U.S.-China Dialogue on Global Health

BACKGROUND REPORT
About the Initiative on U.S.-China Dialogue on Global Issues

The Georgetown Initiative for U.S.-China Dialogue on Global Issues is a university-wide platform for research, teaching, and high-level dialogue among American and Chinese leaders from the public sector, business, and the academy.

The initiative is premised on the view that despite inevitable national differences, there remains considerable room for the cultivation of shared U.S. and Chinese approaches to global issues, including climate change, global health, business and trade, peace and security, and economic and social development.

Created in January 2016 through a gift from the Hong Kong-based Spring Breeze Foundation, the initiative builds on Georgetown’s core strengths of academic excellence, location in Washington, D.C., and Catholic and Jesuit mission of service to the world. Four core principles organize the initiative’s work—independence, transparency, balance, and academic excellence.

About this Report

This background report on U.S.-China dialogue on global health was developed under the auspices of the U.S.-China Research Group on Global Health. Background reports in this series provide a general overview of the evolution of a critical issue in U.S.-China relations with wider implications for world affairs. The text of this report was crafted by initiative staff under the editorial guidance of the research group, which is led by Dr. Jennifer Huang Bouey of Georgetown University and Cheng Feng of Tsinghua University. For more information on this topic and the work of the research group, visit the initiative site at https://uschinadialogue.georgetown.edu/topics/global-health.

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Introduction

Over the past decade, outbreaks of infectious diseases and increased global mobility have given health challenges an increasingly transnational dimension. Infectious diseases such as HIV/AIDS, the Ebola and Zika viruses, malaria, and tuberculosis have no regard for borders and can easily spread around the world in the age of increasing international travel. Simultaneously, the growth in transnational migration and refugee flows generated by uneven economic development and political instability has increased exposure to transnational health threats and raised new challenges for national health systems. Public health is increasingly recognized as a critical issue on the global security agenda. The United States and China, as the world’s leading economies, have affirmed that they have an important role to play in combatting these new threats to global health, and cooperation is expanding at a rapid pace. China and the United States have a shared interest in addressing global health challenges and practicing health diplomacy for the sake of their own citizens and the world.

This document provides background on the evolution of global health issues since World War II and the challenges they have posed for the United States, China, and their relationship. It concludes with an overview of major contemporary health challenges and the prospects for deeper U.S.-China dialogue and cooperation to address them.

The United States, China, and Global Health, 1916-1969

In 1925, following markedly increased reporting associated with the severe poliomyelitis epidemic in 1916 and the influenza pandemic in 1918-1919, all states in the United States began participating in national morbidity reporting. By the end of World War II, the United States had one of the world’s most advanced public health care systems. Even before the establishment of the Communicable Disease Center (the early name for the Centers for Disease Control and Prevention, or CDC) in 1946, the United States had a well-developed national disease monitoring system that required reporting on 29 diseases.1 The average life expectancy of the U.S. population was about 66 years, among the highest in the world. By the early twentieth century, the United States had established leading schools of public health at universities such as Johns
The global health regime developed as the international community, led by the United States, sought to address common challenges cooperatively in the wake of the devastation wrought by World War II.

Hopkins, Columbia, Harvard, and Yale. By 1950, 86 percent of the U.S. public was served by local health departments and 34,895 persons were employed full time in public health agencies.

Having survived World War II with only a fraction of the devastation that much of the developed world had experienced, the United States was well positioned in the late 1950s to become the leader in global health initiatives. The global health regime developed as the international community, led by the United States, sought to address common challenges cooperatively in the wake of the devastation wrought by World War II. Three years after its founding in 1945, the UN established the World Health Organization (WHO) as a framework for international collaboration. The enshrinement of the right to health in the Universal Declaration of Human Rights that same year marked a further milestone. With the onset of the Cold War, the WHO and health issues were overshadowed by the geopolitical rivalry between the United States and the Soviet Union. Still, the WHO enjoyed several major successes in the fight against communicable diseases from the 1950s through the 1970s, the most notable being the global eradication of smallpox by 1979.

China’s Impressive Achievements in Public Health

Since the end of World War II and the establishment of the People’s Republic of China (PRC) in 1949, China’s public health system has achieved great success in reducing debilitating infectious diseases and prioritizing maternal and child health. As a consequence, the life expectancy at birth in China rose from 35 years before 1949 to 75 years in 2010. China’s economic and political rise over the past three decades has created a new point of departure. In response to the SARS epidemic of 2002-2003, in which a new and highly contagious virus originating in southern China infected more than 5,000 people in China and nearly 3,000 people elsewhere in the world, the Chinese government made swift changes to restructure its public health information system domestically and internationally. Since then, it has engaged more directly with the WHO and the rest of the UN system, and stepped up collaboration with the United States around pandemic preparedness and HIV/AIDS prevention and treatment. Cooperation around the H1N1 swine flu (2009), H7N9 avian flu (2012), and West African Ebola (2014) outbreaks spurred a further deepening of bilateral cooperation on the global health agenda.

China was not a player in global health during the first decade or so after the establishment of the PRC in 1949. But in 1963, Beijing did take its first steps toward global assistance in the health arena by deploying its first medical team to Algeria. Soon after, China sent medical teams to Zanzibar (1964), Laos (1964), Somalia (1965), Yemen (1966), the Congo (1967), Mali (1968), Mauritania (1968), Vietnam (1968), and Guinea (1968). This type of health diplomacy earned China the necessary support of delegates from many African countries to gain a seat at the UN later in 1971. Moreover, in 1969, China provided its first international donation of a hospital to
Tanzania as part of its growing, multifaceted involvement in that country and the wider region. In much of Africa and other parts of the world, however, these efforts were overshadowed by the greater health assistance provided by the United States, the Soviet Union, and their allies.


Some of what China was able to share with other developing countries grew out of the success of China’s domestic “rural cooperative medical systems” policy, known popularly as “barefoot doctors” after practitioners in the country’s south, who regularly worked among barefoot farmers in rice paddies. Officially instituted in 1968, the program sought to shift domestic health policy away from urban centers to severely understaffed rural areas by educating and empowering locals with sufficient medical education to act as basic primary care practitioners. At the program’s height, it had created roughly a million new paramedical workers, dramatically increasing access to healthcare across the country. The barefoot doctor system was dismantled in 1981 as part of an effort to modernize healthcare, but the focus on primary care has become a lasting legacy within China and has left a mark on the international community.

International awareness of China’s barefoot doctor system boosted the growing international primary care movement. In 1978, a WHO conference produced the Declaration of Alma Ata. The document explicitly framed healthcare as a socioeconomic issue and human right and established a new global paradigm for healthcare, highlighting the primacy of primary care: “A main social target of governments, international organizations and the whole world community in the coming decades should be the attainment by all peoples of the...
world by the year 2000 of a level of health that will permit them to lead a socially and economically productive life. Primary health care is the key to attaining this target as part of development in the spirit of social justice.” The Chinese healthcare system under the barefoot doctors served as one model for the Alma Ata Declaration’s prescriptions.

Another Chinese contribution to global health during this period was the discovery of the antimalarial drug artemisinin through a priority government research program. This top-secret effort was initiated to help North Vietnamese troops suffering from malaria contracted while involved in jungle warfare during the Vietnam War. Artemisinin later gained international recognition as an antimalarial breakthrough after Deng Xiaoping’s policy of opening and reform took hold after 1978. The drug and its derivatives would go on to save millions of lives across the globe. In 2015, the Chinese scientist responsible for the drug’s discovery earned the Nobel Prize in Medicine.

Deng’s reform and opening-up policies paved the way for much broader health cooperation beyond the dissemination of new drugs. China had already become a member of the WHO in 1972, but this fuller diplomatic opening, including the establishment of full diplomatic relations with the United States in 1979, allowed for greater international engagement around global health issues. The United States and China signed a Protocol for Cooperation in the Science and Technology of Medicine and Public Health in June 1979, and the U.S. CDC began providing assistance to Chinese health authorities in the 1980s. A further milestone was the establishment of the WHO Representative Office in China in 1981. Although China, as a developing country, remained the recipient of international aid flows in health and other fields, its growing wealth and influence translated into deeper engagement abroad.


The 1980s and 1990s also saw the emergence of the greatest global health crisis of the twentieth century: HIV/AIDS, a lethal retroviral infection spread by the exchange of bodily fluids. The condition was first officially documented as an unknown form of illness in Los Angeles, California, in 1981, with matching cases quickly identified across the United States. The CDC responded swiftly, but the unique nature of the illness left health authorities scrambling to understand how to contain the outbreak, which they had no way of knowing was already an international pandemic. The WHO initiated surveillance of the pandemic in October 1983. By 1987, the year the first antiretroviral (ARV) drug was developed to treat HIV infection, the WHO estimated that between five and 10 million people across the globe were infected with HIV. With a mortality rate of 78 percent prior to the increased availability of effective ARVs beginning in 1995, the death toll for people with HIV mounted. Although improved treatment options have decreased the HIV mortality rate, over 34 million people have died from HIV/AIDS worldwide since 1981, and another approximately 37 million people are now living with HIV.
The global spread of HIV/AIDS highlighted the increasingly transnational dimension of health threats in a rapidly globalizing world. Initially, both the United States and China reacted with stricter border controls. In 1987, the U.S. government began to screen visa applicants for HIV, a policy that remained in place, despite domestic and international objections, until 2009. China's screening of foreigners and citizens returning from abroad was instituted in 1985. During the first decade of the global HIV/AIDS pandemic, the Chinese often attributed HIV infection to contact with the West, even punning the word for AIDS (艾滋病) into a heterograph meaning “loving capitalism disease” (爱资产病).9 The pandemic's high point in China came in the mid-1990s, when some estimates of the numbers of those infected reached 100,000, largely because of contaminated blood donations and hypodermic needles. Countermeasures included the banning of all imported blood products and strengthening penalties against drug use and prostitution. The Chinese government implemented its first AIDS policy in 2003 when the government pledged to provide free ARV treatment, HIV testing, medical intervention on mother-to-child transmission, education for AIDS orphans, and welfare for low-income families with HIV/AIDS patients.

As HIV/AIDS emerged as a crisis in China and the United States, both countries increased their bilateral cooperation to combat the pandemic. After several visits to China by U.S. medical delegations, the Chinese government partnered with the U.S. CDC to better prevent, monitor, treat, and spread awareness of the disease, leading to the establishment of the CDC’s Global AIDS Program (GAP) in China in early 2003. GAP quickly developed and implemented a comprehensive HIV prevention and mitigation plan across 15 Chinese provinces under a “prevention for positives” philosophy centered on increased surveillance of high-risk groups through testing, and follow-up care for those who tested positive.10 For its part, the CDC has assisted with capacity building, including improving the quality and geographical reach of laboratory testing capabilities; developing epidemiological surveillance systems; and expanding treatment options, often in partnership with China’s National Center for AIDS/STD Control and Prevention and its National Center for Maternal and Child Health, both part of the Chinese Center for Disease Control and Prevention (CCDC).11

In early 2003, President Bush asked the U.S. Congress to fund the President’s Emergency Plan for AIDS Relief (PEPFAR), an unprecedented five-year, $15 billion initiative targeted at the most afflicted countries in Africa and the Caribbean.12 Congress approved funding in May 2003 and endorsed the president’s proposal for concentrated funding in Botswana, Cote d’Ivoire, Ethiopia, Guyana, Haiti, Kenya, Mozambique, Namibia, Nigeria, Rwanda, South Africa, Tanzania, Uganda, Zambia, and later Vietnam. The program continued under the Obama administration, and since 2003 the United States has invested over $70 billion in PEPFAR, making it the largest commitment in history by any nation to address a single disease. As of the end of 2015, over 68 million people in developing countries had received HIV testing and counseling services and over 9.5 million children and adults were receiving
antiretroviral therapy. PEPFAR is credited with preventing millions of new infections and saving millions of lives.


The outbreak of SARS—severe acute respiratory syndrome, a deadly and highly infectious virus-borne disease—in China from 2002 to 2003 led the country to radically rethink its approach to both domestic and global health, and to rapidly expand health cooperation with the United States and the wider international community. The disease was first detected in November 2002 in Guangdong Province, then spread to other areas, including Hong Kong and Vietnam, in February 2003 and Singapore, Taiwan, Canada, and the United States in March. SARS would go on to spread to 37 countries and result in over 8,000 infections and 775 deaths.

After the first cases of a suspicious pathogen began arising in Guangdong Province, a local medical team began investigating in the first days of 2003. Under international pressure to mobilize against the pandemic threat, the government publicly acknowledged the SARS outbreak in March 2003 and imposed new rules requiring all local health officials to report the number of cases daily with severe penalties for noncompliance, streamlined interdepartmental communication and cooperation on the crisis, created national and provincial interdepartmental SARS task forces, and dedicated over a billion dollars to treating and controlling the epidemic. The minister of health and the mayor of Beijing were dismissed from their posts, saddled with responsibility for the slow government response to the crisis. By June 2003, the outbreak had subsided.

U.S.-China collaboration was an important part of the anti-SARS campaign. Hong Kong officials began collaborating with the CDC in epidemiological investigations of the illness in March. That same month, the WHO established a global laboratory network and the PRC invited a WHO epidemiological team into China, accelerating the successful identification and treatment of the virus. In October 2003, Secretary of Health and Human Services (HHS) Tommy Thompson visited China and forged a multiyear partnership with the Chinese Ministry of Health (MOH) to develop a more robust public health infrastructure. Thompson also established an HHS health attaché at the U.S. embassy in Beijing. The following month, Secretary of State Colin Powell noted that “it is upon such concrete forms of cooperation on issues of regional and global importance that a 21st century U.S.-China relationship will be built, issue by issue, experience by experience, challenge by challenge, initiative by initiative, program by program.”
Not long after the SARS outbreak, China and the international community confronted a more complex challenge, with H5N1 influenza virus—colloquially known as “avian flu” or “bird flu” because it infects and spreads largely through birds. Cases of bird-to-human H5N1 transmission were discovered in Fujian Province in 2003. For more than a decade, U.S., Chinese, and international health authorities have been studying and seeking to limit the spread of avian flu. In 2005, HHS and the Chinese MOH established a Joint Initiative on Avian Influenza, facilitating cooperation between U.S. and Chinese health and agricultural ministries on planning, detection, and vaccines. That same year, President George W. Bush (2001-2009) announced the International Partnership on Avian and Pandemic Influenza in an address to the UN—an ongoing framework for U.S.-China cooperation around the issue.19

The SARS and H5N1 outbreaks spurred a consolidation of global health cooperation between the United States and China. In 2005, both governments inaugurated a Collaborative Program on Emerging and Re-emerging Infectious Diseases, which spurred the establishment of a CDC China Center. That same year, both countries established the U.S.-China Health Care Forum to address bilateral commercial, trade, and policy issues relating to health. In 2006, HHS and Chinese MOH further expanded their collaboration on biomedical research with a memorandum of understanding on research, technology, training, and personnel exchange. In 2006, China nominated Margaret Chan—Hong Kong’s director of health during the SARS epidemic—to be the director-general of the WHO, a post she still holds today.

Over this period, cooperation in the struggle against HIV/AIDS continued. In 2002, the U.S. National Institutes of Health (NIH) gave the CCDC a five-year, $14.8 million grant to develop infrastructure to better research and monitor the spread of the disease in the country. Although HIV/AIDS rates are lower in China than in the United States and many other Western countries, the prevalence of infection is growing, with the number of new infections per year rising 14.8 percent from 2013 to 2014.20 The CDC has provided support to HIV clinics in 15 Chinese provinces; funding and programmatic support has also flowed through USAID, NIH, and the Department of

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AVIAN FLU

Like HIV/AIDS and SARS, H5N1 has a strong transnational dimension. Spread not just by farm poultry but also by migratory wild birds, it has led to human infections in 16 countries across Asia and Africa. Since 2003, more than 850 people have contracted the virus and some 450 have died.1

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Labor. This funding structure for HIV/AIDS programs in China was streamlined in 2006 to all fall under PEPFAR. The CDC has assisted Chinese health authorities with the establishment of three HIV/AIDS clinical training centers in rural areas, which have educated over 300 graduates who are now providing antiretroviral therapy for 50,000 patients in 16 different provinces.21

In this period, Sino-U.S. cooperation also moved beyond bilateral governmental cooperation to the participation of U.S. nongovernmental organizations. Most notably, the Bill and Melinda Gates Foundation opened an office in Beijing in 2006 and began cooperating with the Chinese central and provincial governments on HIV/AIDS prevention, tuberculosis (TB) control, and tobacco control. Since 2006, the Gates Foundation has invested $50 million to expand HIV/AIDS prevention through testing and intervention programming among those most at risk and to provide care and treatment for those infected. It has also provided China’s National Health and Family Planning Commission with a $33 million grant to develop and demonstrate innovative TB-control models that are now considered world standards and are being exported to other countries.22

U.S.-China Collaboration Deepens with the Influenza Threat to Global Health, 2008-2014

The lessons learned from the SARS outbreak and the infrastructure put into place to monitor the continuing threat from avian flu served China and the United States well when a new influenza strain—H1N1, popularly known as “swine flu” for its genetic relationship to flu lineages from pigs—erupted during 2009. The epicenter was in the United States and Mexico, but it went on to spread across the globe. The international community reacted quickly and cooperatively: U.S. and Chinese health authorities shared information and technology to facilitate national monitoring of flu spread and vaccine development, and China even became the first country to mass-produce an H1N1 vaccine. During the lull in the pandemic in the summer of 2009, the U.S.-China Strategic and Economic Dialogue saw the two countries strengthen their bilateral health communications, and during President Barack Obama’s (2009-2017) November 2009 visit to China in the midst of the H1N1 outbreak, the two countries addressed health in a joint statement, pledging to “deepen cooperation on global public health issues, including Influenza A (H1N1) prevention, surveillance, reporting and control, and on avian influenza, HIV/AIDS, tuberculosis, and malaria.”23 Fortunately, H1N1 turned out to be far less dangerous than anticipated, with a mortality rate similar to standard influenza, but the international response it triggered proved a successful deployment of national and international pandemic response protocols.

The experience gained through the H1N1 scare proved useful when a new strain of avian flu, H7N9, emerged in eastern China in March 2013. This form of avian flu
had a high mortality rate of 30 percent, but human-to-human transmission proved extremely rare, allowing the outbreak to be kept in check by successful management. China quickly reported the new viral strain to the WHO after only three cases were detected and posted the full viral genome sequences of these cases onto a public international database to facilitate research around the world. As several more cases were detected over the following weeks, authorities in Shanghai and Hangzhou closed live bird markets and exterminated all poultry therein to prevent the spread of the virus. The outbreak plateaued in June at around 130 confirmed cases with over 40 confirmed deaths, but as expected, the virus reemerged the following winter, with over 100 confirmed cases and 20 deaths in China in January 2014 alone. Chinese authorities again reacted swiftly by closing live bird markets and culling their stocks, again resulting in a rapid drop in new infections.

China’s internal reaction to the H7N9 outbreak prevented the virus from spreading much farther beyond mainland China other than a handful of cases in Hong Kong, Taiwan, and Malaysia. Chinese scientific cooperation with the international community also allowed other countries to prepare for the virus should it spread further. Additionally, in October 2013, Chinese scientists developed a vaccine—the first flu vaccine developed entirely in China—and shared their method with the world, facilitating vaccine development efforts by the CDC and private pharmaceutical companies. The CDC and CCDC collaborated throughout the H7N9 outbreak by sharing epidemiological data and engaging in joint research on the virus. The Chinese efforts to manage the outbreak of H7N9 were widely praised by governments and scientists around the world. In the United States, the CDC executed a limited activation of its Emergency Operation Center to conduct epidemiological and vaccine research, provide assistance to the Chinese, and develop and distribute test kits capable of detecting the virus.24

**Ebola Tests China-U.S. Cooperation, 2014-2016**

The outbreak of the Ebola virus in West Africa in 2014 posed a new global health challenge for the United States, China, and the world community. The deadly virus, with a mortality rate of around 50 percent, ravaged the West African countries of Liberia, Sierra Leone, and Guinea throughout 2014 and into 2015, infecting approximately 30,000 people and killing nearly 12,000. Domestically, the United States and China activated their pandemic preparedness plans to minimize the risk to their citizens in an age of international mobility. The CDC issued detailed guidelines to American hospitals, first responders, and travelers to ensure proper handling of imported cases. The Chinese government enhanced screening capacity at points of entry, designated certain hospitals to treat any Ebola cases that occur in Chinese territory, and provided hospital personnel with specialized training in handling Ebola victims.
The United States and China also provided international assistance. The PRC sent supplies and hundreds of medical aid workers, which were later augmented by the deployment of a People’s Liberation Army medical squad to build a 100-bed treatment center in Liberia along with 480 Chinese medical staff. China’s total aid for the crisis amounted to around $125 million. The United States took similar actions but on a larger scale, with aid exceeding $1 billion. President Obama deployed thousands of troops headed by a U.S. Army general to oversee U.S. aid to the region. The U.S. government also sent supplies and civilian medical staff and constructed 17 100-bed treatment centers. During his visit to the United States in 2014, President Xi Jinping (elected in 2012) highlighted these on-the-ground global health interventions, the largest in both countries’ histories and pledged to “leverage our respective strength and work with the rest of the international community to help affected countries to strengthen capacity-building on health and epidemic prevention so as to place the epidemic under control as soon as possible.”

In some cases, U.S. and Chinese teams collaborated on the ground in Africa. In Sierra Leone, for example, the CDC worked with staff at a Chinese laboratory, and U.S. troops occasionally helped unload medical supplies from Chinese planes. On the international stage, the United States and China worked together in the UN Security Council, jointly declaring the Ebola outbreak a “threat to international peace and security” and called on governments around the world to respond to the crisis. Cooperation also unfolded in the private sector. Shortly after American and Canadian scientists created an experimental anti-Ebola drug called ZMapp, they exhausted their supply in government-required drug trials. But with the help of Chinese government grants, a private Chinese pharmaceutical company licensed the rights to ZMapp and developed it into an anti-Ebola drug called MIL77 that proved very effective in the field.

In the wake of the Ebola crisis, the U.S. and China redoubled their commitment to deeper collaboration on global health. In June 2015, at the U.S.-China Symposium on Ebola, Research, and Global Health Security hosted by the NIH, both countries renewed their commitment to building systems to detect, prevent, and respond to global health threats. HHS Secretary Sylvia Mathews Burwell stated at the symposium, “From finding solutions to combat avian influenzas and minimize the negative impacts on both human and animal populations, to investing in world health infrastructures, to efforts to curb tobacco use, to combating HIV/AIDS, tuberculosis, and cancer—our nations have more than 35 years of successful health collaboration.”

Chinese Vice Premier Liu Yandong noted that “China and the United States share more and more converging interests and shoulder broader common responsibilities in maintenance of global public health security, timely response to emerging infectious diseases and other major issues. China and the United States strengthening cooperation in the field of health care not only concerns the health of the two peoples but also is significant to the whole world.”
The Future of U.S.-China Cooperation on Global Health

Much of the future health collaboration between China and the United States will involve further enhancements to the bilateral working relationship in established areas of mutual concern such as zoonotic influenzas, malaria, HIV/AIDS, TB, other infectious diseases, drug-resistant infections, and health assistance to Africa. Indeed, these past areas of action are the ones that the 2016 U.S.-China Strategic and Economic Dialogue highlighted as venues for deeper cooperation moving forward: “The United States and China are committed to strengthening cooperation to improve global health security,” both sides agreed. They pledged to further “strengthen their partnership to build capacity to prevent, detect and respond to infectious disease threats including but not limited to influenza, malaria, laboratory capacity, and antimicrobial resistance.”

The two powers continue to face the same barriers that have long complicated far-reaching cooperation in this field. China’s tradition of treating public healthcare data as national security information has historically made bilateral collaboration difficult, although the two sides have improved significantly at navigating the bureaucracies on both sides of the Pacific. Moreover, global health is a brand new field in China—the Department of Global Health under the CCDC was only established in 2016. It is important to note that the complexities of bilateral and international cooperation on health are not unique to the U.S.-China relationship. Some experts characterize the global health regime not strictly as a regime but as a “regime complex” that is “decentralized with agencies nominally overlapping in mission, ‘governing’ global health with no command hierarchy.” In this loose, multi-relational system of local, provincial, national, regional, international, nongovernmental, and private actors, effectively navigating the global health landscape and mobilizing action can be challenging even presuming shared interests.

Different Approaches to Foreign Assistance

Bigger challenges to navigate are ideological differences in the United States and Chinese approach to foreign assistance in general. The United States tends to approach foreign aid as a benefactor-beneficiary relationship, providing tangible assets without receiving anything tangible in return. But, in the view of U.S. policymakers, such contributions allow the United States to set political terms for countries that wish to receive them; these conditions nearly always involve reforms like greater democratization, transparency, and more open markets. China, on the other hand, rejects the benefactor-beneficiary approach in favor of the principle of mutual benefit, also known as “win-win.” No political conditions are attached to Chinese assistance, and the relationship is more transactional, with an understanding that assistance begets access to a country’s markets or resources, for example. These principles of mutual benefit and non-interference have given China strong relationships around the developing world by treating other countries as equals.
China does appear to be shifting its approach toward humanitarian assistance on global health crises as it takes on the mantle of a major global power, but the long-standing win-win approach to foreign assistance—in place since the days of Mao—will continue to be an area that leaders on both sides of the Pacific will have to navigate if there is to be greater cooperation on humanitarian actions.

On a tactical level, China and the United States take different approaches to global health crisis situations. The United States and other Western nations tend to favor a shorter-term “vertical” approach that focuses on surging capacity to meet need by eradicating an outbreak’s spread and curtailing a disease’s effects through boosted personnel, medical resources, and research. China tends to take a longer-term “horizontal” approach centered on building infrastructure to create a system-wide expansion of access to medicine and healthcare. These different approaches, while surely complementary, may also represent disconnects the two countries face in collaborating.

Although bilateral activities within China, especially involving the U.S. and Chinese CDCs, will continue as usual, much of their joint global health agenda is envisioned as taking place in Africa. Their main cooperative goals reflect urgent needs brought to the fore by the 2014 Ebola outbreak: to build public health capacity—typical through boosting resources like personnel, materials, and training—and to protect global health security across the continent.

When it comes to joint work in Africa, those who advocate greater U.S.-China cooperation on the continent will have to remember to consider the desires of the third parties: the governments of Africa itself. Some African governments, like South Africa, are concerned about the idea of U.S.-China aid cooperation on the continent, and some are flatly opposed to it. (African diplomats have not expressed these sentiments publicly, but they have become known through WikiLeaks' 2010-2011 unauthorized

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**CHINA’S NEW ACTIVISM ON GLOBAL HEALTH**

Chinese President Xi Jinping has ushered in a new era of Chinese global activism that includes greater Chinese support to international health initiatives. At the UN Sustainable Development Summit in New York in 2015, President Xi pledged to build 100 clinics and hospitals and 100 health projects for women and children in the developing world in the coming five years. In addition, on January 18, 2017, China signed an agreement with the WHO to jointly implement a health project based on China's One Belt, One Road (OBOR) Initiative. The OBOR initiative is a Chinese initiative that focuses on connectivity and economic development cooperation between China and the rest of Eurasia. Although details of the health project are not currently available, the WHO announced that it looked forward to working with member countries of the OBOR initiative to help emphasize health in economic growth strategies as well as to support health services delivery and disease prevention and control.
African suspicion of U.S.-China cooperation arises from a number of considerations. African governments prefer the Chinese no-strings-attached approach to assistance over the conditional U.S. approach, as the latter sometimes requires reforms the governments would rather not implement. Governments are thus afraid that, if China were to join its health assistance to that of the United States, all assistance from both countries could become conditional.

African nations have benefited from the competition introduced into the field of international assistance by China’s more robust foreign aid activities since the 2006 Forum on China-Africa Cooperation, which ushered in a new wave of Western aid projects to compete with Chinese influence. This competition has given African governments options and leverage rather than restricting them with conditions. Ironically, the geopolitical competition between the United States and China that many African countries believe benefits them is often lamented as a roadblock to U.S.-China cooperation on the continent.37

Finally, there are worries that U.S.-China cooperation could result in China moving away from its efficient, infrastructure-focused assistance to join the United States in focusing on building capacity, which some Africans feel has had minimal results relative to the tangible benefits of China-funded hospitals, clinics, and laboratories. Kenya’s ambassador to China, Julius Ole Sunkuli, expressed his observation that “Africans were frustrated by Western insistence on capacity building, which translated […] into conferences and seminars.” Sunkuli went on to claim that there was “no concrete benefit for Africa in even minimal [U.S.-China] cooperation.”38 Speaking in more careful terms meant for the public eye, the African delegation to the 2007 Africa-China-U.S. Tripartite Dialogue nowhere discussed U.S.-China cooperation, but instead expressed its interests in terms that harmonized with the Chinese approach, borrowing the central tenet of Chinese aid in stating that “lasting relationships need to be mutually beneficial” and touting the preeminent value of infrastructure: “One of the best guarantees that a venture will promote African interests is the length of its engagement: a company that builds factories and mine shafts has a greater stake in stability and responsible government than does the short-term speculator.”39

While not all African officials are necessarily opposed to U.S.-China collaboration on health and other forms of aid, discomfort with and suspicion of the idea of increased cooperation between the two global powers is not uncommon across the continent, as demonstrated by the failure in 2008 of European Union-proposed trilateral cooperation with China in Africa, which the Chinese withdrew from due to a lack of African support for the idea. With most U.S.-China plans for joint work on global health being centered in Africa, there is a possibility that African resistance could make substantive collaboration difficult.
The newly appointed director of the Africa CDC, Dr. John N. Kkengasong, has called on the leaders of the G-20 at their forthcoming meeting in July 2017 to champion “the Africa CDC’s strategic approach and its capacity to strengthen or establish National Public Health Institutes—a critical step in enabling countries to identify threats early and respond effectively.”

The Way Ahead on Trilateral Engagement in Africa

Overcoming some of these challenges, China and the United States have agreed to increase their cooperation with the African Union to support the new Africa Centers for Disease Control and Prevention in Addis Abba, Ethiopia, which began operation on January 31, 2017, and the five proposed regional collaboration centers in Egypt, Nigeria, Gabon, Zambia, and Kenya. The newly appointed director of the Africa CDC, Dr. John N. Kkengasong, has called on the leaders of the G-20 at their forthcoming meeting in July 2017 to champion “the Africa CDC’s strategic approach and its capacity to strengthen or establish National Public Health Institutes—a critical step in enabling countries to identify threats early and respond effectively.”

There are concerns about the funding available for the Africa CDC. The African Union has a limited budget, and Ana Ayala, director of the Global Health Law Program at Georgetown University, says that a budget of about “$60 million and a staff of 300” is needed to run an effective program.

The United States and China have also pledged to explore diverse joint opportunities for African healthcare capacity building, including trilateral actions such as potential U.S. support for the establishment of a national public health institution in Sierra Leone as an expansion of a planned China-supported Tropical Disease Research Center in the country. Further trilateral engagement is hoped for with African countries to improve public health systems and, in furtherance of the international health regime, to implement the WHO’s International Health Regulations and Global Health Security Agenda. The HHS and China’s National Health and Family Planning Commission intend to cooperatively develop laboratory systems and conduct medical research, as well as joint epidemiology and training field projects in Africa. While many of these agenda items are broad-stroke goals and nonbinding intentions, there is no doubt that the number of items that both sides want to discuss with one another has grown substantially over the past decade.

Health Ramifications of International Migration

Finally, there are few issues in global health today that are more pressing than the issue of international migration. Recent studies show that the conflicts of the Middle East have forced millions of people to seek sanctuary in other countries, including the United States. The UN estimates that as of mid-2015, there were over 15 million refugees worldwide—a 45 percent increase in just three and a half years. Moreover, with globalization, there are other less dramatic but important trends. It is estimated that today there are more than five million Chinese citizens living and working temporarily overseas, two million of these in Africa alone. China’s OBOR initiative to link China economically to countries in Southeast, Central, and South Asia, Europe, and Africa is likely to lead to a substantial increase in the number of Chinese citizens living abroad during the next decade. The United States and China have developed
a solid base for bilateral cooperation on health and pandemic issues over the past two decades. As the world’s two largest economies, they have an obligation—and an enormous stake—in building on this base of collaboration for the continued research and study of the global health implications of migration.

The United States has been a top destination of international migration since its founding, but China, which remains one of the world’s top migrant-sending countries, is now increasingly becoming a destination in its own right. Both countries are debating their immigration policies. The health security ramifications of international migration revolve around both the introduction of foreign and unfamiliar health threats to a destination country by infected travelers, and how the destination country’s domestic healthcare system stays vigilant to pandemic threats. The potential for the spread of dangerous pathogens from an affected migrant-sending country to a previously unaffected migrant-receiving country is clear. But other important and often overlooked considerations include local doctors’ lack of familiarity with how to care for immigrant health conditions not endemic to the area, and immigrants’ lack of familiarity with local health concerns and regulations such as vaccination requirements.

The health threat posed by migration has recently reared its head in China. An outbreak of yellow fever that began in Angola in December 2015 spread to China three months later, marking the first case of yellow fever ever reported in all of Asia, followed by 10 more Chinese cases imported from Angola by May. Yellow fever is a sometimes deadly disease caused by a mosquito-borne virus. While no cure exists, there is a vaccine, but it is generally administered only to those living in or traveling to areas where the disease is endemic. As such, China’s 1.4 billion citizens are almost universally unvaccinated. The Chinese cases came from Chinese workers returning home after having worked in Angola, where over 200,000 Chinese workers are employed on work visas for China’s aid and investment projects in the country. Chinese authorities do require travelers to Angola to be vaccinated for yellow fever, but there are fears that many of the Chinese workers there may not have abided by this rule. The spread of yellow fever to China is particularly worrisome given the region’s massive population and the fact that the primary vector of transmission—the *Aedes aegypti* mosquito—is common across much of China and nearby countries in South and Southeast Asia. Many epidemiologists have voiced concerns about how dangerous this confluence of factors could prove to be.

So far, the United States and China have each responded to Angola’s yellow fever epidemic separately. In addition to increasing domestic mosquito monitoring and control activities to boost its own preparedness, the Chinese government provided Angola with half a million dollars in emergency assistance in February, before the outbreak had even spread to China. The CDC’s Mozambique Field Epidemiology Training Program graduates have collaborated with Angola’s Ministry of Health to track down suspected cases of yellow fever and intervene accordingly. With so much recent discussion between U.S. and Chinese health authorities regarding cooperative health security efforts in Africa, the tragic yellow fever outbreak in Angola is an opportunity for the two countries to commitment to increased cooperation on such issues.
fever outbreak offers the two countries an opportunity to achieve significant collaborative action on global health, if they choose to embrace it.

The recent concerns of yellow fever epidemic also brought attention to China’s vaccine production. The global vaccine industry has long been dominated by a few multinational companies. In the past decade, vaccine manufacturers from China, India, and other emerging economies entered the international market and helped to drive down the vaccine price. For Jiankang Zhang, representative for PATH’s China Programs, the growth of China’s vaccine industry is “a very positive development for global health, as governments and international procurement agencies will be able to afford more life-saving vaccines and thus protect more lives.” A Chinese vaccine manufacturer obtained the first WHO prequalification vaccine (the Japanese encephalitis vaccine) in October 2013.49 Hope has been high that other vaccines manufactured from China will be qualified and enter the global market before the next pandemic. In the wake of the yellow fever epidemic in 2016, China’s Sinovac Biotech pledged to provide sufficient yellow fever vaccine supply for all Chinese expatriate workers.50 As the world is wondering what the next global pandemic will be, China’s vaccine manufacturing capacity may soon become one of the keys to stemming a potential global crisis.

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A final global health threat for the United States and China to consider as an area for greater cooperation is bioterrorism. Bilateral cooperation on counterterrorism is long established, but there is little evidence of collaboration in combating bioterrorism. Microsoft founder Bill Gates recently brought this issue into sharp relief at the Munich Security Conference that was attended by 450 senior decision makers from around the globe. Gates warned that “whether it occurs by a quirk of nature or at the hand of a terrorist, a fast-moving airborne pathogen could kill more than 30 million people in less than a year.”51 Among other recommendations, he advocated that countries need to prepare for pandemics in the same manner that the military prepares for war—with “germ games” and other pandemic exercises. He concluded that bioterrorism now ranks with nuclear war and climate change as one of three existential threats to humankind.
1946
U.S. Communicable Disease Center (later to become the Centers for Disease Control and Prevention, or CDC) is established

1963
China sends the first Chinese medical team to Algeria, inaugurating its international health aid activities

1968
China implements its "barefoot doctors"/rural cooperative medical systems policy

1948
UN establishes World Health Organization (WHO)
1970

1972
China joins WHO

1978
WHO conference publishes Declaration of Alma Ata championing primary care

1979
WHO-led effort succeeds in eradicating smallpox from the globe

1981
HIV/AIDS first recognized as a new health threat

1979
U.S. and China sign Protocol for Cooperation in the Science and Technology of Medicine and Public Health

1981
The WHO Representative Office is established in China
Notes


29 Burwell, “Address to the China Symposium.”


38 “U.S. embassy cables.”


42 Ibid., 94-5.


