

Creating a united research front
against infectious diseases

Project entrusted by the Ministry of Health,
Labour and Welfare

(iCROWN) project

Infectious Disease Clinical Research
NetwOrk With National Repository

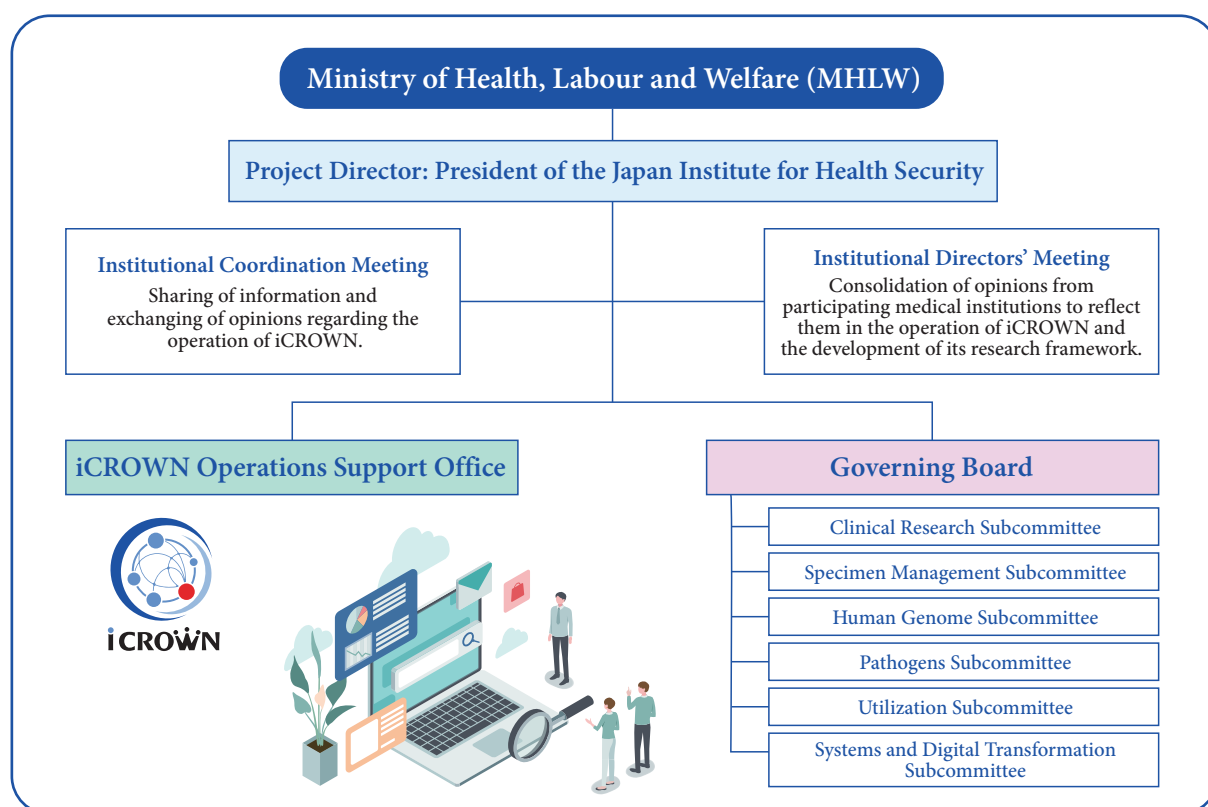
Background and Purpose

During the early stages of the coronavirus disease 2019 (COVID-19), the response in Japan was primarily centered around the Designated Medical Institutions for Infectious Diseases that provided inpatient care for patients with Class I and Class II infectious diseases. However, the facilities where COVID-19 patients were admitted were not necessarily those conducting clinical research, which posed challenges in conducting clinical trials. Furthermore, due to insufficient industry-government-academia collaboration for vaccine and therapeutic drug development during non-crisis periods, the development of Japanese vaccines and therapeutic drugs took longer than in other countries.

In response to these challenges, the REpository of data and Biospecimen of INFECTIOUS Disease (REBIND) was established in FY2021 to generate scientific knowledge about infectious diseases and promote the R&D of pharmaceuticals and other treatments. It began collecting and storing specimens and clinical information and providing them to those who wished to utilize them. In FY2024, the Infectious disease Clinical Research netWOrk With National repository (iCROWN) was established as an extension of REBIND. It established a system for conducting clinical research on infectious diseases at multiple facilities in cooperation with medical institutions, local governments, and other organizations during non-crisis periods, in preparation for when infectious disease crisis management becomes necessary.

Currently, in order to quickly detect outbreaks of infectious diseases, assess their impact, and implement appropriate countermeasures, we are working to establish a system to further advance clinical research through collaboration with the Designated Medical Institutions for Specified and Class I Infectious Diseases that serve as Research-Implementing Institutions and Research-Promoting Institutions that provide academic support for conducting studies, as well as Quasi-Research-Implementing Institutions that support the collection of specimens and data.

Operational structure of iCROWN



JIHS has been entrusted by the Ministry of Health, Labour and Welfare to operate the iCROWN project.

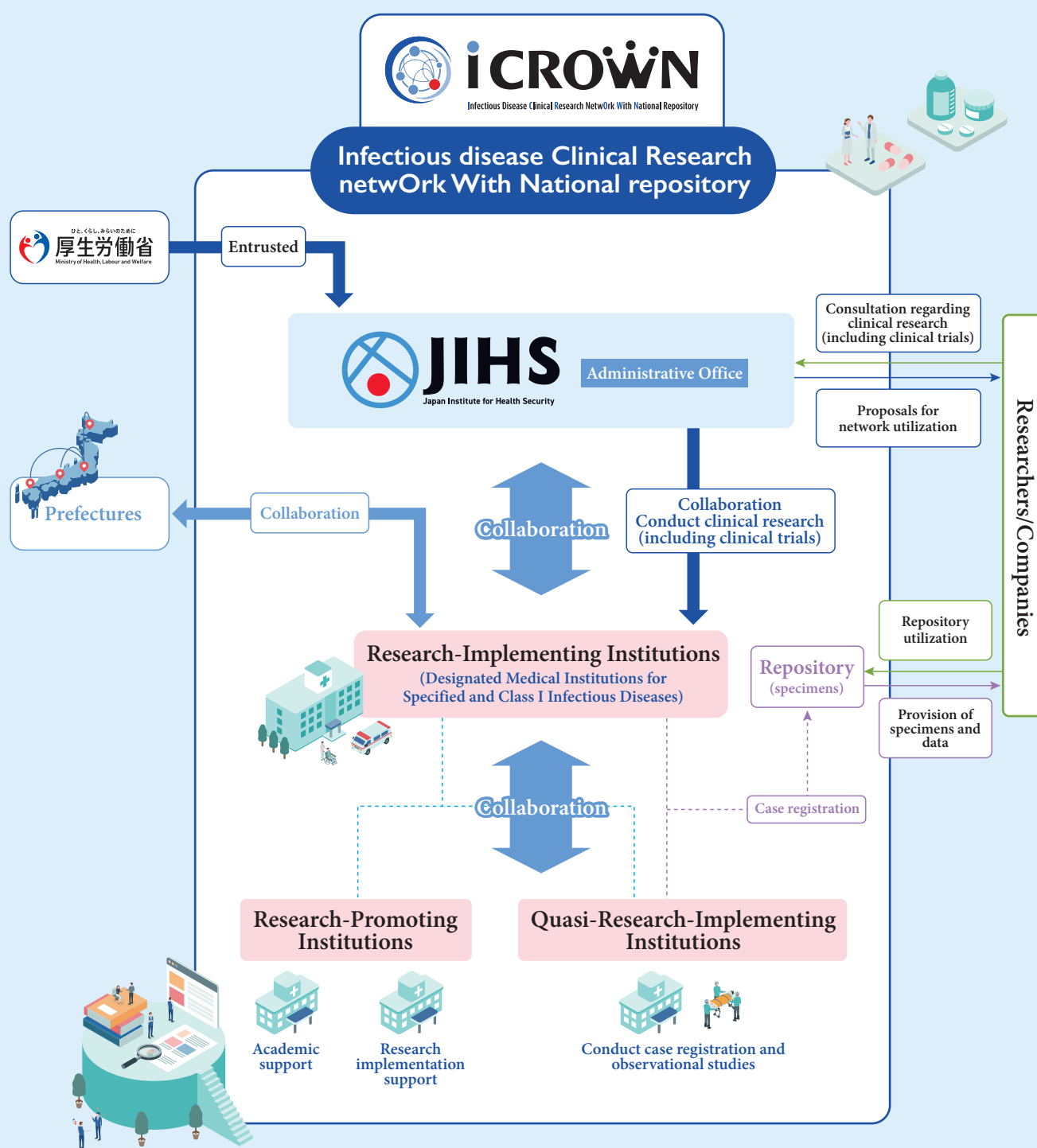
- # Project Overview
- Establish a network of medical institutions (the Designated Medical Institutions for Infectious Diseases, etc.) capable of cooperating on R&D for infectious disease drugs.
 - Build research infrastructure that can respond quickly in the event of an infectious disease crisis.
 - Provide the specimens and clinical information collected in the iCROWN repository to pharmaceutical companies and researchers who wish to utilize them.
- ## Implementation structure of iCROWN
-
- The diagram illustrates the implementation structure of iCROWN, showing the flow of information and collaboration between various entities:
- Ministry of Health, Labour and Welfare** (厚生労働省) is the entrusting authority.
 - JIHS Administrative Office** (Japan Institute for Health Security) is the central administrative hub.
 - Research-Implementing Institutions** (Designated Medical Institutions for Specified and Class I Infectious Diseases) are the primary research partners.
 - Research-Promoting Institutions** provide academic support and research implementation support.
 - Quasi-Research-Implementing Institutions** conduct case registration and observational studies.
 - Repository (specimens)** stores and provides specimens and data.
 - Researchers/Companies** utilize the repository for research and provide proposals for network utilization.
 - Prefectures** collaborate with the research-implementing institutions.
 - Case registration** is a key process linking research institutions to the repository.

The diagram illustrates the implementation structure of iCROWN (Infectious Disease Clinical Research Network With National Repository). At the top, the iCROWN logo is shown, followed by the title "Infectious disease Clinical Research netOrk With National repository".

The structure is organized into several key components and their interactions:

- Ministry of Health, Labour and Welfare (厚生労働省):** Entrusted with the network.
- JIHS (Japan Institute for Health Security):** Administrative Office, which receives entrustment from the Ministry and provides consultation regarding clinical research (including clinical trials) to Researchers/Companies.
- Researchers/Companies:** Submit proposals for network utilization and provide specimens and data to the Repository.
- Repository (specimens):** Utilizes specimens and data provided by Researchers/Companies and provides case registration to Research-Promoting and Quasi-Research-Implementing Institutions.
- Research-Implementing Institutions (Designated Medical Institutions for Specified and Class I Infectious Diseases):** Collaborate with JIHS and Prefectures to conduct clinical research (including clinical trials).
- Prefectures:** Collaborate with Research-Implementing Institutions.
- Research-Promoting Institutions:** Provide academic support and research implementation support to Research-Implementing Institutions.
- Quasi-Research-Implementing Institutions:** Conduct case registration and observational studies, collaborating with Research-Implementing Institutions.

The diagram uses various icons to represent different entities: a person for the Ministry, a building for JIHS, a map for Prefectures, a hospital for Research-Implementing Institutions, a microscope for Research-Promoting Institutions, and a person with a magnifying glass for Quasi-Research-Implementing Institutions.



Initiatives

Initiative Areas

- Operate a repository that promptly collects and stores specimens and clinical information and serves as a foundation for the research and development of diagnostic methods, therapeutic drugs, vaccines, and related products.
- Establish a network for clinical research on infectious diseases consisting of the Designated Medical Institutions for Specified and Class I Infectious Diseases and other institutions in cooperation with local governments during non-crisis periods, and establish a system for generating scientific knowledge about infectious diseases and conducting R&D of pharmaceuticals and other medical products.
- Implement education and training for the rapid initiation of clinical research in the event of an infectious disease crisis.

Repository

We collect specimens and clinical information from participating medical institutions and provide prepared specimens, clinical information, genomic information, and pathogens to researchers and companies. The Ministry of Health, Labour and Welfare will be the custodian of the collected clinical information and samples.

Clinical research

In order to advance clinical research on infectious diseases, we identify and address network-related challenges during non-crisis periods. We also promote clinical research across multiple institutions throughout the fiscal year.

Training and capacity building

Many medical institutions (researchers) are involved in iCROWN. To respond to more advanced and cutting-edge clinical research, we conduct study meetings and training sessions involving government stakeholders and contribute to improving clinical capacity for infectious diseases in the region. We also hold institutional coordination meetings and other forums to foster cooperative relationships with government stakeholders and medical institutions.

Communication

To widely disseminate the results obtained through iCROWN to not only researchers but also the general public, we organize symposiums and maintain a website.



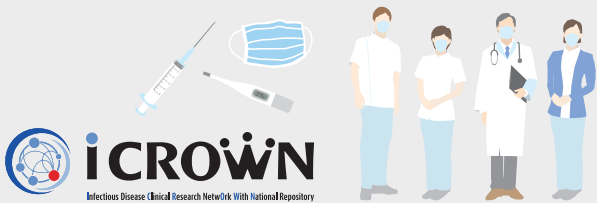
Expectations in the event of an infectious disease crisis

In order to swiftly implement evidence-based countermeasures in the event of an infectious disease crisis, it is expected that the necessary information (specimens and clinical information) will be collected quickly, and scientific insights that contribute to the understanding of pathogenesis and infectious disease countermeasures will be generated.

Furthermore, by utilizing iCROWN to rapidly begin clinical research (including clinical trials) of pharmaceuticals and other products at multiple institutions and to provide collected specimens and clinical information to pharmaceutical companies and researchers requesting them, it is expected that the rapid practical application of pharmaceuticals and other products in Japan will be facilitated.

Medical Institutions Participating in or Agreeing to Participate in iCROWN (as of May 2026)

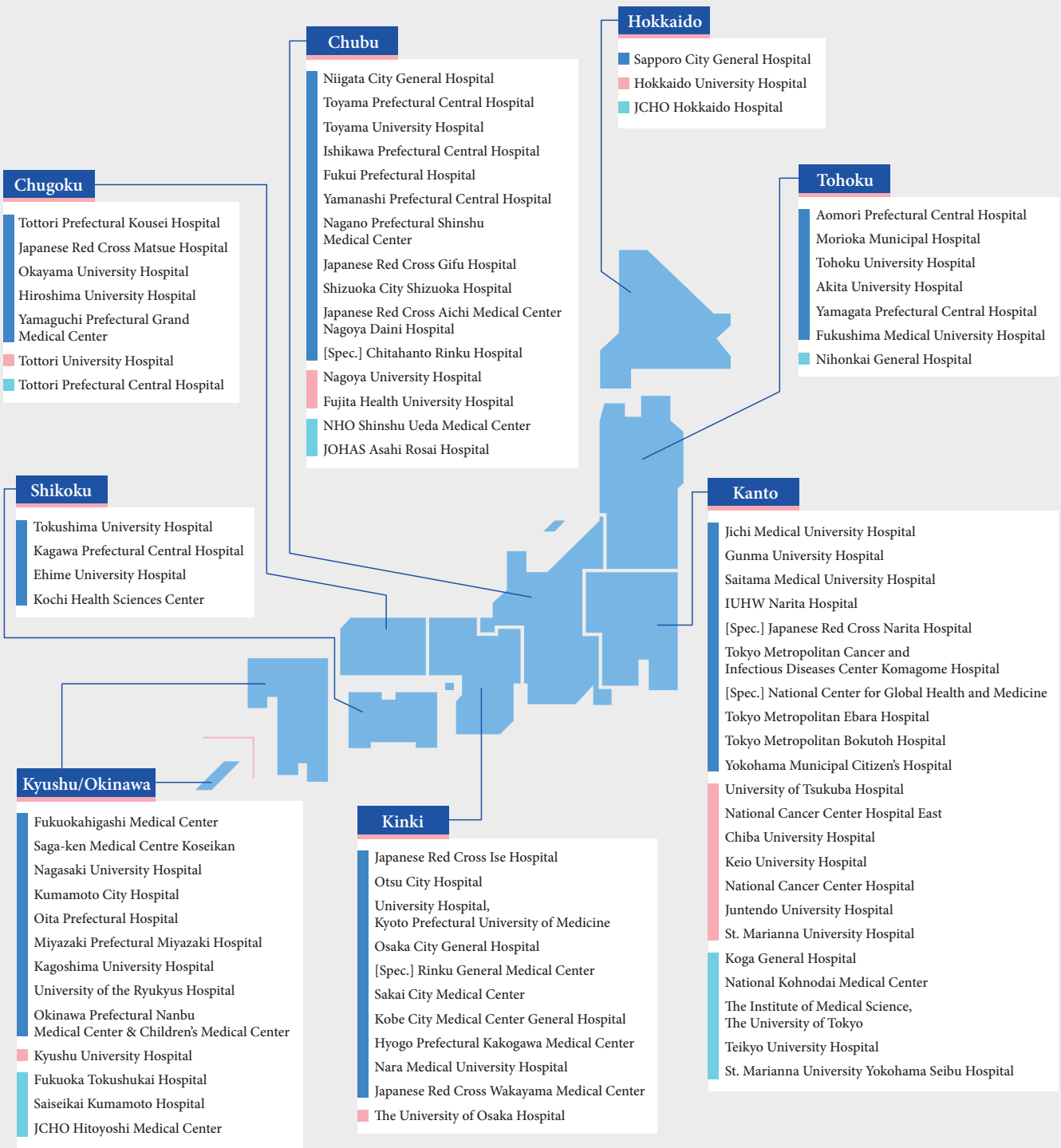
As of the start of FY2026, medical institutions participating in iCROWN are located across all 47 prefectures, forming a nationwide network.



■ Research-Implementing Institutions

No mark: Designated Medical Institutions for Class I Infectious Diseases
[Spec.]: Designated Medical Institutions for Specified Infectious Diseases

■ Research-Promoting Institutions ■ Quasi-Research-Implementing Institutions



(Only medical institutions that have given permission are listed. Information on the medical institutions listed here may have changed since publication.)

The iCROWN Repository

iCROWN collects specimens and medical information from participating medical institutions and stores the prepared specimens, clinical information, genomic information, and pathogens (the repository). These specimens can be utilized for research that elucidates pathogenesis, identifies factors contributing to aggravation and prognosis, improves diagnostic and treatment methods, and contributes to pharmaceutical development. By widely utilizing these specimens in various medical research and development activities, the goal is to promote advances in not only infectious diseases but medicine in general.

Targeted infectious diseases

- Severe acute respiratory infections (including COVID-19)
- Mpox
- Pediatric hepatitis of unknown etiology
- Priority infectious diseases*

*At the 96th meeting of the Infectious Diseases Subcommittee of the Health and Science Council (June 12, 2025), the addition of priority infectious diseases to the list of target infectious diseases was approved. The iCROWN Administrative Office will begin operations as soon as the specimen collection system is in place.

★In addition, we accept specimens from other research projects, information obtained through the Ministry of Health, Labour and Welfare's Surveillance Program upon Entry, and residual specimens.

Collected from participating medical institutions

Specimens

- Blood
- Swabs (nasopharyngeal, skin, etc.)
- Saliva
- Stool
- Sputum

Note: Specimens collected vary depending on the infectious disease.

Medical information

- Basic information at the time of admission
- Travel information
- Medical history/complications
- Vital signs at the time of admission
- Pathogen testing
- Medications used during hospitalization
- Treatments performed during hospitalization
- Outcome at the time of discharge
- Laboratory test results during hospitalization, etc.

Materials provided to users

Specimens

- Human DNA
- Plasma
- PBMC (peripheral blood mononuclear cells)
- Swabs (nasopharyngeal, skin, etc.)
- Saliva
- Stool
- Sputum
- Isolated pathogens (isolated from the above swabs, saliva, etc.)

Clinical information

- Collected data (excluding data that can identify individuals)

Genomic information

- Human genome information
- Pathogen genome information

iCROWN publishes project overviews, Q&As, and other related information. We plan to provide updates with the latest information as it becomes available.

icrown jihs

Search



iCROWN home page
<https://icrown.jihs.go.jp>

Inquiry desk

General inquiries related to iCROWN

JiHS iCROWN Operations Support Office
icrown@jihs.go.jp

Inquiries related to the utilization of the iCROWN Repository

JiHS iCROWN Utilization Desk
icrown-rikatsuyo@jihs.go.jp