

FOKYO CDC

Tokyo Center for Infectious Diseases Prevention and Control

Review of Tokyo iCDC Activities from October 1, 2020

Message from the Director of Tokyo iCDC



Kaku Mitsuo Director of Tokyo iCDC

A new organization charged with Tokyo's infectious disease response

Tokyo iCDC (Tokyo Center for Infectious Diseases Prevention and Control) was launched on October 1, 2020. As a new organization serving as the center for effective infectious disease response, including risk management, investigation/analysis/evaluation, information collection and dissemination, our activities include providing advice concerning the infection situation in Tokyo and its various stages.

Our work covers a broad range of areas, from preparing leaflets to providing support for cluster response in senior care and other facilities.

A network of over 80 experts*

Taking an innovative approach for a local government, Tokyo iCDC has experts provide support and cooperation in building a social network for Tokyo's infectious disease response.

*As of July 1, 2023. Includes task force members.

Risk communication

In order to facilitate the actual implementation of effective infection prevention measures, proactive efforts, such as calling out to the residents and businesses of Tokyo, have been taken to provide information through various channels.

Infectious diseases put all of society at risk. We could say that responding to infectious diseases by having society as a whole build a network will be "the most powerful vaccine (a 'human vaccine')."

Tokyo iCDC will continue to support the Tokyo Metropolitan Government and the people of Tokyo from an expert perspective.

About Tokyo iCDC

Other than providing advice and proposals to the Tokyo Metropolitan Government, the work of Tokyo iCDC includes providing infectious disease response support and sending out information. In normal times, it bolsters its intelligence functions through a network built with local governments, research institutes and other organizations both in Japan and abroad, and in the event of a crisis, it provides prompt and effective response.



Universities/Research institutes The Japanese Association for Infectious Diseases Private companies National Institute of Infectious Diseases Tokyo Metropolitan Institute of Medical Sciences WHO
CDC, USA Singapore's National Centre for Infectious Diseases, etc. Disease prevention and control centers in other countries etc.

About the Tokyo iCDC Expert Board

A network of experts supporting effective infectious disease response

Implementation of effective infectious disease countermeasures requires advice and support based on the latest information, scientific knowledge and expert opinions, making the presence of experts crucial.

To that end, Tokyo iCDC established an Expert Board consisting of experts in various fields related to infectious disease. The Expert Board is made up of nine teams and external advisors, working in collaboration with each other.

This network of experts supporting infectious disease response is an innovative approach for a local government in Japan.



Established to respond to specific challenges

Tokyo iCDC has task forces that study specific matters related to infectious diseases.

Since the establishment of the center in October 2020, 12 task forces* have been set up to conduct studies with Expert Board members and experts from relevant organizations.

*Up to May 2023, the task forces established were mainly related to COVID-19.



About the Infectious Disease Response Support Team

Support to prevent the spread of infection inside facilities

In the first wave of COVID-19 infections, clusters of cases occurred in many hospitals. This led to the establishment of the Infectious Disease Response Support Team consisting of doctors, nurses, and other medical experts, in October 2020. The team is sent to facilities in response to requests from public health centers* and provide guidance on ways to prevent the spread of infection, including zoning and wearing PPE (personal protective equipment).

* In collaboration with the Tokyo Epidemic Investigation Team (TEIT) of the Tokyo Metropolitan Institute of Public Health



Monitoring changes in the number of people in major downtown districts

Utilization for TMG and national government COVID-19 response as a predictive indicator of infection trends

By extracting and monitoring data on the number of people in major entertainment districts for leisure purposes, taken from movement patterns captured using GPS, a correlation was found between the population in entertainment districts during the late night hours and the infection situation.

In addition, as a result of verifying this association over the long term based on a constantly improved mathematical prediction model using data continuously collected over three years, the correlation between the nightlife population and infection situation was again confirmed, and more accurate projections have also become possible.



Changes in the nightlife population and the effective reproduction number (Tokyo Metropolis)

Surveillance of COVID-19 variants (genomic sequencing and PCR testing for variants)

Surveillance of variants indicated as having an effect on immune escape, severity of illness, and transmissibility

The novel coronavirus gradually mutates as it multiplies and circulates throughout a population. Mutations can have an effect on factors such as immune escape, severity of illness, and transmissibility. The emergence of a new variant can lead to the spread of infection.

Therefore, in order to monitor trends in the emergence of variants, the Tokyo Metropolitan Government, in addition to genomic sequencing, has been conducting its own PCR testing for variants to quickly verify the presence of mutations.



*Results of genome analysis of specimens from Tokyo, reported in the past 6 weeks (preliminary). Subject to updates based on additional reports

*BA.2, BA.2.12.1, BA.2.75, and BN.1 are recorded separately. BA.4 and BA.4.6 are recorded separately. BA.5, BF.7, BQ.1, and BQ.1.1 are recorded separately. XBB.1.5, XBB.1.9.1, and XBB.1.16 are recorded separately (the figures for XBB includes XBB lineage except for XBB.1.5, XBB.1.9.1, and XBB.1.16). Recombinant variants (excluding XBB) exclude the XBB lineage. (Per the Pango lineage nomenclature at the time of reporting)

Weekly trends in genome analysis result

COVID-19 Monitoring Meeting

Reporting on Tokyo iCDC activities at this meeting that studied the TMG's COVID-19 response

At weekly Tokyo Metropolitan Government COVID-19 monitoring meetings (held a total of 117 times between July 2020 and April 2023), Tokyo iCDC experts, including Tokyo iCDC Director Dr. Kaku, reported on matters such as the monitoring of the number of people staying in major downtown districts, trends in the emergence of variants, and other studies and research, supporting the implementation of measures including Tokyo's evidence-based COVID-19 response.



Tokyo Metropolitan Government COVID-19 Monitoring Meeting

Raising awareness of infection prevention steps: Providing information to the people of Tokyo

Preparation and distribution of practical handbooks and leaflets

In addition to creating an infection prevention handbook for the general public, under the supervision of the Tokyo iCDC Infection Prevention and Control Team, various leaflets and checklists on infection prevention have been produced and distributed to date to implement targeted and effective measures in accordance with the infection situation at the time, etc.

Publications include:

- A handbook for those recovering at home and those living in the same household to prevent the spread of infection within the home
- A checklist for students and those responsible for supervising students to prevent clusters outbreaks from occurring as a result of extracurricular club activities or at dormitories
- A checklist for young people when infections were spreading mainly among the young people in Tokyo



COVID-19 prevention checklist for young people

Self–Isolation Handbook for COVID– 19 Patients

Raising awareness of infection prevention steps: Providing information to facility operators

Compilation of infection prevention case studies for use by facilities for the elderly, etc.

Since senior citizens and others (eg. those with under lying conditions) are at high risk of developing serious illness due to COVID-19, infection prevention measures are crucial. Many instances of one infection leading to a cluster were seen especially at facilities such as those for the elderly.

That is why the Tokyo iCDC produced and distributed a compilation of infection prevention case studies based on examples of assistance provided by the Infectious Disease Response Support Team with the aim to raise awareness among employees at facilities for the elderly, etc., regarding the proper steps to take to prevent the spread of infection. In order to improve handling capabilities at such facilities, Tokyo iCDC experts also served as lecturers at online training sessions held for facility employees.

Furthermore, placing a focus on room ventilation, an important basic infection prevention measure, a room ventilation checklist for facilities for the elderly and others was produced and made available.



A compilation of infection prevention case studies for facilities for the elderly and those with disabilities

Measuring Post-Vaccination Antibody Titer Levels: COVID-19 Vaccines

Findings from continuous measurement of antibody titers to enhance understanding of vaccines and promote vaccination

The Tokyo iCDC continued to analyze antibody response after COVID-19 vaccination in health care professionals, to support TMG policies (analyses conducted by the Tokyo Metropolitan Institute of Medical Science).

In particular, after analyses showed a decline in antibody titers across all age groups seven months after two vaccine doses, with levels decreasing with age, the TMG successfully requested that the national government accelerate the rollout of vaccine booster shots (third doses) for the elderly.



Antibody titers seven months after two doses of a COVID-19 vaccine

Measures Addressing Long COVID

Measures to raise individual and societal understanding of long COVID, and to encourage consultations and doctor visits

Even after recovery from COVID-19, some individuals may continue experiencing a variety of symptoms as Post-COVID conditions (i.e., long COVID). However, public awareness of long COVID remains insufficient.

In response, the Tokyo iCDC established a task force on long-term effects, which has created leaflets to boost awareness and understanding of long COVID and conducted detailed case analyses of patients at metropolitan hospitals and other facilities.

Online seminars for health care professionals are also being held to provide up-to-date knowledge and information about long COVID and treatment methods, featuring doctors involved with treating long COVID and Tokyo iCDC experts as speakers.



Leaflet about long COVID For individuals (left) For companies (right)

Survey of Tokyo Citizens: Risk Communication

Surveys to understand citizen awareness and behaviors for reflection in information dissemination and response systems

To better understand the attitudes and behaviors of Tokyo citizens, and use that information to effectively disseminate information and develop COVID-19 countermeasures, the Tokyo iCDC conducts regular surveys of Tokyo citizens.

The surveys cover topics such as preventive behaviors and attitudes toward COVID-19, with results being used to help support TMG policies and information dissemination efforts.

Furthermore, in addition to quantitative surveys, the Tokyo iCDC conducts qualitative surveys in the form of group interviews to examine topics such as the impact of the pandemic in greater depth.

Survey Period	Valid Responses	Key Topics			
Oct 15-17 2020	035	•COVID-19 preventive actions •Public awareness of monitoring information			
		•Problems and fears associated with COVID-19			
	•Preventive actions during the state of emergency				
Feb. 10-13, 2021	5,410	•Awareness of TMG measures •Changes in behaviors during/after the state of emergency			
	10,000	•Reasons for masking and not teleworking			
Feb. 26-Mar. 3, 2021		•Reasons for not seeing a doctor			
		•Attitudes and knowledge about COVID-19 vaccines			
	1,000	•Plans for vaccination			
July 16–17, 2021		•Stance on vaccination			
		•COVID-19 preventive actions			
	1,000	•Continuation of preventive actions			
Oct. 21-22, 2021		•Views on the future situation			
		•Reasons for vaccine reluctance			
	•Preventive actions two years into the pandemic •Attitudes toward COVID-19 •Fourth vaccine doses, effects on non-COVID health care	•Preventive actions two years into the pandemic			
Mar. 15–25, 2022		•Attitudes toward COVID-19			
		•Fourth vaccine doses, effects on non-COVID health care			
Oct 1-3 2022	1,000	•Current and future preventive actions nearly three years into the pandemic			
		•Preparing for a possible winter twindemic with seasonal influenza			
	10,429	•Personal attitudes about masking			
Feb 15-21 2023		•Ways to help health care professionals			
		•Changes in attitudes toward COVID-19			
		•COVID-19 and long COVID			
	35 (across 6 groups)	•Positive and negative impacts of COVID			
Mar. 8–11, 2023		•The end of the pandemic, living with COVID			
		•Desired information and initiatives from the government			

*Survey results were reported at TMG COVID-19 Monitoring Meetings

Human Resource Development

Development of human resources for infectious disease response in Tokyo

The Tokyo iCDC is also involved with the development of human resources for infectious disease response in Tokyo.

Training sessions are held for individuals registered in the Tokyo Healthcare Provider Database, which was created for medical facilities and individual health care professionals to register their information in preparation for the spread of COVID-19. Seminars are also held for TMG employees on topics such as risk communication and social media strategies.

Furthermore, as a form of human resource development support, the Tokyo iCDC is also supporting the Tokyo Program for Infectious Disease Doctors.*

Training program (5 years) Infectious Disease Epidemiological Specialist Course: train public health doctor Receive specialist training at public health center and epidemiological specialist course at the NIID Work at government organization such as public health center or the Tokyo Metropolitan Government										
	Receive specialist course at public health center		Receive specialist course at NIID	Work at public health center or TMG			MG			
L	Year 1	Year 2	Year 3	Year	r 4	Year 5				
 Infectious Disease Specialist Course: train infectious clinical doctor Receive specialist training at university hospital, etc., followed another hospital with the aim of acquiring knowledge of infectious diseases Work at Tokyo Metropolitan Hospitals, etc. 										
	Receive specialist course at university hospital		Receive special course at anoth hospital	ist Ier	Work at Tokyo Metropolitan Hospi		n Hospital			

*A program that aims to train doctors to stand at the forefront of infectious disease response in Tokyo and lead organizations in clinical and public health fields during outbreaks of emerging infectious diseases or Class-1 infectious diseases.

For more details on Tokyo iCDC initiatives, please visit the website via the QR code below.



Compiled by: **Tokyo iCDC Secretariat** Survey and Analysis Section, Infectious Disease Control Division, Bureau of Public Health, Tokyo Metropolitan Government October 2023 2nd Edition