on a fast-growing list of cities with more than 10 million inhabitants. **"In some, people live incredibly close** together without great sanitation, **creating conditions for rapid spread**, Inglesby says." This happened last year, for instance, in the Democratic Republic of Congo's capital city Kinshasa, home to 17 million. There, a new, more contagious strain of a disease typically confined to rural areas, mpox, spread quickly. As a result, mpox now poses a threat not only to Kinshasa and the DRC but also the world, given the international flights going in and out of Kinshasa daily. **Over the past few decades, public health experts have watched infectious diseases** spring up and **evolve** in surprising ways. That's a main reason the Center for Health Security was created in the first place, Inglesby says of the group that started in 1998 and has helped fight anthrax attacks and other bioterrorist threats, plus outbreaks of swine flu (H1N1), yellow fever, the Ebola and Zika viruses, and COVID-19. Chances are, Inglesby says, experts won't be able to predict **the next pandemic**. It **could be the bird flu** ravaging U.S. cattle and poultry farms and infecting humans. **It could be Zika or dengue fever**, spread by mosquitoes, or another strain of influenza or coronavirus. **"No one really knows,"** he says. **"That's why we need to heed lessons from the past and prepare."** Today, five years after COVID-19 spread to every continent on Earth, killed millions, and left roughly 400 million people with brain fog, breathing difficulties, and other symptoms of long COVID, Inglesby and others want to share and highlight the lessons learned to better prepare us for the next one that will inevitably occur. Much of what they learned relates to the months leading up to the pandemic, "a critical window of opportunity to do everything you can to contain the disease," Inglesby says. It involves decisions made at the executive level to combat a fast-spreading new virus, along with the timeline and manner in which officials share information and deploy countermeasures. It also involves the steps taken—or not taken—to contend with misinformation, which Gronvall, who teaches a class on the 1918 influenza virus that killed roughly 50 million, says we can count on transpiring in all pandemics. "We'll be unpacking COVID for decades to come, with doctoral students and scholars poring over the data," Gronvall says. But **with other pandemics on the horizon** and COVID-19 continuing to mutate and cause lasting complications for people with and without chronic health conditions, experts say **our country can't** ignore what it learned and **put its head in the sand**.

1AC (Pandemics ADV – Solvency/Link) – 3/5

AND, Single-payer healthcare is fundamental to pandemic preparedness, stopping disease spread through multiple mechanisms.

Galvani et al. 2022 (Alison, Professor of epidemiology at Yale School of Public Health. Abhishek Parpia, epidemiologist and global health researcher. Anirudh Pandey, infectious disease modeler and researcher. "Universal Healthcare as Pandemic Preparedness: The Lives and Costs That Could Have Been Saved During the COVID-19 Pandemic." Proceedings of the National Academy of Sciences. 119.25. doi: 10.1073/pnas.2200536119)

Mechanisms by which **Medicare for All would save lives** and avert morbidity **during a pandemic.**

The observed relationship between healthcare coverage and COVID-19 mortality is attributable to multiple factors, as detailed below.

Improved access to primary care and reduction in comorbidities.

First, the prevalence of those underlying conditions which exacerbate COVID-19 **severity would be reduced via equitable access to care.** For example, **uninsured adults are significantly more likely than insured adults to be unaware of their hypertension** (33, 34), **much less likely to be receiving treatment** (35), and much less likely to have their hypertension under control (36). **Hypertension** specifically **increases** the risk of COVID-19 **mortality** by 188% (37). Additionally, uninsured women were found to have a higher prevalence of obesity (35), which is another risk factor for severe COVID-19. Diabetes has similarly been associated with significantly increased COVID-19 severity and mortality (38). Uninsured adults with diabetes were half as likely to be aware of their condition as their insured counterparts (39).

Early diagnosis and access to life-saving medical care.

Financial barriers reduce and delay care for COVID-19. Due to apprehension about their ability to pay, 14% of US adults reported that even if they experienced the two most common symptoms of COVID-19, fever and dry cough, they would still avoid seeking care (40). These financial concerns are justified as 18% of the US population had medical debt even prior to the COVID-19 pandemic, collectively totaling \$140 billion (41). Medical debt ballooned further during the pandemic as the confluence of lost insurance and lost income makes it more challenging to pay medical bills (42, 43). **Removing financial obstacles to care can accelerate diagnosis.** More timely medical attention increases the probability of recovery from COVID-19 infection (10, 44). For example, treatment with monoclonal antibodies early during the infection reduced the risk of severe outcomes (hospitalization or death) by 85% (45). **Reducing the time to diagnosis also ensures more prompt isolation, which in turn reduces transmission to others.**

The Coronavirus Aid, Relief, and Economic Security (CARES) Act subsidizes all testing and medical bills for the uninsured with COVID-19. However, hurdles still exist that may prevent individuals from seeking care. Since this program does not directly offer insurance to patients, uninsured individuals may be unaware that their COVID-19-related medical expenses can be reimbursed, which may prevent them from seeking treatment (46, 47). Furthermore, CARES Act provides financial assistance for only one disease. It is a possibility that people without insurance and seeking medical care for COVID-19 symptoms might be billed for a different diagnosis or other services associated with testing (48).

Geographic inequities in healthcare access have exacerbated case fatality rates in the United States (49). Specific provisions in the **Medicare for All** 2021 bill to iteratively **monitor and address geographic and racial inequity** (12) **would have particular importance during a pandemic.** Rural hospitals are disproportionately reimbursed at the **relatively low rates** paid by Medicaid (50) **and have heavy burdens of uncompensated**

care (51), **which has challenged the survival of rural facilities** (52). Although hospital fees nationwide would be reduced by Medicare for All, **applying Medicare rates across the board would actually increase support to those rural hospitals which currently serve substantial populations of Medicaid and uninsured patients** (53). Furthermore, clinical outcomes such as mortality have been elevated among rural communities during the COVID-19 pandemic (49). Rural hospitals were more prone to shortages of ventilators, personal protective equipment, ICU capacity, and healthcare workers (54). These factors would be rectified by investment to expand healthcare facilities and hospital capacity in rural areas (12).

Facilitation of COVID-19 preventative measures.

COVID-19 mortality rates have been higher and vaccination rates lower among Black and Hispanic individuals relative to White individuals (55, 56). A key driver of these disparities is inequitable access to primary care (57, 58). For example, **recommendation of COVID-19 vaccination to patients by their trusted primary care providers is effective in overcoming vaccine hesitancy** (59, 60).

Consequently, it is unsurprising that individuals without access to a primary care provider have lower rates of vaccine uptake despite it being free to the public. Universal healthcare would ameliorate such inequities, particularly given the provisions for investment to address racial and other disparities.

1AC (Pandemics ADV – Harms/Impact) – 4/5

AND, Pandemics cause extinction.

Kim et al. 2021. (Kiseong, department of Bio and Brain Engineering, KAIST; R&D Center, BioBrain Inc.; Department of ICT Convergence System Engineering, Chonnam National University; Bio-Synergy Research Center; Moon Soul Graduate School of Future Strategy. "Network Analysis to Identify the Risk of Epidemic Spreading." Applied Sciences, vol. 11, no. 7, 7, Multidisciplinary Digital Publishing Institute, January, 2021, p. 2997)

Several **epidemics, such as the Black Death and the Spanish flu**, have **threatened human life throughout history**; however, it is unclear if humans will remain safe from **the sudden and fast spread of epidemic diseases**. Moreover, the transmission characteristics of epidemics **remain undiscovered**. In this study, **we present** the results of **an epidemic simulation experiment revealing the relationship between epidemic parameters and pandemic risk**. To analyze the time-dependent risk and impact of epidemics, we considered two parameters for infectious diseases: the recovery time from infection and the transmission rate of the disease. Based on the epidemic simulation, we identified two important aspects of human safety with regard to the threat of a pandemic. First, humans should be safe if the fatality rate is below 100%. Second, even when the fatality rate is 100%, humans would be safe if the average degree of human social networks is below a threshold value. Nevertheless, **certain diseases can** potentially **infect all nodes in the human social networks**, and these diseases cause a pandemic when the average degree is larger than the threshold value. **These** results indicated that certain **infectious diseases lead to human extinction** and can be prevented by minimizing human contact.

1. Introduction

The emergence of a pandemic is one of the various scenarios **frequently discussed as a human extinction event, and it is listed as one of the global catastrophic risks in studies** regarding the future [1,2,3]. In particular, **several pandemics, such as the Black Death** [4,5], **Spanish flu** [6], and those caused by **smallpox** [7], severe acute respiratory syndrome (**SARS**) [8], **and Ebola** [9], have **affected a large population throughout history. The risk of pandemics increases with** an increase in **population mobility** between cities, nations, and continents, thereby **threatening humankind** [10,11,12]. It is essential to analyze the epidemic spread in society to minimize the damage from epidemic disasters; however, extinctive epidemic spreading experiments have limitations in real-world situations, as they predict stochastic effects on the spread without considering the structure of human society. Network-based approaches have been proposed to overcome these limitations and perform epidemic spreading simulations by considering the network structure of numerous real-world connections [13,14,15]. These methods use various models of epidemic spreading, such as the susceptible–infectious–susceptible (SIS) [16,17,18], susceptible–infectious–recovered (SIR) [19,20,21], and Watts threshold models [22]. While these methods are mathematically convenient, they are epidemiologically unrealistic for various infections because they require exponentially distributed incubation and infectious periods [23,24,25]. Moreover, previous epidemic studies did not perform quantitative assessment of the pandemic risk depending on the network connectivity in individuals and fatality rate of various diseases [26].

1AC (Solvency) — 5/5

Contention 2 is Solvency.

Medicare for All is key to universal healthcare. European countries prove the plan would guarantee coverage for all Americans while cutting healthcare costs.

NashBio 2024 (Nashville Biosciences, Data-based Research Firm Focused On Biotechnology. The Healthcare Divide: Privatized US vs Public European Models. NashBio. April 9, 2024.
<https://nashbio.com/blog/healthcare/the-healthcare-divide-privatized-us-vs-public-european-models/>)

The Opposing Models For decades, the healthcare systems of the United States and Europe have taken vastly different approaches, sparking heated debate over which model delivers better care at a sustainable cost. While the US relies primarily on private insurance and market competition, most European nations have adopted tax-funded universal healthcare as a basic right for all citizens.

US: Private Markets vs. Europe: Public Coverage At its core, the American healthcare system is a private, decentralized collection of for-profit hospitals, clinics, insurance companies, and other providers incentivized to maximize revenues. Employers typically offer private insurance plans, and government programs like Medicare and Medicaid cover the elderly and low-income populations. However, an estimated 28 million non-elderly Americans remain uninsured despite the Affordable Care Act's coverage expansions.

In stark contrast, European healthcare systems are overwhelmingly publicly-funded through taxation to ensure universal coverage for all legal residents. Countries like the UK, Spain, and Sweden operate single-payer national health services, while others like Germany, France, and the Netherlands have multi-payer universal systems that incorporate a mix of private and public insurance schemes.

Higher Costs, Lagging Outcomes in the US One indisputable fact is that the US healthcare system is exorbitantly more expensive per capita than any European model, yet its health outcomes lag behind on metrics like life expectancy and infant mortality. In 2019, US healthcare spending reached \$11,072 per person – over double the average of \$5,505 across wealthy European nations.

Many experts attribute the US system's high costs to profit-driven incentives, administrative complexities associated with private insurers, and a fee-for-service payment structure that encourages more treatment over quality outcomes. European systems emphasize cost controls, standardized fee schedules, and integrated care delivery as more efficient alternatives.

The Trade-Off: Innovation vs. Wait Times However, America's high healthcare spending does contribute to cutting-edge medical innovations and reduced wait times for specialized treatments like newly approved cancer therapies. European systems often face longer delays for non-urgent services as public health authorities aim to manage finite budgets and capacity. Although the US has lengthier emergency room wait times on average than European countries.

Universal Coverage vs. Uninsured Millions Access to healthcare also differs significantly between the US and Europe. The Affordable Care Act brought the US's uninsured rate below 10% for the first time, but millions still lack coverage and face potentially bankrupting medical bills. European universal systems cover all citizens cradle-to-grave – services like preventative screenings, hospital stays, specialist visits, surgeries, prescribed medications, and prenatal care are fully covered with little or no out-of-pocket costs beyond modest copays.

Challenges for the Future

Both systems face mounting challenges from aging populations and rising costs associated with chronic diseases and new technologies. European nations are experimenting with public-private hybrid schemes and value-based reimbursements, while **American policymakers continue debating the role of government involvement amidst calls for “Medicare for All.”**

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1NC

1NC (Biotech Innovation DA – Uniqueness) - 1/4

FIRST, Pharmaceutical profits and innovation are high now.

Rotz et al. 2026 (Greg, Pharmaceutical & Life Sciences Advisory Leader at PwC US; Glenn Hunzinger, Health Industries Leader at PwC US; Sandhya Banskota, Principal at PwC US. "Future of Pharma: Breakthroughs at Scale." PwC. January 9, 2026. <https://www.pwc.com/us/en/industries/pharma-life-sciences/pharmaceutical-industry-trends.html>)

Breakthroughs at scale—the future of pharma: A vision for 2035

By 2035, **the pharmaceutical industry is poised to play a more expansive and transformative role in healthcare. Breakthroughs** in science **enable pharmaceutical companies to treat** and even cure, **diseases that lack effective options today**. At the same time, the industry can expand its role from medicine makers to lifespan partners, leveraging science, AI, ecosystems, and empathy to help people live well at every stage of life.

Reasons to believe— catalysts driving a new future

Accelerating science: **AI-driven drug R&D, synthetic biology, and digital biomarkers are just a few of the here-and-now advances that hold even greater promise in the future. Biopharma venture investment—rebounding sharply to roughly US \$26 billion in 2024 after a two-year downtrend—signals renewed confidence in a new wave of innovation.** Advances in molecular biology, computational chemistry, **and AI-enabled discovery are** collapsing timelines for new medicines and **unlocking entirely new therapeutic modalities**. Meanwhile, the convergence of data from genomics, real-world evidence, and digital health tools is giving scientists and clinicians unprecedented insight into how diseases begin, progress, and respond to treatment. **These breakthroughs are redefining what is possible in medicine and signaling that a new era—defined by precision, prevention, and personalization—is already underway.**¹

AND Those innovations include CRISPR gene editing technology, which is expanding to be used for farming now.

Le Page 2026 (Michael, senior reporter at New Scientist. "14 CRISPR GENE EDITING" New Scientist, Vol. 269 Issue 3579, p37. January 24, 2026.)

Gray used to experience severe episodes of sickle cell disease, but in 2019 she was effectively cured by **a revolutionary technique** that **enables changes to be made to specific bits of** our **DNA called CRISPR gene editing**. In 2023, that experimental treatment became the first approved CRISPR therapy.

There are hundreds of clinical trials of CRISPR-based treatments now under way, **and this is just the start**. CRISPR could help treat all kinds of diseases, not just genetic conditions. For instance, a single dose of CRISPR could reduce your risk of heart attacks and strokes by permanently lowering your cholesterol levels.

And while it isn't yet safe enough to attempt, it does seem likely that in the future, CRISPR will be routinely used to alter our children's genomes to reduce their risk of common diseases.

CRISPR is also starting to transform farming by making it much easier to develop crops and livestock that are disease-resistant, adapted to warmer conditions or better for eating.

Given all this, there is no doubt that CRISPR is one of the very best ideas of the 21st century. Its power lies in its ability to correct “spelling mistakes” in DNA.

There are two parts to this: first, you have to get your gene-editing tool to the right place in the genome, like moving your cursor to the right spot in a long document on a computer. Next, you make the change.

Microbes use this mechanism in their battle with other microbes and, prior to 2012, biologists had discovered **many natural gene-editing proteins**. However, each one **targeted just one location, or sequence, in the genome**. To edit a different spot, the only option was to redesign the part of the protein that binds to DNA to target another sequence, a laborious process that took years.

But it turns out that bacteria have evolved a big family of gene-editing proteins that don't bind to DNA directly. Instead, they hook up with a piece of RNA – a cousin of DNA – and search for sequences that match the RNA. And making RNA takes days, not years.

In 2012, Jennifer Doudna at the University of California, Berkeley, and her colleague Emmanuelle Charpentier at the Max Planck Institute for Infection Biology in Berlin, Germany, showed how **one of these gene-editing proteins, called CRISPR Cas9, could** be made to **target any desired sequence** by adding the right form of “guide RNA”.

There are now thousands of variants of CRISPR being used for many purposes, but all rely on guide-RNA targeting. **It is a world-changing technology**, for which Doudna and Charpentier, were awarded a Nobel prize in 2020.

1NC (Biotech Innovation DA – Link) – 2/4

AND Switching to single payer crushes pharmaceutical revenue, killing funding for biotech research and development.

Cudmore 2020 (Katie, life science consultant specializing in market access & market access analyst with a Masters in Neuropharmacology from the University of Cambridge. "How Would Single Payer Healthcare in the US Impact Pharma? A Pricing Perspective." Pharmaphorum. April 5, 2020. <https://pharmaphorum.com/views-analysis-market-access/how-would-single-payer-healthcare-in-the-us-impact-pharma-a-pricing-per-spective>)

Many pharmaceutical companies argue that they **rely on the revenue generated from sales in the US in order to deliver new and innovative medical advances.**

While drug prices have been under political scrutiny, drug expenditure only accounts for on average 15% of current health care spending, and there are many other factors that play a significant role in the financial burden of the American healthcare.

The idea of a government-run, single payer healthcare system

While centralising a healthcare system is a monumental job, it has been done in some Nordic countries with varying levels of success, however the same cannot be said for the ongoing efforts in Mexico.

Germany also stood firm against drug prices and set up IQWiG to independently evaluate new drugs and review public comments. Their system has proved successful and Germany lowered their medication prices without forgoing significant healthcare benefits.

With the US being a much larger market and their increased lobbying for lower drug prices what would be the impact on global innovation if the US were to adopt a single payer system?

Firstly, the government would have significantly more buying power to exert pressure on drug prices due to economies of scale.

The top five pharmaceutical companies by market share **generate between 40-50% of their revenue from US sales.** EU sales only contribute between 20-30% of total revenue with an average of 70% of total revenue generated from the US and EU combined. These two regions alone provide nearly all pharmaceutical companies with a majority of their revenue, making them key targets for the market access of new products.

When it comes to reinvesting this money, on average **most major pharmaceutical companies spend between 15-25% of their revenue on research and development.**

Let's assume that **with a single payer system, the US government would be able to** bring about a **decrease** in **drug prices to the levels of those paid by the NHS in the UK or other single payer systems.** If this were to be introduced, **pharmaceutical companies are estimated to lose their on average 25% of their total revenue. This equates to the entire research and development budget in the top five pharmaceutical companies, if not more.**

1NC (Biotech Innovation DA – Internal Link) – 3/4

AND Continued biotech innovation is key to global food security.

Tuhin 2025 (Muhammad, founder of Science News Today. "How Biotechnology Is Reinventing Agriculture." Science News Today. March 29, 2025. <https://www.sciencenewstoday.org/how-biotechnology-is-reinventing-agriculture>)

The Future of Biotechnology in Agriculture

The future of biotechnology in agriculture looks promising, with ongoing advancements in gene editing technologies such as CRISPR-Cas9. This revolutionary tool allows scientists to make precise changes to an organism's DNA, enabling the development of crops with even more targeted traits. **For example, gene editing could be used to develop crops with enhanced nutritional content, improved disease resistance, or greater climate resilience**, all without introducing foreign genes from other species.

Gene editing also offers the potential for faster and more cost-effective development of new crop varieties. Unlike traditional genetic modification, which often involves the insertion of genes from different species, gene editing can make precise changes to a plant's existing DNA. This approach has the potential to address many of the concerns associated with GMOs, as it does not involve the introduction of foreign DNA and could be more easily accepted by consumers and regulatory agencies.

Moreover, **biotechnology is poised to play a key role in** the growing field of **vertical farming and other innovative agricultural practices**. **By combining biotechnology with cutting-edge technologies** such as hydroponics, aeroponics, and artificial intelligence, **farmers can produce food in urban environments with minimal space and resource use. This could help address food insecurity in densely populated cities while reducing the environmental footprint of conventional farming.**

Conclusion

Biotechnology is undoubtedly transforming the face of agriculture, **offering innovative solutions to the challenges of feeding a growing global population**, addressing the impacts of climate change, and promoting sustainable food production. **From genetically modified crops that are resistant to pests and diseases to biofortified crops that combat malnutrition, biotechnology is opening up new frontiers in food production.** While challenges remain, including ethical and environmental concerns, ongoing advancements in biotechnology hold immense promise for creating a more efficient, resilient, and sustainable agricultural system.

As biotechnology continues to evolve, it will play an increasingly vital role in ensuring food security for future generations. The marriage of science, technology, and agriculture is paving the way for a future where food is abundant, sustainable, and accessible to all. **With continued innovation and responsible stewardship, biotechnology could be the key to feeding the world in the 21st century and beyond.**

1NC (Biotech Innovation DA – Impact) – 4/4

AND, Food insecurity leads to war.

Cribb 2022 (Julian, Fellow of the Australian Academy of Technological Science and Engineering (ATSE) and the Australian National University Emeritus Faculty. "How food can end wars, repair climate and restore the Earth." Surviving the 21st Century. May 25, 2022. <https://cribb.substack.com/p/how-food-can-end-wars-repair-climate-and-restore-the-earth>)

Humans have fought over food and the means of producing it **for 20,000 years**, as rock art in Australia shows. **Food**, water **and land scarcity are primary drivers in** two thirds of **modern conflicts** today. Indeed, **many people seem to have forgotten that the primary German war aim in World War II was to take farmland from the Soviets and put German farmers on it.** It is very likely that **controlling the Ukraine's bountiful and reliable food bowl is among Putin's main aims** also. In the short run this is imposing hunger and even starvation on hundreds of millions of people far beyond Europe.

Spreading hunger in turn snowballs into government failures, **civil wars** and **refugee tsunamis around the world** – as it did in 2008 when a shortfall in Ukrainian grain exports led to revolutions in three Arab countries. Already, a third of a billion people – equal to the entire population of Europe – leave their homes each year, either as refugees or economic migrants, to seek better lives in countries which seem more stable and food secure. War will add to the flood.

Thus, in developing a new food system for the world of the 21st Century, we also have to find a way to curb the human appetite for war.

In Food or War, I trace the links between food and conflict through human history, explore the role of food in recent conflicts and examine **nine regions of the world** which **are at high risk of food failure and conflict in the foreseeable future** – **conflicts ranging from riots and government failure to nuclear war**. My aim is to show that **the link between food and war is inexorable** – but that it can be broken. And that **having enough good food is the most** under-rated, under-recognised and **precious 'weapon of peace' in the world today**.

1NC Case (Pandemics ADV – No Inherency Options)

NOW, onto the Pandemics Advantage

FIRST, Pandemics aren't inevitable or likely; don't believe the hype

Demasi 2025 (Maryanne, Australian Journalist. Citing Research From Policy Experts Professor Garrett Brown And Dr. David Bell From The University of Leeds. Pandemic Panic: Are Outbreaks Really On The Rise?. MD Reports. March 20, 2025. <https://blog.maryannedemasi.com/p/pandemic-panic-are-outbreaks-really>)

Senior policy **experts Professor Garrett Brown and Dr David Bell from the University of Leeds** challenge these claims.

Their research - Reevaluating the Pandemic Preparedness and Response Agenda (REPPARE) - **reveal**s that **the WHO's warnings about rising pandemic frequency are misleading.**

According to Brown and Bell, **the** apparent **surge in outbreaks is** largely **a result of improved diagnostic tools—meaning we are detecting more diseases, not** necessarily **experiencing more** of them.

At the same time, infectious disease mortality has been steadily **declining for decades**, thanks to advancements in hygiene, medical care, and nutrition.

A major concern is the WHO's focus on speculative threats like "Disease X"—a hypothetical pathogen that could, in theory, cause a future pandemic. Since known infectious threats have not demonstrated the catastrophic impact predicted, the WHO has introduced this theoretical concept to justify its continued push for pandemic preparedness.

Brown and Bell argue that these **forecasts rely more on speculation than solid evidence, and foster unnecessary fear.**

More concerning is how **this fixation on hypothetical pandemics diverts attention and funding from real, ongoing health crises like tuberculosis and malaria.**

Tuberculosis alone kills over 1.3 million people annually, while malaria claims more than 600,000 lives—mostly children. These diseases are both preventable and treatable, yet their funding is shrinking as global resources shift towards pandemic preparedness based on uncertain projections.

The financial rationale is equally questionable. Brown and Bell highlight that G20 **reports on pandemic risk rely on unreliable data and exaggerated economic models.** These reports further **distort the perceived threat by factoring in extraordinary costs,** such as government stimulus packages, **making pandemics seem disproportionately catastrophic** compared to diseases like tuberculosis and malaria.

Ultimately, Brown and Bell argue that **prioritising hypothetical pandemics over real, ongoing health crises, is not only misguided—it is dangerous.**

1NC Case (Pandemics ADV – No Solvency – Misinformation)

SECOND, Single-payer can't solve pandemics; misinformation and medical mistrust undermine public health efforts

Caceras 2022 (Maria Mercedes Ferreira Caceres, Juan Pablo Sosa, Jannel A Lawrence, Cristina Sestacovschi, Atiyah Tidd-Johnson, Muhammad Haseeb Ul Rasool, Vinay Kumar Gadamidi, Saleha Ozair, Krunal Pandav, Claudia Cuevas-Lou, Matthew Parrish, Ivan Rodriguez, Javier Perez Fernandez, Division of Research & Academic Affairs, Larkin Community Hospital, South Miami, Florida, USA; Department of Medicine, American University of Antigua, Coolidge, Antigua; Family Medicine, Larkin Community Hospital Palm Springs Campus, Hialeah, Florida, USA; Family Medicine, Larkin Community Hospital South Campus, Miami, Florida, USA; Pulmonary Disease and Critical Care Medicine, Larkin Community Hospital Palm Springs Campus, Hialeah, Florida, USA. National Center for Biotechnology Information. The Impact of Misinformation on the COVID-19 Pandemic. January 22, 2022. <https://pmc.ncbi.nlm.nih.gov/articles/PMC9114791/#abstract1>)

Social media platforms served as a driving force for misinformation related to COVID-19

Thus, one step in dealing with this burden of misinformation on social media is by increasing surveillance of these sites and further enhancing the ability to identify false information on the internet in the form of new software, enhanced algorithms, or increased fact-checkers.

An effective framework for internet media sites to disseminate information should be created to prevent further crises. In creating this framework, the psychological drivers of sharing and accepting false and inaccurate information should be assessed since health topics can lead to anxiety and panic [75]. Media and news websites should increase evidence-based communication with information from peer-reviewed medical journals. Internet media and technology companies can develop apps that disseminate accurate, up-to-date scientific data and government mandates and recommendations based on geography.

Historically, **healthcare misinformation has largely shaped public health behavior**, but the impact of this association became ostensive **during the COVID-19 pandemic. It brought about a surge of** several **rumors, hoaxes, and false theories regarding the** origin of the **virus, its spread, and treatment options** which even led to fatalities in some cases. **Misinformation regarding the** incidence rate, **prevalence, and spread of the virus has contributed significantly towards** the complacent attitude of people to this crisis. Additionally, **the emergency use authorization of various COVID vaccines resurfaced** the **general public's mistrust in science, which, combined with the rampant spread of falsified information, made vaccine hesitancy a parallel pandemic**. As a result, this has shed new light on **the importance of** having credible sources of healthcare information and **continuous monitoring of social media platforms to determine whether accurate information is being relayed to the public**. A multifaceted approach is crucial to combat such a massive "infodemic" and requires a collaborative strategy involving local governments and law enforcement bodies, social media companies, community-based organizations, and other vital stakeholders to dispel such myths. This article highlights some of the **challenges posed by misinformation in an era of social media, the catastrophic impact of misinformation on fighting public health crises**, and the various strategies adopted by countries worldwide to combat it.

1NC Case (Pandemics ADV – Analytic Arguments)

THIRD,

<u>Write Your Own Analytic Arguments</u>	
Can you poke any holes in the story of the 1AC's Advantage? Is there anything about it that doesn't make sense?	US Single-payer can't solve pandemics that originate outside of the US. Global pandemics will still exist.
Can you find any ways to refute the Advantage using DR. MO (Deny, Reverse, Minimize, Outweigh)?	
Can you point out any flaws with any 1AC pieces of evidence (cards) using ABCD (Author, Basis, Context, Date)?	

1NC Case (Pandemics ADV – No Impact Options)

FOURTH No impact: genetic diversity means pandemics won't lead to extinction

Vermeer 2025 (Michael, PhD Chemistry, senior physical scientist at RAND. "On the Extinction Risk from Artificial Intelligence." RAND. May 6, 2025.
https://www.rand.org/content/dam/rand/pubs/research_reports/RRA3000/RRA3034-1/RAND_RRA3034-1.pdf)

To support this assertion, we look first to historical pandemics. Natural biological threats have existed for millennia. The 14th-century bubonic plague—the Black Death—wiped out 30–50 percent of Europe's population, and the 1918 influenza pandemic resulted in 50 million deaths worldwide (Shipman, 2014). The combination of drought and pathogens introduced during the European conquest of Mexico in the 16th century led to more than a 90-percent reduction in the native population (Acuna-Soto et al., 2002). However, although these examples led to drastic human population declines, they did not fully extinguish the human population. Indeed, with one known exception—the extinction of the Christmas Island rat, preceded by the emergence of a deadly pathogen in the population—there are no well-corroborated instances of pathogens causing the complete extinction of a mammalian species (Wyatt et al., 2008).

A greater threat would likely come from novel pathogens, including both modified natural pathogens or completely de novo pathogens, designed for high transmissibility and high lethality. However, even pathogens designed to cause these effects might be limited by human heterogeneity. Human genetic diversity plays a key role in limiting the effectiveness of pathogens across populations. Within a population, pathogens affect individuals differently depending on factors related to the specific genetic characteristics of each host (Jones, 2021). Some individuals or subpopulations might possess genetic traits that confer resistance or immunity to certain pathogens. For example, differences in viral receptors between individuals can affect the ability of the hepatitis C virus to enter a host's cells (Huang et al., 2019).

The strength of immune response can vary among individuals, influencing their ability to fight off infections. The likelihood that a pathogen will cause death is influenced by the immune response that an individual is able to put up against the pathogen (Rouse and Sehrawat, 2010), meaning that outcomes will vary between individuals, even when controlling for pathogen dose.

Relatedly, the infection dose—the amount of a pathogen that an individual is exposed to—can significantly alter the course of a disease (Rouse and Sehrawat, 2010). Individuals who only receive a small infection dose have a higher chance of successfully mounting an immune response, and infection dose is a factor that cannot easily be controlled for. This is the case not only for transmissible pathogens that spread person-to-person but also for nontransmissible pathogens, such as *Bacillus anthracis*, the causative agent of anthrax. As a result, it is unlikely that even a carefully engineered pathogen would be 100 percent lethal for all humans, as certain individuals or populations might possess traits that allow them to fight the disease or receive a non-lethal dose of the pathogen that causes the disease. Case studies have suggested that exposure to even highly lethal viruses, such as rabies, is not always fatal (Gold et al., 2020).

The postinfection survival of some individuals leads to several important consequences. First, some populations will emerge with immunity; survivors might develop immunological memory, thereby reducing the severity of disease on reinfection. Second, over generations, natural selection will dictate that hosts with immune systems that are better equipped to fight off a pathogen will survive and pass along those traits to offspring. Third, subpopulations with increased immunity within a larger population can alter disease dynamics, thereby lowering the pool of susceptible individuals and reducing the continued spread of a pathogen in the population (Grassly and Fraser, 2008).

2AC

Pandemics ADV

Case Overview

<u>Case Overview - Template</u>	
Explain the impact of the Advantage (Hint: look at the 1AC Kim et al. 2021 evidence)	The impact of the Pandemics Advantage is extinction from pandemics---that's Kim 21.
Explain how the plan solves that impact (Hint: look at the 1AC Galvani 2022 evidence and NashBio 2024 evidence)	The plan solves the impact because ensuring access to healthcare for everyone helps with disease monitoring and prevention, as well as reducing spread and severity of diseases. That's Galvani 22.
Explain why the impact of the Advantage is more important than the Negative's impacts using magnitude, risk, and/or timeframe (pick 1 or 2 to explain)	Vote Affirmative because Case outweighs on magnitude and risk. Pandemics risk extinction, which is the biggest possible impact there; and scholars say a pandemic would be a global catastrophe if it doesn't cause extinction. Experts agree that future pandemics are guaranteed, so we must be prepared to respond---that's Buchler 25.

AT: Pandemics Unlikely

Now, onto the line-by-line

1NC 1,

<u>2AC Case Argument - Template</u>	
Tell the judge which 1NC argument you're answering. Summarize their argument in a few words.	They say pandemics aren't likely
Tell the judge which piece of 1AC evidence answers the argument using the cite (author name and year).	But, first, our Buchler 25 evidence answers this
Explain in your own words what that 1AC evidence says that answers the 1NC argument	It says diseases evolve unpredictably and are spreading more because people are moving around the world and living in close proximity.
Make up your own argument to respond to the 1NC argument (Hint: you can explain why your evidence is better than theirs and/or attack the credibility of their argument with ABCD)	Second... their evidence just says that we're detecting more diseases than before, not that any of the factors we highlight are wrong.
Read a relevant piece of new evidence	Third...

Pandemics are likely now due to climate change and public health cuts

Geddes 26 (Linda, British science journalist and author. She is a former science correspondent for The Guardian in London and was previously a staff writer and editor at New Scientist magazine. She has a degree in cell biology. "Six major health threats that could shape 2026: here's what experts are watching." Gavi. 2-19-2026.
<https://www.gavi.org/vaccineswork/six-major-health-threats-could-shape-2026-heres-what-experts-are-watching>)

These are challenging times for global health. From conflict-related disease outbreaks and rising health misinformation to climate change and global health funding cuts, **the risks to our collective global health are growing**, and can feel overwhelming.

Yet, even as these risks intensify, global health organisations and their partners are mobilising research, resources and new tools to bolster our defences against these global health threats.

A new insight paper published by Gavi, the Vaccine Alliance, examines six immediate threats to global and regional health in 2026, why they matter, and the initiatives and solutions aimed at keeping us all safe.

1. Conflict-associated outbreaks

By some measures, **violence and disputes between and within states are approaching their highest levels since World War II. Conflict drives the emergence and transmission of infectious disease by displacing populations, disrupting healthcare delivery and breaking supply chains for food, clean water and medicines. It can also accelerate the spread of antimicrobial resistance.**

The degree to which conflict helps to drive disease outbreaks depends on local conditions, says Carrie Nielsen, immunisation lead at the International Federation of Red Cross and Red Crescent Societies. "A lot of factors contribute, including environmental conditions, the ability to deliver health services during the conflict, and pre-conflict health infrastructure and immunisation coverage."

Cholera illustrates how conflict-related conditions can accelerate disease spread. More than 6,000 people died from the disease in 2024 – around 50% more than in 2023 – while the number of affected countries rose from 45 to 60. The current surge has been worsened by disruptions to surveillance and response in conflict-affected areas including parts of Sudan and the Democratic Republic of the Congo.

Although multiple factors are driving the upsurge, safe water, sanitation and effective case management remain essential for outbreak control. "In areas affected by conflict, when people are being displaced, it can be difficult to provide basic services and prevent the disease spreading," says Allyson Russell of Gavi's Outbreaks and Global Health Security team.

Despite these challenges, efforts to prevent and control outbreaks are expanding. Global production of oral cholera vaccine has increased from around 30 million doses in 2022 to 80 million in 2025, supported by manufacturers, donors and Gavi's expanded investment in cholera prevention and response – including support for the global oral cholera stockpile.

Looking ahead, Gavi is increasing its support for populations in conflict and other fragile settings by more than 15% during 2026–2030 compared to the previous five-year period including introducing a new agile funding tool – the Gavi Resilience Mechanism (GRM) – designed to respond rapidly to unexpected health emergencies and humanitarian crises that are not covered through existing mechanisms.

2. Climate change and arboviruses

Climate change is reshaping the geography of diseases caused by arboviruses – those spread by mosquitoes and other arthropods.

Although the relationships between these viruses and climate are complex, a growing body of research shows that **rising temperatures**, shifting rainfall patterns and more frequent flooding **are expanding mosquito habitats**. "This is leading to more outbreaks of diseases including malaria, yellow fever, chikungunya and dengue," says Ignacio Esteban, Senior Manager in Gavi's Policy team.

When temperatures rise, mosquitoes become adults more quickly, and the incubation period of the viruses within mosquitoes is shorter, which increases the speed of transmission of these viruses to humans.

- Diana P. Rojas, infectious disease epidemiologist of the WHO Global Arbovirus Programme and co-lead of the Global Arbovirus Initiative

When researchers from Imperial College London and the World Health Organization (WHO) modelled yellow fever cases in Africa, for example, they found that deaths could increase by 11–25% by 2050.

A separate study found that the global population at risk of mosquito-borne diseases will increase by around half a billion, to 6.5 billion by 2050. Updated risk maps published in 2025 also show dengue, chikungunya, Zika and yellow fever expanding into higher latitudes, including parts of Mexico, Europe and the Middle East.

Temperature is a key driver. Mosquitoes – especially *Aedes aegypti* and *Aedes albopictus* – are the primary vectors for dengue, Zika and chikungunya. "When temperatures rise, mosquitoes become adults more quickly, and the incubation period of the viruses within mosquitoes is shorter, which increases the speed of transmission of these viruses to humans," says infectious disease epidemiologist Diana P. Rojas, of the WHO Global Arbovirus Programme and co-lead of the Global Arbovirus Initiative.

Record heat is already translating into record disease. In 2024 – the warmest year on record – more than 14.4 million dengue cases were reported globally, more than double the previous peak in 2023.

Extreme weather is compounding the risk. Scientists warn that floods, droughts and heavy rains can increase human exposure to mosquitoes and other vectors. "After a rainy season, when there are floods or when people collect water because of drought, there will be more breeding sites for mosquitoes, and then those places are more likely to have dengue or other arbovirus outbreaks," says Dr Rojas.

The burden falls disproportionately on lower-income countries and vulnerable groups, including children, women and displaced populations.

In response, global efforts are to address this threat are expanding. WHO's Global Arbovirus Initiative aims to strengthen surveillance, preparedness and vector control, while the World Mosquito Program is releasing mosquitoes infected with *Wolbachia* bacteria to reduce their ability to transmit viruses. Gavi is also planning to invest US\$ 2.2 billion in vaccines against climate-sensitive diseases, including cholera, Japanese encephalitis, malaria, meningitis A, typhoid and yellow fever.

3. Global health funding cuts

Sharp reductions in aid from high-income countries to lower-income nations in 2025 **have disrupted essential health services, from disease surveillance and vaccination to maternal care and emergency preparedness.**

AT: No Solvency---Misinfo

1NC 2,

<u>2AC Case Argument - Template</u>	
Tell the judge which 1NC argument you're answering. Summarize their argument in a few words.	They say single payer does not solve medical mistrust due to misinformation
Tell the judge which piece of 1AC evidence answers the argument using the cite (author name and year).	But, first, our Galvani 22 evidence answers this
Explain in your own words what that 1AC evidence says that answers the 1NC argument	It says relationships with medical professionals like primary care and family doctors in medical professionals are key to build trust and reduce vaccine hesitancy.
Make up your own argument to respond to the 1NC argument (Hint: you can explain why your evidence is better than theirs and/or attack the credibility of their argument with ABCD)	Second...
Read a relevant piece of new evidence	Third...

AT: No Solvency---US Only

1NC 3,

<u>2AC Case Argument - Template</u>	
Tell the judge which 1NC argument you're answering. Summarize their argument in a few words.	They say the M4A cannot solve pandemics originating outside of the US
Tell the judge which piece of 1AC evidence answers the argument using the cite (author name and year):	But, first, our evidence answers this
Explain in your own words what that 1AC evidence says that answers the 1NC argument	It says
Make up your own argument to respond to the 1NC argument (Hint: you can explain why your evidence is better than theirs and/or attack the credibility of their argument with ABCD)	Second--- The US is a major travel hub in an increasingly connected world AND the base of the World Health Organization; it's impossible to fight pandemics without the US.
Read a relevant piece of new evidence	Third---

AT: No Impact---Genetic Diversity

1NC 4,

<u>2AC Case Argument - Template</u>	
Tell the judge which 1NC argument you're answering. Summarize their argument in a few words.	They say no impact due to genetic diversity
Tell the judge which piece of 1AC evidence answers the argument using the cite (author name and year).	But, first, our Kim et al. 21 evidence answers this
Explain in your own words what that 1AC evidence says that answers the 1NC argument	It says Pandemics historically have had the capability to wipe out massive numbers of the population. Genetic diversity is not enough to prevent this since diseases evolve to overcome the diversity.
Make-up your own argument to respond to the 1NC argument (Hint: you can explain why your evidence is better than theirs and/or attack the credibility of their argument with ABCD)	Second---
Read a relevant piece of new evidence	Third---

AND, New, emerging infectious diseases are stronger and risk cause extinction.

Oosterhout 2021 (Cock Van, School of Environmental Sciences, University of East Anglia, Norwich Research Park, Norwich, UK "Mitigating the threat of emerging infectious diseases; a coevolutionary perspective". Virulence 12, no. 1 (2021): 1288-1295. May 6, 2021 <https://pmc.ncbi.nlm.nih.gov/articles/PMC8115449/>)

Mass food production has underpinned our "ecological success", but it is entirely unsustainable based on environmental, ecological, and coevolutionary grounds. We urgently need to reduce our reliance on animal protein, in particular the consumption of other

mammals. Emission of potent greenhouse gases by ruminant livestock is contributing significantly to anthropogenic “radiative forcing” and global warming[52]. The vast amount of **antibiotics used to enhance growth and control infections has led to the emergence of new, more virulent, and more resistant microorganisms**[53]. **Given that mammals are** phylogenetically **closely related to humans, they also pose the most significant threat for the evolution and transmission of zoonotic EIDs**. Producing animal protein from aquaculture and aquaponics has the potential to become an environmentally and coevolutionary more sustainable way of feeding part of the world's population[46]. In addition, we will also need to develop a larger variety of palatable non-meat-based alternatives, which will have direct and indirect health benefits[54]. Reducing the number of livestock is imperative for human health, as well as for the health of the planet. To implement this and other changes, we must embrace a coevolutionary robust One Health approach and focus on what really matters: One World – One Health.

Concluding remarks

Emerging infectious diseases (EIDs) are possibly **the greatest existential threat to humanity**, but fortunately, we have never been in a stronger position to defend ourselves against these threats. COVID-19 has elicited a huge pan-global response among our medical and scientific communities, and as a species, we have shown remarkable behavioral plasticity to cope with the new conditions. Nevertheless, COVID-19 has revealed the tension between our rights as individuals and the well-being of society as a whole. However, tackling this pandemic requires us to act as an eusocial species rather than as selfish individuals. It calls for increased social responsibility, in particular in the uptake of the vaccine and adherence to rules designed to control the COVID-19 pandemic. Misinformation on the web and “playing politics” can significantly undermine the much-needed concerted response. Going forward, we need to recognize that our health, the environment, and our global economy are all closely interlinked, and that the world's natural resources must be governed in a way that attains a coevolutionary balance. The “One World – One Health” concept was created in 2004, inspired by the “One Medicine” approach [55] that integrates human and veterinary medicine to respond to zoonoses[56]. By considering the health of humans, wildlife and ecosystems, the holistic One Health approach has recruited multisector expertise in dealing with humanity's greatest challenge. New initiatives are emerging that envision innovative prevention strategies, such as PREZODE[42]. I advocate that these initiatives also address the coevolutionary imbalance, integrating this into the One Health framework. Importantly, all these changes require broad public support underpinned by an understanding of the significant threat our society is facing, and what we can do at an individual and societal level to improve our long-term (coevolutionary) prospects as a species. I believe that **this is essential because with increased globalization, we have created a perfect storm for the evolution and outbreak of EIDs. Rather than just combating the existing EIDs** and minimizing their social-economic impacts, **we must also curtail the evolution of novel EIDs, thereby reducing the risks of future outbreaks**, and the possible transition from the “Anthropocene” into a “Pathocene”.

2AC – Off Case

BioTech DA

Now, onto the Biotech DA

FIRST, Non-unique: Pharmaceutical R&D is low now

Armstrong 2026 (Annalee, Senior Editor At Biospace. Pharma R&D Spend Drops 3.6% As Pipeline Prioritizations

Take Shape. BioSpace. March 25, 2026.

<https://www.biospace.com/business/pharma-r-d-spend-drops-3-6-as-pipeline-prioritizations-take-shape>)

R&D spending at the top 16 pharmaceutical companies declined by 3.6% overall in 2025, as many aggressively cut spending and refocused pipelines. **AbbVie had the steepest decline, meaning the company spent 29% less on research.**

Overall, the top 16 heavyweights spent \$159.1 billion on R&D in 2025, compared to \$165 billion the previous year.

Johnson & Johnson's research expenses fell by nearly 15% to \$14.7 billion. Much of that decline can be attributed to changes made in 2023, when the healthcare giant completed a prioritization of its R&D investment within the Innovative Medicines segment. **J&J exited a number of programs** at the time, **including infectious diseases and vaccines**, such as a respiratory syncytial virus (RSV) adult vaccine program, hepatitis and HIV development.

While that program wrapped up in 2024, J&J's 2025 spend reflects a slimmer organization.

Similarly, **Bristol Myers Squibb dropped R&D spending by 11% in 2025** to \$9.95 billion. The company attributed this to lower impairment charges for the period, which can result from writing down failed programs, and the ongoing strategic productivity initiative.

BMS originally announced that program in April 2024, pledging to achieve \$1.5 billion in cost savings through eliminating jobs and prioritizing development programs. The company cut several legacy programs from its 2019 Celgene acquisition in the process.

Merck is also doing a little restructuring. The company cut R&D expenses by 12% for 2025 thanks to lower charges for business development activity. But those savings were offset by higher clinical activity and restructuring costs.

Pfizer, too, flagged restructuring across the company as impacting its R&D spend, which fell 4% to \$10.21 billion.

SECOND, no link. Even if Medicare for All lowers revenue, that won't harm innovation.

Blumenthal et al. 2021 (David, Former President of the Commonwealth Fund. Mark Miller, Executive Vice President at Arnold Ventures. Lovisa Gustafsson, Vice President At The Commonwealth Fund. The U.S. Can Lower Drug Prices Without Sacrificing Innovation. The Commonwealth Fund. October 1, 2021.

<https://www.commonwealthfund.org/blog/2021/us-can-lower-drug-prices-without-sacrificing-innovation>)

Legislation giving Medicare the ability to negotiate drug prices in the United States **would make** their **life-saving potential immediately available to millions of Americans** who cannot now afford them, thus extending lives and alleviating suffering. The pharmaceutical industry, however, has done a masterful

job of **arguing** that these Americans must suffer in the short term since **lower prices would gut long-term innovation** in drug development.

This **is a false choice**. We need not trade the certainty of saved lives now for the possibility of saved lives in the future.

The reason: Large pharmaceutical companies are nowhere near as important to real drug innovation as they purport to be. Furthermore, smart policy changes can sustain and increase the pace of life-changing breakthroughs in biomedicine through increased funding of the National Institutes of Health (NIH), cutting the costs and accelerating the speed of clinical trials, and reforming patent law to stop innovation-blocking abuses used by Big Pharma to prevent new drugs from entering the market.

The Congressional Budget Office estimated that reducing the pharmaceutical industry's **revenues would result in** two **fewer drugs** in the next decade, 23 fewer in the following decade, and 34 fewer drugs in the third decade. Predictions 20 to 30 years out are necessarily imprecise, **but** in any case, many of **those** projected **new therapies would likely be neither novel nor** more **valuable** than existing drugs. That is, they wouldn't be innovative.

Many would be modified versions of existing drugs, created merely to extend patent protections and thus monopolies over existing therapeutics. When Medicare Part D dramatically increased the pharmaceutical industry's revenues 18 years ago, major drug companies directed their drug-development efforts primarily at drug classes where there were already five or more products on the market. Currently, **the majority of new patents** filed by large pharmaceutical companies **are modifications of drugs already on the market**.

Historically, many breakthrough products did originate with large pharmaceutical companies, but the innovation process in biomedicine has changed fundamentally. **Truly innovative therapies** — like the mRNA vaccines for Covid-19 that are saving untold number of American lives — **now originate in** small companies that are spinoffs of **university research efforts mostly funded by the NIH** and philanthropies. In 2018, such small firms accounted for nearly two-thirds of the brand new drugs patented in the United States and nearly three-quarters of drugs in the late stage of the development pipeline. The mRNA technology underlying the Moderna and Pfizer-BioNTech vaccines came out of NIH labs, the University of Pennsylvania, and MIT.

To be sure, large **pharmaceutical companies** play a critical role in the end stage of drug development, funding and running essential clinical trials and navigating regulatory approvals. But they **are no longer the dominant source of true innovation, and maintaining** their **enormous profits** at current levels — which, at 15% to 20% of revenues, well exceed market standards — is **no longer** an efficient way to **promote biomedical innovation**. And it is worth remembering that Big Pharma spends its revenues on many less productive activities than clinical

trials and regulatory approvals, including lobbying and political contributions (more than \$800 million in the 2016 to 2020 period) and marketing (tens of billions of dollars annually).

The United States needs a new strategy for drug innovation that recognizes the new reality of the biomedical innovation process, and the true, limited role of Big Pharma. We could start by reinvesting a substantial fraction of the hundreds of billions of dollars that could be saved from pending drug-payment-reform legislation into the most powerful engine of innovation in drug development: the NIH and its academic research partners. This would likely generate a flood of truly innovative, life-saving products — not a flock of me-too drugs — that small companies could perfect and Big Pharma could steer to market.

Policymakers and regulators should also develop innovative ways to reduce the cost and increase the speed of clinical trials needed to demonstrate the safety and efficacy of new agents. Operation Warp Speed showed how this is possible through government-industry partnerships. The federal government not only funded the research needed to make the mRNA vaccines but also assumed some of the financial risk associated with the vaccines' clinical trials. Our pandemic experience should precipitate new policymaking to make clinical trials cheaper and faster.

Also critical will be reforms of patent law to reduce the frivolous use of patents by Big Pharma to inhibit innovation. Current patent law enables large pharmaceutical companies to spend billions of dollars annually on legal maneuvering to protect existing patents and preserve their market monopolies.

One strategy they use is creating so-called "patent thickets" around existing products. These consist of large numbers of often meaningless patents — for such things as moving to a time-release formulation — that competitors have to challenge in court before they can market competing products. For example, AbbVie, which markets the world's best-selling drug, Humira, has filed 257 related patent applications. Such challenges can take years to adjudicate and cost huge sums in legal fees. Meanwhile, Big Pharma maintains its monopolies and pricing power for decades longer than the 17 years contemplated under current law.

The United States needs an effective strategy for maximizing drug innovation and the huge benefits to humanity that it promises. **Protecting the revenues of Big Pharma is not that**

strategy.

THIRD, No Impact: Food shortages do not cause conflict

Vestby 2018

(Jonas, Doctoral Researcher at the Peace Research Institute Oslo, Ida Rudolfson, doctoral researcher at the Department of Peace and Conflict Research at Uppsala University and PRIO, and Halvard Buhaug, Research Professor at the Peace Research Institute Oslo (PRIO); Professor of Political Science at the Norwegian University of Science and Technology (NTNU); and Associate Editor of the Journal of Peace Research and Political Geography, "Does hunger cause conflict?", 5/18/18, <https://blogs.prio.org/ClimateAndConflict/2018/05/does-hunger-cause-conflict/>)

It is perhaps surprising, then, that **there is little scholarly merit in the notion that a short-term reduction in access to food increases the probability that conflict will break out**. This is because **to start** or participate in violent **conflict requires people to have both the means and the will**. Most **people on the brink of starvation are not in the position to resort to violence**, whether against the government or other social groups. In fact, the urban middle classes tend to be the most likely to protest against rises in food prices, since they often have the best opportunities, the most energy, and the best skills to coordinate and participate in protests.

Accordingly, **there is a widespread misapprehension that social unrest** in periods of high food prices **relates** primarily **to food shortages**. **In reality, the sources of discontent are considerably more complex** – linked to political structures, land ownership, corruption, the desire for democratic reforms and general economic problems – where the price of food is seen in the context of general increases in the cost of living. Research has shown that while the **international media have a tendency to seek simple resource-related explanations – such as drought or famine – for conflicts** in the Global South, debates in the local media are permeated by more complex political relationships

2NC

Biotech DA

O/V

First, an overview:

<u>DA Overview – Template</u>	
Explain the impact of the Disadvantage (Hint: look at the Cribb 2022 evidence)	The impact of the Biotech Disadvantage is nuclear war from food insecurity. Widespread hunger leads to government collapse and sparks civil wars that escalate---that's Cribb 22.
Explain how the plan causes that impact (Hint: look at the 1NC Cudmore 2020 evidence)	The plan causes the impact because it crushes pharmaceutical profits which are essential for funding biotech research---that's Cudmore 20. This would kill innovation for tech such as CRISPR, which is transforming farming by using gene-editing to grow crops resistant to drought and disease---that's Le Page 26 and Tuhin 25.
Explain why the impact of the Disadvantage is more important than the impacts of the Affirmative's Advantages using magnitude, risk, and/or timeframe (pick 1 or 2 to explain)	Vote Negative because the Disadvantage outweighs Case on magnitude. Nuclear war would wipe out humanity and make the planet unlivable. History proves we can survive pandemics, but the permanent destruction nuclear war would cause is unprecedented and existential.
Read the DA Turns Case evidence below (Geddes 2026)	

AND, DA turns Case: war harms global health and spreads diseases

Geddes 2026 (Linda, science journalist and author, former science correspondent for The Guardian, former staff writer and editor at New Scientist magazine, with a degree in cell biology. "Six major health threats that could shape 2026: here's what experts are watching." Gavi. February 19, 2026.
<https://www.gavi.org/vaccineswork/six-major-health-threats-could-shape-2026-heres-what-experts-are-watching>)

These are challenging times for global health. From conflict-related disease outbreaks and rising health misinformation to climate change and global health funding cuts, the risks to our collective global health are growing, and can feel overwhelming.

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1. Conflict-associated outbreaks

By some measures, violence and disputes between and within states are approaching their highest levels since World War II.

Conflict drives the emergence and transmission of infectious disease by displacing populations, disrupting healthcare delivery and breaking supply chains for food, clean water and medicines. It can also accelerate the spread of antimicrobial resistance.

The degree to which conflict helps to drive disease outbreaks depends on local conditions, says Carrie Nielsen, immunisation lead at the International Federation of Red Cross and Red Crescent Societies. “A lot of factors contribute, including environmental conditions, the ability to deliver health services during the conflict, and pre-conflict health infrastructure and immunisation coverage.”

Cholera illustrates how conflict-related conditions can accelerate disease spread. More than 6,000 people died from the disease in 2024 – around 50% more than in 2023 – while the number of affected countries rose from 45 to 60. The current surge has been worsened by disruptions to surveillance and response in conflict-affected areas including parts of Sudan and the Democratic Republic of the Congo.

Although multiple factors are driving the upsurge, safe water, sanitation and effective case management remain essential for outbreak control. **“In areas affected by conflict, when people are being displaced, it can be difficult to provide basic services and prevent the disease spreading,”** says Allyson Russell of Gavi’s Outbreaks and Global Health Security team.

AT: Innovation Low Now

Now, onto the line-by-line.

First, 2AC 1,

<u>2NC/1NR Off-Case Argument – Template</u>	
Tell the judge which 2AC argument you're answering. Summarize their argument in a few words.	They say non-unique because pharmaceutical R&D is low now
Tell the judge which piece of 1NC evidence answers the argument using the cite (author name and year).	But, first, our Rotz 26 evidence answers this
Explain in your own words what that 1NC evidence says that answers the 2AC argument	It says right now pharmaceutical companies' investment is higher, signaling renewed confidence in R&D. This is a reversal of the previous trend towards lower investment.
Make up your own argument to respond to the 2AC argument (Hint: you can explain why your evidence is better than theirs and/or attack the credibility of their argument with ABCD)	Second...
Read a relevant piece of new evidence from the section below	Third...

AT: No Link---Others Innovate

NEXT, 2AC 2,

<u>2NC/1NR Off-Case Argument – Template</u>	
Tell the judge which 2AC argument you're answering. Summarize their argument in a few words.	They say no link because the public sector, not the pharmaceutical industry, innovates
Tell the judge which piece of 1NC evidence answers the argument using the cite (author name and year):	But, first, our evidence answers this
Explain in your own words what that 1NC evidence says that answers the 2AC argument	It says
Make up your own argument to respond to the 2AC argument (Hint: you can explain why your evidence is better than theirs and/or attack the credibility of their argument with ABCD)	Second... FIRST, their evidence says university research is funded by government organizations like the NIH, but this evidence is from 2021, before the federal government started slashing funding for scientific agencies. SECOND, even if new discoveries come from the public sector, the pharmaceutical industry builds on those discoveries to stay competitive; continued innovation of existing biotechnologies like CRISPR is what our Tuhin 25 evidence says is key to food security.
Read a relevant piece of new evidence from the section below	Third...

The public sector alone isn't key to innovation; empirical research proves.

Schulthess et al. 22 (Duane, Harry P. Bowen, Robert Popovian, Daniel Gassull, Augustine Zhang & Joe Hammang. Researchers in health policy, economics, and regulatory science. "The Relative Contributions of NIH and Private Sector Funding to

Conclusion

This paper addressed the issue of the relative contribution of the private and public (NIH) sector funding to the discovery and development of new therapies and the likelihood of FDA approval. **While each sector makes important contributions, the findings of this study refute the false maxim that the public sector is solely responsible for all new innovations. This conclusion is consistent with the findings published in peer-reviewed scientific journals over the past several decades.** Yet, many **policymakers**, journalists, and academicians **continue to espouse the position that questions, or even denies, the role of the private sector in the discovery and development of innovative therapies.** Such continued skepticism in the context of recent health policy debates around such issues as March in Rights is a distraction for patients and their families desperately looking for curative therapies. It is hoped that **this study's objective examination of private versus public sector contributions to biopharmaceutical research and innovation** will serve to **better inform** both current and future **policy debates.**

AT: No Food Wars

NEXT 2AC 3,

<u>2NC/1NR Off-Case Argument – Template</u>	
Tell the judge which 2AC argument you’re answering. Summarize their argument in a few words.	They say no impact because food insecurity does not lead to conflict
Tell the judge which piece of 1NC evidence answers the argument using the cite (author name and year).	But, first, our Cribb 22 evidence answers this
Explain in your own words what that 1NC evidence says that answers the 2AC argument	It says major wars have historically started over food and farmland. World War II and more recent examples like Putin’s war in Ukraine prove that food security is a key driver of conflict.
Make up your own argument to respond to the 2AC argument (Hint: you can explain why your evidence is better than theirs and/or attack the credibility of their argument with ABCD)	Second... Their evidence only says starving people can't fight wars. Political instability and desperation caused by food scarcity doesn't require people to be on the literal brink of starvation to escalate to violence.
Read a relevant piece of new evidence from the section below	Third...

Food insecurity causes regional instability that incites violent government collapse and military intervention.

Ellison and Sikorsky 2024 (Tom, Deputy Director of the Center for Climate and Security at the Council on Strategic Risks; Erin, Director of the Center for Climate and Security, and the International Military Council on Climate and Security at the Council on Strategic Risks. “The Feeding Resilience Plan: Safeguarding US National Security at the Crossroads of Food and

Food Insecurity, Climate Change, and Instability

Food- and climate-**driven instability undermines US interests** by threatening US allies, incubating terrorism, drawing in US military and humanitarian resources, and giving openings for adversaries and competitors to extend their influence. **Conflict and instability worsen food insecurity** and climate vulnerability **in a vicious cycle**—security issues are the predominant cause of hunger in roughly one-third of countries experiencing acute food insecurity.⁵

The overlap of war and hunger in Gaza and Sudan typify this link – **of the dozen countries** with more than a million people **facing emergency-level food insecurity, ten are experiencing “high” or “extreme” levels of conflict**, according to the Food Security Information Network and the ACLED Conflict Index.⁶⁷

But **food matters for security everywhere, often short of severe hunger. Volatility in food prices** and agricultural employment **motivate destabilizing protests and economic dislocation that can contribute to conflict. In 2022, 20 countries experienced food-related protests, contributing to the collapse of governments from Haiti to Sri Lanka**, according to a report by the World Food Program.⁸ Today, severe food price spikes continue in Sub-Saharan Africa, the Middle East, and Central and Southeast Asia.⁹

Climate change adds to these pressures and is projected to reduce global calorie production and push more than 500 million more people into severe food insecurity, even in a moderate emissions scenario.¹⁰ As climate change reduces crop yields and contributes to price spikes,¹¹ further instability will likely stem from lost agricultural livelihoods in rural areas and protests over food affordability in urban centers. Compounding these climate pressures are ecological strains broader than global warming, such as overfishing, disruption of farming and fishery ecosystems from fertilizer and pesticide pollution, and threats to crops from pests and disease.¹² In this setting, insurgent groups may increasingly seek to control or extort the food trade to fund their operations, as researchers have observed in the Philippines.¹³ Militaries are becoming embroiled in food issues as insecurity grows; for example, the President of Indonesia tapped the military to help farmers plant rice in response to drought, while Pakistan's military has commandeered one million acres of government-owned land to grow food for civilians.^{14,15}

Rather than a far-off threat, **food insecurity already endangers US national security**. In 2010-11, **food price spikes** and agricultural livelihood losses¹⁶ **contributed to the Arab Spring protests**¹⁷ **and were precipitated by crop failures** of the type growing more likely due to climate change.¹⁸ **The resulting instability and conflict destabilized governments across the region, enabled the rise of ISIS, and, in turn, drew in US military intervention** in

Iraq, Libya, and Syria and gave Russia and Iran opportunities to expand their influence. Meanwhile, **today in West Africa, food insecurity is contributing to instability, extremism, and Russian predation**. Since 2020, grievances over economic hardship and poor governance have motivated eight coups in West and Central Africa, including in Burkina Faso, Chad, Guinea, Mali, and Niger,¹⁹ countries that are among the globe's worst off in food availability and affordability.²⁰ These coups have disrupted Western-supported counterterrorism operations against anti-U.S. militant groups, raised risks of regional conflict, and created inroads for Russian mercenaries who expand Moscow's influence on the continent.^{21,22}

1NR

Pandemics ADV

We're going to extend 3 arguments from the 1NC:

XT Demasi---Pandemics Unlikely

<u>2NC/1NR Case Block - Template</u>	
Tell the judge which 1NC argument against the Advantage/Solvency you're extending. Summarize the argument in a few words.	First Next, extend 1NC 1---no inherency
Tell the judge which piece of 1NC evidence you're extending using the cite (author name and year). You can skip this if your argument was analytic. Then, explain the 1NC argument in your own words.	Our 1NC Demasi 25 evidence says that pandemics are not becoming "more likely", but that our ability to detect diseases is improving. They say climate change and emerging diseases have increased the risk, but even if there are more diseases or increased spread, that hasn't resulted in full-blown pandemics.
Explain why your 1NC argument is better than the Affirmative's response. If your 1NC argument used evidence, explain why it is better than whatever evidence the 2AC used to respond to your argument. Try using ABCD (author, basis, context, date) If your 1NC argument was analytic (did not use evidence), you can still attack the Affirmative evidence using ABCD!	Prefer our <u>evidence</u>/argument because Demasi 25 criticizes the <u>basis</u> of their Buchler evidence, which is just based on speculation, while ours uses hard data to prove that diseases have been killing less people for <i>decades</i>.

Read a new piece of evidence below if it supports your argument	AND...
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XT Caceras---Misinfo

<u>2NC/1NR Case Block - Template</u>	
Tell the judge which 1NC argument against the Advantage/Solvency you're extending. Summarize the argument in a few words.	Next, extend 1NC 2---no solvency
Tell the judge which piece of 1NC evidence you're extending using the cite (author name and year). You can skip this if your argument was analytic. Then, explain the 1NC argument in your own words.	Our 1NC Caceras 22 evidence says that social media misinformation, not access to healthcare, ruins the ability to respond to pandemics. COVID proves that online misinformation led to people <u>choosing</u> not to get treated or vaccinated. They say that single-payer would solve medical mistrust, but we say that building those relationships requires people to choose to regularly see doctors in the first place.
Explain why your 1NC argument is better than the Affirmative's response. If your 1NC argument used evidence, explain why it is better than whatever evidence the 2AC used to respond to your argument. Try using ABCD (author, basis, context, date) If your 1NC argument was analytic (did not use evidence), you can still	Prefer our <u>evidence</u>/argument because it's based on what happened during the last pandemic instead of guessing what would have happened if the US had single payer.

attack the Affirmative evidence using ABCD!	
Read a new piece of evidence below if it supports your argument	AND...

XT Vermeer---Genetic Diversity

FINALLY,

<u>2NC/1NR Case Block - Template</u>	
Tell the judge which 1NC argument against the Advantage/Solvency you're extending. Summarize the argument in a few words.	Next, extend 1NC 4---no impact
Tell the judge which piece of 1NC evidence you're extending using the cite (author name and year). You can skip this if your argument was analytic. Then, explain the 1NC argument in your own words.	Our 1NC Vermeer 25 evidence says that genetic differences prevents human extinction from disease. They say that zoonotic diseases are more likely now. But even if zoonotic diseases are increasing, they do not possess the ability to wipe out everyone.
Explain why your 1NC argument is better than the Affirmative's response. If your 1NC argument used evidence, explain why it is better than whatever evidence the 2AC used to respond to your argument. Try using ABCD (author, basis, context, date) If your 1NC argument was analytic (did not use evidence), you can still attack the Affirmative evidence using ABCD!	Prefer our evidence/<u>argument</u> because history proves that genetic diversity will always prevent extinction from diseases. Even recent pandemics like COVID didn't spread to everyone or kill everyone who did get infected because of genetic differences.
Read a new piece of evidence below if it supports your argument	AND...

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1AR

Pandemics ADV

O/V

First, an overview:

The impact of the Advantage is extinction. Pandemics are likelier than ever; access to healthcare is key to disease prevention and response. Vote AFF because case outweighs on magnitude and risk. Preventing an existential disease is the highest priority, and experts agree future pandemics are guaranteed.

AT: Pandemics Unlikely

Now onto the line-by-line.

FIRST, they extend pandemics unlikely.

BUT

Extend Buchler 25 and Geddes 26---climate change is making infectious diseases worse, which their Demasi evidence doesn't dispute. Even if their data says mortality has decreased generally, it only takes one outbreak escalating to cause our impact, which experts agree is inevitable.

AT: Can't Solve Misinfo

**NEXT, they extend misinformation means plan can't solve
BUT**

Extend Galvani 22.

**Advice from trusted doctors overrides random claims from the
Internet; increasing access to healthcare helps build that trust.**

**Prefer our evidence---it's written by multiple epidemiologists who
specifically study the spread of diseases.**

AT: No ! to Pandemics

NEXT, they extend no impact to pandemics.

BUT

Extend Oosterhout 21 and Kim 21. Infectious diseases are getting WORSE now, so COVID not killing everyone doesn't mean the next disease won't. We can't predict how effective natural defenses will be for diseases that we've never seen before.

Biotech DA

Now onto the Biotech DA.

AT: DA Turns Case

First, they say the DA turns case.

BUT we agree that future diseases are inevitable---the plan is still key to prepare for and respond to those outbreaks---that's Galvani et al. 22.

Now, we'll extend two arguments.

XT NUQ---Innovation Low Now

FIRST, extend 2AC 1, non-unique: our Armstrong 26 evidence shows major pharmaceutical companies cut R&D spending in 2025.

If their disadvantage is true, innovation should have already stopped and caused food wars.

Prefer our evidence---it looks at top companies' spending in 2025.

They just say companies invested more in 2024.

XT No Link---Start-ups

SECOND, extend 2AC 2, no link: our Blumenthal et al. 21 evidence says government-funded university researchers are key to innovation, not pharmaceutical companies.

Even if funding is lower, universities will still do research, and it doesn't mean companies will suddenly do more innovation.

2NR (outline)

BioTech DA

Overview

Part of MR. T that the NEG will collapse on is magnitude

**The 2NR will also highlight and explain the significance of the 1AR
not extending any arguments against the DA's impact**

Line-by-Line

Pandemics ADV

Now, onto case.

XT No Inherency---Pandemics Unlikely

Extension of 1NC 1 no inherency argument (Demasi 25)

XT No !---Genetic Diversity

Extension of 1NC 4 no impact argument (Vermeer 25)

2AR

Pandemics ADV

Overview

Part of MR. T that the AFF will collapse on is risk

Line-by-Line

BioTech DA