

National security has been classically conceived as a narrowly military and state-centric concept, especially in the Western industrial world. Security is, generations of strategists and statesmen have told us, a matter of defending core nation-state values and interests by force of arms. Two world wars across the first half of the twentieth century, and a long nuclear confrontation to follow, engrained this military and state-centric conception deeply into global consciousness and public discourse.

The tragic COVID-19 crisis now confronting us suggests that this logic may be flawed, or at least oversimplified. Over 2.3 million people worldwide died in the first year of this global pandemic, with well over 100 million infected. These figures are likely understated. 44 Untold millions of people continue to suffer from "long COVID" maladies around the world.

As the COVID-19 crisis so graphically shows us, medical security is national security in the deepest sense. This pandemic has already killed more Americans in its first year than in the four years that the United States fought in World War II, the Korean War, and the Vietnam War combined. 45 It has brought worse economic and social dislocation to the United States, as recent turbulence has

shown, than all of America's post-World War II conflicts combined.⁴⁶

Health care crises can be devastating at the national level, but they can also be dangerous for defense forces in concrete operational terms, often with disturbing geopolitical implications. Pandemics like the COVID-19 crisis provide thought-provoking examples that clearly illustrate the national security importance of the medical dimension.

The health care dangers of pandemics and the related strategic implications were illustrated in the March 2020 case of the *USS Theodore Roosevelt*, the American aircraft carrier operating in the South China Sea. The *Theodore Roosevelt* had a crew of close to 5,000

sailors, many of whom became infected with coronavirus during a stopover in Vietnam last year.⁴⁷ Over 1,150 crew members fell ill, and one actually died.⁴⁸ COVID-19 spread rapidly on the *Theodore Roosevelt*, and it was forced to retire to Guam, immobilized for over two months. The *USS Ronald Reagan* crew also suffered from coronavirus, although in lesser numbers. With two Pacific-based American carriers immobilized for much of the spring, and the United States itself preoccupied with the coronavirus crisis and its complex political ramifications at home, China became markedly more assertive in the South China Sea.⁴⁹

Medical crises can also have broader geopolitical consequences. China's early emergence from the pandemic, and the ways that its leadership used its

seeming success to promote domestic support for its ruling party and military, also have clear significance on the international stage. Indeed, the profile of the coronavirus crisis yields insights into China's increasing activity in Hong Kong, in the South China Sea, and on the Sino-Indian border in the Himalayas.⁵⁰

The COVID pandemic promises to have further, still broader geopolitical consequences. Ties between China and Mediterranean and Central European nations hit by the pandemic, such as Italy, Greece, and Serbia, are deepening. China aided many of these countries more rapidly than did the European Union.⁵¹ In Eastern Europe and the Mediterranean, Chinese support on COVID and through the Belt and Road Initiative (BRI) reoriented the affinities of countries like Serbia, Greece, and Hungary toward the East.⁵² This rising divergence within the European Union and NATO between supporters and critics of Beijing makes cohesive joint action against China more difficult. This division is similarly complicating European cooperation with the United States.

COVID-19 has spread rapidly in the developing world, with new variants of the virus dangerously complicating global responses to the pandemic as a whole. The



ominous migration of the COVID crisis to new, poverty-stricken areas of the world with dense urban concentrations and weak local medical systems—such as the favelas of Rio de Janeiro or the Rohingya refugee camps of Bangladesh—poses elemental health challenges for the world community. Their implications, however, transcend the geostrategic to become questions of both national and human security.

The medical issue of most pressing human security significance today is the question of COVID-19 vaccine distribution. As of March 2021, three vaccines had been approved in the United States, but cost and cold storage conditions rendered those vaccines largely unsuitable for the developing world. Meanwhile, President Xi Jinping of China has pledged to supply countries throughout

the world, as well as Olympic athletes. China's efforts are amplified by its strong influence at the World Health Organization (WHO), an organization the United States largely abandoned under the Trump administration. Although the earliest verifiably high-quality vaccines have emerged in Western industrial nations, the likelihood that China will produce vaccines most congenial to developing nations is strong, magnifying further Beijing's prospective political influence in the developing world.

THE UNITED STATES, JAPAN, AND GLOBAL MEDICAL SECURITY

Rather than China or the United States, Japan is the largest national economy that has escaped the full force of the deadly coronavirus, with less than 6800 fatalities and under 411,000 confirmed infected cases during the first year of the pandemic.⁵³ This is an important reality, given that China has emerged so rapidly from the pandemic and the United States is still suffering. Japan is also the largest creditor in the world and has immense potential, especially in cooperation with other major democracies, to stabilize the political-economic turbulence of post-COVID world affairs.

The COVID challenge confronting the world today is quintessentially a global challenge, but one in which the United States and Japan share common national security interests that they do not share to an equal degree with other nations. Japan and the United States have complementary technical healthcare expertise. The United States has a global network of medical and healthcare contacts, stemming from the central role of its Center for Disease Control (CDC) and National Institute of Health (NIH). Throughout 2020, the NIH hosted

over 130 Japanese research fellows. The United States also has formidable substantive experience in dealing with infectious diseases, as well as high-quality research and development institutions at major universities and in the private sector. Additionally, the United States is home to some of the world's preeminent pharmaceutical enterprises. Three of these—Pfizer, Moderna, and Johnson & Johnson—were the first to develop effective, globally recognized COVID vaccines.

Japan, for its part, has important parallel public institutions, enabling strong cooperation with the United States. Among these institutions is the National Institute of Infectious Diseases. Japan also has regional expertise on Asia; dynamic, multifaceted industrial groups; a growing pharmaceutical industry; and special strengths in diagnostic technology, at the complex interface of medicine, tech, and communications. ⁵⁴

Reinforcing the complementary medical expertise of the United States and Japan are their formidable non-medical assets. The United States and Japan are two of the three

largest economies in the world, both with sophisticated financial markets and military assets to support their medical and public health sectors. In contrast to China, the second largest economy, both the United States and Japan offer strong intellectual property protection to innovators. In confronting COVID-19 itself, American firms have developed promising therapeutics for more serious COVID patients, as well as vaccines, while Japan may well have promising therapeutics for less serious cases. 55

Although the political economies of Japan and the United States are complementary, and although the two countries are natural strategic partners, these countries are also heir to contrasting cultural traditions, with only intermittent mutual relationships across the years. ⁵⁶ They fought on opposite sides of history's most destructive conflict and have rarely been battle comrades, despite their remarkably durable post-World War II alliance. Medical cooperation is a powerful way to inspire deep trust between them, especially in the midst of a global pandemic. It is, as William James would put it, "the moral equivalent of war," in binding the two sides of the Pacific together. ⁵⁷

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The United States and Japan also have powerful health rationales and motivations to cooperate, unique to their national health circumstances. Japan, although largely spared by the pandemic so far, has the oldest population of any major nation in the world. Twenty-nine percent of its people are now over 65, compared to 17 percent in the United States.⁵⁸

America's population is younger than that of Japan, with a median age of 38 years, compared to Japan's 49 years. Yet the United States has highly vulnerable populations, such as the

Black community. The United States also sees interactive and irrepressible patterns of human connectivity that can lead to explosive infection outbreaks, as recently seen in the way COVID-19 wounded New York City. The COVID-19 pandemic has led to the deaths of over half a million Americans and well over 20 million infected, with terrible casualties especially among the Black community, which saw 24 percent of fatalities, nearly double the 13 percent demographic share. The United States also needs to integrate health care more systematically into its thinking about national security, which heretofore has been conceived almost exclusively in military terms.⁵⁹

AN AGENDA FOR HEALTH SECURITY COOPERATION

To integrate health security more systematically into national security planning and the national consciousness, Japan and the United States need an intensified program of cooperation along the following six dimensions:

1. Institutional Reform

The United States should reestablish the National Security Council Directorate for Global Health Security and Biodefense. This initiative was created in 2015, but shortsightedly abolished three years later. Under the Biden administration, establishing a functional equivalent may well be only a matter of time. Japan could establish a parallel entity to facilitate bilateral dialogue, and the government health-care specialists at these institutions should be involved in

broader national security debates.
Contingency planning for the next wave of pandemics—possibly for COVID-19, should a second wave strike, and then for future iterations—should also be undertaken, both between governments and at the Track 1.5 and Track 2.0 levels.
Regular joint training and tabletop exercises that simulate epidemics should be undertaken regularly in order to maintain consciousness of the pandemic dangers that could lie ahead.

Several of the most dangerous global pandemics, including SARS (2002) and MERS (2015), as well as bird flu and swine flu, not to mention COVID-19 (2019-20) originated in Asia, with a particular concentration in China.

3. Privilege the Role of Experts

Technical experts have much to contribute to health policy debates, which are all too often dominated by politicians dangerously lacking in medical expertise. Universities can certainly play a role. Johns Hopkins University, to cite one current example, is working to enhance public understanding of COVID-19 issues through its JHU Coronavirus Resource Center website.⁶³

4. Cooperative Research

As the two largest free market economies in the world, both equipped with strong intellectual property regimes, Japan and the United States are well-equipped to conduct collaborative medical research. Recent breakthroughs by Takara Bio of Japan and Arizonabased bioSyntagma in rapid PCR virus testing illustrate the potential for research cooperation on COVID issues.⁶⁴

2. Bilateral Dialogue

During the early 1990s, Tokyo and Washington pursued what history must record as one of their most successful bilateral policy discussions: the Structural Impediments Initiative (SII).⁶⁰ Given the global intensity and long term geo-economic importance of the current pandemic, as well as the varied ways that regulation and politics distort their health care systems, the two nations should establish a "Medical SII." This would ideally be a government-togovernment central dialogue forum, supported by think tank and NGO advisory mechanisms.

A Medical SII should, among other issues, consider the pressing problem of over-regulation in health care. This is especially critical in emerging sectors such as diagnostics, where outdated regulation, especially in Japan, impedes health-care progress.⁶¹ Contingency planning for future pandemics should be another central element of bilateral cooperation, because the danger of future global pandemics is strong, especially global pandemics emerging in Asia. Several of the most dangerous global pandemics, including SARS (2002) and MERS (2015), as well as bird flu and swine flu, not to mention COVID-19 (2019-20) originated in Asia, with a particular concentration in China. Several cross-cutting factors make Asia a high-risk locale for potential pandemics.⁶² Rising urban encroachment on animal habitats coupled with rising global connectivity make future pandemics a worldwide human security challenge of the first magnitude. The United States and Japan share a common interest in combatting such prospective dangers.

5. Multilateral Cooperation

The World Health Organization needs reform, but it also performs vital functions, especially in monitoring health trends in the developing world. As the COVID-19 pandemic intensifies across the developing world, it is especially important that an international framework for assistance be maintained. Dangerous COVID-19 variants, such as those discovered in South Africa in early 2021, can easily emerge where the disease festers untreated among large populations, making rapid worldwide vaccination a global imperative. 65 Apart from the WHO itself, which the United States has fortunately rejoined, the United States and Japan could play a key role in invigorating and broadening the Access to COVID-19 Tools (ACT) Accelerator, a core group of global health organizations that provides COVID-related aid to low- and middleincome countries.⁶⁶ The two countries could also provide powerful new support for the Gavi and COVAX vaccine coalitions.

As the two largest shareholders of the Asian Development Bank (ADB), the United States and Japan must also play a key role in the ADB's \$9 billion Asia-Pacific Vaccine Access Facility. This important effort was launched in December 2020 to support low-income ADB members in securing access and delivery of COVID-19 vaccines. ⁶⁷ Together with other measures discussed above, supporting this ADB initiative would lessen the dangers of pandemic expansion and mutation, both globally and within the Indo-Pacific region.

A final dimension to multilateral cooperation involving the United States and Japan is the two nations' active



cooperation, beginning in March 2021, with India and Australia to dramatically increase the supply of COVID-19 vaccines across the Indo-Pacific region. At their first virtual quadrilateral summit, leaders of the four nations, including U.S. President Joseph Biden and Japanese Prime Minister Yoshihide Suga, agreed to support efforts to ramp up vaccine manufacturing within the region. This included bolstering India's vaccine output of American vaccines by as many as one billion doses by 2022.⁶⁸ Japan was to provide concessional yen loans to India to facilitate this production, while Australia was to support transportation and logistics.

6. Strengthening Medical Supply Capabilities
The COVID-19 pandemic has revealed the United
States' and Japan's current reliance on China for basic
pharmaceuticals, as well as personal protective equipment
(PPE). In Japan, for example, 70-80 percent of medical
masks and 90 percent of ventilators are made in China.⁶⁹
The pandemic has also made clear the dangers of

inadequate supply and, in some cases, quality, that such reliance can engender. The U.S. Congress and the Japanese Diet have both recently stressed the necessity of "reshoring," or producing more and more medical equipment and supplies at home.⁷⁰

If the United States and Japan must continue to rely on China in the short term, this parochial tendency needs to be complemented by a more efficient solution: U.S.-Japan cooperation. Japan produces key optical components for diagnostic equipment and has a strong high-tech manufacturing sector, while the United States is a world leader in medical technology innovation.⁷¹ The two countries should be able to engage in joint production, or in supply chain integration, just as efficiently as they do in the defense industry. They should also be able to think systematically and cooperatively about the expansion of respective national resource stockpiles. Both nations stockpile oil and munitions, so they should be able to stockpile medical supplies as well. They should do so in a coordinated fashion that leaves room for mutual assistance in times of need. Pandemics could



be one trigger mechanism for stockpile activation, but earthquakes could potentially play that catalytic role as well.

When the original U.S.-Japan Security Treaty was signed in September 1951, the Korean War was raging, and the world lay in the shadow of potential nuclear conflict. Seven decades later, we are in a very different world. The potential security challenges of the past are not extinct, but a vital new dimension of security—medical security—has come to the fore. In an era of new vulnerabilities inspired by demographic change, the COVID-19 pandemic is a clear-cut security threat. The specter of pandemics makes it imperative to integrate medical security tightly into our future conception of trans-Pacific alliances.

⁴⁴On the statistical details of the COVID-19 crisis, see the Johns Hopkins University Corona Virus Resource Center website at https://coronavirus.jhu.edu.

⁴⁵An estimated 405,000 Americans were killed in World War II, 58,000 in the Vietnam War, and 36,000 in the Korean War, but around 500,000 in the first year of the COVID crisis. See Heather Hollingsworth and Tammy Webber, "US tops 500,000 virus deaths, matching the toll of 3 wars," AP News, February 22, 2021, https://apnews.com/article/us-over-500k-coronavirus-deaths-4ffa86c709f6a843de9cf0711e7215cf, and the JHU Corona Virus Resource Center website, as indicated above.

⁴⁶On the enormity of the carnage, see Jennifer Nuzzo, "To Stop a Pandemic: A Better Approach to Global Health Security," Foreign Affairs, January/February 2021, pp. 36-42, https://www.foreignaffairs.com/articles/china/2020-12-08/stop-pandemic.
⁴⁷See Mary Van Beusekom, "COVID-19 spread freely aboard USS Theodore Roosevelt, report

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53 Statistics from the Johns Hopkins University Corona Virus Resource Center website at https://coronavirus.ihu.edu.

⁵⁴ Johns Hopkins University SAIS Edwin O. Reischauer Center Corona Virus Policy Research Task Force, *Diversifying Medical Supply: Lessons from Covid-19*. Washington, D.C.: Edwin O. Reischauer Center for East Asian Studies, February, 2021.

55"Bio COVID-19 Therapeutic Development Tracker," Biotechnology Innovation Organization, March 2021, https://www.bio.org/policy/human-health/vaccines-biodefense/coronavirus/pipe-line-tracker.

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⁵⁹Statistics from the Johns Hopkins University Corona Virus Resource Center website at https://coronavirus.jhu.edu.

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⁶²See Johns Hopkins University Edwin O. Reischauer Center Covid 19 Policy Research Task Force, Shadows of COVID-19: The Developing World and East Asia's Response. Washington, D.C.: Edwin O. Reischauer Center for East Asian Studies, August, 2020.

⁶³See the Johns Hopkins University Corona Virus Resource Center website at coronavirus.jhu.edu. ⁶⁴Takara Bio USA, "Takara Bio and bioSyntagma, Inc. develop method for large-scale automated COVID-19 testing," *Takara Bio*, June 8, 2020, https://www.takarabio.com/about/announcements/takara-bio-usa-inc-and-biosyntagma-inc-develop-method-for-large-scale-automated-covid-19-testing.

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