

Building Infection-Resilient Societies That Enable the Protection of People's Lives

COVID-19 is a threat not only to the lives and health of people around the world; it is also a threat to *human security* as it devastates societies and their economies. Against this background, JICA is forging ahead with its Initiative for Global Health and Medicine, which aims to protect people from health crises.

The COVID-19 pandemic has spread rapidly across the globe. Humans have been exposed to the threat of various infectious diseases, including Spanish influenza (Spanish flu), which raged around the world about a century ago. More recent examples include the severe acute respiratory syndrome (SARS) and the Middle East respiratory syndrome (MERS). Yet the spread of COVID-19 is on an unprecedented scale and a historic event that is still devastating people's lives and health as well as societies and their economies.

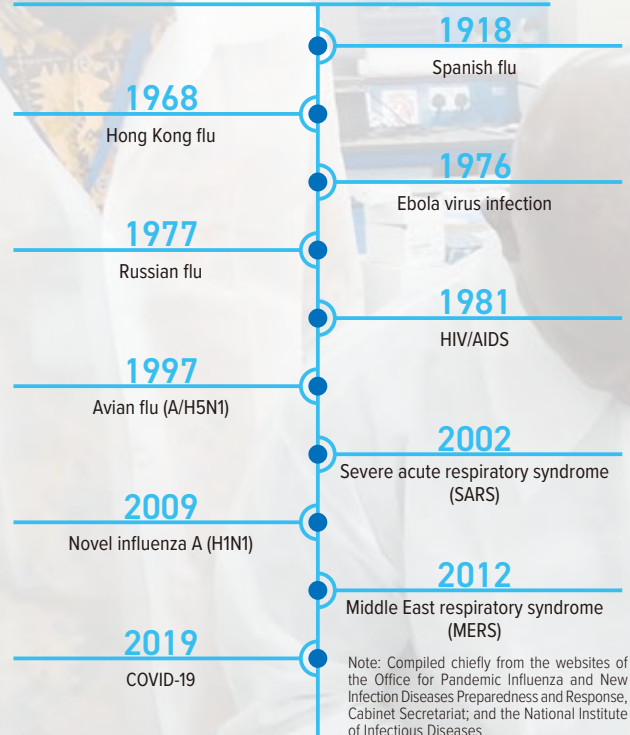
JICA's Initiative for Global Health and Medicine launched

There are concerns that vulnerable health systems and slow vaccination rollouts in developing countries may prolong the impact of COVID-19, resulting in worsened poverty and wider economic disparities.

To date, JICA has extended cooperation to some 150 countries to realize *human security*. To help protect the lives of people in the world amid the pandemic, JICA launched JICA's Initiative for Global Health and Medicine in July 2020, based on the trusting relationships that it has built with partner countries over the years.

Designed to support *human security* and Universal Health Coverage (UHC),* this initiative aims to strengthen health systems in partner countries with a focus on three pillars: *prevention*, *precaution*, and *treatment*.

Major infectious diseases from the 20th century onward



Support for Remote Intensive Care by Leveraging Digital Transformation (DX)

In July 2021, JICA launched a project designed to provide training and technical advice on intensive care medicine for countries that include those in Asia and Latin America. Such technical guidance is made via a communications system that links Japanese doctors and nurses specializing in intensive care with doctors and nurses engaged in intensive care for COVID-19 patients in these countries. The project also involves the provision of medical facilities, equipment, and supplies for temporary intensive care units (ICUs).

As the numbers of patients who need ICUs are surging due to the pandemic, JICA is cooperating in building the response capacity of doctors and nurses who treat critically ill patients and in developing ICUs for isolating infected individuals from other patients. The aim is to help partner countries to better cope with the pandemic and strengthen their health systems.

From Kenya to East Africa: Establishing and Strengthening Frameworks for Infectious Disease Testing and Research

The Kenya Medical Research Institute (KEMRI) is a center of excellence in research for human health in Africa. JICA has been a key partner of KEMRI for more than four decades—since its foundation in 1979.

KEMRI is a principal center for administering PCR tests for COVID-19 in Kenya, accounting for as much as 50% of such tests in the country at one time. Moreover, KEMRI is entrusted with performance testing of test kits by the Africa Centres for Disease Control and Prevention (Africa CDC), a specialized agency of the Africa Union. KEMRI also played a leadership role in the training session that six neighboring countries in East Africa jointly conducted with JICA to build the capacity to test infectious diseases.

JICA provided KEMRI, which plays such an important role, with PCR test kits and training for laboratory testing technicians who cope with COVID-19 and other infectious diseases.

Besides, in 2020, JICA extended ¥8 billion in health-sector policy loans to Kenya for attainment of UHC. Other JICA cooperation that helps prevent the spread of infectious diseases in Kenya includes (1) accepting Kenyan students in Japan for training in infectious disease control; (2) supporting the Ministry of Health through assigned JICA experts; and (3) providing hospitals on the forefront of treating patients with Japan-made ultrasonic diagnostic imaging devices and X-ray diagnostic devices, both of which allow doctors to examine patients without transporting them.

Three pillars for “leaving no one’s health behind”

1. Promoting infectious disease prevention

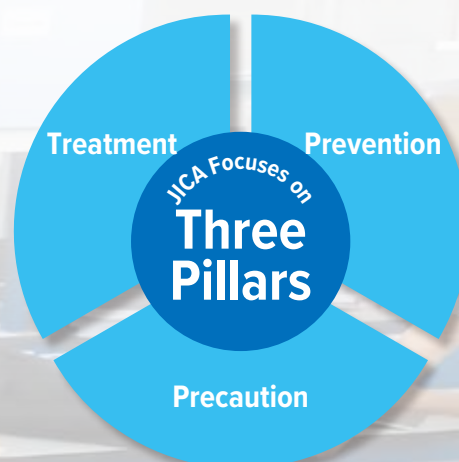
JICA cooperates in developing countries and regions with access to COVID-19 vaccines, acting in concert with COVAX—an international framework for collective procurement of vaccines. JICA also cooperates in developing and upgrading health service delivery systems and medical security systems with a view to achieving UHC. In addition, JICA works on mainstreaming infectious disease control in its activities aimed to address development issues in sectors other than health, including water and sanitation, urban planning, education, nutrition, and other social services.

2. Enhancing infectious disease research and alert systems

JICA utilizes the network of infectious disease laboratories that it has built through its cooperation in preventing the spread of COVID-19 and to help prepare for future health crises. JICA works on constructing, expanding, and improving such laboratories as well as on training related professionals. It also supports the development of COVID-19 testing systems with an eye to facilitating early case detection and contact tracing as well as to strengthening border controls.

3. Strengthening the treatment system

JICA utilizes the network that it has developed with referral



hospitals in its cooperation activities of building quality health systems that allow everyone to receive safe and reliable treatment. It works on strengthening health service delivery systems through the construction, expansion, or improvement of some 100 core hospitals as well as through the training of medical professionals. In addition, JICA supports case management (diagnosis, treatment, and care) designed to prevent COVID-19 patients from falling into serious condition or even dying. It also supports intensive care units with telehealth technology.

*UHC is defined as “ensuring that all people can use the promotive, preventive, curative, rehabilitative, and palliative health services they need, of sufficient quality to be effective, while also ensuring that the use of these services does not expose the user to financial hardship.”

Comprehensive Cooperation for Viet Nam, a Country That Has Proven Effective in Controlling the Pandemic

JICA is providing comprehensive cooperation to Viet Nam to support its COVID-19 response so that the country will better implement *prevention*, *precaution*, and *treatment*—the three pillars of JICA’s Initiative for Global Health and Medicine.

For many years, JICA has been supporting 24 hospitals—including three referral hospitals, i.e., Bach Mai Hospital, Hue Central Hospital, and Cho Ray Hospital—as well as the National Institute of Hygiene and Epidemiology (NIHE), which plays a leading role in studying and testing infectious diseases. This support involved building the foundations for the countrywide health system and training health professionals.

Along with such cooperation, in the context of *prevention*, JICA worked with a Japanese private pharmaceutical firm to transfer the Japanese technology of manufacturing a measles-rubella combined

vaccine to the Centre for Research and Production of Vaccines and Biologicals (POLYVAC), starting in 2003. Based on this technology and associated experience, POLYVAC is now developing a Vietnamese vaccine for COVID-19.

In the context of *precaution*, NIHE has been taking the lead in developing a nationwide PCR testing system and drawing up testing guidelines.

In the context of *treatment*, the three referral hospitals are taking the initiative in accepting and examining COVID-19 patients, thus accumulating much experience and expertise in hospital infection control and other aspects. They dispatch their doctors and nurses to regional hospitals to share such experience and expertise. It is worth adding that JICA’s emergency provision of equipment and supplies needed to diagnose and treat COVID-19—including



Vietnamese technicians at POLYVAC are producing measles vaccines.

diagnostic reagents and extracorporeal membrane oxygenation (ECMO) machines—has also helped to get the pandemic under control and enhance the capacity to cope with serious cases.