

PROVISIONAL
TRANSLATION

Basic Strategy for International Cooperation for Strengthening Measures on Emerging Infectious Diseases

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International Cooperation for Strengthening Measures on Emerging
Infectious Diseases
Cabinet Meeting

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I. Introduction

Based on various lessons learned from the outbreaks of Middle East Respiratory Syndrome (MERS) in the Arabian Peninsula and other regions since 2012, Ebola hemorrhagic fever, which spread in West Africa in 2014, and other cases, as well as trends in the international community, the "Ministerial Meeting on Measures on Emerging Infectious Diseases" (hereinafter referred to as the "Ministerial Meeting") in September 2015 has approved the "Basic Guidelines for Strengthening Measures on Emerging Infectious Diseases" (hereinafter referred to as the "Basic Guidelines"). In February 2016, the Ministerial Meeting compiled the "Action Plan for Strengthening Measures on Emerging Infectious Diseases" (hereinafter referred to as the "Basic Plan") to promote measures against emerging infectious diseases.

Moreover, regarding the worldwide spread of Antimicrobial Resistant (AMR)¹ bacteria, the Global Action Plan was adopted by the World Health Assembly in May 2015. Amid calls for further strengthening of antimicrobial resistance (AMR) countermeasures, the Ministerial Meeting has compiled the National Action Plan on Antimicrobial Resistance (AMR) (2016-2020) (hereinafter referred to as the "Action Plan") in April 2016 and promoted these efforts.

The Basic Plan and Action Plan were originally scheduled to cover the period through 2020, but due to the spread of the COVID-19 in the same year, the period was extended to 2022. Recently, efforts to coexist with COVID-19 have been progressing in many countries around the world, including Japan. Considering the Japanese G7 Presidency in 2023, the Basic Guidelines and the Basic Plan will be unified and revised to compile the Basic Strategy.

¹ AMR: Antimicrobial resistance

II. Basic Concept

1. Background and Purpose of Formulating the Basic Strategy

The risk of acquiring infectious diseases through animals has increased due to forest development and climate change on a global scale. In addition, due to the progress of globalization, various emerging and re-emerging infectious diseases, including zoonotic diseases, are spreading across national borders to the international community.

In accordance with the WHO International Health Regulations (IHR)², the Director-General of WHO may declare a Public Health Emergency of International Concern (PHEIC)³ in situations when the international spread of a disease is recognized as posing a public health risk to other countries or when urgent international coordination of measures is required. In the past, PHEIC has been declared for the international outbreak of H1N1 influenza in April 2009, the outbreak of Ebola hemorrhagic fever in West Africa in August 2014, and the recent international outbreak of COVID-19 infection in January 2020.

With regard to countermeasures against infectious diseases, each country's active contribution and role as a member of the international community will not only benefit the international community in confronting the spread of infectious diseases across borders but will also give it an advantage in its own fight against infectious diseases.

The Basic Strategy includes measures for Japan to cooperate with developed countries and contribute to the international community through international cooperation with developing countries. If taken in coordination with domestic countermeasures and implemented in an integrated manner by the relevant ministries and agencies, these measures will help to strengthen Japan's response to infectious diseases.

In addition, this Basic Strategy will be mutually coordinated and promoted in an integrated manner with the "Global Health Strategy⁴" which summarizes related measures based on the perspective that contributions to global health are important from the perspectives of human health, diplomacy, economy, and security; the "Strategy for Strengthening the Vaccine Development and Production System⁵", a national strategy for long-term, continuous efforts to create the strength to develop and produce vaccines in Japan; the "National Action Plan for Pandemic Influenza and New Infectious Diseases⁶"

² IHR: International Health Regulations

³ PHEIC: Public Health Emergency of International Concern

⁴ Global Health Strategy (approved by the Headquarters for Healthcare Policy on May 24, 2022): https://www.kantei.go.jp/jp/singi/kenkouiryou/senryaku/r040524global_health.pdf

⁵ Strategy for Strengthening the Vaccine Development and Production System (Cabinet approval on June 1, 2021)

⁶National Action Plan for Pandemic Influenza and New Infectious Diseases, etc. (Cabinet approval on June 7, 2013)

which establishes infection control measures and other measures to be implemented by the government in preparation for outbreaks of new strains of influenza; the "Basic Principles of the Asia Health and Wellbeing Initiative" and the "Basic Principles of the Africa Health and Wellbeing Initiative" with a view to contributing to the achievement of UHC in Asia and Africa; and other related governmental policies. This will allow to promote comprehensive measures against infectious diseases in Japan.

2. Issues and Basic Directions for Japan

(1) Strengthening of PPR⁷ through the development of Global Health Architecture⁸, and contribution to the promotion of UHC⁹

The history of international outbreaks of infectious diseases has led to the recognition of the importance of international cooperation for developing Global Health Governance¹⁰, not only from the perspective of humanitarian assistance, but also from the perspective of preventing the spread of infectious diseases from epidemic countries to their own countries and addressing threats to the security of the international community. Such cooperation includes rapid local response by the international community for the containment of infectious diseases from early outbreaks and collaboration among countries, international organizations and NGOs that implement measures at the local level.

It is also important to strengthen capacities for prevention, preparedness, and response (PPR) in peacetime as well as to achieve more resilient, equitable, and sustainable UHC in response to public health emergencies. UHC, in particular, contributes to the concept of "Human Security"¹¹ of which Japan has been a strong proponent.

To realize these goals, it is essential to develop a Global Health Architecture, including the establishment of sustainable health systems through financial contributions to relevant international organizations and public-private partnerships, and strengthening of collaboration among financial and health authorities in each country. Based on the Global Health Strategy, it is important for Japan to make its

⁷ Global Health Architecture: the status of mechanisms, organizations and other actors addressing global health and medical issues.

⁸ PPR: Prevention, Preparedness, Response

⁹ UHC (Universal Health Coverage): Universal Health Coverage means that everyone receives high-quality health services, when and where needed, without financial hardship.

¹⁰ Global Health Governance: organic cooperation among organizations necessary to respond to future health crises.

¹¹ Human Security: a concept that focuses on individual human beings and encourages sustainable individual self-reliance and social development through protection and empowerment in order to protect people from a wide range of serious threats to their survival, livelihood, and dignity, and to realize their rich potential.

contribution in mutual cooperation with various stakeholders, including national governments, international organizations, private companies, and civil society.

The number of tuberculosis patients in Japan has been decreasing, and the prevalence rate per 100,000 people (hereinafter referred to as "prevalence rate") was 9.2 in 2021, making Japan a low prevalence country with a prevalence rate of less than 10 as defined by the World Health Organization. Nevertheless, the number of tuberculosis patients in 2021 was 11,519, and tuberculosis remains the largest chronic infectious disease in Japan. In Africa and Asia, the increase in multidrug-resistant tuberculosis caused by inadequate tuberculosis treatment is still one of the most important challenges in tuberculosis control policy.

In response to the COVID-19, Japan has made efforts through international organizations such as the WHO, the World Bank and the Asian Development Bank, and has contributed to the establishment of the ACT Accelerator (hereinafter referred to as "ACT-A"¹²) and the COVAX Facility (hereinafter referred to as "COVAX"¹³), financial support, and mobilization of funds. In addition, Japan has been promoting vaccine donation and has provided "Last One Mile Support" for and cold chain system development, and support to meet the needs of developing countries for economic and social revitalization and resumption of cross-border travel after the acute phase of a COVID-19 pandemic has passed. Such international cooperation must be continued.

Furthermore, while giving consideration to cross-sectoral approaches in related fields such as education, water and sanitation, and trade, Japan, as a responsible member of the international community, will make a positive contribution through these efforts to measures against infectious diseases that pose an international threat, aiming to play a global leading role in this subject.

(2) Human resource development and personnel support for infectious disease control, including international cooperation

It is extremely important to develop and secure human resources who have specialized knowledge about infectious disease control, who can collect information and study countermeasures, and who can play an active role in infectious disease research and control.

In response to the spread of infectious diseases overseas in the past, Japan has been making efforts to develop human resources and international partnership by dispatching medical and other personnel in addition to financial cooperation. In view

¹² A global collaboration to accelerate development, production, and equitable access to COVID-19 tools such as vaccines, therapeutics, and diagnostics

¹³ A global framework supporting equitable worldwide access to COVID-19 vaccines.

of the importance of such measures, it is necessary to further strengthen human resource development and secure human resources capable of taking responsibility of infectious disease control both in Japan and in international cooperation in the medium to long term.

(3) Testing, information collection and analysis, and research systems for infectious diseases

The spread of Ebola hemorrhagic fever since 2014 has led to the development of testing and research systems for Ebola and other high-risk pathogens (type one pathogen) in developed countries. In Japan it is also necessary to strengthen the testing, information collection and analysis, and research systems for pathogens and other substances related to infectious diseases that cause severe symptoms, such as Ebola hemorrhagic fever.

Specifically, in preparation for outbreaks of Ebola hemorrhagic fever and other type one infectious diseases, the testing system must be strengthened, including the establishment of a public sector system and building a cooperative system with testing institutions, so that necessary testing can be performed smoothly from the initial stage.

In addition, it is necessary to centralize information to strengthen the collection and analysis of information on infectious diseases overseas at the National Institute of Infectious Diseases.

Furthermore, given the fact that Japan has fallen behind other countries in the development of vaccines and therapeutics for the COVID-19, it is necessary to steadily promote research on infectious diseases through the development of research systems and human resources in ordinary times, including the establishment of the BSL4 facility¹⁴ at Nagasaki University.

(4) Promotion of the One Health approach

The concept of "One Health" has been proposed as a way of thinking that in order to protect human health, it is necessary to not only focus on human diseases, but also to make cross-disciplinary efforts involving humans, animals, and the environment.

At past G7 summits, it has been confirmed that each country will strengthen its One Health approach¹⁵ and engage in research and development of new drugs, including anti-microbial agents.

¹⁴ BSL4 facility: Bio Safety Level 4 facility. An advanced containment facility for the most hazardous pathogens among facilities that handle viruses and other pathogens.

¹⁵ An approach stating that cross-disciplinary issues related to human and animal health and the environment should be addressed through collaboration among all concerned parties.

Japan has also been cooperating with concerned organizations and collecting information on zoonotic diseases both domestically and internationally. However, the recent experience with the COVID-19 has reaffirmed the importance of measures against zoonotic diseases. It is necessary to further strengthen these measures, including building capacity for international measures, while working in unison with the related ministries and agencies on One Health.

(5) Promotion of measures to control AMR

Antimicrobial resistance (AMR) has been acknowledged as a serious global health threat and recognized as one of the priorities to be addressed in the health sector of the Group of Seven (G7). WHO has placed AMR measures on its key policy agenda.

The Government of Japan formulated the National Action Plan on AMR in 2016 to promote and strengthen domestic measures and international cooperation on AMR, the government has been making concerted efforts to promote AMR measures. Japan needs to exert leadership in measures against antimicrobial resistance (AMR) not only domestically but also globally.

III. Positioning of the Basic Strategy

It is important that the government and related private organizations and enterprises, including health and medical institutions, take comprehensive measures against infectious diseases, based on the basic concept and direction presented in Section II. From this perspective, the Basic Strategy presents specific measures in Section IV for each of the five measure groups that Japan should mainly address over the next five years (see table below).

Since countermeasures against infectious diseases must be taken continuously, always taking into account the latest situation domestically and overseas, the progress of the measures will be monitored on a regular basis, and the progress of measures listed in IV will be followed up every fiscal year. If necessary, this Strategy will be revised in light of international trends, such as discussions at the G7 Summit to be held in 2023, etc.

<Outline of measures for each of the five measure groups>

Measure Group	Measures
1. Strengthening of PPR through the development of Global Health Architecture and contributing to the promotion of UHC, etc.	(1) Contribution to the development of Global Health Architecture (2) Promotion of UHC initiatives (3) Assistancess through international organizations and public-private partnerships (4) Promotion and utilization of bilateral cooperation
2. Development of human resources to deal with infectious diseases, international contribution through human support, etc.	(1) Training and career path support for human resources dealing with infectious diseases. (2) Promotion of efforts of the Japan Disaster Relief Infectious Diseases Response Team. (3) Cooperation with WHO and other international organizations. (4) Establishment of a system to improve the SDF's ability to respond to infectious diseases. (5) Ensuring the safety of Japanese nationals abroad.
3. Promotion of testing, information collection and analysis, research, and other activities related to infectious diseases.	(1) Strengthening the testing system for infectious diseases. (2) Strengthening information collection, analysis, and research systems related to infectious diseases.
4. Promotion of the One Health approach	(1) Measures to prevent the introduction of infectious diseases through imported animals.

	<p>(2) Early response to infectious diseases that may be brought to Japan by migratory birds crossing the border, etc.</p> <p>(3) Promotion of research on the One Health approach.</p> <p>(4) Efforts to build a cooperative framework for the One Health approach.</p>
5. Promotion of measures to control AMR.	Promotion of measures to control AMR.

IV. Measures by Measure Group

1. Strengthening of PPR through the development of Global Health Architecture and contributing to the promotion of UHC, etc.

(1) Contribution to the establishment of Global Health Architecture

① Participation in international discussions to strengthen PPR

○ Taking into account the benefits and lessons learned from international collaborative frameworks related to COVID-19 such as ACT-A (including COVAX), and bearing in mind the WHO framework, the US-led COVID-19 global action plan, and discussions at G7 and G20, etc., the government will respond appropriately to the movement to strengthen Global Health Architecture, including new financial mechanisms (Pandemic Fund)¹⁶ and related new platforms including finance and health collaboration. [Cabinet Secretariat, Ministry of Foreign Affairs, Ministry of Finance, Ministry of Health, Labour and Welfare]

② Contribution to the setting of international standards on pandemics

○ The current IHR (2005) raises such issues as early warning and action, rapid notification and information sharing, implementation and compliance, rapid evaluation, and response, and PHEIC's decision-making process. To resolve these issues, Japan will actively participate in the discussions to ensure that the Working Group of Member States for targeted amendments to the IHR, whose establishment was approved at the 75th Session of the World Health Assembly in 2022, will adopt the revision proposal at its 77th Session in May 2024.

WHO has established an intergovernmental negotiating body to draft and negotiate a WHO convention, agreement or other international instrument on pandemic prevention, preparedness and response (WHO CA+) in 2022, and is currently preparing a new legal instrument. Negotiations have begun among

¹⁶ At the time of establishment, the name was “Financial Intermediary Fund for Pandemic Prevention Preparedness-and Response (PPR FIF)”.

member states on the elements to be included in the instrument which will be submitted at the 77th Session of the World Health Assembly in May 2024, and Japan will contribute as a vice-chair. At the same time, Japan will be actively involved in the Standing Committee on Pandemic and Emergency Preparedness and Response, which was newly established by the Executive Board in 2022.

The government will strengthen the global infectious disease control and support WHO reform through targeted amendments and enhanced implementation of the IHR, development of WHO CA+, and improvement of WHO's health crisis programs. [Ministry of Foreign Affairs, Ministry of Health, Labour and Welfare]

- To respond promptly to infectious disease crises and to strengthen intelligence on infectious diseases, training on the collection and analysis of infectious disease intelligence overseas will be carried out starting in ordinary times at the National Center for Global Health and Medicine in cooperation with the National Institute of Infectious Diseases. The government will also secure specialized information gathering capabilities overseas and consider and reach conclusions regarding the nature of overseas intelligence gathering and infectious disease research centers and implement these conclusions sequentially. In addition, research will be conducted on strengthening the integrated system of infectious disease intelligence functions in Japan and overseas. [Ministry of Education, Culture, Sports, Science and Technology, Ministry of Health, Labour and Welfare]

(2) Promotion of UHC initiatives

- The idea of UHC is to ensure that all people have access to effective, high-quality medical services at an affordable cost, including measures against infectious diseases. UHC also contributes to the concept of human security, which focuses on each individual human being and protects people from a wide range of serious threats. Japan will continue to lead international discussions toward achievement of UHC around the world, including Asia, and form an organic international network by utilizing the efforts of WHO. This will lead to the development of international health personnel who can respond to local needs and the accelerated development of medical technologies and drugs, etc. [Ministry of Foreign Affairs, Ministry of Health, Labour and Welfare]
- Through international conferences on UHC, forums such as G7 and G20, international organizations such as WHO, World Bank, Asian Development Bank,

Global Fund¹⁷, Gavi Vaccine Alliance¹⁸, Global Health Innovative Technology Fund (GHIT)¹⁹, and UHC2030²⁰, as well as bilateral assistances, and their organic collaboration, the government will promote effective and reliable implementation of efforts to achieve more resilient, equitable, and sustainable UHC at national, regional, and global levels. In doing so, the government will respond appropriately to trends in discussions in international fora. [Cabinet Secretariat, Ministry of Foreign Affairs, Ministry of Finance, Ministry of Health, Labour and Welfare]

- The government will merge the National Institute of Infectious Diseases and the National Center for Global Health and Medicine to create the institute for health security and establish a broad collaborative relationship with international organizations and national public health authorities such as WHO and national CDCs to realize UHC. This network will be used as a foundation to dispatch doctors and other medical personnel to partner countries, support the improvement of public health response capabilities, and develop local human resources. [Ministry of Health, Labour and Welfare]

(3) Initiatives through international organizations and public-private partnerships

- ① Strengthening cooperation with international organizations and public-private partnerships through appropriate contributions
 - The government will strengthen cooperation through appropriate contributions to international organizations and public-private partnership funds such as WHO Voluntary Contributions, World Bank, Global Fund, Gavi Vaccine Alliance, Coalition for Epidemic Preparedness Innovations (CEPI)²¹, Global Drug Facility (Stop Tuberculosis Partnership)²², Global Antibiotic Research and Development

¹⁷ Global Fund: Established in 2002 in partnership with governments and the private sector to provide financial support to fight AIDS, Tuberculosis and Malaria after the G8 Kyushu-Okinawa Summit in 2000.

¹⁸ Gavi, the Vaccine Alliance (Gavi): A public-private partnership intended to improve vaccine coverage in developing countries. In addition to donors (donor countries), governments of developing countries, and relevant international organizations, the pharmaceutical industry, private foundations, and civil society are also participating in the alliance.

¹⁹ Global Health Innovative Technology Fund (GHIT Fund). A Japan-based global public-private partnership involving Japanese pharmaceutical companies, universities and research institutes in product development and collaboration with global partners for the promotion of development in the fields of pharmaceuticals, vaccines and diagnostics for Malaria, Tuberculosis and lesser-known tropical diseases

²⁰ UHC2030: a multi-stakeholder platform involving nations, regions, international organizations, the public, charitable organizations, the private sector and other stakeholders. Its secretariat is co-hosted by the World Bank, WHO and OECD..

²¹ An international fund that provides funding to pharmaceutical companies and research institutions that develop vaccines.

²² Global Drug Facility (GDF): The Global Anti-Tuberculosis Drug Facility is a project managed by the Stop Tuberculosis Partnership, a public-private partnership established in 2000 to fight tuberculosis

Partnership (GARDP)²³ contributions, GHIT, UHC2030, Unitaid²⁴, UNFPA²⁵, IPPF²⁶, etc., and promote efforts to strengthen Global Health Architecture and achieve more resilient, equitable, and sustainable UHC. [Cabinet Secretariat, Ministry of Foreign Affairs, Ministry of Finance, Ministry of Health, Labour and Welfare]

- In collaboration with relevant ministries and agencies, and in relationship with other crisis funds (e.g., UN CERF²⁷), the government will actively participate in discussions among member states on how the funds should be managed, including the roles and strategies of the WHO "Emergency Response Fund" (CFE)²⁸, the World Bank "Multi-Donor Trust Fund for Health Emergency Preparedness and Response" (HEPRTF)²⁹, and the "Pandemic Fund" managed by the World Bank, taking a leading position, in particular as the largest donor to HEPRTF. [Cabinet Secretariat, Ministry of Foreign Affairs, Ministry of Finance, Ministry of Health, Labour and Welfare]
 - The International Monetary Fund (IMF) immediately provides grant aid to eligible countries through the "Catastrophe Containment and Relief Trust" (CCRT)³⁰ to cover the debts of member countries to the IMF that are due within two years of a major public health crisis. Japan will continue to participate in discussions at the IMF Executive Board and other meetings to prepare for future public health crises using this fund. [Ministry of Finance]
- ② Efforts through research support organizations including GHIT against NTDs, tuberculosis, malaria, and others.
- Regarding the GHIT Fund, Japan will continue to promote support R&D and contribute to supply preparation and supply of drugs and other products utilizing Japanese technology through public-private partnerships by using the excellent R&D capabilities of Japan's pharmaceutical industry to promote and expand the R&D of

worldwide. The project contributes to the global fight against tuberculosis by providing high-quality drugs for multidrug-resistant tuberculosis.

²³ Global Antibiotic Research and Development Partnership (GARDP): a public-private partnership established to develop new drugs for drug-resistant bacterial infections.

²⁴ Unitaid: An organization (WHO affiliated organization) established in 2006 under a French initiative to achieve equitable access to medicines through innovative financing (e.g., solidarity tax on airplane tickets). Provides support for the rapid supply of high-quality medicines and other medical products to developing countries at low cost by subsidizing the activities of research institutes and international organizations related to innovations in research, development, and improved access to medicines for AIDS, tuberculosis, malaria, and other diseases.

²⁵ UNFPA: United Nations Population Fund

²⁶ IPPF: International Planned Parenthood Federation

²⁷ Central Emergency Response Fund

²⁸ Contingency Fund for Emergency

²⁹ Health Emergency Pandemic Response Multi Donor Trust Fund

³⁰ The Catastrophe Containment and Relief Trust

drugs for neglected tropical diseases (NTDs), tuberculosis, malaria, and other urgent issues. [Ministry of Foreign Affairs, Ministry of Health, Labour and Welfare]

③ Addressing NTDs, tuberculosis, malaria, and other infectious diseases individually

- The government will accelerate the eradication of tropical diseases, implement information sharing and exchange platforms, expand treatment, and build capacity to provide quality health services in the African region through contributions to WHO's ESPEN (Expanded Special Project for the Eradication of Neglected Tropical Diseases). [Ministry of Health, Labour and Welfare]

- The Global Fund was established in 2002 as a financial support organization to fight the three major infectious diseases (AIDS, tuberculosis, and malaria), which was proposed by Japan at the 2000 Kyushu-Okinawa Summit. Its 7th replenishment for the period from 2023 to 2025 has a goal to save 20 million people in developing countries from the three major infectious diseases during the period from 2024 to 2026, and to reduce the mortality rate from the three major infectious diseases to the same year by 64% comparing to the 2020 level. Japan will continue to promote support during these periods, and with a view to achieving UHC, we will promote prevention, treatment, and care of the three major infectious diseases and health systems strengthening in developing countries in a timely manner. [Ministry of Foreign Affairs, Ministry of Health, Labour and Welfare]

- In particular, for tuberculosis, the government will promote collaboration with existing programs in public-private partnerships such as the Global Fund, Unitaids, and the Stop Tuberculosis Partnership. [Ministry of Foreign Affairs, Ministry of Health, Labour and Welfare]

- The government will promote international joint research for the prevention, diagnosis, development of drugs and treatments for NTDs, tuberculosis, malaria, and H. pylori infection based on local needs under the "International Joint Research and Development Promotion Project for Science and Technology in Medical Fields" (Science and Technology Research Partnership for Sustainable Development (SATREPS)³¹ program and International Joint Research Program to Fight Neglected Tropical Diseases (NTDs) in Africa) managed by the Japan Agency for Medical

³¹ (SATREPS: Science and Technology Research Partnership for Sustainable Development) is implemented in cooperation with the Japan International Cooperation Agency (JICA).

Research and Development (AMED)³². [Ministry of Foreign Affairs, Ministry of Education, Culture, Sports, Science and Technology]

④ Contributions to international efforts

○ The government will participate in discussions within the international framework to ensure equitable access to medical countermeasures, based on the knowledge, issues, and lessons learned from the comprehensive financing and supply coordination mechanism for equitable access to vaccines during the pandemic of COVID-19. [Ministry of Foreign Affairs, Ministry of Health, Labour and Welfare]

○ The Gavi Vaccine Alliance, a public-private partnership established to protect children's lives and health by increasing immunization coverage in low-income countries, has four goals: to expand the number of supported diseases from 13 to 18 by 2025, to strengthen health systems to increase equity in immunisation to improve sustainability of immunization programs, and to ensure healthy markets for vaccines and related products. The government will promote support for achieving these goals and assist in the implementation of comprehensive efforts to provide cost-effective immunizations at affordable prices.

In addition, since the impact of the COVID-19 highlighted the importance of ensuring equitable access to vaccines whose safety, efficacy, and quality are guaranteed regardless of a nation's economic strength, the government will continue to support vaccine supply and other efforts to ensure equitable access to vaccines. [Ministry of Foreign Affairs, Ministry of Health, Labour and Welfare]

○ In collaboration with relevant ministries and agencies, the government will consider engagement in the Medicines Patent Pool (MPP)³³ established by Unitaid and active contribution to the framework to enable the supply of affordable medicines to developing countries. At the same time, the government will pursue the participation of Japanese companies in international markets through Unitaid and MPP. [Ministry of Foreign Affairs, Ministry of Health, Labour and Welfare]

○ To create a system in which companies that develop vaccines can expect to recover their investment, the government will, for example, consider ways to facilitate the domestic supply of vaccines, such as the purchase of vaccines by the government for

³² Japan Agency for Medical Research and Development (AMED)

³³ MPP (Medicines Patent Pool): Mechanism to promote access to medicines and other products by encouraging voluntary licensing of patents for medicines and other products.

immunization in the event of outbreaks of new infectious diseases, and will take necessary measures such as supporting the acquisition of WHO prequalification for vaccines that have been successfully developed. In addition, the government will consider global supply through international frameworks such as the Gavi Vaccine Alliance, and the use of ODA in response to the assistance needs of developing countries. [Ministry of Foreign Affairs, Ministry of Health, Labour and Welfare]

- Contribute to One Health³⁴ initiatives in line with the framework of relevant international organizations such as WHO, WOAH³⁵, FAO³⁶, etc. [Ministry of Health, Labour and Welfare, Ministry of Agriculture, Forestry and Fisheries]

(4) Promotion and utilization of bilateral cooperation

① Efforts to Strengthen Health Systems Using Bilateral ODA

- The challenges faced by developing countries are diverse, and the economic situation of each country and the condition of the health system that is a prerequisite for the cooperation are also diverse. Since it is also important to support the self-help efforts of partner countries and provide cooperation for their self-sustaining development, the government will organically combine technical cooperation, loan assistance and grant assistance according to the situation in partner countries. The government will operate in a prompt and flexible manner, paying attention to the possibility of collaboration with other donors (including international organizations engaged in disease-specific initiatives) and the private sector. [Ministry of Foreign Affairs, Ministry of Finance]

- The government will develop expert human resources and deploy them overseas through "Infectious Disease Emergency Specialist (IDES³⁷) Training Program" in addition to direct support by deploying subject-matter experts through GOARN³⁸ and also, actively share Japan's knowledge in this area. [Ministry of Health, Labour and Welfare]

³⁴ One Health: A concept that promotes the integration of the fields of human and animal health and the environment under a single policy.

³⁵ World Organization for Animal Health: An intergovernmental organization with headquarters in France whose goal is to improve animal health around the world.

³⁶ Food and Agriculture Organization of the United Nations: An international organization with headquarters in Italy whose goals are the development of the world economy and freeing humanity from hunger.

³⁷ IDES: Infectious Disease Emergency Specialist

³⁸ Global Outbreak Alert and Response Network (GOARN): An international framework for infectious disease control led by WHO. The purpose of the network is to collect information on infected persons, disseminate important information, and provide technical support for early response in outbreak countries. The National Institute of Infectious Diseases participates in this network in Japan.

- Based on the results of long-standing cooperation in the health sector between the Government of Japan and the World Bank, the government will promote support for activities by the World Bank that contribute to strengthening PPR and UHC through the World Bank's Japan Trust Fund and other means. [Ministry of Finance]
 - The government will provide Emergency Grant Aid and Emergency Relief Goods, contribute funds and supplies to international organizations, dispatch experts and other human resources support in response to the need for assistance in the event of an outbreak of infectious diseases. The government will strive to prevent further outbreaks and spreads of infectious diseases by restoring the dysfunctional health systems and improving their resilience through emergency response support, human resource development, provision of medical supplies, and establishment of health information systems in the affected countries. [Ministry of Foreign Affairs, Ministry of Health, Labour and Welfare]
- ② Promotion of bilateral relations through public-private partnership, etc.
- Regarding countermeasures against infectious diseases in developing countries, the government will collect information on the health needs surrounding infectious diseases in developing countries from the viewpoint of further promoting international contributions and contributing to the development of new markets for the Japanese medical industry, etc. Relevant government agencies, organizations, and groups, etc. will study and coordinate the provision of therapeutic drugs, diagnostic drugs, vaccines, protective clothing, and other materials and equipment to developing countries, the nature of the delivery system including technical support for the equipment and materials, and how the relevant local organizations should work together to provide such support, in order to ensure its smooth implementation by relevant organizations. [Cabinet Secretariat, Ministry of Foreign Affairs, Ministry of Health, Labour and Welfare]
 - For medicines that must be developed urgently during infectious disease crises in developing countries, the public and private sectors will work together to promptly consider measures to support clinical research and supply systems and implement them.

To this end, the government will collect information related to infectious diseases overseas in ordinary times and provide necessary support for the development of drugs for anticipated infectious diseases. [Cabinet Secretariat, Ministry of Foreign

Affairs, Ministry of Health, Labour and Welfare]

- Japan's products and technologies for prevention, diagnosis, and treatment of various infectious diseases will be packaged and deployed internationally as products originated from Japan, with the public and private sectors working together to study and coordinate this process. [Cabinet Secretariat, Ministry of Foreign Affairs, Ministry of Health, Labour and Welfare]
- The government will promote the activation of support for initiatives by international organizations related to infectious diseases such as crowdfunding which is widely provided by domestic NGOs and other organizations together to citizens and companies and vaccine bonds issued by companies. [Cabinet Secretariat, Ministry of Foreign Affairs, Ministry of Health, Labour and Welfare]

③ Promotion of technical support

- The government will cooperate with international organizations that promote research and development of therapeutic drugs for chagas, malaria, and other infectious diseases. Support research and development of compounds effective against infectious diseases that are in high demand internationally.

In addition, regarding countermeasures against antimicrobial resistance (AMR), the government will work together with international organizations that promote research and development of therapeutic drugs, support joint development of compounds obtained through the Booster Program, promote the expansion of antibiotic resistant bacteria surveillance using ASIARS-Net³⁹ developed in Japan and technical support for One Health surveillance in Asia.

Furthermore, the government will promote education and research projects in infectious disease laboratory centers as support for developing countries. [Cabinet Office (Health), Ministry of Foreign Affairs, Ministry of Health, Labour and Welfare]

- The government will develop and revise guidelines for regulatory harmonization of drugs at the International Council for Harmonization of Technical Requirements for Pharmaceuticals (ICH) involving regulatory authorities in Japan, the U.S., and Europe based on the Global Health Strategy and in accordance with the technological progress for the smooth supply of drugs developed in Japan for the treatment of infectious diseases. The government will promote dissemination to other countries

³⁹ ASIARS- Net: Asian Antimicrobial Resistance Surveillance Network

through training and seminars held at the PMDA⁴⁰ Asia Training Center for Pharmaceuticals and Medical Devices. [Ministry of Health, Labour and Welfare]

- The government will support the appropriate use of drugs for infectious diseases in Asian countries and actively provide information on Japan's findings and safety information on adverse reactions for drugs for infectious diseases developed in Japan through training and seminars according to the needs of Asian regulatory authorities held at the PMDA Asia Training Center for Pharmaceuticals and Medical Devices, and by disseminating the information in English on the PMDA website. [Ministry of Health, Labour and Welfare]

2. Development of human resources to deal with infectious diseases, international contribution through human support, etc.

(1) Training and career path support for human resources to control infectious diseases

① Promotion of training to develop human resources to control infectious diseases

- The Japan Disaster Relief Infectious Diseases Response Team and the Ministry of Health, Labour and Welfare will provide cross-disciplinary and effective training in epidemiology, laboratory diagnosis, clinical management and infection prevention and control (IPC), public health response, logistics, management, and international health policy to personnel registered for deployment in order to develop and improve the system for training and dispatching global health personnel. Relevant organizations (National Center for Global Health and Medicine (NCGM)⁴¹, National Institute of Infectious Diseases, JICA, etc.) will systematically conduct training programs to provide this training, further increase the number of registered personnel and promote human resource development on infectious diseases at universities [Cabinet Secretariat, Ministry of Foreign Affairs, Ministry of Education, Culture, Sports, Science and Technology, Ministry of Health, Labour and Welfare]

- As part of the training and human resource development at universities, practical training and research will be conducted abroad. Trainees be deployed overseas through the FETP-J⁴² (Field Epidemiology Training Program for Professionals in

⁴⁰ PMDA: Pharmaceuticals and Medical Devices Agency. An organization established in 2004 that provides examination, safety, and relief services for pharmaceuticals and medical devices.

⁴¹ National Center for Global Health and Medicine

⁴² Field Epidemiology Training Program: This program was established in 1999 at the National Institute of Infectious Diseases with the aim of creating a nationwide network to train field epidemiologists who will serve as the core for rapid detection and appropriate response to infectious disease crisis management cases. In principle, this is a two-year practical training program for physicians, veterinarians, and other specialists involved in infectious disease countermeasures, as well as those who are engaged in community health services such as infectious disease countermeasures by the

Epidemiology) course at the National Institute of Infectious Diseases and will use overseas R&D centers under the "Research Infrastructure Development Project for Emerging and Re-emerging Infections" managed by the AMED. In addition, the government will continue training approximately five specialists in infectious disease emergency management every year with comprehensive knowledge and abilities, including clinical and epidemiological knowledge related to infectious diseases, public health response skills, and international coordination skills through the "Infectious Disease Emergency Specialist (IDES) Training Program" run by the Ministry of Health, Labour and Welfare. [Ministry of Education, Culture, Sports, Science and Technology, Ministry of Health, Labour and Welfare]

- In light of the increased risk of serious imported infectious diseases entering Japan, as evidenced by the cross-border spread of Ebola hemorrhagic fever, Middle East Respiratory Syndrome (MERS), and other infectious diseases, and pandemic outbreaks of the COVID-19, the National Institute for Infectious Diseases will establish a more robust, strategic, and flexible system that will contribute to both domestic and international monitoring and response. The National Institute of Infectious Diseases (NIID) will further strengthen its capacity for "Basic human resource development" because of its role in fostering human resources who will serve as the foundation for contributing to epidemiological surveys and public health control in various institutions in local and national governments.

From the perspective of early detection and response, training in hands-on epidemiology and risk assessment of cases that can be directly linked to effective public health control in crisis management, the ability to collect intelligence information based on the characteristics of domestic and foreign infectious diseases and pathogens will be enhanced. Continuous training will be provided to acquire basic infection control techniques that can be used in a variety of situations, such as suspected outbreaks of unknown pathogens. [Ministry of Health, Labour and Welfare]

② Career path support for international health personnel

- Regarding FETP-J, the government will conduct research on upgrading, diversifying, and making the training content available online, in order to train excellent field epidemiology specialists with the ability to collect, analyze, apply and disseminate information, who can effectively respond to emerging infectious diseases and other

national and prefectural governments. Currently, a total of 92 trainees have completed the course during 24 terms.

crises such as outbreaks of drug-resistant bacterial infections as part of support for strengthening the response in the Asia-Pacific region as advocated at the AMR One Health Tokyo Conference. The goal is to have 157 students complete the course by 2027.

The government will also consider how to conduct refresher training for those who have completed the training a certain number of years ago. [Ministry of Health, Labour and Welfare]

- In light of support career paths for international health personnel (policy and technical personnel) in a wide range of fields, including infectious diseases, who are expected to play active roles in international organizations, the Ministry of Health, Labour and Welfare, with the cooperation of the Ministry of Foreign Affairs, the Ministry of Education, Culture, Sports, Science and Technology, and other relevant ministries, will continuously collect and provide information and analyze current conditions of international organizations and relevant domestic organizations to which personnel can be dispatched, such as positions and required abilities, and will also use this information to match the relevant personnel with relevant domestic organizations. [Ministry of Foreign Affairs, Ministry of Education, Culture, Sports, Science and Technology, Ministry of Health, Labour and Welfare, Ministry of Agriculture, Forestry and Fisheries]
- To build a system that enables international contribution with human resources and to strengthen the ability to respond to infectious disease emergency management in Japan, the IDES training program will continue to train specialists infectious disease emergency management who have clinical and epidemiological knowledge of infectious diseases, public health response abilities, and international coordination skills, etc. [Ministry of Health, Labour and Welfare]
- The Global Health Human Resource Strategy Center, which was established in September 2017 at the National Center for Global Health and Medicine, is a center for human resources registration and search system for registrants. The center provides information on available positions in the Global Health field according to preferences and individual support to applicants such as career consultation, document correction, and exam preparation. The government will continue to provide information and other employment assistance in the future to international organizations when infectious disease-related posts arise. [Ministry of Foreign Affairs, Ministry of Health, Labour and Welfare]

(2) Promotion of efforts of the Japan Disaster Relief Infectious Diseases Response Team

① Development of deployment system

- To further improve the deployment system of the Japan Disaster Relief Infectious Diseases Response Team and to deployment the teams effectively, the Advisory Committee, the Technical Committee, and the Task Review Committee of the Infectious Diseases Response Team will discuss and examine the dispatch system, matters to be considered, medium-term issues, and team activities and operations, and strive to implement improvement measures. [Ministry of Foreign Affairs, Ministry of Health, Labour and Welfare]

② Support for activities of the Japan Disaster Relief Infectious Diseases Response Team

- To improve the deployment system for the Japan Disaster Relief Infectious Diseases Response Team, case studies will be conducted during introductory training by JICA, and the introduction, storage, maintenance, management, and review of the team's portable equipment and materials will be continuously performed.

In addition, to ensure the appropriate and safe activities of the teams, the government will fully utilize the expertise and networks of WHO to collect, share, and exchange opinions on the latest information on infectious diseases. [Ministry of Foreign Affairs]

- When the Japan Disaster Relief Infectious Diseases Response Team conduct international disaster relief activities that cannot be handled by civilian assets and other alternative means are not available, upon consultation with the Ministry of Foreign Affairs and the Ministry of Defense, and in cooperation with the Ministry of Health, Labour and Welfare, the Ministry of Foreign Affairs, and other relevant ministries and agencies, the necessary personnel, equipment/material and other supplies will be transported to overseas areas by the SDF in order to support said activities. [Cabinet Secretariat, Ministry of Foreign Affairs, Ministry of Health, Labour and Welfare, Ministry of Defense]
- The government will continue to contract with private companies that provide services such as transportation to a safe location, including Japan, in the event that members of the Japan Disaster Relief Infectious Diseases Response Team get infected and suffer from an infectious disease during their activities, in order to minimize the health damage to their health and ensure the safety of their lives. [Ministry of Foreign Affairs]

(3) Cooperation with WHO and other international organizations

- In addition to collecting and sharing information through WHO to ensure quick response to outbreak of infectious disease crises, the government will collaborate with WHO to dispatch appropriate personnel to GOARN and other frameworks in a timely manner by promoting support for infectious disease control projects at WHO. [Ministry of Health, Labour and Welfare]

(4) Establishment of a system to improve the SDF's ability to respond to infectious diseases

- In order to train excellent SDF medical officers and nurses with expertise in infectious disease control who can respond to national emergency , the National Defense Medical College will secure a variety of cases and improve education and training by strengthening the infectious disease treatment system, train medical officers who will play leading roles in advanced infectious disease protection research and in unit protection, diagnosis, and treatment in the event when infectious disease incidents occur in Japan and overseas, and study promotion of projects to strengthen collaboration with SDF. [Ministry of Defense]

(5) Ensuring the safety of Japanese nationals abroad

- The Ministry of Foreign Affairs issues, Travel Advice and Warning on Infectious Diseases, Region-wide Safety Information, and Spot Information on the overseas safety website according to the outbreak status of infectious diseases occurring overseas, provide timely and appropriate information and warnings to Japanese nationals overseas, as well as health and safety lectures⁴³ by medical specialists for Japanese nationals overseas. [Ministry of Foreign Affairs]
- The diplomatic missions abroad collect information on outbreaks of infectious diseases in the area under its jurisdiction from the authorities and relevant organizations, etc. and promptly report to the Ministry of Foreign Affairs. Information and warnings will be provided timely and appropriately to Japanese nationals overseas through websites and consular e-mails. [Ministry of Foreign Affairs]
- The Ministry of Foreign Affairs and the Ministry of Health, Labour and Welfare will closely share the information obtained through diplomatic missions abroad and

⁴³ The government will provide accurate medical knowledge and information on preventive measures to Japanese nationals living abroad who are concerned about infectious diseases.

through the IHR framework, and collaborate to utilize this information, respectively, for safety measures for Japanese nationals overseas and in Japan. [Ministry of Foreign Affairs, Ministry of Health, Labour and Welfare]

- In case where Japanese nationals living overseas are infected with a disease, support framework at diplomatic missions overseas will be established in cooperation with relevant ministries and agencies to ensure that the Japanese national can receive the best possible treatment, including local treatment and emergency transport to a third country or Japan, taking into consideration medical judgments and the requests of the individual or his/her family. [Cabinet Secretariat, Ministry of Foreign Affairs, Ministry of Health, Labour and Welfare]

- In peace time, the government works through diplomatic missions abroad to gather information on commercial airlines and crisis management companies that can respond to infectious diseases. The government will build cooperative relationships with them so that private companies and other countries can provide prompt support if Japanese nationals living overseas are infected. They can assist when it is determined that emergency transport to a third country, or Japan, is the best course of action as a result of comprehensive consideration of a medical doctor's decision and the requests of the individual or their family. Furthermore, the government will strengthen measures by cooperating with relevant ministries and agencies, and by developing response procedures to ensure the safety of Japanese nationals overseas by taking all possible measures including consideration of the use of SDF transport aircraft when there are no charter planes or other alternatives available. [Cabinet Secretariat, Ministry of Foreign Affairs, Ministry of Health, Labour and Welfare, Ministry of Defense]

3. Promotion of testing, information collection and analysis, research, and other activities related to infectious diseases

(1) Strengthening the testing system, etc. for infectious diseases

- In Japan, the risk of outbreaks of Type I infectious diseases (imported cases, bio-terrorism, etc.) will increase with the G7 summit in 2023 and the Osaka-Kansai Expo in 2025, so from the perspective of health risk management, the government will take necessary measures to maintain the functions and infrastructure of BSL4 facilities to enable more practical operations in diagnosis and treatment. [Ministry of Health, Labour and Welfare]

- Regarding regional public health institutes, the government will promote the establishment of a system in municipalities at ordinary times and improve the testing system by strengthening cooperation with the National Institute of Infectious Diseases, in preparation for outbreaks of emerging and reemerging infectious diseases in Japan [Ministry of Health, Labour and Welfare]

 - The government will promote the establishment of a system to secure test reagents and testing facilities to expand the testing capacity and respond immediately to the increasing demand for testing, in the event that a case of an infectious disease is confirmed in Japan and the infection spreads rapidly. [Ministry of Health, Labour and Welfare]
- (2) Strengthening information collection, analysis, and research systems related to infectious diseases
- ① Strengthening overseas information collection and analysis capabilities, etc.
 - At the institute for health security, the government will conduct surveys and research that contribute to international cooperation in prevention and medical care, including promotion of building network for joint multi-center clinical trials, etc. in Japan and abroad, and train and improve the quality of human resources who can play an active role in Japan and abroad. [Ministry of Health, Labour and Welfare]

 - To strengthen the information collection, analysis, and evaluation functions of the National Institute of Infectious Diseases, the government will integrate and manage the necessary information from WHO and other international organizations, the U.S. CDC⁴⁴, public health organizations in other countries, and domestic and foreign media. Furthermore, the government will establish a system to quickly and accurately analyze and evaluate this information by training personnel capable of such evaluation and utilizing various information services. [Ministry of Foreign Affairs, Ministry of Health, Labour and Welfare]

 - For infectious disease outbreaks overseas, the government will participate in training (FETP-J⁴⁵ initial induction training), including online format, organized by the National Institute of Infectious Diseases to acquire specialized knowledge in infectious diseases for medical attachés in diplomatic missions abroad, and strengthen information gathering on public health in countries affected by outbreaks.

⁴⁴ Centers for Disease Control and Prevention in the U.S.

⁴⁵ FETP-J: Field Epidemiology Training Program Japan

[Ministry of Foreign Affairs, Ministry of Health, Labour and Welfare]

② Strengthening research systems, including BSL4 facilities

- Nagasaki University has planned and completed construction of a BSL4 facility equipped with state-of-the-art equipment for R&D in the fields of pathogen analysis, animal experiments, and the development of treatments and vaccines, etc., with maximum consideration for safety, in order to improve basic research capabilities in infectious diseases at domestic universities and other research institutions, and to train and secure personnel familiar with the handling of highly dangerous pathogens, etc., including zoonotic diseases. The government will provide necessary support for safe and stable management and operation of the facility.

In addition, the government will provide necessary support for the formation of an infectious disease research center based on the BSL4 facility and strengthen the infectious disease research function in Japan so that it can quickly respond to emerging and reemerging infectious diseases that pose an international threat. [Cabinet Secretariat, Ministry of Education, Culture, Sports, Science and Technology, Ministry of Health, Labour and Welfare]

- There is one BSL4 facility in Japan operated by the National Institute of Infectious Diseases, and another one is being prepared at Nagasaki University. Regarding the division of roles between the two institutions, the National Institute of Infectious Diseases will function as a first responder in case of emergency, especially in establishing a rapid and accurate testing function and treatment system, while Nagasaki University is expected to play a central role in academic research on specific Type I pathogen in Japan in the future.

Furthermore, the National Institute of Infectious Diseases will actively participate in building the infrastructure for the management and operation of the BSL4 facility at Nagasaki University and promote collaboration between the two institutions. [Ministry of Education, Culture, Sports, Science and Technology, Ministry of Health, Labour and Welfare]

- The government will discuss the construction of an integrated system for biosafety and biosecurity and continue to actively promote the computerization of pathogen management with the goal of strengthening the maintenance and enhancement of biosafety and biosecurity. [Ministry of Health, Labour and Welfare]

- The National Institute of Infectious Diseases in FY2022 began works on the

construction of a treatment system for specific Type I pathogen infectious diseases approved by the city and local communities with a goal of human resource development at the BSL4 facility. The institution will continue to develop practical human resources skilled in operations using infectious pathogens, cultured cells, and laboratory animals. [Ministry of Health, Labour and Welfare]

- Regarding communication with the local communities on the subject of the BSL4 facility, in addition to safety and security reports on the BSL4 facility and outreach activities at the Murayama Town Hall using the active disclosure of research activities promoted by the National Institute of Infectious Diseases as a model, the National Institute of Infectious Diseases will make BSL4 facility operations more transparent by actively disseminating the results of projects related to the BSL4 facility. [Ministry of Health, Labour and Welfare]

- The “Investigation Committee for the Formation of Research Centers for Infectious Diseases” will promote the safe management and operation of BSL4 facilities and the formation of research centers for infectious diseases based on these facilities, while monitoring progress in the development of BSL4 facilities. The Committee will also discuss, coordinate, and promote necessary support measures among relevant parties. [Cabinet Secretariat, Ministry of Education, Culture, Sports, Science and Technology, Ministry of Health, Labour and Welfare]

- Based on the “Plan for the Promotion of Research and Development in the Medical Field” (partially revised on April 6, 2021, approved by the Headquarters for Healthcare Policy), the government will steadily promote R&D related to infectious diseases with seamless research support by AMED from foundation to practical application.
In addition to promoting measures based on scientific evidence and connecting research results to the development of therapeutic drugs, diagnostic drugs, vaccines, etc., AMED will maintain and improve the network of overseas R&D centers for infectious diseases researched and managed by this organization, promote joint research, etc. using this network, and develop human resources at universities and other research institutions, including multidisciplinary collaboration. [Cabinet Office (Health), Ministry of Education, Culture, Sports, Science and Technology, Ministry of Health, Labour and Welfare, Ministry of Economy, Trade and Industry]

- Based on the “Strategy for Strengthening the Vaccine Development and Production

System” (approved by the Cabinet on June 1, 2021), the Strategic Center of Biomedical Advanced Vaccine Research and Development for Preparedness and Response (SCARDA) was established at AMED in March 2022. The Center will strengthen and promote related research with a clear vision of the final product to realize domestically produced vaccines through the “Project for Establishment of World-Class R&D Center for Vaccine Development”. This center will be the core of the research in ordinary times. In addition, SCARDA will adopt research projects on vaccines and new modalities for important infectious diseases, and provide strategic funding to support long-term, stable, and strategic R&D in ordinary times in order to deliver vaccines against important infectious diseases as quickly as possible in the event of an infectious disease outbreak. [Cabinet Office (Health), Ministry of Education, Culture, Sports, Science and Technology, Ministry of Economy, Trade and Industry]

- The government will enrich clinical information and specimen collection through a mechanism that serves as a foundation for research and development of drugs for emerging and reemerging infectious diseases (Repository of Data and Biospecimen of Infectious Diseases (REBIND ⁴⁶)), and promote its utilization by research institutions. [Ministry of Health, Labour and Welfare]
- The Japan Antimicrobial Resistant Bacterial Bank (JARBB) currently stores approximately 210,000 strains, including strains derived from humans (healthy individuals / infectious diseases), livestock / pets, the environment, food, and their genetic information. JARBB plans to develop and distribute on demand three panels: Quality Control Panels (for hospital laboratories and for test kits), Basic Research Panels, and Drug Development Research Panels (for for new drug development and for regulatory, approval). Government will continue to collect drug-resistant bacteria strains and promote generating genomic sequencing data of them. [Ministry of Health, Labour and Welfare, Ministry of Agriculture, Forestry and Fisheries]

4. Promotion of the One Health approach

(1) Measures to prevent the introduction of infectious diseases through imported animals

- The government will inspect the range and measures of target animals and infectious diseases and measures to strengthen monitoring of imported animals and take necessary actions. At the same time, the government will also consider the

⁴⁶ REpository of Data and Biospecimens of INfectious Diseases

establishment of a system that will enable quick action when a new infectious disease threat becomes apparent. [Ministry of Health, Labour and Welfare, Ministry of Agriculture, Forestry and Fisheries]

- The government will provide training for quarantine station staff on zoonotic diseases to improve their ability to respond to cases. The government will also provide training for livestock quarantine officers and education and training in inspection techniques for diseases that are subject to animal quarantine to improve the ability to identify and diagnose similar diseases. [Ministry of Health, Labour and Welfare, Ministry of Agriculture, Forestry and Fisheries]

(2) Early response to infectious diseases that may be brought to Japan by migratory birds crossing the border, etc.

- In the event of an outbreak of highly pathogenic avian influenza, the following actions will be taken to determine the extent of the virus infection. In the case of domestic poultry, epidemiological surveys will be conducted at infected farms, etc., and monitoring of wild birds in the vicinity of outbreak areas will be strengthened. In addition, for wild birds and birds raised in zoos, etc., surveys of migratory birds flying around the outbreak area and bird habitat conditions will be conducted, and monitoring of wild birds will be strengthened. [Ministry of Agriculture, Forestry and Fisheries, Ministry of the Environment]

- The government will conduct necessary surveillance on infectious diseases related to wild birds and animals from the viewpoint of biodiversity conservation in cooperation with research institutes, etc. In addition, if there is information which is also useful for public health and livestock health, it will be shared with the Ministry of Health, Labour and Welfare, Ministry of Agriculture, Forestry and Fisheries, etc., as necessary. [Ministry of the Environment]

- The government will take necessary measures for livestock hygiene centers to strengthen diagnostic capabilities related to highly pathogenic avian influenza and other diseases affecting domestic poultry. [Ministry of Agriculture, Forestry and Fisheries]

- The government will take necessary actions for the National Institute for Environmental Studies and other institutions to strengthen the surveillance system for highly pathogenic avian influenza and other diseases affecting wild birds, etc.

[Ministry of the Environment]

- The government will take necessary actions such as providing training to regional public health institutes to strengthen their ability to diagnose rabies and other diseases in wild animals and to promote surveillance. [Ministry of Health, Labour and Welfare]

(3) Promotion of research on the One Health approach

- The National Institute of Infectious Diseases, the National Institute of Animal Health of the National Agriculture and Food Research Organization, the National Institute for Environmental Studies, and other institutions work together on conducting research on pathogens carried by animals, including zoonotic diseases. The government will continue to promote cross-disciplinary collaboration among related institutions in the analysis of genomic characterization of avian influenza virus and other zoonotic pathogens and research to clarify the actual status of drug-resistant bacteria. [Ministry of Health, Labour and Welfare, Ministry of Agriculture, Forestry and Fisheries, Ministry of the Environment]

- Led by the National Institute of Infectious Diseases, research institutes under the jurisdiction of other ministries, universities, local governments, and other related organizations will collaborate to collect comprehensive information on occurrence of zoonotic diseases in Japan and overseas, conduct analysis and research, develop human resources, and utilize the obtained knowledge to promote the One Health Approach.

In addition, the government will support local government' other initiatives such as surveys and research to promote the One Health Approach in local regions. [Ministry of Health, Labour and Welfare]

- In the Division of Zoonosis Research, which was newly organized in FY2021 in the National Institute of Animal Health of the National Agriculture and Food Research Organization, a database of zoonotic pathogens derived from animals will be created, and a monitoring method for early detection of pathogens will be developed using this database. [Ministry of Agriculture, Forestry and Fisheries]
- Under leadership of the National Institute for Environmental Studies, which is the contact point for the International Epizootic Office for wild animals, the monitoring information on the spatial and temporal distribution and dynamics of wild animals

and their pathogens in Japan and East Asia will be collected in cooperation with research institutes, universities, and other related organizations. This information will be used to study the origin and evolution of pathogens and their relationship to biodiversity, and to contribute to countermeasures against zoonotic diseases in Japan and overseas through the results of these studies. [Ministry of the Environment]

(4) Efforts to build a cooperative framework for the One Health approach

○ Collaboration among the relevant ministries such as the Ministry of Health, Labour and Welfare, the Ministry of Agriculture, Forestry and Fisheries, and the Ministry of the Environment is important for the promotion of the One Health Approach. Currently, the ministries are working together on initiatives to address avian influenza and to regulate the import of animals. The government will continue to promote cross-disciplinary collaboration among related organizations and work closely with local governments to further promote One Health. In addition, the government will promote close cooperation between departments within local governments, such as building local cross-departmental quarantine systems. [Ministry of Health, Labour and Welfare, Ministry of Agriculture, Forestry and Fisheries, Ministry of the Environment]

○ To further promote One Health Approach, the government will continue to share awareness of issues and a collaborative mindset, and discuss issues that need to be addressed and necessary actions/framework to be taken, in the Infectious Disease Committee of the Health Science Council and collaborative symposium of, Japan Medical Association, Japan Veterinary Medical Association, and Ministry of Health, Labour and Welfare to further promote the One Health Approach and discuss issues that need to be addressed and necessary actions and systems. [Ministry of Health, Labour and Welfare]

5. Promotion of measures to control AMR

○ The government will promote AMR measures in a unified manner, based on the revised National Action Plan on Antimicrobial Resistance (AMR). [Cabinet Secretariat, Cabinet Office (Food Safety), Ministry of Foreign Affairs, Ministry of Education, Culture, Sports, Science and Technology, Ministry of Health, Labour and Welfare, Ministry of Agriculture, Forestry and Fisheries, Ministry of the Environment]

- The government will promote R&D that contributes to antimicrobial resistance (AMR) measures, including introduction of market incentives for antimicrobial drug development, and will exert a leadership over global AMR policies. [Ministry of Foreign Affairs, Ministry of Health, Labour and Welfare]

- The government will continue to support WHO's response to antimicrobial resistance (AMR) and will advance measures against AMR in the Group of Seven (G7) process. The government will strengthen international collaboration among developed countries by supporting or contributing to antimicrobial resistance (AMR) efforts through the Food and Agriculture Organization (FAO), the World Organization for Animal Health (WOAH), United Nations Environment Programme (UNEP), Global Drug Facility (Stop Tuberculosis Partnership), Global Antibiotic Research and Development Partnership (GARDP) fund, Pandemic fund and other international initiatives, and will lead international discussions through contributions to the Stop Tuberculosis Partnership and GARDP. [Ministry of Foreign Affairs, Ministry of Finance, Ministry of Health, Labour and Welfare, Ministry of Agriculture, Forestry and Fisheries, Ministry of the Environment]

Concluded