

A Deep Dive into China's COVID-19 Response

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676,609,955 cases and 6,881,955 deaths as of March 10, 2023¹—that's the impact of Coronavirus disease 2019 (COVID-19) on the world in a short three year time period. COVID 19 is the disease caused by severe acute respiratory syndrome coronavirus (SARS-CoV-2), which spreads from person to person usually through the mouth or nose when the infected coughs, speaks, sneezes or even breathes. Due to all of these ways of transmission, the virus is highly contagious, which led to the World Health Organization (WHO) declaring COVID-19 a pandemic on March 11, 2020. This high contagiousness was exacerbated as people with little to no symptoms could unknowingly transmit the virus to other people. Although some people experienced no or little symptoms, others had mild symptoms such as sore throat, fever, loss of taste and smell, headaches. Moreover, a good amount of cases also had severe symptoms that can lead to outcomes such as lung damage, nervous system problems, kidney failure or death. With SARS-CoV-2 being new at the time, there was no vaccine, and the prevention methods of masking and social distancing only reduced the risk of contracting COVID-19 by about 60%². Many countries were forced to shut down—work was moved online and the social world flipped upside down, with many interactions taking place over apps such as Zoom and Facetime. People stayed inside for many days at a time, only going out for essentials such as groceries. Economically, COVID-19 crushed governments, businesses, and people. Around 400,000 businesses in the US alone shut down in the second quarter of 2020 alone, while many more struggled to survive the pandemic³. As a result, workers were heavily impacted, with one estimate by the International Labour Organization suggesting that 8.8% of global working hours were lost, which was equivalent to 255 million jobs⁴. Moreover, the pandemic had a disproportionate impact on low income countries and people with low incomes as half of these workers lost jobs⁵. Unfortunately, economic hardship was the norm until vaccines started to roll out in early 2021, allowing countries to open back up. COVID-19 widely impacted billions across the world, but it all started in one place. The first cases of COVID-19 were said to have come from Wuhan, China in late 2019 with cases spreading into other countries in early 2020.⁶ Given COVID-19's ability to spread rapidly, China, one of the most populated countries on Earth,⁷ was destined to be the center for a gigantic outbreak. Since China was also the first country to report COVID-19, it would seem that they would have a significantly higher number of cases than most other countries since they were the first country to experience the virus and due to their large

¹ "Covid-19 Map." *Johns Hopkins Coronavirus Resource Center*, coronavirus.jhu.edu/map.html. Accessed 27 Oct. 2023.

² Sohee Kwon et al., "Association of Social Distancing and Face Mask Use with Risk of COVID-19," *Nature Communications* 12, no. 1 (2021), <https://doi.org/10.1038/s41467-021-24115-7>.

³ Ryan A. Decker and John Haltiwanger, "Business entry and exit in the COVID-19 pandemic: A preliminary look at official data," Federal Reserve, last modified May 6, 2022,

[https://www.federalreserve.gov/econres/notes/feds-notes/business-entry-and-exit-in-the-covid-19-pandemic-a-preliminary-look-at-official-dat-a-20220506.html](https://www.federalreserve.gov/econres/notes/feds-notes/business-entry-and-exit-in-the-covid-19-pandemic-a-preliminary-look-at-official-data-20220506.html).

⁴ "COVID-19 and the World of Work. Seventh Edition Updated Estimates and Analysis," International Labor Organization, last modified January 25, 2021, accessed October 27, 2023,

https://www.ilo.org/wcmsp5/groups/public/@dgreports/@dcomm/documents/briefingnote/wcms_767028.pdf.

⁵ "COVID-19 and the World," International Labor Organization.

⁶ David L. Roberts, Jeremy S. Rossman, and Ivan Jarić, "Dating first cases of COVID-19," *PLOS Pathogens*, <https://journals.plos.org/plospathogens/article?id=10.1371/journal.ppat.1009620>.

⁷ "The largest countries of the world," World Data, accessed October 27, 2023, <https://www.worlddata.info/the-largest-countries.php>.

population. However, in June 2020, there were only 83,430 confirmed cases and 4,634 reported deaths in China, far less than most western countries such as America, which had 1.9 million cases and 100,000 reported deaths at $\frac{1}{3}$ the population of China. This paper will take a deep dive into the Chinese government's response to the coronavirus outbreak, including analysis of specific policy responses and how it fared compared to other countries that handled COVID-19 differently. This paper will also examine whether or not the Chinese government's response was morally justifiable, and suggest what could have been done instead from a human rights perspective. Although China's initial COVID-19 response effectively contained the outbreak, there were many ethical flaws within the response which ultimately led to millions more lives being impacted and many other governments turning away from policies similar to China when they combated COVID.

Zero COVID Policy

Through the implementation of the "Zero COVID policy," China was able to effectively combat COVID-19, keeping both the number of cases and deaths to a minimum while the policy was in effect. The "Zero COVID policy" was China's attempt to combat COVID-19 during the pre-vaccine era, which included strict, total lockdown. Wuhan, the epicenter of the virus, was placed under a strict 76 day lockdown which included suspension of public transportation to limit movement or possibility of spread. Many cities soon followed afterwards, leading to health checkpoints at 14,000 public transit hubs across China.⁸ This allowed for limited transportation outside of the Hubei Province, keeping the spread of the virus to a minimum. Transportation was only one part of the entire process to contain the virus in China. PCR testing, which analyzes upper respiratory specimens to identify genetic material of SARS-Co-V-2 and is one of the most accurate COVID detection methods,⁹ increased from 200 tests a day to 35,000.¹⁰ Within weeks, 9 million people had been tested. All of these tests allowed the government to identify and isolate people with the virus. Isolation was taken very seriously under Zero COVID, as patients with COVID-19 were sent to specific COVID hospitals with 40,000 staff ready to take care of them.¹¹

Contact tracing was another key aspect to China's efforts at containment. China was effectively able to survey and identify close contacts to positive cases within 24 hours, leading to a mandatory 14 day quarantine, usually in a hotel for international arrivals, but most citizens just self quarantined or were placed in a COVID-19 specific field hospital.¹² By isolating close contacts, China was able to keep the virus from spreading more, as in some cities close to 70% of cases were discovered among close contacts.¹³ Random and mass screening also helped identify cases in asymptomatic patients, allowing for proper isolation. Mass screening was often done on the city-wide level while random screening was done with key population groups such as healthcare workers, the elderly, imported goods workers, and public service workers.¹⁴ About 25% of cases were identified through these screenings.¹⁵ Finally, China's Zero COVID policy

⁸ Talha Burki, "China's Successful Control of COVID-19," *The Lancet Infectious Diseases* 20, no. 11 (2020): [https://doi.org/10.1016/s1473-3099\(20\)30800-8](https://doi.org/10.1016/s1473-3099(20)30800-8).

⁹ "COVID-19 and PCR Testing," Cleveland Clinic, accessed October 27, 2023, <https://my.clevelandclinic.org/health/diagnostics/21462-covid-19-and-pcr-testing>.

¹⁰ Qiulan Chen et al., "Rapid and Sustained Containment of Covid-19 Is Achievable and Worthwhile: Implications for Pandemic Response," *BMJ*, December 1, 2021, <https://doi.org/10.1136/bmj-2021-066169>.

¹¹ Chen et al., "Rapid and Sustained,"

¹² Chen et al., "Rapid and Sustained"

¹³ Chen et al., "Rapid and Sustained"

¹⁴ Chen et al., "Rapid and Sustained"

¹⁵ Chen et al., "Rapid and Sustained"

had other government regulations: stay at home orders for everyone except essential workers (key populations like healthcare, public service, etc), community workers composing of mainly volunteers helping with control activities through things such as health education and monitoring of high risk people, and providing services while in lockdown. Movement restriction was also implemented through border control. Provincial borders were closed through with shutting down public transit. International borders were guarded closely as well, making sure travelers are quarantined when they enter the country. Anyone who entered the country was tested and screened at the airport or any other port of entry and then taken to a hotel for quarantine. Another factor that led to Zero COVID becoming implemented was Chinese's society's beliefs of sacrificing for the greater good. Many Chinese citizens remember the SARS outbreak in 2003, another deadly disease that originated in China, influencing Chinese citizens' acceptance of the strict policies put in place to mitigate the spread of COVID 19.¹⁶ Additionally, mask-wearing is commonplace in East Asian countries, including China, for preventing the further spread of sickness.¹⁷ They were willing to sacrifice personal freedoms because it would only be a couple of months for the policies that were put in place to contain the virus, leading to a quick return to normal life. Although returning to normal life was not fully guaranteed at the moment, the Chinese people realized that the Zero COVID policy could help in limiting the virus which would lead to a faster return to normality. Chinese culture and the people wanted what was best for all, which led to compliance with health and ultimately a successful battle against COVID.¹⁸ On February 10th, 2020 China's case total per day was around 2,000. However, with the rapid implementation of the Zero COVID policy, that number shrunk to only 400 cases per day just two weeks later and then 200 per day at the beginning of March 2020.¹⁹ These decreasing numbers suggest that China's COVID management was effective in preventing widespread infection and public harm. This can be backed up over a longer span as by the end of October 2020 China only had 90,604 confirmed cases and 4739 deaths, far less than most Western countries. For example, in America there were 8.85 million cases by the end of October.²⁰ Moreover, due to the implementation of Zero COVID, China was still able to grow economically in a time of a complete lockdown through effectively containing the virus. Economic growth increased by 3% over the year, which is higher than western nations such as the U.S. and Germany who grew less than 2%²¹. With this policy, China was able to effectively limit the virus, allowing for a quicker return to normalcy.

Lack of Transparency and Misinformation

Although China's Zero COVID policy seemed to be effective at attacking and limiting the spread of the virus, there were many issues with the government's response to COVID,

¹⁶Burki, "China's Successful"

¹⁷Ralph Jennings, "Not Just Coronavirus: Asians Have Worn Face Masks for Decades," VOA News, last modified March 11, 2020, accessed October 27, 2023, https://www.voanews.com/a/science-health_coronavirus-outbreak_not-just-coronavirus-asians-have-worn-face-masks-decades/6185597.html

¹⁸ Burki, "China's Successful"

¹⁹Kai Kupferschmidt and Jon Cohen, "China's aggressive measures have slowed the coronavirus. They may not work in other countries," Science, last modified March 2, 2020, accessed October 27, 2023, <https://www.science.org/content/article/china-s-aggressive-measures-have-slowed-coronavirus-they-may-not-work-other-countries>.

²⁰ CNBC.com staff, "Coronavirus: U.S. records more than 80,000 new daily cases," CNBC, last modified October 29, 2020, accessed October 27, 2023, <https://www.cnbc.com/2020/10/28/coronavirus-live-updates.html>.

²¹ Keith Bradsher, "China's Economy Stumbled Last Year With Covid Lockdowns Hobbling Growth," New York Times, last modified January 16, 2023,

<https://www.nytimes.com/2023/01/16/business/china-gdp-fourth-quarter-2022.html#:~:text=China%20grew%203%20percent%20for,the%20economy%20declined%201.6%20percent>.

including lack of transparency and spreading of misinformation which led to outcomes such as large data gaps in reporting of cases.²² This ended up confusing not only the Chinese people about the severity of the virus, but it also misinformed other countries and the WHO, who were trying to use data to help in their response to the virus. China's Zero COVID policy, according to the on-paper numbers, was very effective at combating the COVID-19 pandemic, as seen by the number of cases being stagnant until 2022.²³ Due to this, the Chinese government was keen to emphasize this success on the global stage, declaring a "major and decisive victory" over the virus.²⁴ Being a major competitor on the world stage and a country that also has much opposition from other countries, China sought to emphasize their success whenever they could. However, China's COVID response was not a major victory. China's death toll only sampled from people that were tested for the virus, meaning people who had caught COVID or died from it but went untested could have been unaccounted for.²⁵ People may have avoided hospitals and other health facilities, therefore thousands of cases and deaths could have been unaccounted for. Moreover, estimates from other health organizations such as the Chinese Center for Disease Control and Prevention (CDC) claimed that 80% of the population has been infected.²⁶ China's lack of transparency with its COVID data is very concerning not only for the country's population but also people around the world. The Chinese government controls lots of the information that is circulated to the population,²⁷ meaning that if the government is underreporting cases and deaths the Chinese people are being fed incorrect information on a life threatening virus. The effect of this information to the general population is drastic, as people could downplay the actual severity of the virus, leading to things such as interactions with other people outside of the household and not being as careful in public which could further spread the virus. Further spread of the virus then leads to more people getting dangerous symptoms and filling up Intensive Care Units. Lack of transparency also has its effects on the global stage. Since China was not reporting that many cases, other countries could deem travel to and from China safe, when in reality travel was dangerous.²⁸ This could lead to an increase in the spread of the virus and put more people at risk, including citizens of other countries who come into contact with COVID either while in China or with a person visiting a country from China. As a result of this lack of transparency by the Chinese government, many countries criticized their response, including U.S. President Joe Biden and the German government.²⁹ Further, the WHO and its emergency director Mike Ryan spoke out against China, saying that the Chinese government was underrepresenting data on many fronts.³⁰ The WHO was concerned that

²² Simone McCarthy, "China calls its Covid response a 'miracle in human history.' The data isn't so clear," CNN, last modified February 17, 2023, accessed October 27, 2023, <https://www.cnn.com/2023/02/17/china/china-covid-decisive-victory-xi-jinping-death-rate-intl-hnk/index.html>.

²³ Ryan Woo, Roxanne Liu, and David Stanway, "Analysis: China's COVID governance under pressure as Omicron spreads," Reuters, last modified March 16, 2022, accessed October 27, 2023, <https://www.reuters.com/world/china/chinas-covid-governance-under-pressure-omicron-spreads-2022-03-16/>.

²⁴ McCarthy, "China calls," CNN.

²⁵ McCarthy, "China calls," CNN.

²⁶ McCarthy, "China calls," CNN.

²⁷ "How Censorship Works in China: A Brief Overview," Human Rights Watch, last modified 2006, accessed October 27, 2023, <https://www.hrw.org/reports/2006/china0806/3.htm>.

²⁸ Eduardo Baptista and Brenda Goh, "China defends its COVID response after WHO, Biden concerns," Reuters, last modified January 5, 2023, accessed October 27, 2023, <https://www.reuters.com/world/china/biden-raises-concern-over-chinas-covid-response-after-who-questions-data-2023-01-05/>.

²⁹ Baptista and Goh, "China defends," Reuters.

³⁰ Baptista and Goh, "China defends," Reuters.

without correct information, they would be unable to make informed decisions on how to respond to the virus on a global scale, threatening the lives of millions.³¹

Vaccines

Although vaccines in China were developed rapidly, large shortcomings such as hesitancy and limited efficacy led to a wide range of issues. Zero COVID had to be expanded and large outbreaks occurred when restrictions were eventually lifted due to lingering vaccine issues within the country. Development for a vaccine started very quickly after outbreaks around the world. In 2020, which was considered to be the start of the virus in many countries, clinical trials on vaccines were already underway³². By December of 2020, the UK became the first western country to license a vaccine against COVID with emergency use authorization (usage of unapproved medical products to treat life threatening diseases) for the Pfizer/BioNTech vaccine.³³ Countries such as the U.S. soon followed, authorizing the same vaccine later in December. China was on a similar timeline with their vaccines, with local state-backed pharmaceutical companies being the source of vaccines in China. China's first vaccine was developed by Sinopharm and approved on December 30, 2020³⁴.

China's development of their own vaccine had major impacts on other countries around the world. The West was very reluctant to adopt China's vaccine, with one reason being the efficacy rate sitting at only around 80%³⁵ while Pfizer was above 90%.³⁶ While western countries did not accept China's vaccine,³⁷ the Chinese were able to find other countries to export their vaccines to. As of December 2022, 119 countries all over Asia, Africa and South America used the Chinese vaccine. China exported over 1.5 billion shots and became one of the biggest providers of vaccines to the global market.³⁸ Even with all of these successes, internationally, there were lots of shortcomings with vaccine adoption back in China. First off, there was vaccine hesitancy among the population. The elderly, who are considered to be the most at-risk population due to increased fatality, have had only 59% of people aged 80 or older receive a shot.³⁹ This was in part due to some vaccine hesitancy but also the government's rollout plan. Older people were not able to get a vaccine until March 2021 and they were often underrepresented in clinical trials, leading to doctors being hesitant to recommend vaccines due to insufficient data. The vaccine saga got even worse in 2022, when China rolled out a vaccine mandate plan that limited unvaccinated people in public areas such as cinemas, libraries, etc.

³¹ Baptista and Goh, "China defends," Reuters.

³² "History of COVID-19: Outbreaks and vaccine timeline," Mayo Clinic, <https://www.mayoclinic.org/diseases-conditions/history-disease-outbreaks-vaccine-timeline/covid-19>.

³³ FDA, "FAQs on Emergency Use Authorizations (EUAs) for Medical Devices Related to COVID-19," U.S. Food and Drug Administration, <https://www.fda.gov/medical-devices/covid-19-emergency-use-authorizations-medical-devices/faqs-emergency-use-authorizations-euas-medical-devices-related-covid-19#:~:text=The%20FDA%20can%20use%20its,life%2Dthreatening%20diseases%20when%20certain>.

³⁴ Reuters Staff, "China gives its first COVID-19 vaccine approval to Sinopharm," Reuters, last modified December 30, 2020, accessed October 27, 2023,

<https://www.reuters.com/business/healthcare-pharmaceuticals/china-gives-its-first-covid-19-vaccine-approval-sinopharm-2020-12-31/>.

³⁵ Reuters Staff, "China gives," Reuters.

³⁶ CDC staff, "Grading of Recommendations, Assessment, Development, and Evaluation (GRADE): Pfizer-BioNTech COVID-19 Vaccine," Centers for Disease Control and Prevention, accessed October 27, 2023,

<https://www.cdc.gov/vaccines/acip/recs/grade/covid-19-pfizer-biontech-vaccine.html>.

³⁷ Katharina Buchholz, "Where Chinese Vaccines Are Used," Statista, last modified July 30, 2021, accessed October 27, 2023,

<https://www.statista.com/chart/25446/countries-authorizing-coronavirus-vaccines-of-chinese-origin/>.

³⁸ "China COVID-19 Vaccine Tracker," Bridge Beijing, accessed October 27, 2023,

<https://bridgebeijing.com/our-publications/our-publications-1/china-covid-19-vaccines-tracker/>.

³⁹ Rebecca Cohen, Morgan McFall-Johnson, and Paola Rosa-Aquino, "China's refusal to use Western COVID-19 vaccines is making its protest problems even worse," Business Insider, last modified November 29, 2022, accessed October 27, 2023,

<https://www.businessinsider.com/china-wont-use-western-covid-19-vaccines-protests-2022-11>.

The vaccine mandate was met with so much backlash on social media platforms such as WeChat that the government reverted their statement to needing a negative test instead of a vaccine to access these places.⁴⁰

Even if most of the general population is vaccinated, China's vaccines are also not as effective compared to a western mRNA vaccine. mRNA vaccines instruct the body's immune system to build key COVID protein to trigger an immune response while the Chinese vaccine is only based on an inactivated form of the virus, which is used to help build an immune response when injected. The virus is injected into a person, but it is dead, so a person cannot get the virus.⁴¹ However, the vaccine is not as effective in combating the virus.⁴² These vaccines are also not as effective against newer variants such as omicron. This means there is a higher likelihood of breakthrough cases and COVID continuing to spread. Ineffective vaccines led to putting millions at risk, since people are more vulnerable to catch the disease. This was especially true for the elderly who have some of the lowest vaccine rates in the country. Due to these vaccines, Western countries tried to find ways to help China, including offering the more effective mRNA vaccine. However, China refused to use Western mRNA vaccines, and stuck with their own. This led to a dilemma by the Chinese government, as they had to find a way to open the country back up without massive spread, which unfortunately did not work. At the end of 2022, when Zero Covid was finally lifted, there were an estimated 2 million deaths.⁴³ They eventually did approve an mRNA vaccine that was made in China, but by then it was too late since the vaccine was introduced in early 2023.⁴⁴ Some of these deaths could be attributed to poor handling of vaccines by the government such as not targeting the elderly, using ineffective vaccines, and not accepting effective ones.

Ethical considerations of China's COVID response

Another important aspect to consider within a large medical response by a country is the ethical perspective. In bioethics, there are four main principles: beneficence, non-maleficence, autonomy and justice. These principles were first described by two American philosophers, Tom Beauchamp and James Childress.⁴⁵ Beneficence is to promote a course of action that best represents a patient. Non-maleficence is to promote a course of action that prevents harming a patient. Autonomy is when a patient has the ultimate responsibility in making decisions. Finally, justice is concerned with fairness and equity in treatment. In most cases, these principles are applied to the individual decisions made by medical professionals, however, these principles can also be applied to medical decisions made by a larger entity like the government.

In the case of China and COVID-19, the government centered much of their focus on trying to do good for their people (beneficence), but took away the autonomy of their people (both in a bioethical context and a general one as well), as well as violating the idea of justice by

⁴⁰Yanzhong Huang, "The Short-Lived COVID-19 Vaccine Mandate in Beijing," Think Global Health, last modified July 19, 2022, accessed October 27, 2023, <https://www.thinkglobalhealth.org/article/short-lived-covid-19-vaccine-mandate-beijing>.

⁴¹ Jonathan Corum, "How the Sinovac Vaccine Works," *The New York Times*, December 24, 2020, <https://www.nytimes.com/interactive/2020/health/sinovac-covid-19-vaccine.html>.

⁴²Carolyn Y. Johnson, Cate Cadell, and Joel Achenbach, "How China's vaccine strategy stoked its looming 'zero covid' crisis," *Washington Post*, December 1, 2022, accessed October 27, 2023, <https://www.washingtonpost.com/health/2022/12/01/china-zero-covid-vaccines/>.

⁴³Jennifer Jett and Cheng Cheng, "China had almost 2 million excess deaths after the end of 'zero-Covid,' U.S. study finds," NBC, <https://www.nbcnews.com/news/world/china-excess-deaths-zero-covid-study-rcna101746>.

⁴⁴ Nicole Hong, "China Approves an mRNA Covid Vaccine, Its First," *The New York Times*, March 22, 2023, <https://www.nytimes.com/2023/03/22/business/china-mrna-covid-vaccine.html>.

⁴⁵ Erin G. Stone, "Evidence-Based Medicine and Bioethics: Implications for Health Care Organizations, Clinicians, and Patients," *The Permanente Journal* 22, no. 4 (2018). <https://doi.org/10.7812/tpp/18-030>.

prioritizing only some patients over others. The idea of beneficence can be seen in citywide lockdowns such as Shanghai, where the estimated quality adjusted life years (QALYs) saved was about 3.15 million years.⁴⁶ By having a lockdown, the government was trying to implement overall good, which worked by saving lives. Even with the good the government tried to implement, there were also lots of ethically flawed decisions made such as laws that took away the autonomy of their people and violated the idea of justice by prioritizing only some patients over others.

The Chinese government also had many other ethical and human rights mishaps through their strict lockdowns. When the outbreak first started, 60 million people in two days were isolated.⁴⁷ This alone limits autonomy as people are trapped, and if they do decide to leave they face dire consequences such as lofty fines or even imprisonment.⁴⁸ Mask wearing was strictly enforced and people were arrested if they did not have one on. However, one of the most persistent issues was connected to the bioethical idea of justice. Chilling stories emerged of how people with non COVID related illnesses were receiving inadequate treatment. A boy with cerebral palsy died because no one took care of him after his father was quarantined.⁴⁹ A woman with leukemia died after several hospitals turned her away because they were overwhelmed with COVID patients.⁵⁰ A man with kidney disease jumped to his death because he could not get access to a healthcare facility because hospitals were still busy treating COVID.⁵¹ All these were clear cut examples of how China and its healthcare system were clearly violating the principle of justice. These people were neglected and did not receive adequate care they deserved in order to combat their own health issues.

Many other violations, such as going against non-maleficence were prevalent during COVID in China. Early in the pandemic, Dr. Li Wenliang, a former ophthalmologist from the Central Hospital of Wuhan, tried to take initiative by warning the population about the spread of COVID by posting online, but the government dismissed him, thinking he was spreading misinformation.⁵² This mishap by the government and shutting down freedom of expression allowed for the neglect of the virus and lost time that could have been used to combat the virus. Another example is from a woman identified only as Ms. Yu, a nurse at a hospital near Wuhan who took to the internet in order to gain support for donations due to insufficient PPE. However, the government-operated hospital criticized her, saying she brought harm to the organization which led to the nurse retracting her statement, publicly criticizing herself and erasing her efforts for help.⁵³ This crackdown by the hospital violated the ability for someone to ask others for help. The actions by the hospital also come into contention with violation of a bioethical principle (non maleficence), as they are not equipping their personnel with protective equipment, leaving them more vulnerable to a lethal virus.

Discussion: China's Response Compared to Other Countries

⁴⁶ Guangqian Shine Yang, "The Ethics of China's Zero Covid Policy," Seven Pillars Institute, last modified July 29, 2022, accessed October 27, 2023, <https://7pillarsinstitute.org/ethics-of-chinas-zero-covid-policy/>.

⁴⁷ "Human Rights Dimensions of COVID-19 Response," Human Rights Watch, last modified March 19, 2020, accessed October 27, 2023, <https://www.hrw.org/news/2020/03/19/human-rights-dimensions-covid-19-response>.

⁴⁸ Bloomberg, "Breaching China's COVID rules could get you up to four years in prison," Fortune, last modified January 11, 2022, accessed October 27, 2023, <https://fortune.com/2022/01/11/china-covid-rules-dalian-outbreak-jail-time/>.

⁴⁹ "Human Rights," Human Rights Watch.

⁵⁰ "Human Rights," Human Rights Watch.

⁵¹ "Human Rights," Human Rights Watch.

⁵² Junhong Zhu, "Is It Ethical to Be a 'whistleblower' during COVID-19 Pandemic? Ethical Challenges Confronted by Health Care Workers in China," *Journal of Advanced Nursing* 76, no. 8 (2020): <https://doi.org/10.1111/jan.14376>.

⁵³ Zhu, "Is It Ethical"

China was the first country that had to combat COVID-19, thus their handling of the virus was watched on a worldwide stage. Once other countries started to have their own issues in early 2020 with the virus, they adapted their own unique responses to deal with the impacts of COVID. France adopted a response to COVID-19 that was similar to China's approach. The two countries have completely different governments and ideals, with one being a western democracy, while the other being a one party authoritarian system, but ended up with quite similar tactics in response to one of the biggest health crises of the 21st century. Initially, France emphasized autonomy and continued life as usual when COVID was first detected in the country on Jan 24th, 2020.⁵⁴ However, as the virus continued to spread, cases spiked and France was in the midst of a serious COVID-19 outbreak by mid-March. This prompted France to change their approach to controlling the virus from light measures to more suppressive measures like China implemented. French society went into complete lockdown, even going so far as to mobilize the military to help with logistics of the lockdown as well as provide medical support.⁵⁵ If someone were to go out, they needed to obtain permission by the government via written note stating why.⁵⁶ Like in China, bans on congregating in public areas and utilizing transit were put into effect in order to stop the spread of the virus. If these lockdown restrictions were violated in France, individuals could be fined thousands of dollars.⁵⁷ From a bioethical perspective, France had very similar values to China in this situation: limit autonomy in favor of beneficence. The whole reason for a lockdown such as this one was to try and keep people healthy. By their shift in policy, France, like China, was willing to sacrifice personal freedoms for the good of the people. One key difference in the responses were the repercussions faced for violating COVID policy. In France, the consequence for violating COVID regulations usually entailed paying a relatively small fine which was between 200-3000 euros.⁵⁸ However, in China, some people who violated COVID policies were sentenced to prison for four years.⁵⁹

Although these restrictive measures were effective at controlling the virus, not every country chose to adopt such strict regulations. Sweden implemented a strategy that imposed little to no restrictions on its people that received lots of criticism globally. Their main regulation was a ban on non-essential travel, but schools, restaurants, shops, and gyms all remained open with no restrictions on where people were allowed to go.⁶⁰ In this situation, Sweden adopted a response that was completely different than China's, where autonomy was prioritized over everything. However, this also presented a situation where the Swedish government could have violated the principle of nonmaleficence. The Swedish government not doing anything to protect its people against a lethal virus could have indirectly facilitated the death or severe illness of many people.

Another country that prioritized autonomy, though perhaps not to such a drastic extent, was the United States. Although the United States has less than one fourth of the population of China,⁶¹ its response to COVID ultimately resulted in much worse outcomes for the American population than the Chinese population experienced. Specifically, the U.S. death rate is 340 per

⁵⁴Bo Yan et al., "Why Do Countries Respond Differently to COVID-19? A Comparative Study of Sweden, China, France, and Japan," *The American Review of Public Administration* 50, nos. 6-7 (2020): <https://doi.org/10.1177/0275074020942445>.

⁵⁵"Macron launches army Operation Resilience to support fight against coronavirus," France 24, last modified March 25, 2020, accessed October 27, 2023, <https://www.france24.com/en/20200325-macron-launches-army-operation-resilience-to-support-fight-against-coronavirus>.

⁵⁶Yan et al., "Why Do Countries"

⁵⁷Yan et al., "Why Do Countries"

⁵⁸Yan et al., "Why Do Countries"

⁵⁹ Bloomberg, "Breaching China's," *Fortune*.

⁶⁰Yan et al., "Why Do Countries"

⁶¹"Current World Population," Worldometer, accessed October 29, 2023, https://www.worldometers.info/world-population/#google_vignette.

million people which is 100 times worse than China.⁶² The U.S. was very inefficient in their rollout of their plan to prevent COVID. For the first six weeks after the first cases of COVID, both the federal and state government did little to combat the virus. There was not enough testing or contact tracing. There were 500,000 tests per day when experts stated that there needed to be at least a million in order to keep up with demand.⁶³ Moreover, only 8 states had sufficient contact tracing, which was 5 contact tracers for every case).⁶⁴ This lack of testing and inefficient contact tracing led to wasted time in combating the virus. Moreover, the culture inside of the United States has not helped in combating the virus. Freedom is one of the values that is heavily emphasized in the United States, dating back to writing of the constitution and bill of rights with things such as the First Amendment which guarantees freedom of speech, and assembly.⁶⁵ In a harsh time such as COVID-19 this ideal can become somewhat problematic, as people may refuse to listen to authorities and end up doing what they want to due to heavy emphasis in American culture of free expression. The U.S. is also a very individualistic society, with many prioritizing themselves over the greater good,⁶⁶ which goes against what China does in prioritizing the good of everyone over the individual.⁶⁷ This can lead to people not caring about the health and safety of those around them, which could be exercising their individual freedoms such as not wearing a mask. In June of 2020, while COVID was raging in the U.S., only 16% of the cases in China were outside of Hubei province where the virus originated.⁶⁸ China's government did so well at mitigating spread in the early stages of the pandemic that they did not have enough data on how the virus spread throughout the country. Due to China's ethical approach of prioritizing the health and safety of their citizens over things such as autonomy, they reported that they were able to limit the virus well compared to other countries.

Through all of these topics, from China's Zero COVID policy that started it all to the mishaps and misinformation, it is clear that there are numerous aspects that went into how China decided to combat the virus. Once the virus spread to other countries, each adopted a unique regulatory strategy to combat its spread and impact, ranging from Sweden with an open policy and continuing life as normal to France who adopted an authoritarian position and shut down completely. COVID mitigation strategies at both ends of the spectrum may be considered too severe. It would be preferable in the future to adopt an approach based on compromise between the hardline authority of some countries and the relaxed nature of others. This includes looking at all of the facts related to the virus and setting a course of action that would not only help combat the virus effectively, but also preserve other ideals such as autonomy. Although with an infectious disease, there may be some loss in autonomy, the impact of helping everyone else around will be much greater.

Conclusion

⁶²Gavin Yamey and Dean T. Jamison, "U.S. Response to COVID-19 is Worse than China's. 100 Times Worse.," Time, <https://time.com/5850680/u-s-response-covid-19-worse-than-chinas/>.

⁶³Yamey and Jamison, "U.S. Response," Time.

⁶⁴Yamey and Jamison, "U.S. Response," Time.

⁶⁵"The Constitution," The White House, accessed October 27, 2023,

<https://www.whitehouse.gov/about-the-white-house/our-government/the-constitution/#:~:text=The%20First%20Amendment%20provides%20that,the%20right%20to%20bear%20arms.>

⁶⁶. "Individualism," Partners Healthcare, accessed October 27, 2023,

<https://pips.partners.org/life-in-the-united-states/american-culture/individualism.aspx#:~:text=Americans%20usually%20view%20every%20person,community%2C%20or%20any%20other%20group.>

⁶⁷Burki, "China's Successful"

⁶⁸Gavin Yamey and Dean T. Jamison, "U.S. Response to COVID-19 is Worse than China's. 100 Times Worse.," Time, <https://time.com/5850680/u-s-response-covid-19-worse-than-chinas/>.

China's COVID policy through the first couple of years of the pandemic was one of the most successful in combating the virus and keeping cases low. Zero COVID allowed for a complete lockdown of the country with quarantine and restrictions on travel. However, as time went on, it was evident that there were also large faults in China's policy. Misinformation by the government was rampant, which led to issues such as underreporting cases. Vaccine distribution was also a mess, from the low efficacy vaccines until 2023 paired with the vaccine hesitancy especially among the elderly. Then there was the ethical side to China's response. Through their course of action, China set up a response that focused on maximizing the bioethical principles of beneficence and non-maleficence. However, by emphasizing these principles regardless of the consequences, issues emerged with protecting the principles of autonomy and justice. When the virus spread to other countries, some took up models of response similar to China's while other countries went in the complete opposite direction. By being the first and biggest country to deal with COVID, China's dealings with the virus will continue to be examined for years to come.

Bibliography

- Baptista, Eduardo, and Brenda Goh. "China defends its COVID response after WHO, Biden concerns." Reuters. Last modified January 5, 2023. Accessed October 27, 2023. <https://www.reuters.com/world/china/biden-raises-concern-over-chinas-covid-response-after-who-questions-data-2023-01-05/>.
- Bloomberg. "Breaching China's COVID rules could get you up to four years in prison." Fortune. Last modified January 11, 2022. Accessed October 27, 2023. <https://fortune.com/2022/01/11/china-covid-rules-dalian-outbreak-jail-time/>.
- Bradsher, Keith. "China's Economy Stumbled Last Year With Covid Lockdowns Hobbling Growth." New York Times. Last modified January 16, 2023. <https://www.nytimes.com/2023/01/16/business/china-gdp-fourth-quarter-2022.html#:~:text=China%20grew%203%20percent%20for,the%20economy%20declined%201.6%20percent.>
- Buchholz, Katharina. "Where Chinese Vaccines Are Used." Statista. Last modified July 30, 2021. Accessed October 27, 2023. <https://www.statista.com/chart/25446/countries-authorizing-coronavirus-vaccines-of-chinese-origin/>.
- Burki, Talha. "China's Successful Control of COVID-19." *The Lancet Infectious Diseases* 20, no. 11 (2020): 1240-41. [https://doi.org/10.1016/s1473-3099\(20\)30800-8](https://doi.org/10.1016/s1473-3099(20)30800-8).
- CDC staff. "Grading of Recommendations, Assessment, Development, and Evaluation (GRADE): Pfizer-BioNTech COVID-19 Vaccine." Centers for Disease Control and

Prevention. Accessed October 27, 2023.

<https://www.cdc.gov/vaccines/acip/recs/grade/covid-19-pfizer-biontech-vaccine.html>.

Chen, Qiulan, Lance Rodewald, Shengjie Lai, and George F. Gao. "Rapid and Sustained Containment of Covid-19 Is Achievable and Worthwhile: Implications for Pandemic Response." *BMJ*, December 1, 2021, e066169. <https://doi.org/10.1136/bmj-2021-066169>.

"China COVID-19 Vaccine Tracker." Bridge Beijing. Accessed October 27, 2023.

<https://bridgebeijing.com/our-publications/our-publications-1/china-covid-19-vaccines-tracker/>.

CNBC.com staff. "Coronavirus: U.S. records more than 80,000 new daily cases." CNBC. Last modified October 29, 2020. Accessed October 27, 2023.

<https://www.cnbc.com/2020/10/28/coronavirus-live-updates.html>.

Cohen, Rebecca, Morgan McFall-Johnson, and Paola Rosa-Aquino. "China's refusal to use Western COVID-19 vaccines is making its protest problems even worse." *Business Insider*. Last modified November 29, 2022. Accessed October 27, 2023.

<https://www.businessinsider.com/china-wont-use-western-covid-19-vaccines-protests-2022-11>.

"The Constitution." The White House. Accessed October 27, 2023.

<https://www.whitehouse.gov/about-the-white-house/our-government/the-constitution/#:~:text=The%20First%20Amendment%20provides%20that,the%20right%20to%20bear%20arms>.

Corum, Jonathan. "How the Sinovac Vaccine Works." *The New York Times*, December 24, 2020. <https://www.nytimes.com/interactive/2020/health/sinovac-covid-19-vaccine.html>.

"COVID-19 and PCR Testing." Cleveland Clinic. Accessed October 27, 2023.

<https://my.clevelandclinic.org/health/diagnostics/21462-covid-19-and-pcr-testing>.

"COVID-19 and the World of Work. Seventh Edition Updated Estimates and Analysis."

International Labor Organization. Last modified January 25, 2021. Accessed October 27, 2023.

https://www.ilo.org/wcmsp5/groups/public/@dgreports/@dcomm/documents/briefingnote/wcms_767028.pdf.

"COVID-19 Dashboard." Johns Hopkins University & Medicine Coronavirus Resource Center.

Accessed October 27, 2023. <https://coronavirus.jhu.edu/map.html>.

Decker, Ryan A., and John Haltiwanger. "Business entry and exit in the COVID-19 pandemic: A preliminary look at official data." Federal Reserve. Last modified May 6, 2022.

<https://www.federalreserve.gov/econres/notes/feds-notes/business-entry-and-exit-in-the-covid-19-pandemic-a-preliminary-look-at-official-data-20220506.html>.

- FDA. "FAQs on Emergency Use Authorizations (EUAs) for Medical Devices Related to COVID-19." U.S. Food and Drug Administration. <https://www.fda.gov/medical-devices/covid-19-emergency-use-authorizations-medical-devices/faqs-emergency-use-authorizations-euas-medical-devices-related-covid-19#:~:text=The%20FDA%20can%20use%20its,life%2Dthreatening%20diseases%20when%20certain.>
- "History of COVID-19: Outbreaks and vaccine timeline." Mayo Clinic. [https://www.mayoclinic.org/diseases-conditions/history-disease-outbreaks-vaccine-timeline/covid-19.](https://www.mayoclinic.org/diseases-conditions/history-disease-outbreaks-vaccine-timeline/covid-19)
- Hong, Nicole. "China Approves an mRNA Covid Vaccine, Its First." *The New York Times*, March 22, 2023. [https://www.nytimes.com/2023/03/22/business/china-mrna-covid-vaccine.html.](https://www.nytimes.com/2023/03/22/business/china-mrna-covid-vaccine.html)
- "How Censorship Works in China: A Brief Overview." Human Rights Watch. Last modified 2006. Accessed October 27, 2023. [https://www.hrw.org/reports/2006/china0806/3.htm.](https://www.hrw.org/reports/2006/china0806/3.htm)
- Huang, Yanzhong. "The Short-Lived COVID-19 Vaccine Mandate in Beijing." Think Global Health. Last modified July 19, 2022. Accessed October 27, 2023. [https://www.thinkglobalhealth.org/article/short-lived-covid-19-vaccine-mandate-beijing.](https://www.thinkglobalhealth.org/article/short-lived-covid-19-vaccine-mandate-beijing)
- "Human Rights Dimensions of COVID-19 Response." Human Rights Watch. Last modified March 19, 2020. Accessed October 27, 2023. [https://www.hrw.org/news/2020/03/19/human-rights-dimensions-covid-19-response.](https://www.hrw.org/news/2020/03/19/human-rights-dimensions-covid-19-response)
- "Individualism." Partners Healthcare. Accessed October 27, 2023. <https://pips.partners.org/life-in-the-united-states/american-culture/individualism.aspx#:~:text=Americans%20usually%20view%20every%20person,community%2C%20or%20any%20other%20group.>
- Jennings, Ralph. "Not Just Coronavirus: Asians Have Worn Face Masks for Decades." VOA News. Last modified March 11, 2020. Accessed October 27, 2023. [https://www.voanews.com/a/science-health_coronavirus-outbreak_not-just-coronavirus-asians-have-worn-face-masks-decades/6185597.html.](https://www.voanews.com/a/science-health_coronavirus-outbreak_not-just-coronavirus-asians-have-worn-face-masks-decades/6185597.html)
- Jett, Jennifer, and Cheng Cheng. "China had almost 2 million excess deaths after the end of 'zero-Covid,' U.S. study finds." NBC. <https://www.nbcnews.com/news/world/china-excess-deaths-zero-covid-study-rcna101746>
- Johnson, Carolyn Y., Cate Cadell, and Joel Achenbach. "How China's vaccine strategy stoked its looming 'zero covid' crisis." *Washington Post*, December 1, 2022. Accessed October 27, 2023. [https://www.washingtonpost.com/health/2022/12/01/china-zero-covid-vaccines/.](https://www.washingtonpost.com/health/2022/12/01/china-zero-covid-vaccines/)

- Kupferschmidt, Kai, and Jon Cohen. "China's aggressive measures have slowed the coronavirus. They may not work in other countries." *Science*. Last modified March 2, 2020. Accessed October 27, 2023.
<https://www.science.org/content/article/china-s-aggressive-measures-have-slowed-coronavirus-they-may-not-work-other-countries>.
- Kwon, Sohee, Amit D. Joshi, Chun-Han Lo, David A. Drew, Long H. Nguyen, Chuan-Guo Guo, Wenjie Ma, Raaj S. Mehta, Fatma Mohamed Shebl, Erica T. Warner, Christina M. Astley, Jordi Merino, Benjamin Murray, Jonathan Wolf, Sebastien Ourselin, Claire J. Steves, Tim D. Spector, Jaime E. Hart, Mingyang Song, Trang VoPham, and Andrew T. Chan. "Association of Social Distancing and Face Mask Use with Risk of COVID-19." *Nature Communications* 12, no. 1 (2021). <https://doi.org/10.1038/s41467-021-24115-7>.
- "The largest countries of the world." World Data. Accessed October 27, 2023.
<https://www.worlddata.info/the-largest-countries.php>.
- "Macron launches army Operation Resilience to support fight against coronavirus." France 24. Last modified March 25, 2020. Accessed October 27, 2023.
<https://www.france24.com/en/20200325-macron-launches-army-operation-resilience-to-support-fight-against-coronavirus>.
- McCarthy, Simone. "China calls its Covid response a 'miracle in human history.' The data isn't so clear." CNN. Last modified February 17, 2023. Accessed October 27, 2023.
<https://www.cnn.com/2023/02/17/china/china-covid-decisive-victory-xi-jinping-death-rate-intl-hnk/index.html>.
- Reuters Staff. "China gives its first COVID-19 vaccine approval to Sinopharm." Reuters. Last modified December 30, 2020. Accessed October 27, 2023.
<https://www.reuters.com/business/healthcare-pharmaceuticals/china-gives-its-first-covid-19-vaccine-approval-sinopharm-2020-12-31/>.
- Roberts, David L., Jeremy S. Rossman, and Ivan Jarić. "Dating first cases of COVID-19." *PLOS Pathogens*.
<https://journals.plos.org/plospathogens/article?id=10.1371/journal.ppat.1009620>.
- Stone, Erin G. "Evidence-Based Medicine and Bioethics: Implications for Health Care Organizations, Clinicians, and Patients." *The Permanente Journal* 22, no. 4 (2018).
<https://doi.org/10.7812/tpp/18-030>.
- Woo, Ryan, Roxanne Liu, and David Stanway. "Analysis: China's COVID governance under pressure as Omicron spreads." Reuters. Last modified March 16, 2022. Accessed October 27, 2023.
<https://www.reuters.com/world/china/chinas-covid-governance-under-pressure-omicron-spreads-2022-03-16/>.



-
- Yamey, Gavin, and Dean T. Jamison. "U.S. Response to COVID-19 is Worse than China's. 100 Times Worse." *Time*.
<https://time.com/5850680/u-s-response-covid-19-worse-than-chinas/>.
- Yan, Bo, Xiaomin Zhang, Long Wu, Heng Zhu, and Bin Chen. "Why Do Countries Respond Differently to COVID-19? A Comparative Study of Sweden, China, France, and Japan." *The American Review of Public Administration* 50, nos. 6-7 (2020): 762-69.
<https://doi.org/10.1177/0275074020942445>.
- Yang, Guangqian Shine. "The Ethics of China's Zero Covid Policy." Seven Pillars Institute. Last modified July 29, 2022. Accessed October 27, 2023.
<https://7pillarsinstitute.org/ethics-of-chinas-zero-covid-policy/>.
- Zhu, Junhong. "Is It Ethical to Be a 'whistleblower' during COVID-19 Pandemic? Ethical Challenges Confronted by Health Care Workers in China." *Journal of Advanced Nursing* 76, no. 8 (2020): 1873-75. <https://doi.org/10.1111/jan.14376>.
- "Current World Population." Worldometer. Accessed October 29, 2023.
https://www.worldometers.info/world-population/#google_vignette.