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Epidemiology and Public Health Team

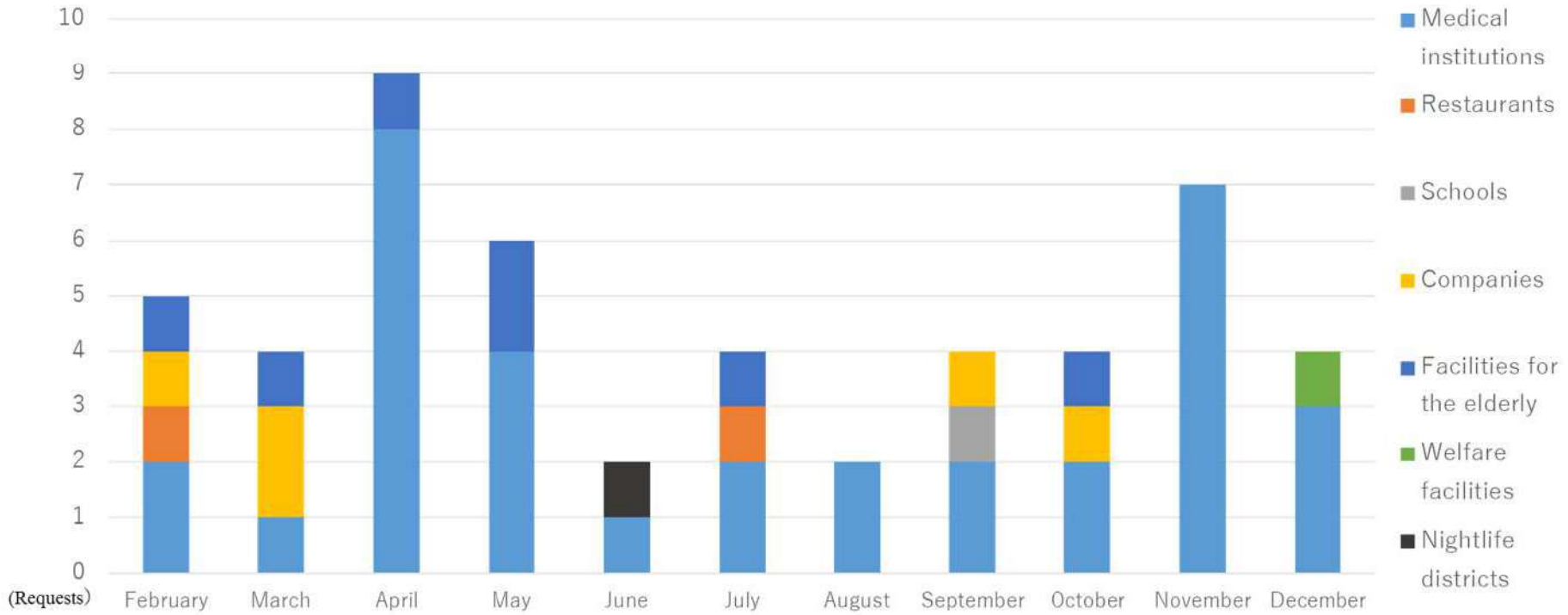
TEIT Activities and Key Points for Infection Control

- **Established to support epidemiological studies conducted by public health centers in Tokyo, the Tokyo Epidemic Investigation Team (TEIT)*, whose members mainly consist of doctors and public health nurses, reported on the status of COVID-19-related activities from January to December 2020 and key measures at the 28th Monitoring Meeting held on January 14, 2021.** *Established in 2012.

https://www.bousai.metro.tokyo.lg.jp/_res/projects/default_project/_page_/001/012/788/28kai/2021011407.pdf

Changes in the number of requests for TEIT dispatch[2]

- The largest number of requests was for medical institutions, with one request each month from February to December.
- From October, support was jointly provided by the Infectious Disease Response Support Team in 12 cases.

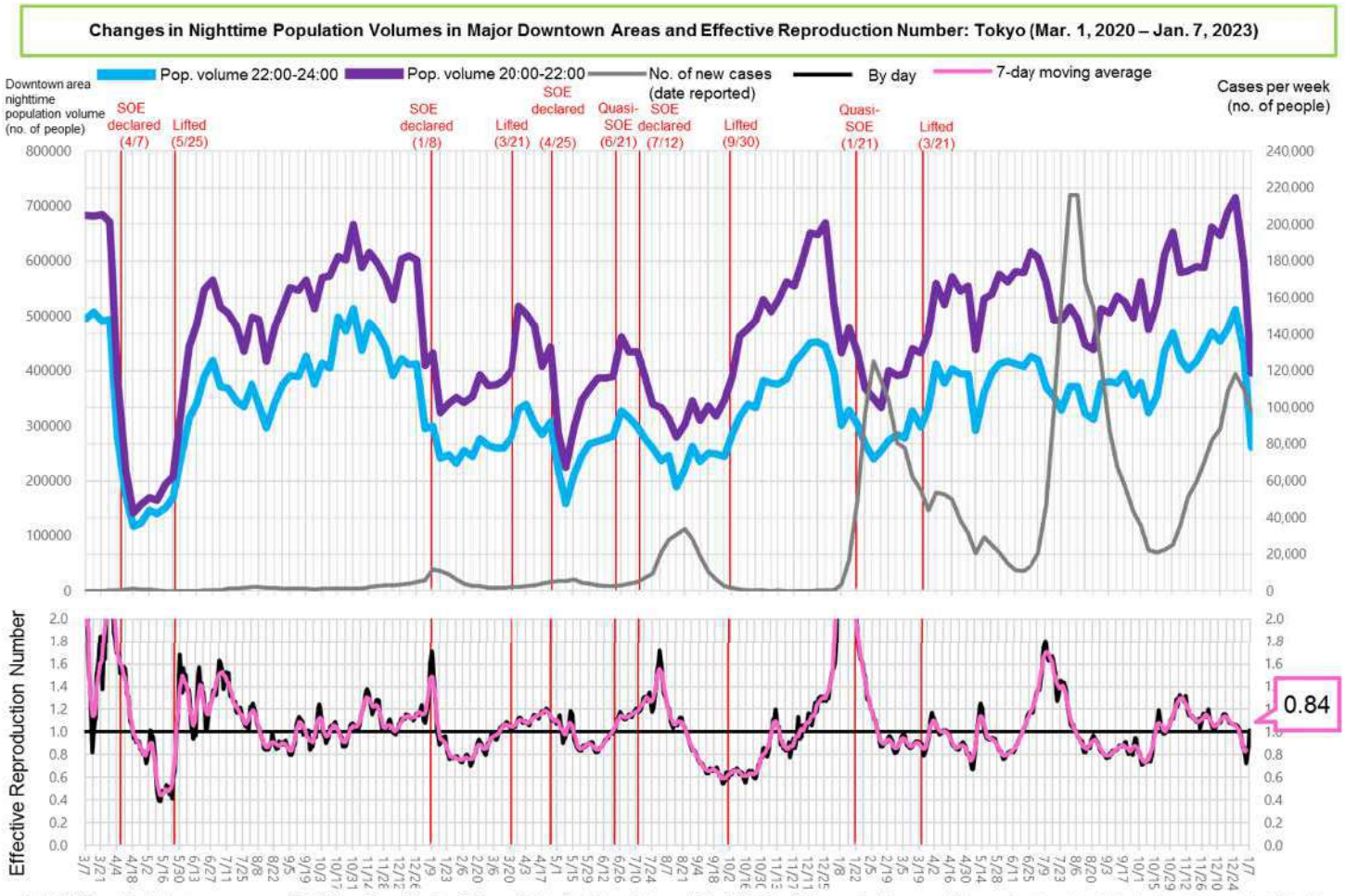


No. of TEIT requests by month (January to December 2020) N=51

Epidemiology and Public Health Team

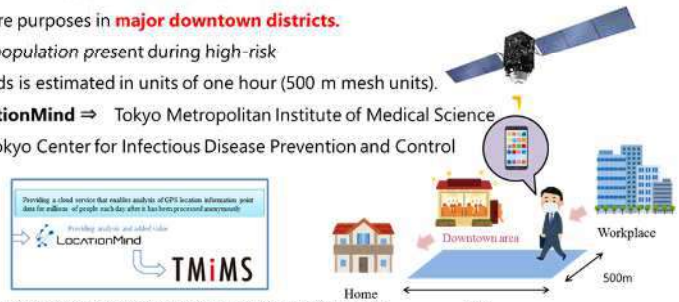
Monitoring of Night-time Population in Major Downtown Areas

- Studies conducted by the Epidemiology and Public Health Team's Professor Atsushi Nishida and Professor Hiroshi Nishiura, the Infection Forecast Simulation Task Force's Professor Ryosuke Shibasaki and others have confirmed that there is a relationship between trends in the night-time population staying in major downtown areas of Tokyo for leisure purposes and later trends in confirmed cases of COVID-19 infection and the effective reproduction number.
- From April 2021, this information was reported at every Monitoring Meeting as a leading indicator of increases in confirmed cases.



Understanding the high-risk flow and presence of people

- **The flow and presence of people for leisure purposes* is estimated** based on GPS movement patterns.
- Extraction of data on movement and non-movement for leisure purposes in **major downtown districts.**
- *The population present during high-risk* periods is estimated in units of one hour (500 m mesh units).
- **LocationMind** ⇒ Tokyo Metropolitan Institute of Medical Science
  ⇒ Tokyo Center for Infectious Disease Prevention and Control



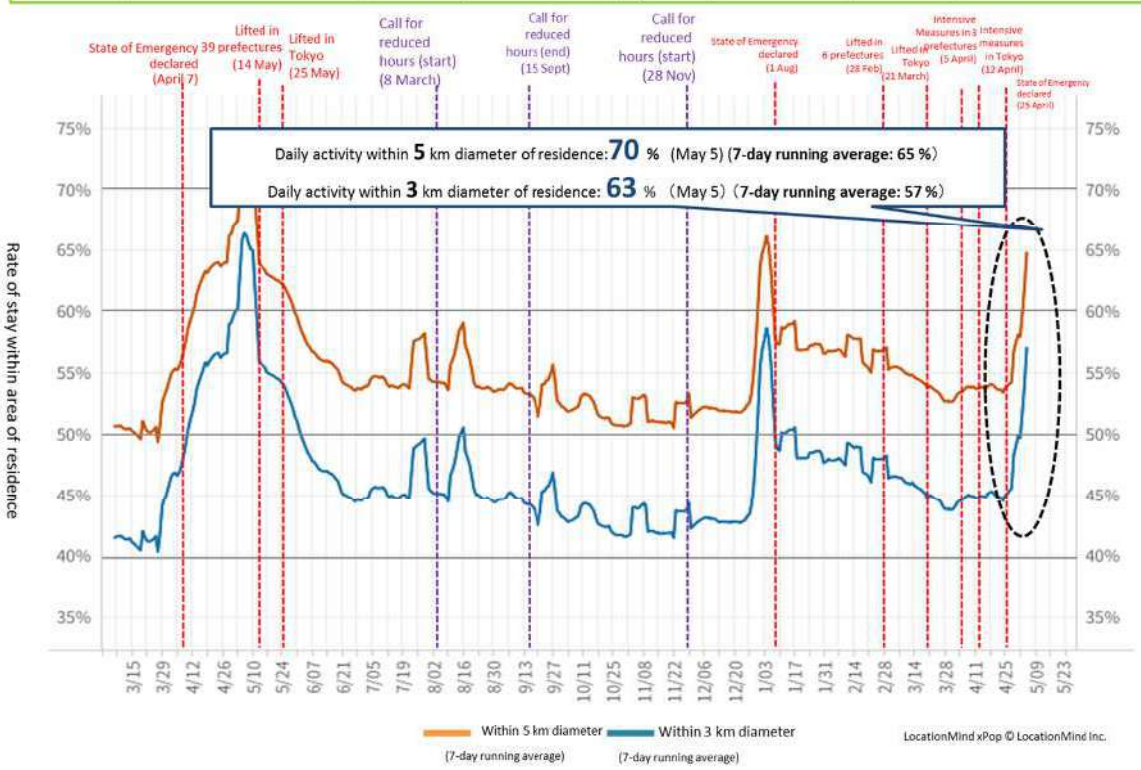
*After estimating the location of the workplace and home from the GPS movement patterns, any non-movement outside the workplace and home for 15 min or more is counted as being for leisure purposes.

Stay-at-Home Indicators

- **Using the percentage of city residents who completed their daily activities moving within a 5- or 3-kilometer distance from their residence as stay-at-home indicators, it was reported that most city residents cooperated with the Stay Home request during the 2021 Golden Week holidays.**

(Reported at each Monitoring Meeting beginning with the 44th meeting held on May 6, 2021)
https://www.bousai.metro.tokyo.lg.jp/_res/projects/default_project/_page_/001/013/725/44kai/2021050609.pdf

Stay-at-home indicators (March 1, 2020 to May 5, 2021): Entire Tokyo Metropolitan area



Comparison of number of people present in major downtown districts during Golden Week (April 29–May 5, 2021) and lowest numbers during the first and second State of Emergency declarations

		First State of Emergency declaration	Second State of Emergency declaration
Tokyo	Minimum time (weeks)	20.5.3-9	21.1.10-16
	Afternoon: 12:00-18:00	**1.67 times**	**0.72 times**
	Night: 18:00-24:00	**1.56 times**	**0.71 times**
Osaka	Minimum time (weeks)	20.5.3-9	21.1.17-23
	Afternoon:12:00-18:00	**1.17 times**	**0.52 times**
	Night: 18:00-24:00	**1.06 times**	**0.54 times**

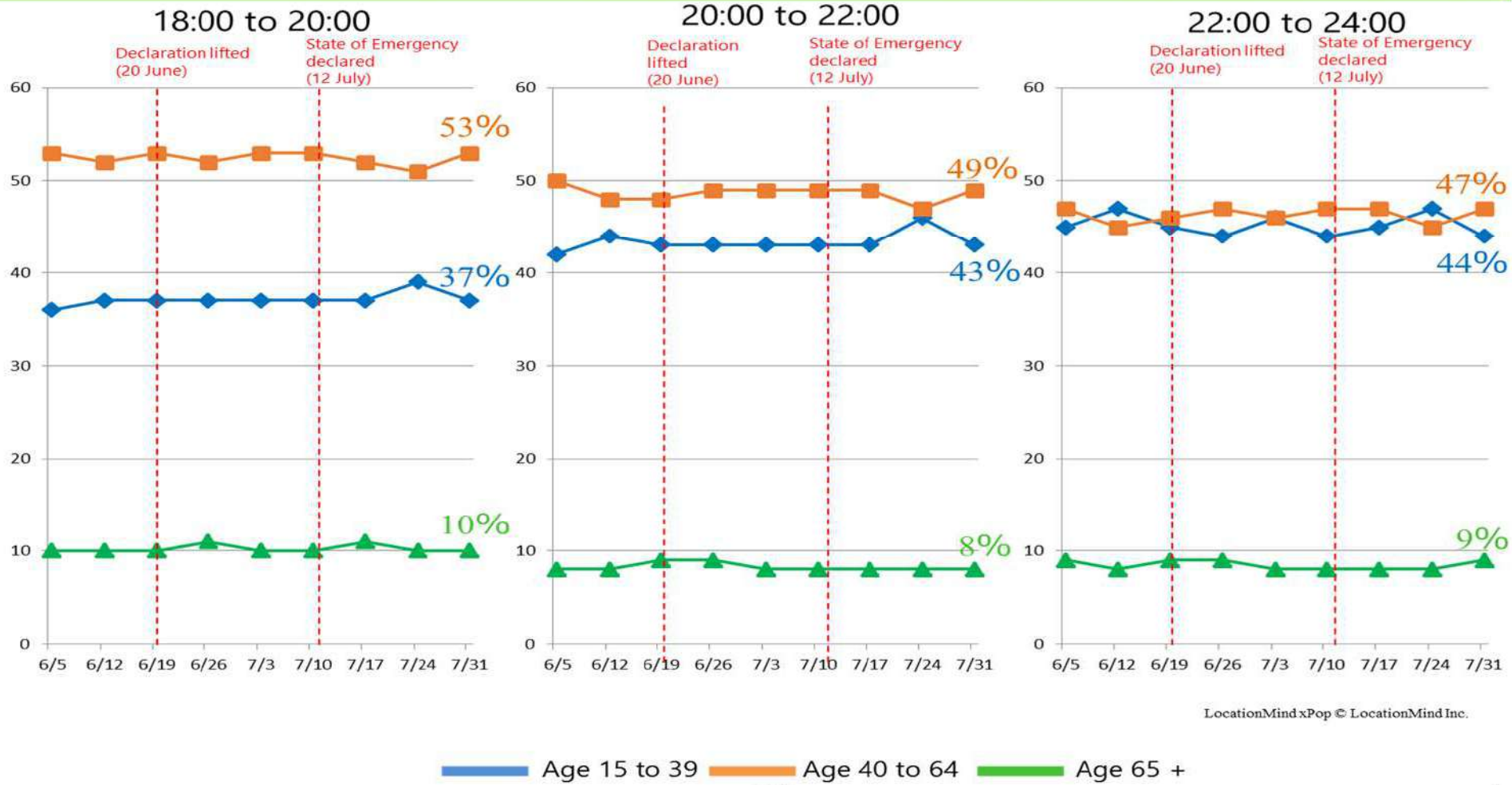
LocationMind xPop © LocationMind Inc.

Share of Night-time Population by Age Group

- The night-time population was analyzed by age group, and the share of the population by age group was reported at each Monitoring Meeting beginning with the 58th meeting held on August 12, 2021.
- There were continued calls for cooperation from middle-aged residents at key times for minimizing the risk of infection from the perspective of preventing pressure on medical care.

https://www.bousai.metro.tokyo.lg.jp/_res/projects/default_project/_page_/001/014/526/58kai/20210812_07.pdf

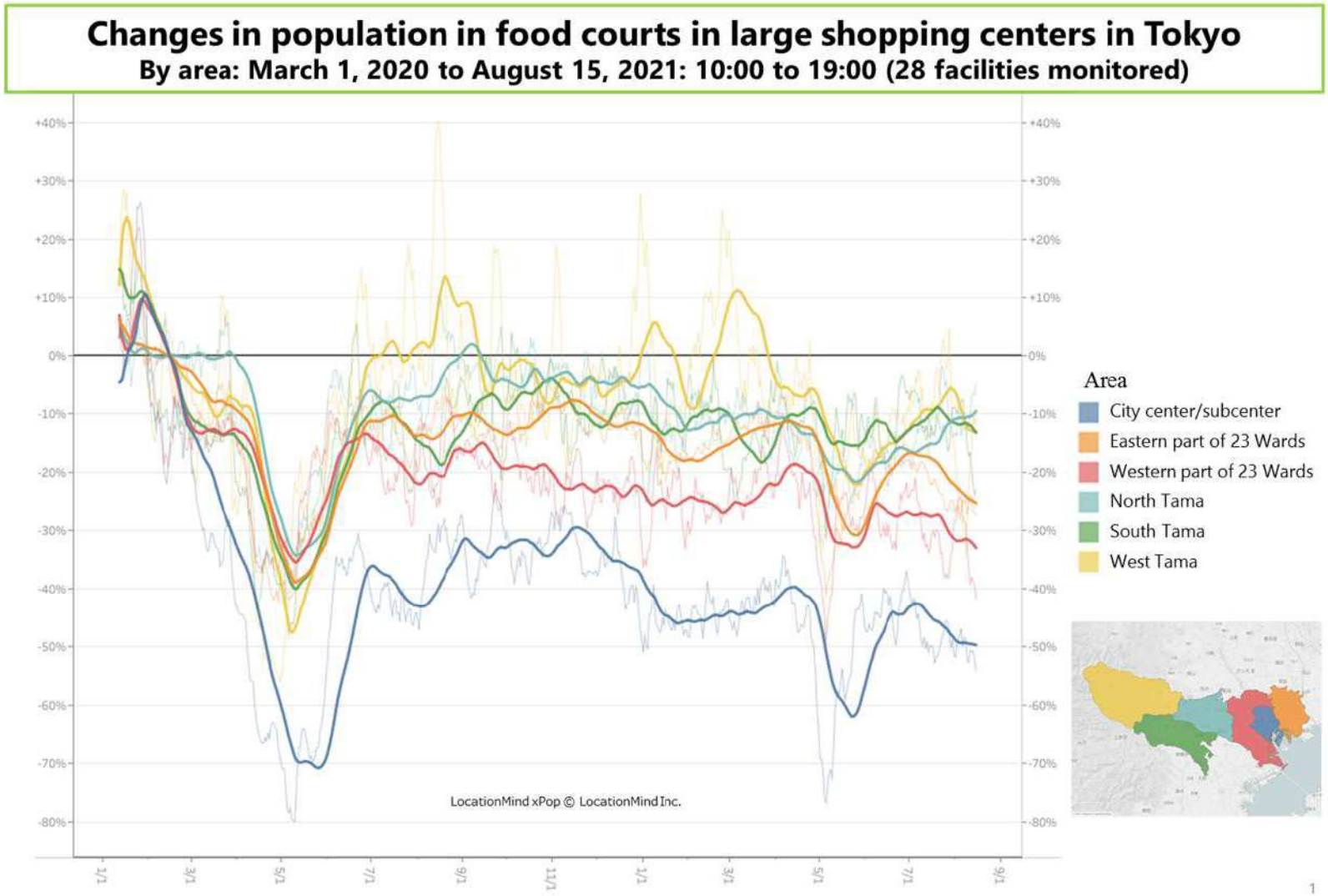
Nightlife population in major downtown districts in Tokyo: percentages by age (June 1 to July 31, 2021)



Population in Food Courts at Large Shopping Centers in Tokyo

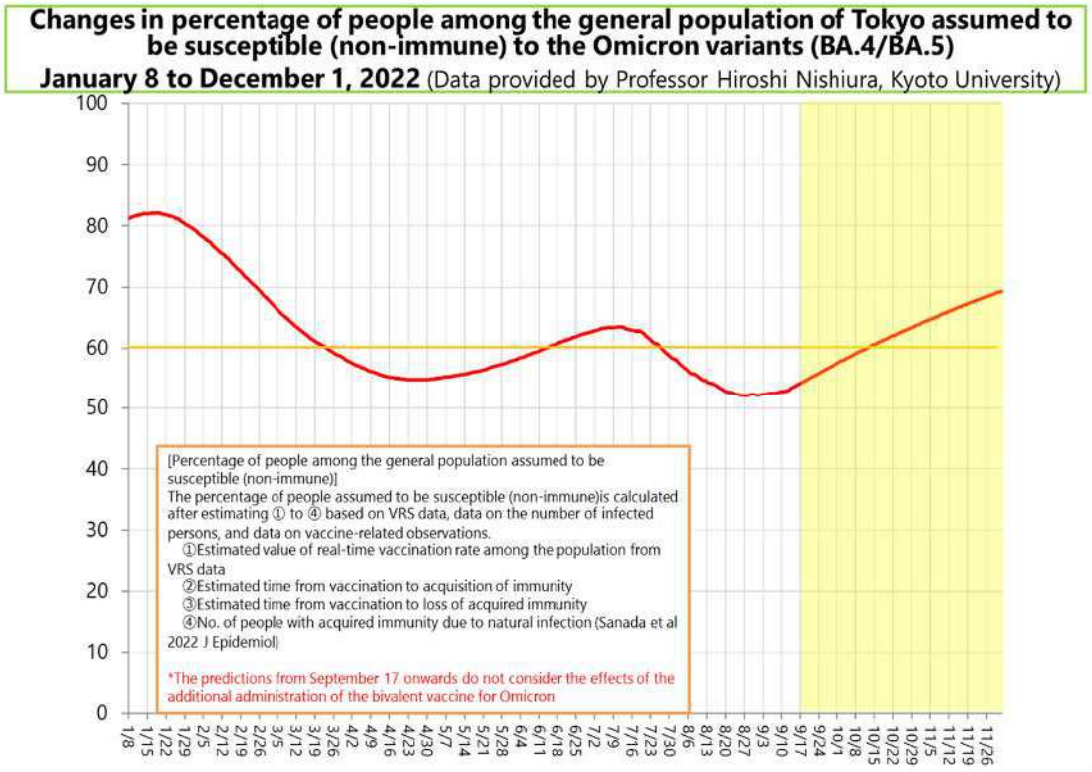
- **Trends in the population in food courts at large shopping centers in Tokyo (28 facilities) were reported starting from the 59th Monitoring Meeting held on August 20, 2021, and reducing the number of people and the time spent in such food courts was urged.**

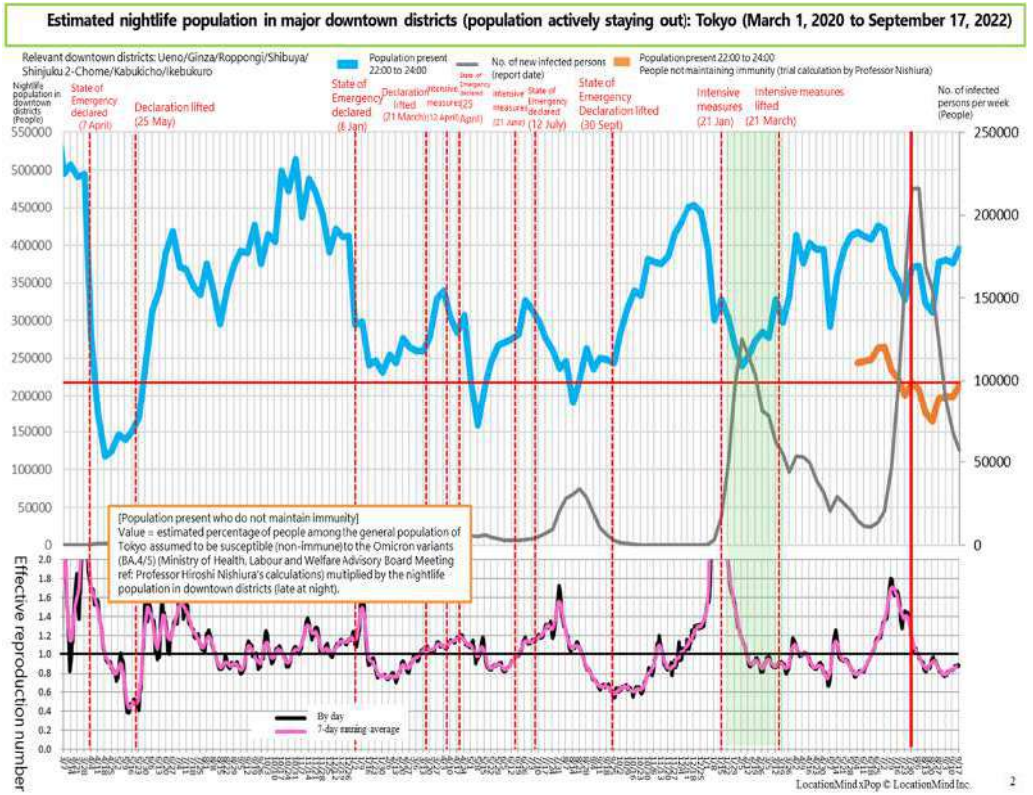
https://www.bousai.metro.tokyo.lg.jp/_res/projects/default_project/_page_/001/014/570/59kai/20210820_07.pdf



Estimated number of people susceptible to the Omicron variant (non-immune people)

- Along with the night-time population volumes, graphs showing trends in the number of people among the general population in Tokyo susceptible to the BA.4 and BA.5 lineages of the Omicron variant (the percentages without effective immunity) were reported at the Monitoring Meeting.
- As an increase in the susceptible population could impact the infection situation, promotion of additional vaccination doses was urged.





Epidemiology and Public Health Team

Verification of the Long-Term Relationship Between the Night-time Population in Downtown Tokyo Areas and the COVID-19 Infection Situation

- The research work done by the Epidemiology and Public Health Team, which accurately extracted and monitored weekly night-time population data to find a correlation between night-time population and the infection situation, was verified to show a long-term relationship based on multiple improvements of the prediction formula.
- Along with confirming the correlation between the night-time population and the infection situation, it was reported at the 117th Monitoring Meeting held on April 28, 2023 to be able to provide more accurate forecasts.
  https://www.bousai.metro.tokyo.lg.jp/_res/projects/default_project/_page_/001/027/815/20230428_09.pdf

Connection between nightlife population and state of infections: Long-term data analysis February 2020 to May 2022 (after prevalence of Omicron variant)

◆ Improved mathematical prediction model for the infection situation

No. of infections* Comparing this week with last week

$$log\left[\frac{C_a(t)}{C_a(t-7)}\right] = \beta_0 + \beta_1 log(NP_a(t-8)) + \beta_2 \Delta log(NP_a(t-8)) + \varepsilon(t)$$

① Total nightlife population 8 days ago*
Positive correlation
β_1=0.692
(95% confidence interval : 0.427 - 0.955)

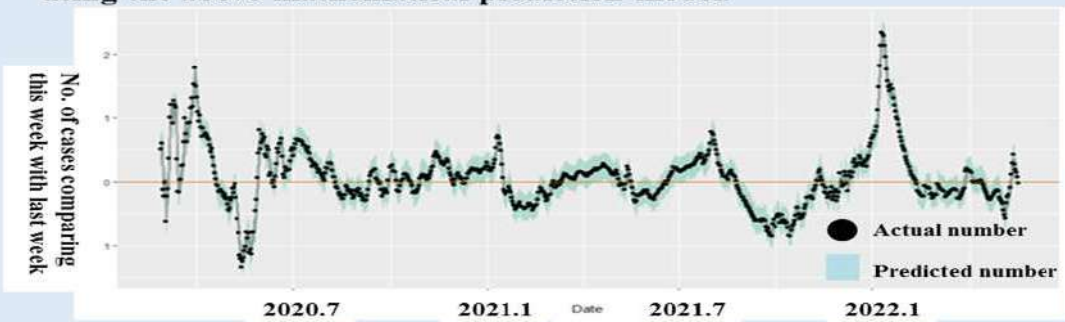
② Daily change in nightlife population 8 days ago*
β_2=-2.527
(95% confidence interval: -3.345 - -1.713)

No. of infections from previous day* Comparing this week with last week

*Using 7-day running average value

① There is a positive correlation between the (total) nightlife population and the later infection situation
② Add the day-to-day change in nightlife population to the mathematical prediction model to refine the prediction

◆ Comparison of predicted number and actual number of infections (comparing this week with last week) calculated using the above mathematical prediction model.



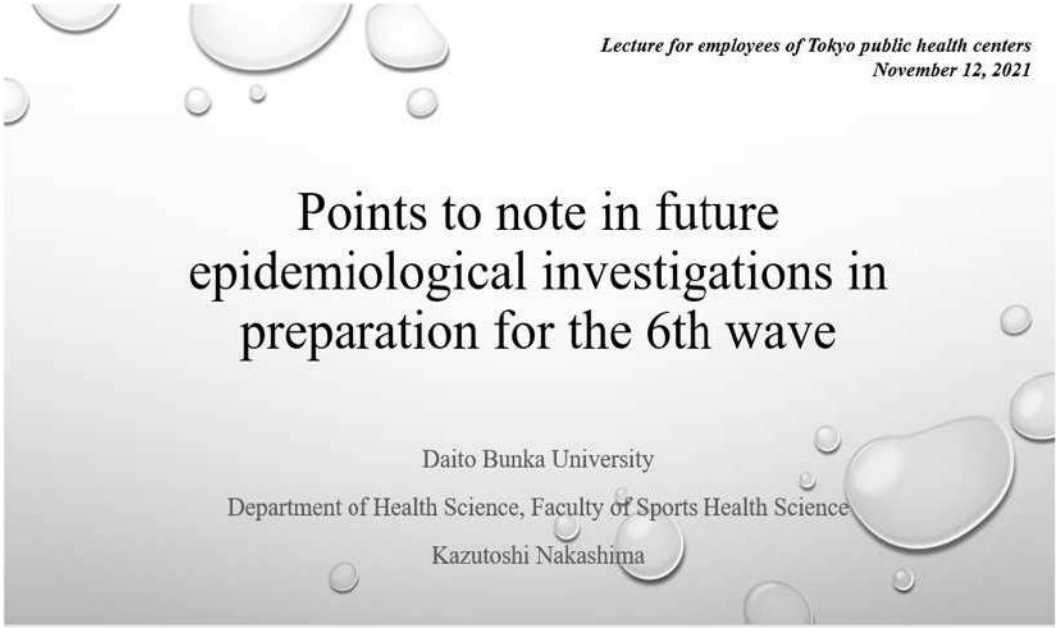
- The actual number of infections (comparing this week with last week) is generally the same as the predicted number
- Using the nightlife population improves the accuracy of predictions of the expansion/convergence (around the inflection point) of infections

Okada, Yamasaki, Nishida, Shibasaki & Nishiura
Night-time population consistently explains the transmission dynamics of COVID-19 in three megacities, Japan. *in revision*

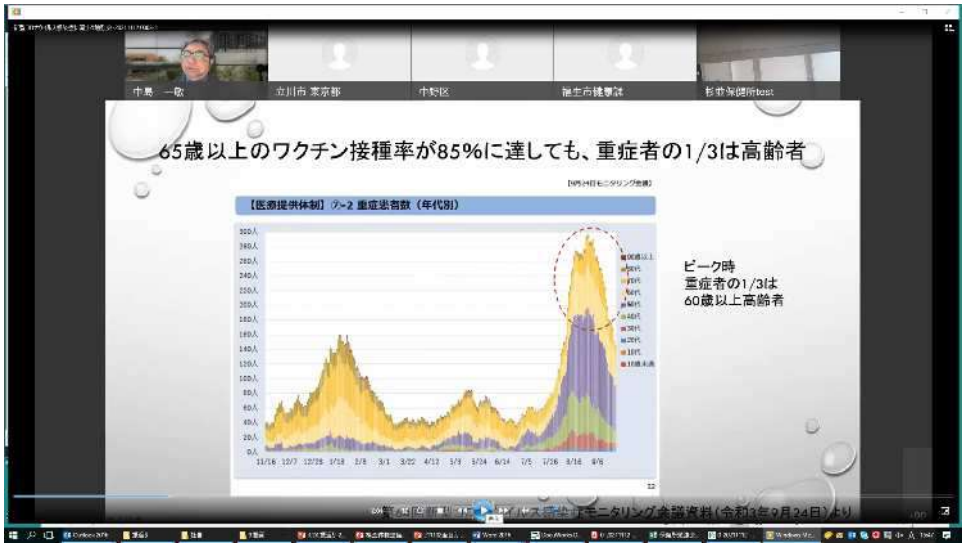
LocationMind xPop data makes use of data that NTT Docomo has wholly and statistically processed from location information sent from mobile phones, obtained with consent from users of the auto GPS function on the Docomo Map Navi, an app service provided by NTT Docomo. The location data is GPS data (latitude/longitude information) measured at least every five minutes, and does not include information that identifies the individual.

Study Session for Public Health Centers (November 12, 2021)

- **Professor Kazutoshi Nakashima of the Epidemiology and Public Health Team was invited as a lecturer in an online study session with an analysis of the current COVID-19 situation and measures to prepare for the 6th wave of infections for employees engaged in epidemiological studies at public health centers, etc.**



On the Day of the Study Session



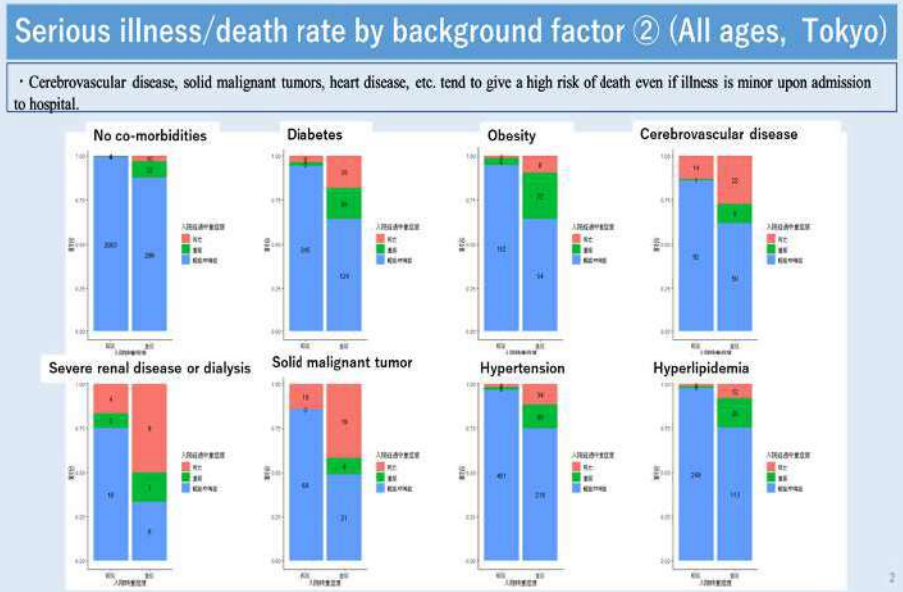
Research Utilizing Registries

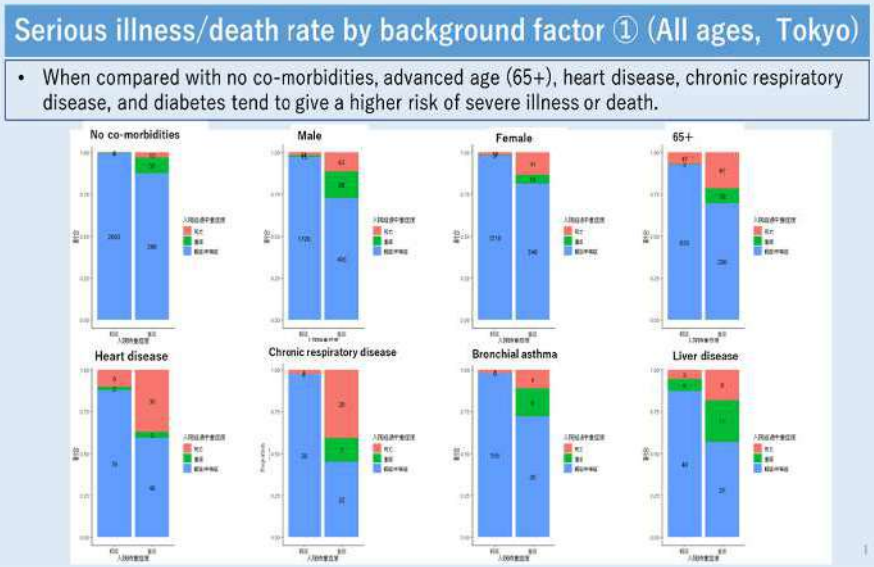
- **Research utilizing registries (cases diagnosed with COVID-19 with hospitalization managed at a medical institution) was reported at the 31st Monitoring Meeting held on February 4, 2021.**

https://www.bousai.metro.tokyo.lg.jp/_res/projects/default_project/_page_/001/012/970/31kai/2021020407.pdf

Overview

Purpose	To clarify the clinical presentation and epidemiological trends of COVID-19 patients
Subject	Cases diagnosed with COVID-19 with hospitalization managed at a medical institution
Period	January 2020 to present* *As of the time of the monitoring report: February 4, 2021
Analysis/ Study	・Explore COVID-19's clinical presentation, course, prognosis, and risk factors for developing severe symptoms ・Course and safety of cases of drug administration
Contribution	・Basic data which can be used for the future development of prevention and treatment methods, etc.





Epidemiological Study on COVID-19 infection after-effects

- **The results of an epidemiological study on COVID-19 infection after-effects conducted at the National Center for Global Health and Medicine were reported at the 31st Monitoring Meeting held on February 4, 2021.**
  https://www.bousai.metro.tokyo.lg.jp/_res/projects/default_project/_page_/001/012/970/31kai/2021020407.pdf

Overview of the Study

● Subjects

78 patients recovering from COVID-19 who were discharged from the National Center for Global Health and Medicine **between February and June of 2020**.

● Method

Telephone interview (63 respondents)

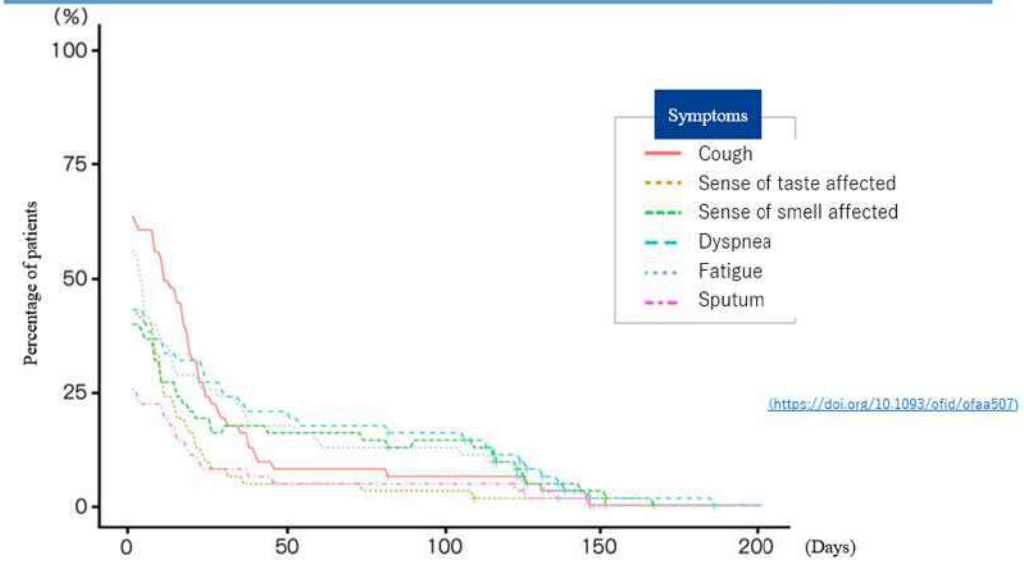
● Results

・48% and **27% of patients reported experiencing some kind of infection after-effects** 2 months and **4 months after** onset, respectively.

・In particular, **approximately 10% of patients reported breathing difficulty, fatigue, or an impaired sense of smell even 4 months after the onset of COVID-19.**

・24% of patients experienced hair loss, of which 64% reported that hair loss had not improved as of the time of the study.

No. of days since COVID-19 onset and percentage of patients with acute symptoms



Percentage of patients with long COVID by age

There are patients with long COVID in all age groups (total: 76%), and the percentages of people with long COVID in their 20s and 30s are high.

Age	No. of patients surveyed	No. of patients confirmed to have long COVID	Percentage (%) of people with long COVID
Under 20	2	0	0
20–29	12	9	75
30–39	6	5	83
40–49	15	10	67
50–59	10	9	90
60–69	8	7	88
70+	10	8	80
Total	63	48	76

*Long COVID is defined as prolonged symptoms lasting over 14 d

Frequency of main symptoms of long COVID by age (14 days after onset)

The percentage of people with a cough, dyspnea, and fatigue was high, as was the percentage of people in their 20s whose sense of taste and smell was affected.

	First	Second	Thirds
Under 20 (n=2)	-	-	-
20–29 (n=12)	Sense of smell affected (50%)	Sense of taste affected (47%)	Sputum (33%)
30–39 (n=6)	Cough (50%)	Dyspnea (50%)	Fatigue (50%)
40–49 (n=15)	Cough (33%)	Fatigue (27%)	Dyspnea (27%)
50–59 (n=10)	Cough (80%)	Fatigue (40%)	Dyspnea (40%)
60–69 (n=8)	Cough (50%)	Sense of smell affected (25%)	Dyspnea (25%)
70+ (n=10)	Cough (60%)	Fatigue (60%)	Dyspnea (60%)

(The underlined parts are the same percentage)

Infectious Disease Medical Treatment Team

Analysis of the Antibody Cocktail Treatment Situation in Tokyo (September 2021)

- **The course of the virus after antibody cocktail administration was analyzed and reported at the 62nd Monitoring Meeting held on September 9, 2021.**

*Of 1,048 cases reported by 116 medical institutions in Tokyo, 420 were extracted with a course of 14 days or more since administration

https://www.bousai.metro.tokyo.lg.jp/_res/projects/default_project/_page_/001/015/430/62kai/20210909_10.pdf

Course after Administration

Subjects	Course after Administration		
	Reduced Severity	No Improvement	Death
420	400 (95.2%)	19 (4.5%)	1 (0.2%)

(Number of people; as of September 3, 2021)

Distribution by Age

(Number of people; %)

		10s	20s	30s	40s	50s	60s	70s	80s	90s	Total
All patients	A	3	27	48	69	135	48	43	34	12	419
		0.7%	6.4%	11.5%	16.5%	32.2%	11.5%	10.3%	8.1%	2.9%	100%
Reduced severity		3	26	48	69	126	46	41	31	10	400
		0.8%	6.5%	12.0%	17.3%	31.5%	11.5%	10.3%	7.8%	2.5%	100%
No improvement	B	0	1	0	0	9	2	2	3	2	19
		0.0%	5.3%	0.0%	0.0%	47.4%	10.5%	10.5%	15.8%	10.5%	100%
Rate of no improvement	B/A	0.0%	3.7%	0.0%	0.0%	6.7%	4.2%	4.7%	8.8%	16.7%	4.5%

Days from Administration to Reduced Severity

(Number of people; %)

Day Administered	Next Day	2 Days After	3 Days After	4 Days After	5 Days After	Other*	Total
13	78	75	47	35	23	129	400
3.3%	19.5%	18.8%	11.8%	8.8%	5.8%	32.3%	100%

Vaccination

		2nd Dose	1st Dose	Unvaccinated	Unknown	Total
All patients	A	68	47	230	74	419
		16.2%	11.2%	54.9%	17.7%	100%
Reduced severity		65	46	215	74	400
		16.3%	11.5%	53.8%	18.5%	100%
No improvement	B	3	1	15	0	19
		15.8%	5.3%	78.9%	0.0%	100%
Rate of no improvement	B/A	4.4%	2.1%	6.5%	0.0%	4.5%

Course after Administration (Unvaccinated Patients Only)

(Number of people)

Subjects	Course after Administration		
	Reduced Severity	No Improvement	Death
230	215 (93.5%)	15 (6.5%)	0 (0%)

Subjects unaffected by vaccines (unvaccinated patients) were extracted to confirm the efficacy of the antibody cocktail treatment.

Infectious Disease Medical Treatment Team

Analysis of the Antibody Cocktail Treatment Situation in Tokyo (November 2021)

- **The course of the virus after antibody cocktail administration was analyzed and reported at the 70th Monitoring Meeting held on November 25, 2021.**

*Of 2,965 cases reported by 174 medical institutions in Tokyo, 2,374 were extracted with a course of 14 days or more since administration

https://www.bousai.metro.tokyo.lg.jp/_res/projects/default_project/_page_/001/020/622/70/20211125_10.pdf

Course after Administration

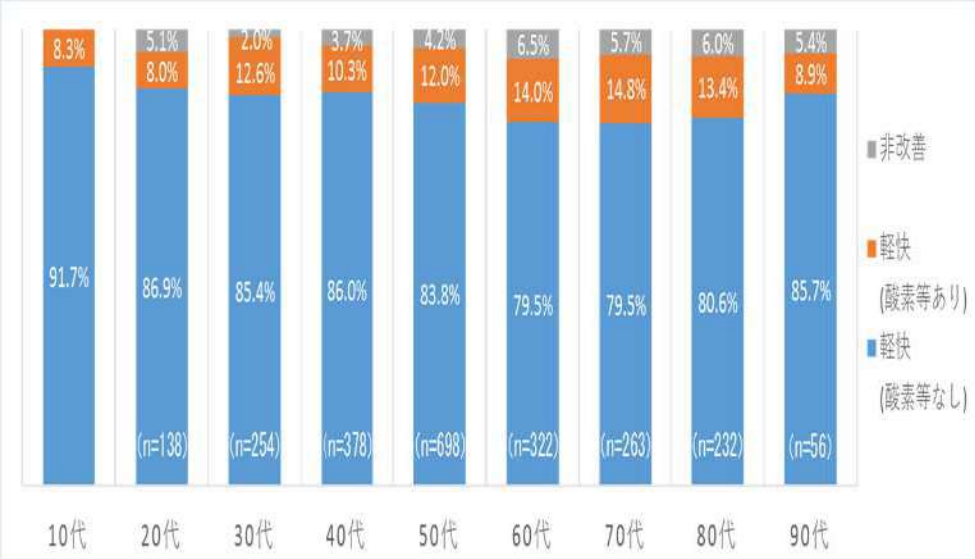
(Number of people; as of October 14, 2021)

Subjects	Reduced Severity		No Improvement	Death
	No administration of oxygen, etc.	Had administration of oxygen, etc.		
2374	1970	288	109	7
	2258			
	95.1%		4.6%	0.3%

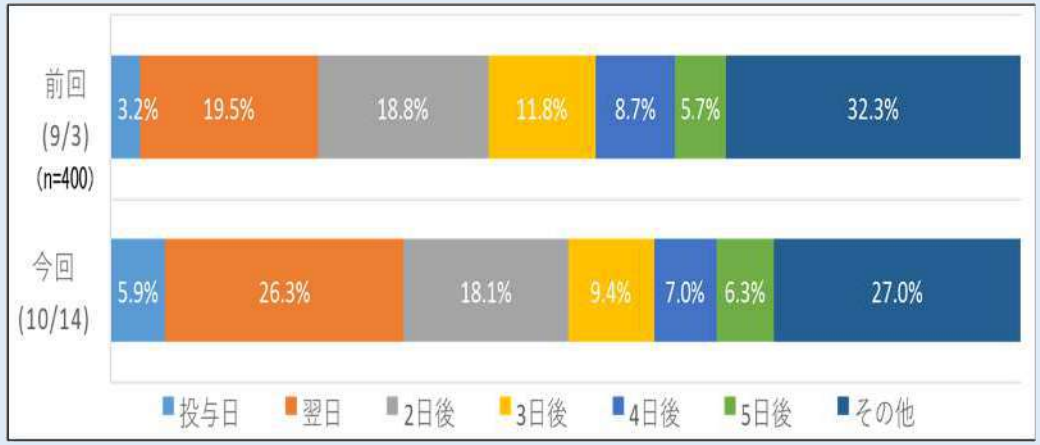
Breakdown by Age

n＝2,374

Rate of Reduced Severity by Age　n＝2,365



Days from Administration to Reduced Severity (vs. September 2021)



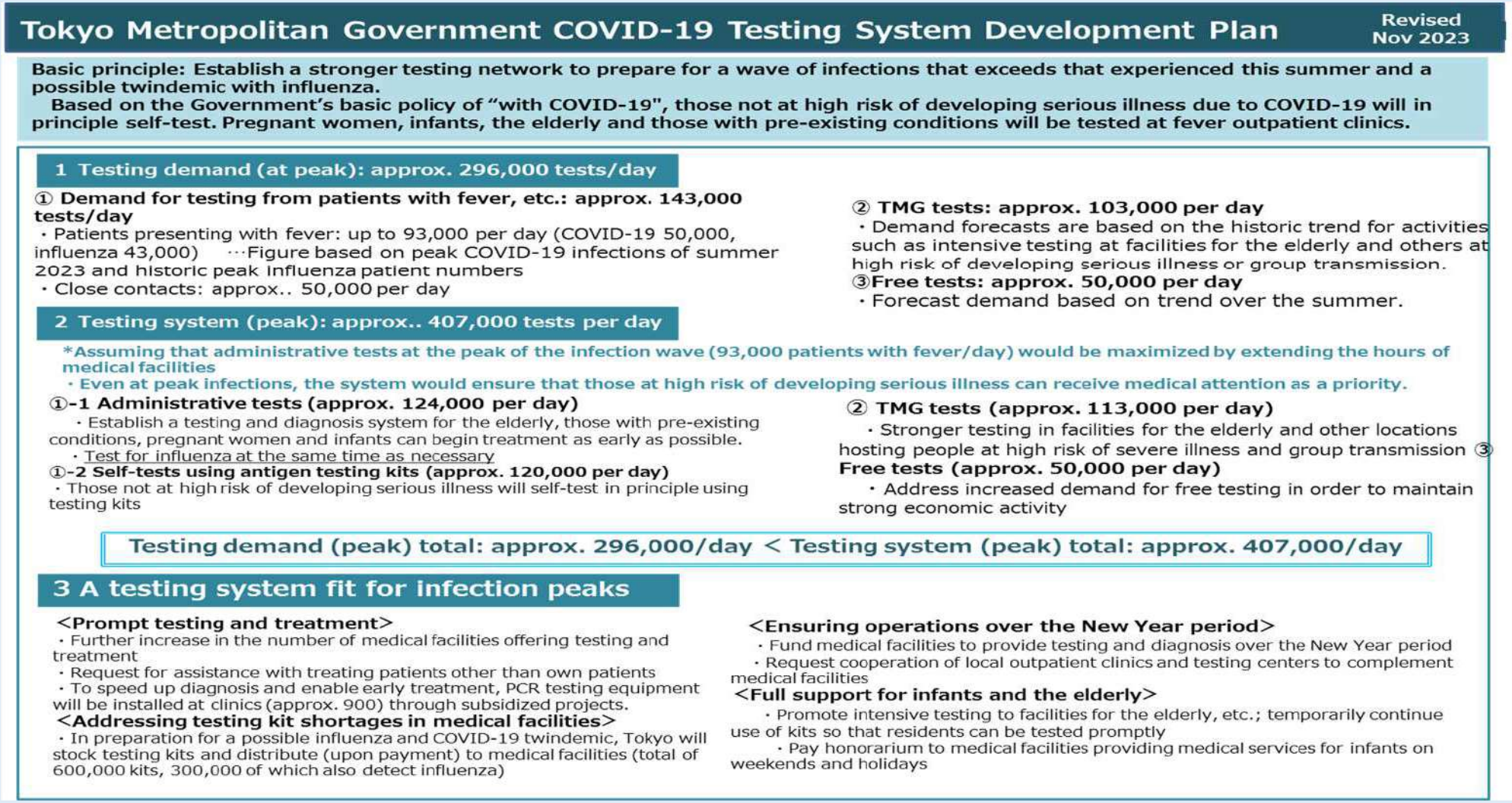
Testing and Diagnosis Team

Involvement in the Formulation of TMG Testing System Development Plans

- **Provided recommendations from an expert perspective for the formulation and revision of the "Plan for Development of COVID-19 Testing Systems"***

*TMG formulated the "Plan for Development of COVID-19 Testing Systems" in accordance with the "Guidelines for the Development of COVID-19 Testing Systems" set out by the government of Japan. After being formulated in April 2021, the plan has been revised three times – in November of the same year, and then in April and November of 2022.

https://www.hokeniryo.metro.tokyo.lg.jp/kansen/kensa/kensakeikaku_kaitei_202211.html



Risk Communication Team

Survey of Tokyo Citizens

- **From the standpoint of effective public relations, the Risk Communication Team conducted a total of 9 surveys on Tokyo citizen awareness and behaviors from October 2020 to April 2023** (including a group interview).
- **In addition to being reported at the TMG Monitoring Meeting, the survey results were posted on the Tokyo iCDC blog with detailed explanations.**
  Tokyo iCDC blog: https://note.com/tokyo_icdc

Survey Date	Survey Title	Valid Responses	Topics	URL (Monitoring Meeting)
October 15-17, 2020	Preliminary survey on Tokyo citizens awareness	935	•COVID-19 preventive actions •Public awareness of monitoring information •Problems and fears associated with COVID-19	https://www.bousai.metro.tokyo.lg.jp/_res/projects/default_project/_page_/001/012/198/2020111207.pdf
February 10-13, 2021	Tokyo citizens awareness survey under the state of emergency	5,410	•Preventive actions during the state of emergency •Awareness of TMG measures •Changes in behaviors during/after the state of emergency	https://www.bousai.metro.tokyo.lg.jp/_res/projects/default_project/_page_/001/013/177/35kai/2021030408.pdf
February 26-March 3, 2021	Tokyo citizens awareness survey	10,000	•Reasons for masking and not teleworking •Reasons for not seeing a doctor •Attitudes and knowledge about COVID-19 vaccines	https://www.bousai.metro.tokyo.lg.jp/_res/projects/default_project/_page_/001/013/601/41kai/20210415_05-1.pdf
July 16-17, 2021	Survey of Tokyo Citizens on vaccination	1,000	•Plans for vaccination •Stance on vaccination •COVID-19 preventive actions	https://www.bousai.metro.tokyo.lg.jp/_res/projects/default_project/_page_/001/014/827/60kai/20210826_08.pdf
October 21-22, 2021	Survey of Tokyo Citizens	1,000	•Continuation of preventive actions •Views on the future situation •Reasons for vaccine reluctance	https://www.metro.tokyo.lg.jp/tosei/hodohappyo/press/2021/11/05/documents/30_01.pdf
March 15-25, 2022	Survey of Tokyo Citizens	10,000	•Preventive actions two years into the pandemic •Attitudes toward COVID-19 •Fourth vaccine doses, effects on non-COVID health care	https://www.bousai.metro.tokyo.lg.jp/_res/projects/default_project/_page_/001/021/411/85/20220421_11.pdf
October 1-3, 2022	Survey of Tokyo Citizens	1,000	•Current and future preventive actions nearly three years into the pandemic •Preparing for a possible winter twindemic with seasonal influenza	https://www.bousai.metro.tokyo.lg.jp/_res/projects/default_project/_page_/001/022/394/20221027_11.pdf
February 15-21, 2023	Survey of Tokyo Citizens	10,429	•Personal attitudes about masking •Ways to help health care professionals •Changes in attitudes toward COVID-19 •COVID-19 and long COVID	https://www.bousai.metro.tokyo.lg.jp/_res/projects/default_project/_page_/001/023/293/20230316_07.pdf
March 8-11, 2023	Group interview (120 minutes)	35 people *6 groups	•Positive and negative impacts of COVID •The end of the pandemic, living with COVID •Desired information and initiatives from the government	https://www.bousai.metro.tokyo.lg.jp/_res/projects/default_project/_page_/001/023/381/20230330_06.pdf

(Reference) Survey of Tokyo Citizens

Results of the Tokyo Resident Survey by the Tokyo iCDC Risk Communication Team (conducted in Feb. 2023)

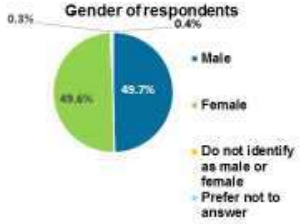
2023. 3. 16

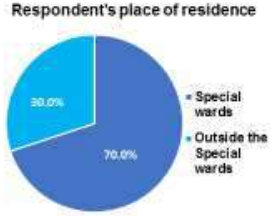
- **Survey method:** Internet survey
- **Survey target:** People in their 20s to 70s who have an address in Tokyo
- **Sampling method and number of samples:**
  - Quota sampling based on gender, age composition, and place of residence according to the population ratio of Tokyo
  - 10,429 samples
- **Survey period:** Wednesday, February 15, 2023 to Tuesday, February 21, 2023...1 week
- **Survey items:**
  - ○ Feelings and experiences regarding COVID-19 ○ Preparations for COVID-19
  - ○ Behavior and infection prevention measures after the category change (from May 8)
  - ○ Intent and rationale for mask wearing in the future, basic infection prevention measures, etc.

1

Basic attributes of valid collected surveys

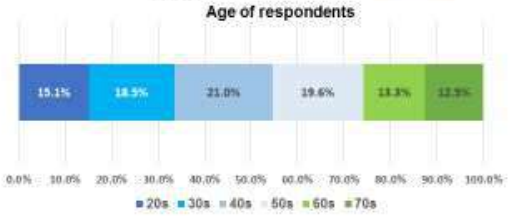
Valid collected surveys n=10,429





Occupations of respondents (Unit: %)

Administrative professional	8.4
Specialist/technical professional	13.9
Clerical worker	19.0
Sales worker	3.9
Service worker	10.8
Security worker	0.7
Agriculture, forestry, or fisheries worker	0.1
Production process worker	1.6
Transport or machinery operator	0.9
Construction or mining worker	0.8
Worker in transportation, cleaning, packaging, etc.	1.8
Unclassifiable occupation	3.6
Full-time housewife / househusband	13.9
Student	2.4
Unemployed	13.4
Prefer not to answer	4.9
Total	100.0

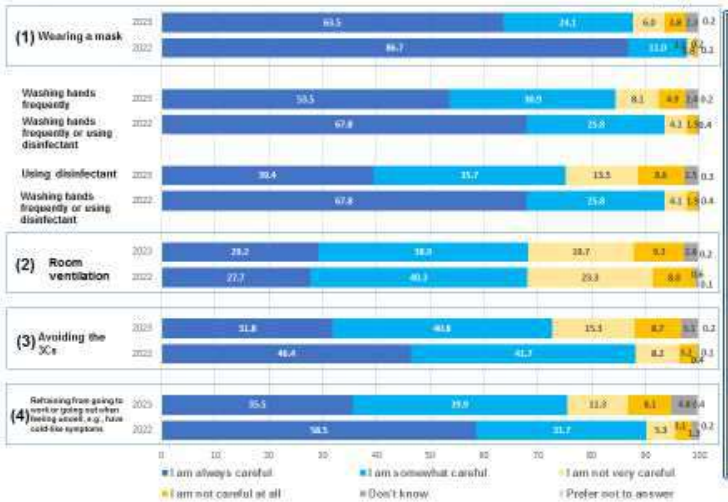


Note: The ratios of each component of the results of this survey are rounded to the second decimal place, so the total will not necessarily be equal 100.

2

Regarding COVID-19 measures, please select the answer that currently (as of mid-February) best applies to you for each item.

(2023: n=10,429) (2022: n=10,000) (%)



About three years have passed since the outbreak of COVID-19, and **as of mid-February 2023**, after it was indicated that the disease would be reclassified as Category V, **it can be seen that many Tokyo residents are still taking care with regard to infection prevention measures.**

(1) Regarding "**wearing a mask**," about 90% of respondents answered that they are "**always/somewhat careful.**" The percentage of respondents who are "**always careful**" decreased by about 20% compared to the results of the survey in March last year.

(2) Regarding "**room ventilation**" about 70% of respondents answered that they are "**always/somewhat careful**," which is about the same as the results of the survey in March last year.

(3) Regarding "**avoiding the 3Cs**," about 70% of respondents answered that they are "**always/somewhat careful.**" The percentage of respondents who are "**always careful**" decreased by about 15% compared to the results of the survey in March last year.

(4) Regarding "**refraining from going to work or going out when not feeling well**," about 75% of respondents answered that they are "**always/somewhat careful.**" The percentage of respondents who are "**always careful**" decreased by about 20% compared to the results of the survey in March last year.

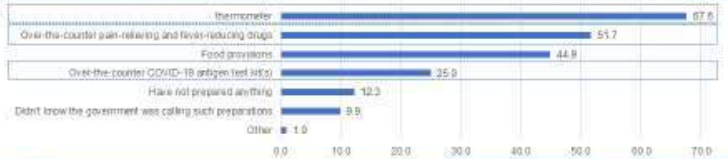
3

If you are working, how often have you practiced telework in the past month? Please select the answer that applies.

(2023: n=10,429) (2022: n=10,000)

The Tokyo Metropolitan Government is calling on people to prepare test kits, medicines, food, etc. in preparation for COVID-19 infection. Choose all of the items that you have prepared for yourself.

(n=10,429) (%)



- About 30% of respondents are **practicing telework (at the time of the survey)**, which is about the same as the results of the survey in March last year.
  (**However, if the percentage of respondents who answered that they "work in a job that cannot utilize telework"** or are "**not currently working**" **are excluded**, that percentage is approx. 60%)
- **As for preparations against COVID-19 infection**, about 70% of people have prepared **thermometers** and about 50% have prepared **over-the-counter pain-relieving and fever-reducing drugs.** In addition, the percentage of people who have prepared "**over-the-counter COVID-19 antigen test kits**" is 25%.

4

Speaker at the 8th Nikkei FT Communicable Diseases Conference

特別セッション6

COVID-19とリスクコミュニケーション(仮)

Moderator：奈良由美子氏
（放送大学大学院生活健康科学プログラム 教授）

(Except from statement)

Risk communication is an act intended to share information and viewpoints through the exchange of information and opinions among individuals, institutions, and groups. It is easy for many people to be afraid of communicable diseases because the microorganisms that cause them are invisible to the human eye and sometimes isolation is required for infected individuals. Lack of information sharing and understanding about communicable diseases often lead to discrimination and social division. Risk communication is important for helping individuals prevent infection and for preventing discrimination and division in society. Risk communication is essential not only in times of emergency, but also in times of normalcy.

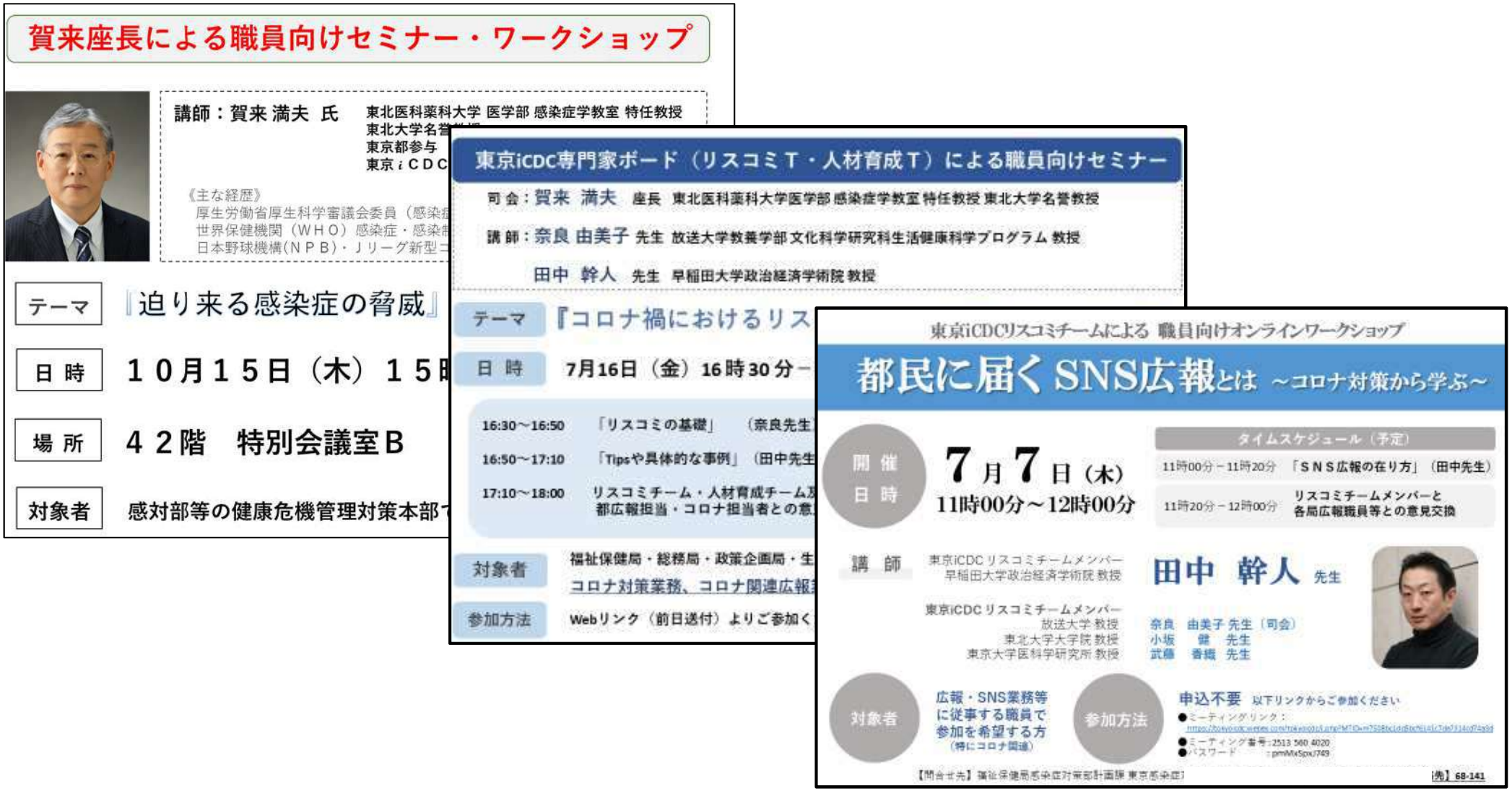
Creating a social network on risk communication that is built upon information sharing, collaborating and cooperating among many people leads to the concept of the “human vaccine.”

In October 2020, the Tokyo Metropolitan Government established the Tokyo Center for Infectious Disease Control and Prevention (Tokyo iCDC) as a permanent command center for communicable disease control. One of the eight current “expert boards” is the Risk Communication Team. It is positioned as the most basic and important team in communicable disease control.

The difficulties in risk communication during the COVID-19 pandemic can be summarized in the following 6 points. (1) The message must be delivered quickly, accurately, and plainly in a situation where knowledge is highly uncertain and often unknown. (2) Communicable disease pandemics are long-lasting and its status changes rapidly. (3) Every individual is a stakeholder in risk communication. (4) The systematic risk is high, spilling over into social, economic, political, ethical, and educational issues. (5) Making a one-way request to refrain from a certain action or to change one’s behavior may lead to questions, oppositions, and distrust. It is important to acknowledge the “why”s and provide an “acceptable” explanation. (6) As the pandemic becomes more prolonged and problems more complex, it is necessary not only to educate and raise awareness about the risks and to evoke behavioral changes, but also to visualize issues and have twoway communication to build a consensus.

Seminars for TMG Employees Held

- When the Tokyo iCDC was launched, a seminar for employees was held with the theme of "The Looming Threat of Infectious Disease."
- The Risk Communication Team and the HR Development Team held seminars for TMG employees with the themes of "Risk Communication During the COVID-19 Pandemic" and "PR on Social Media to Reach City Residents."



Risk Communication Team
Vaccination Information TF

Editorial Supervision of Leaflets Raising Awareness of COVID-19 Vaccination

- Supervised the creation of leaflets, etc. for parents related to the vaccination of children (for parents concerned about side effects as it relates to childcare, not sure whether to get their children vaccinated, etc.)

Message to Tokyo Residents Before the New Year's Holidays

- **A message to Tokyo residents was created heading into the first New Year's Holidays since the outbreak of COVID-19 in Tokyo.**
  (Reported at the 24th Monitoring Meeting on December 17, 2020)
  https://www.bousai.metro.tokyo.lg.jp/_res/projects/default_project/_page_/001/012/484/24kai/202012178.pdf

COVID-19: A message from the Governor of Tokyo
December 17,2020
https://tokyodouga.jp/jttf31zxkl0.html

A Message from the Tokyo *i* CDC

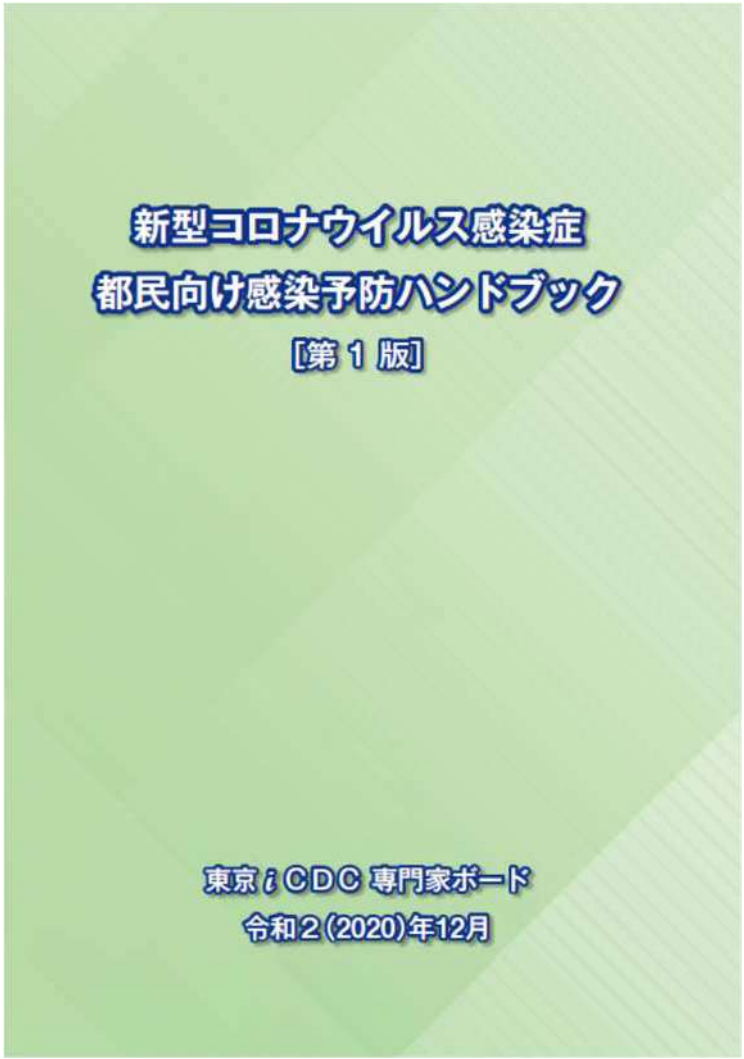
5 rules for a different year-end/new year period

1. **Do not go to crowded places.**
2. **Only spend time with people you usually meet.**
3. Never forget to wear a mask.
4. Never forget to wash your hands.
5. Never forget to air out rooms.

Infection Prevention Handbook for Tokyo Citizens

- **The handbook was created to ensure a safe and comfortable daily life based on a proper understanding of how to prevent infection.** (Reported at the 24th Monitoring Meeting held on December 17, 2020)
- **It included useful information such as how the virus is transmitted and how to prevent infection.**

https://www.hokeniryo.metro.tokyo.lg.jp/kansen/corona_portal/soudan/kannsenyobouhandbook.html



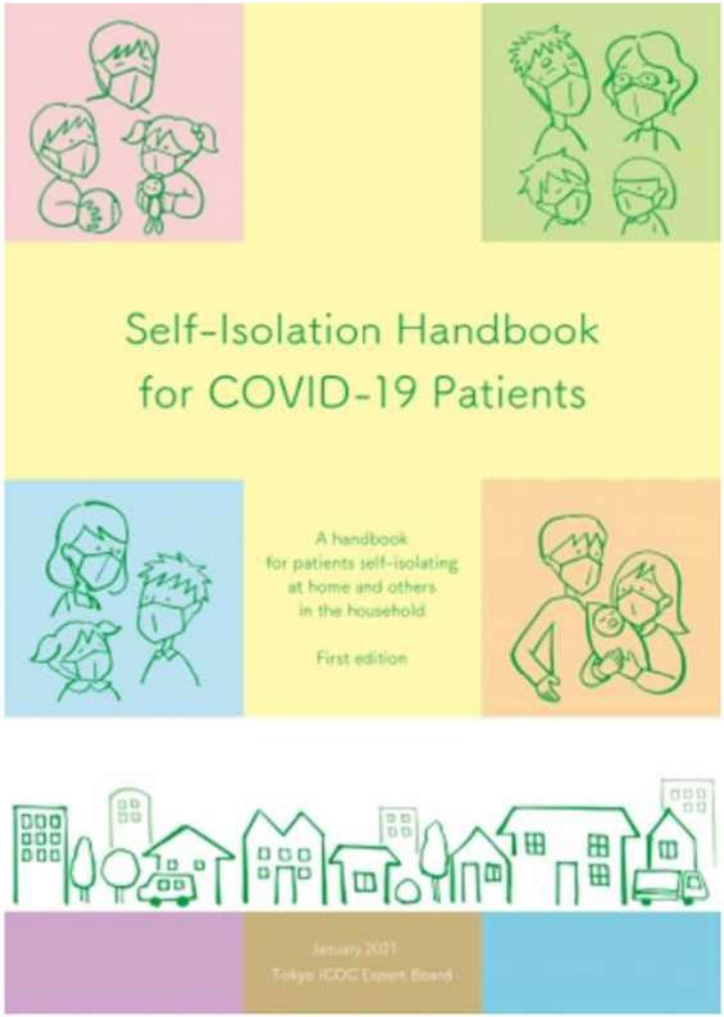
Main Contents

- What is COVID-19 (SARS-CoV2)?
- What symptoms are associated with COVID-19?
- How do people get infected with the virus?
- What should I pay attention to if I have a worrying symptom?
- Thorough prevention of infection transmission
  - ☐ Measure 1. Wear a mask at all times
  - ☐ Measure 2. Wash your hands
  - ☐ Measure 3. Ventilation
  - ☐ Measure 4. Disinfect your environment
  - ☐ Measure 5. Avoid the “three Cs”

Infection Prevention and Control Team

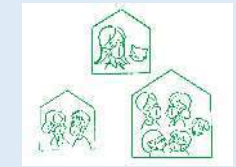
Self-Isolation Handbook for COVID-19 Patients

- This handbook was created to help persons diagnosed with COVID-19 and those who live with them spend the time when the patient is recovering at home with peace of mind.
- In view of the characteristics of the Omicron variant, the handbook was revised when necessary to add information about ventilation, etc. (three editions as of April 2023).
  https://www.hokeniryo.metro.tokyo.lg.jp/kansen/corona_portal/shien/zitakuryouyouhandbook.html
  *First Edition: January 21, 2021 Second Edition: September 14, 2021 Third Edition: January 20, 2022



Main Contents

- For those who have been diagnosed with COVID-19 and those who live with them
- Characteristics of COVID-19
- Guidelines to follow when recovering at home



- 8 points for preventing infection at home
  ① Use separate rooms
  ② Limit the people taking care of the sick person to the extent possible
  ③ Both the sick person and those who live with them should wear masks correctly
  ④ The sick person and those who live with them should wash their hands frequently
  ⑤ Ventilate rooms frequently
  ⑥ Clean and disinfect common areas of the house that are frequently touched
  ⑦ Launder dirty linen and clothes
  ⑧ Dispose of garbage in sealed trash bags
- Points to be aware of regarding highly infectious variants (including Omicron)

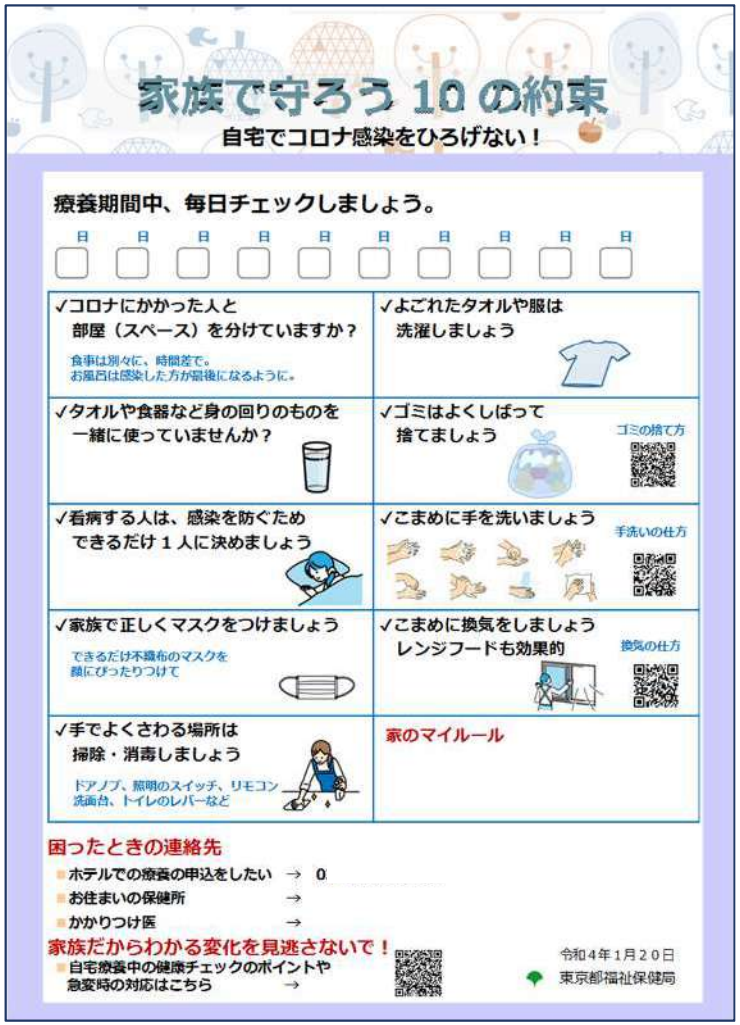
Infection Prevention and Control Team

Distribution of “10 things to do if someone you live with has COVID-19”

- In view of the emergence of the highly infectious Omicron variant, along with the 3rd edition of the Self-Isolation Handbook for COVID-19 Patients (January 20, 2022), a booklet in the form of a checklist of items for family to follow in order to prevent the spread of infection within the home called “10 things to do if someone you live with has COVID-19” was distributed.

- A version for schools with a simplified design and wording was also distributed.

https://www.hokeniryo.metro.tokyo.lg.jp/kansen/corona_portal/shien/zitakuryouyouhandbook.html



＜For the General Public＞

＜For Schools＞

Infection Prevention and Control Team

Compilation of Infection Prevention Case Studies for facilities used by the elderly and those with disabilities

- **Based on examples of assistance provided by the Infection Prevention and Control Team, Tokyo iCDC created a collection of occasionally-seen examples of incorrect measures being taken at places such as care facilities for the elderly where many cluster infections had occurred in order to educate employees about correct measures to prevent infection.** (Reported at the 67th Monitoring Meeting held on October 14, 2021)

https://www.hokeniryo.metro.tokyo.lg.jp/kansen/corona_portal/iryokikan/corona_taisakujirei.html

＜Main Examples＞

Infection Prevention and Control Team

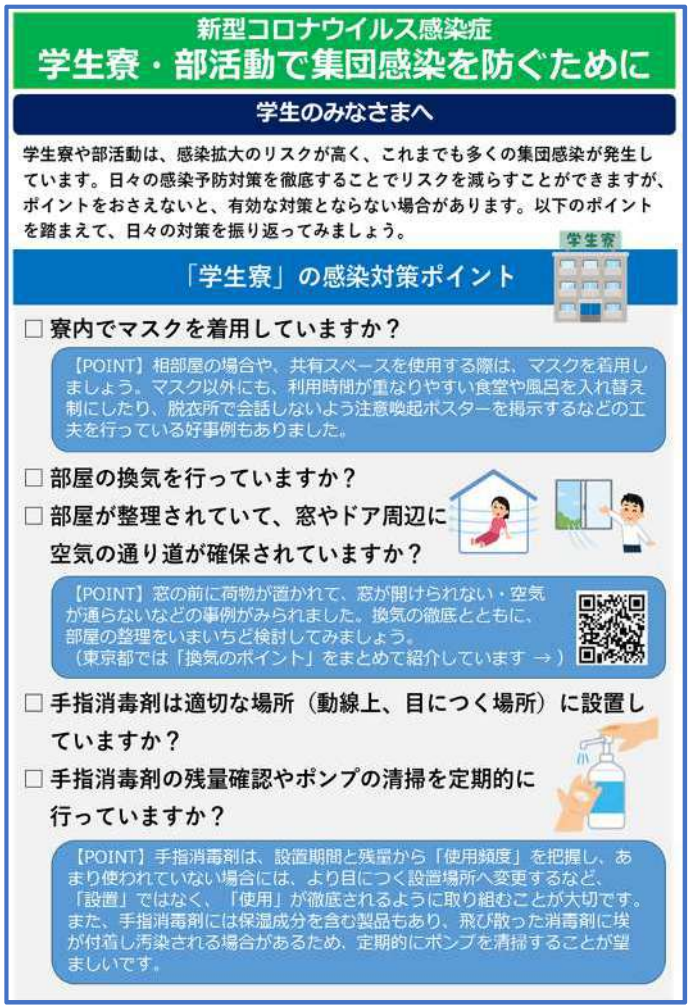
Creation of a Checklist for Preventing Cluster Outbreaks at School Dormitories and Extracurricular Club Activities

- **After interviewing public health centers, etc. about cases of cluster infections at educational institutions, a checklist was created to prevent cluster outbreaks at club activities and school dormitories which was distributed to universities and schools in Tokyo.**

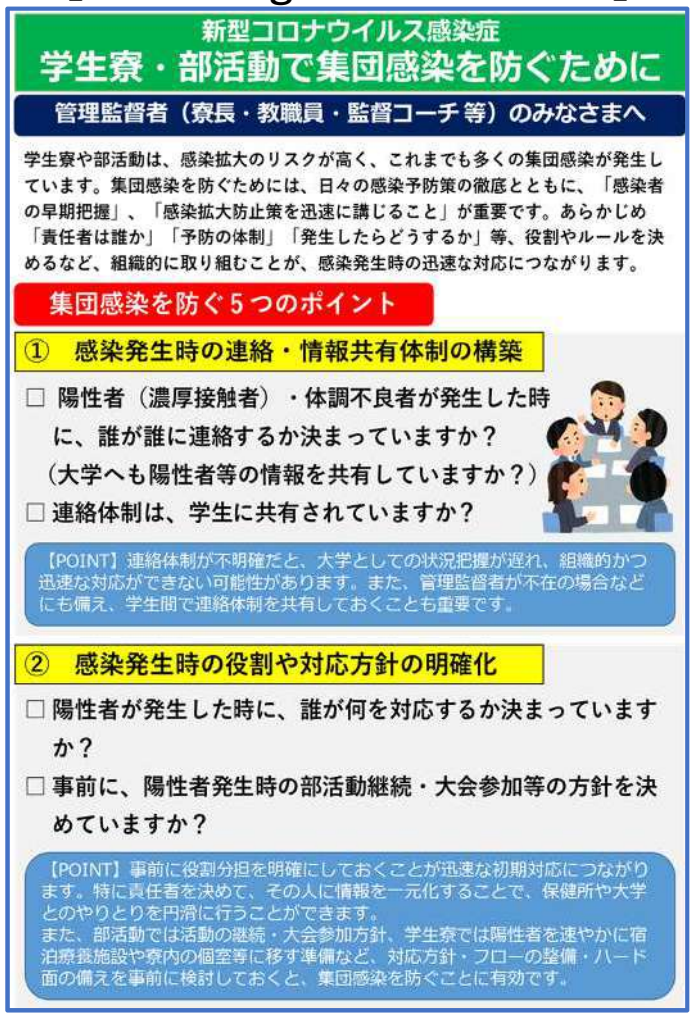
(Reported at the 75th Monitoring Meeting on January 20, 2022)

https://www.hokeniryo.metro.tokyo.lg.jp/kansen/corona_portal/iryokikan/corona_ryou_bukatu_checklist.html

【For students】



【For managers and coaches】



Purpose

Promote awareness of key points for preventing infection in order to prevent cluster infections at university dormitories or during extracurricular club activities.

Contents

- **For those responsible for supervising students**
  Establish a system for communicating and sharing information in the event of an outbreak of infections, clarify roles and policy for response at such a time (etc.)
- **For students**
  Wear masks and use hand sanitizer even in the dormitories, refrain from conversation when masks have been taken off (etc.)

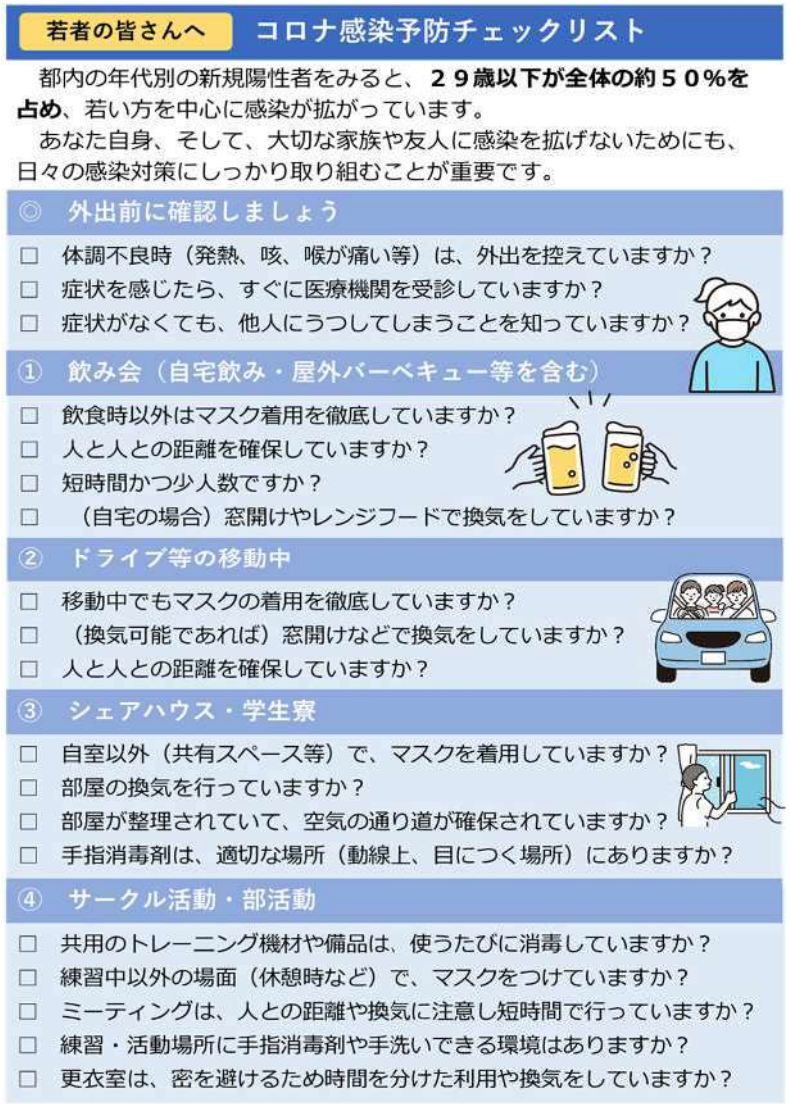
Infection Prevention and Control Team

Creation of COVID-19 Infection Prevention Checklist for Young People

- **An infection prevention checklist for young people was created and disseminated at universities and schools in Tokyo.**

(Reported at the 86th Monitoring Meeting held on April 21, 2022)

https://www.hokeniryo.metro.tokyo.lg.jp/kansen/corona_portal/iryokikan/wakamonochecklist.html



若者の皆さんへ　コロナ感染予防チェックリスト

都内の年代別の新規陽性者をみると、**２９歳以下が全体の約５０%を占め**、若い方を中心に感染が拡がっています。
あなた自身、そして、大切な家族や友人に感染を拡げないためにも、日々の感染対策にしっかり取り組むことが重要です。

◎ 外出前に確認しましょう
- □ 体調不良時（発熱、咳、喉が痛い等）は、外出を控えていますか？
- □ 症状を感じたら、すぐに医療機関を受診していますか？
- □ 症状がなくても、他人にうつしてしまうことを知っていますか？

① 飲み会（自宅飲み・屋外バーベキュー等を含む）
- □ 飲食時以外はマスク着用を徹底していますか？
- □ 人と人との距離を確保していますか？
- □ 短時間かつ少人数ですか？
- □ （自宅の場合）窓開けやレンジフードで換気をしていますか？

② ドライブ等の移動中
- □ 移動中でもマスクの着用を徹底していますか？
- □ （換気可能であれば）窓開けなどで換気をしていますか？
- □ 人と人との距離を確保していますか？

③ シェアハウス・学生寮
- □ 自室以外（共有スペース等）で、マスクを着用していますか？
- □ 部屋の換気を行っていますか？
- □ 部屋が整理されていて、空気の通り道が確保されていますか？
- □ 手指消毒剤は、適切な場所（動線上、目につく場所）にありますか？

④ サークル活動・部活動
- □ 共用のトレーニング機材や備品は、使うたびに消毒していますか？
- □ 練習中以外の場面（休憩時など）で、マスクをつけていますか？
- □ ミーティングは、人との距離や換気に注意し短時間で行っていますか？
- □ 練習・活動場所に手指消毒剤や手洗いできる環境はありますか？
- □ 更衣室は、密を避けるため時間を分けた利用や換気をしていますか？

Purpose

As infections were spreading mainly among the younger generation, a checklist for how to prevent infection in situations where the virus is easily spread, such as drinking parties or leisure activities, was disseminated in order to promote awareness of infection prevention measures.

Contents

- Things to check before going out, such as staying home if you feel you have any symptoms
- Key points for preventing infection in 4 situations including drinking parties and when in transit (wearing a mask, ventilation, hand sanitizing, etc.)
- Introduction of the risks of infection after-effects and various help lines

Other

Tie-up with Tokyo Waction (higher change of winning bonus items by using the checklist)

Infection Prevention and Control Team

Online Training on Preventing the Spread of Infection

- **In view of many occurrences of cluster infections at care facilities for the elderly and facilities for persons with disabilities during the outbreak of the Omicron variant, training videos on preventing the spread of infection, based on examples of infection control measures, were distributed on the TMG website in order to improve response capabilities at facilities, etc.**
- **In addition to the above, a workshop was conducted over live streaming (including a Q&A session with the lecturer).**

Online distribution of training video (video recording)

1 Distribution Available on the TMG website starting on April 28, 2022
https://www.hokeniryo.metro.tokyo.lg.jp/kansen/corona_portal/iryokikan/kensyuudouga.html

2 Contents **Basics**
Standard preventive measures at facilities (① hand hygiene, ② personal protective equipment, ③ COVID-19 infection control)

Lecturer: Prof. Sugawara Erisa (Tokyo iCDC Infection Prevention and Control Team, professor at the Graduate School of Tokyo Healthcare University Division of Infection Prevention and Control)

Examples ① Examples of support during the 6th wave ② Daily preparedness, etc.
Lecturer: Ms. Chishima Kayako (Infectious Disease Response Support Team, National Hospital Organization Headquarters, Ministry of Health, Labour and Welfare J-DMAT (Japan Disaster Medical Assistance Team) Secretariat)

3 Number of views Basics: ① 6,734 ② 4,117 ③ 3,431 Examples: ① 2,402 ② 2,000

Online training (live stream)

1 Dates **First session:** Wednesday, May 18, 2022 **Second session:** Tuesday, July 5, 2022

2 Contents ① **Lecture by an expert** Preparation during ordinary times, response when cluster infections occur, etc.

Lecturer: Prof. Sugawara Erisa (Tokyo iCDC Infection Prevention and Control Team, professor at the Graduate School of Tokyo Healthcare University Division of Infection Prevention and Control)

② **Presentation of examples**
Key points for infection control, examples of support provided by the Infectious Disease Response Support Team, etc.

Lecturer: Ms. Chishima Kayako (Infectious Disease Response Support Team, National Hospital Organization Headquarters, Ministry of Health, Labour and Welfare J-DMAT (Japan Disaster Medical Assistance Team) Secretariat)

③ **Question & answer session**

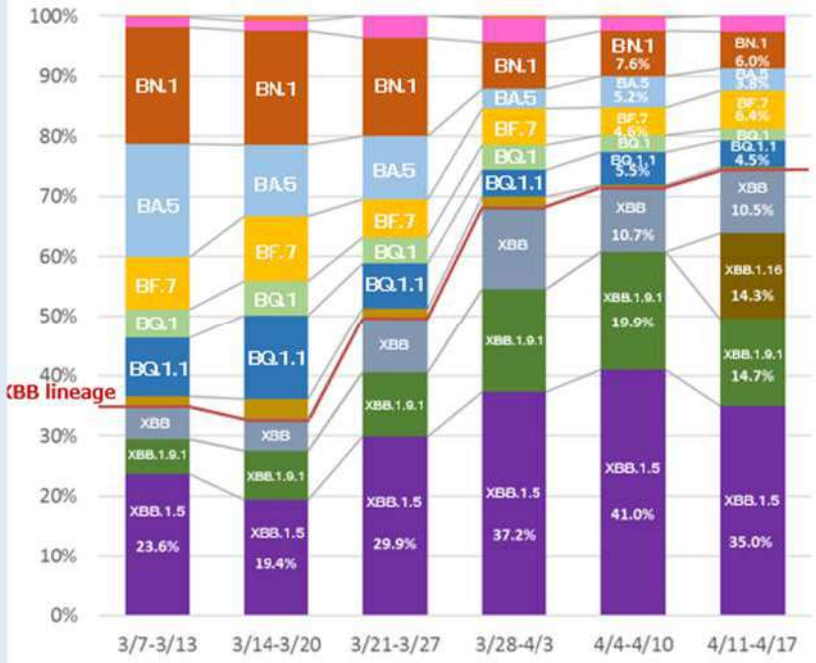
3 Number of participants First session: 405 elderly care facilities/facilities for persons with disabilities Second session: 231 elderly care facilities/facilities for persons with disabilities

Conducting of Genome Analysis

- Just like common viruses, COVID-19 undergoes mutations in the course of repeated propagation and infection.
- Following the emergence of the Alpha variant, which was confirmed in the UK in September 2020, the Omicron variant became the dominant strain of the virus until the present (June 2023), and there are also many sub-lineages derived from Omicron.
- In Tokyo, genome analyses were conducted at Tokyo Metropolitan Institute of Public Health and private testing institutions, etc. The results were announced at the Monitoring Meetings and published on the TMG website.

Weekly trends in genome analysis results

(As of 12:00, May 8, 2023)



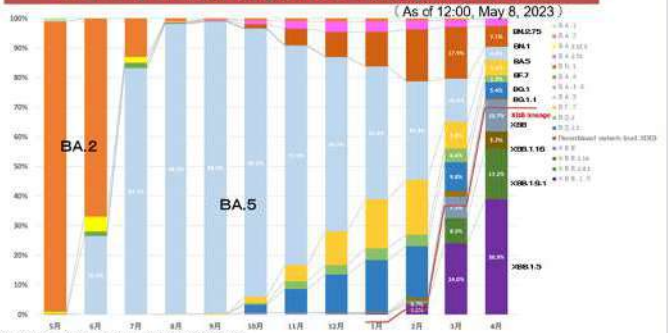
	4/4-4/10	4/11-4/17	Change	4/4-4/10 (actual numbers)	4/11-4/17 (actual numbers)
XBB.1.5	41.0%	35.0%	↓	134	93
XBB.1.9.1	19.9%	14.7%	↓	65	39
XBB.1.16	0.0%	14.3%	↑	0	38
XBB	10.7%	10.5%	→	35	28
BF.7	4.6%	6.4%	↑	15	17
BN.1	7.6%	6.0%	↓	25	16
BQ.1.1	5.5%	4.5%	↓	18	12
BA.5	5.2%	3.8%	↓	17	10
BA.2.75	2.1%	2.6%	↗	7	7
BQ.1	2.8%	1.9%	↘	9	5
Recombinant variants (excl. XBB)	0.3%	0.4%	→	1	1
BA.2	0.3%	0.0%	→	1	0

*Change of 1.0% pt or more ↑↓
Change of 0.5% pt or more ↗↘

*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)

Monthly trends in genome analysis results

(As of 12:00, May 8, 2023)



*Results of genome analysis of specimens from Tokyo, reported in the past year
*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)

Results of genome analysis (breakdown by month)

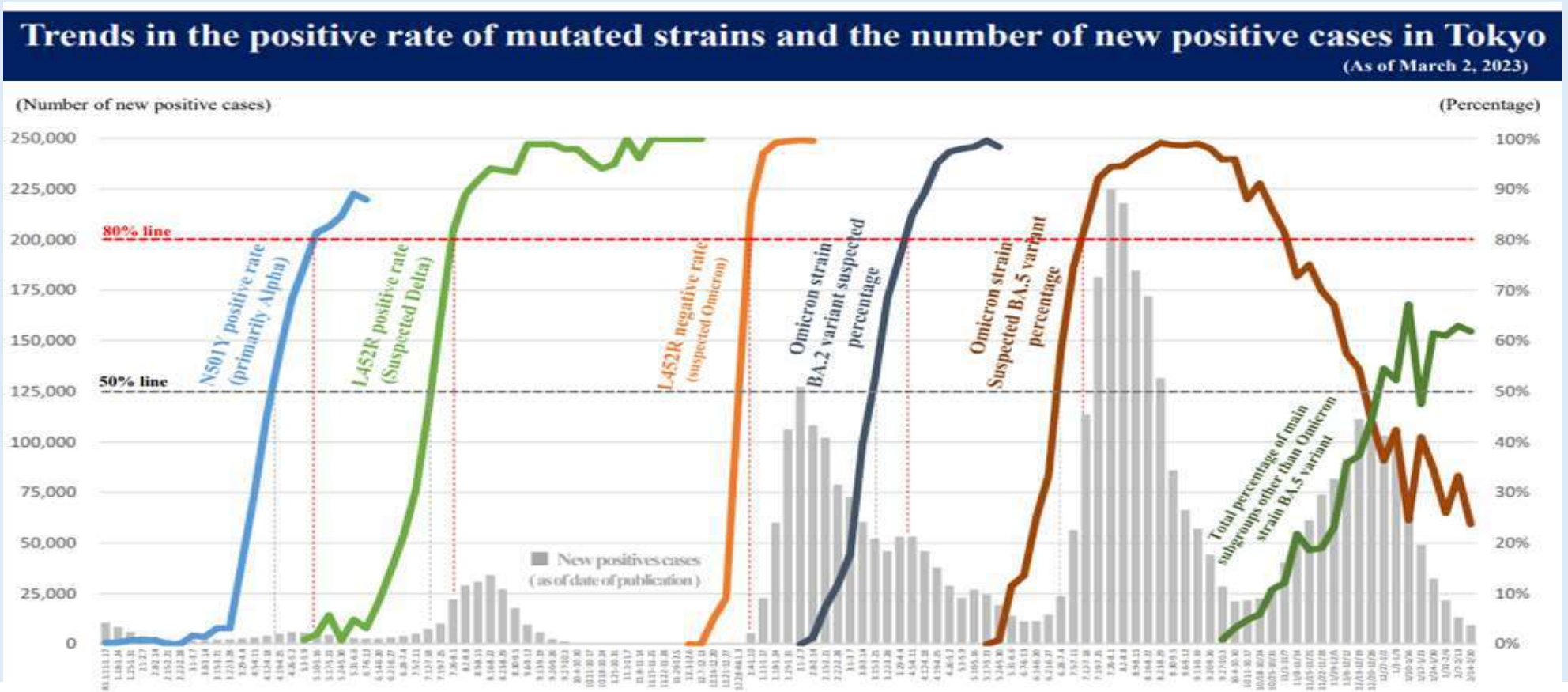
(As of 12:00, May 8, 2023)

Name	May	June	July	August	September	October	November	December	Jan.2023	Feb.2023	Mar.2023	Apr.2023
Omicron (BA.1)	53	1	1	0	0	0	0	0	0	0	0	0
Omicron (BA.2)	4,911	2,893	4,558	214	68	78	206	299	158	19	6	1
Omicron (BA.2.12.1)	29	213	993	69	7	0	0	0	0	0	0	0
Omicron (BA.2.75)	0	0	24	43	70	140	551	1,019	517	65	32	16
Omicron (BN.1)	0	0	0	0	11	141	1,188	2,433	1,753	494	231	47
Omicron (BA.4)	0	78	801	75	48	2	0	0	0	0	0	0
Omicron (BA.4.6)	0	0	23	32	37	36	56	23	1	0	0	0
Omicron (BA.5)	8	1,144	29,135	21,587	19,044	9,787	15,870	16,967	6,717	938	193	29
Omicron (BF.7)	0	0	10	30	56	217	1,186	3,279	2,482	526	119	35
Omicron (BQ.1)	0	0	0	0	5	72	550	945	567	110	31	15
Omicron (BQ.1.1)	0	0	0	0	5	278	1,719	3,688	2,918	458	128	36
XBB	0	0	0	0	1	78	126	115	36	18	9	7
XBB.1.5	0	0	0	0	0	0	0	29	55	96	317	258
XBB.1.9.1	0	0	0	0	0	0	0	1	29	113	114	38
XBB.1.16	0	0	0	0	0	0	0	0	0	0	0	0
Recombinant variants (excluding XBB)	8	0	0	0	0	0	14	36	43	32	25	5
Total	5,009	4,329	35,549	22,053	19,344	10,829	21,487	28,860	14,978	2,819	1,322	663
Number of new positive cases (by date reported)	101,664	58,599	567,728	757,621	244,023	106,143	257,031	462,603	279,867	47,190	23,072	10,567
Percent conducted	4.9%	7.4%	6.2%	2.9%	7.9%	10.8%	8.4%	6.2%	5.4%	6.0%	5.7%	6.3%

*Results of genome analysis of specimens from Tokyo, reported in the past year
*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)

Conducting of Variant PCR Testing ①

- Variant strains of the virus have been pointed out as having the potential for immune escape and increased severity, infectiousness, and transmissibility, and the emergence of new variants has tended to correspond with an increase in the number of infections.
- In addition to genome analysis, TMG began conducting its own PCR testing capable of identifying variants early on in order to ascertain the emergence of variant strains.

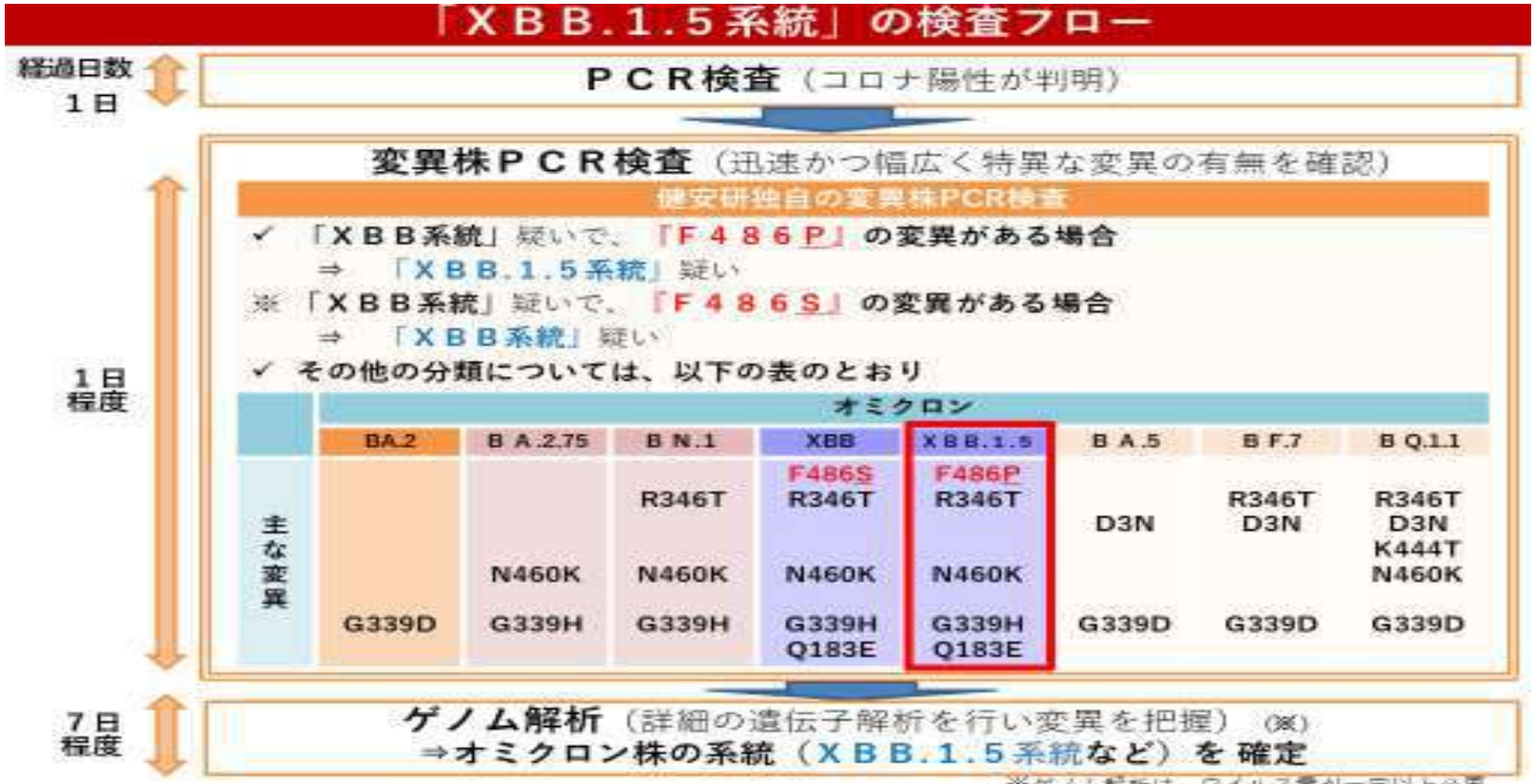


Conducting of Variant PCR Testing ②

- The Tokyo Metropolitan Institute of Public Health (TMIPH) began screening for COVID-19 variants in December 2020 with real-time PCR testing.
- Tests confirmed the presence or absence of the N501Y variant, a shared mutation in the spike protein found in the Alpha, Beta, and Gamma variants, the E484K variant, found in the Beta, Gamma, and R.1 variants, and the L452R variant, found in the Delta variant.
- TMIPH developed its own variant PCR testing method for the Omicron variant, and began conducting tests for it on December 3, 2021. This method makes it possible to estimate whether the COVID-19 detected corresponds to the Omicron, Delta, or Alpha variant by detecting the presence or absence of L452R, N501Y, and E484A mutations.

  *Testing system for COVID-19 variants at TMIPH: https://www.tmiph.metro.tokyo.lg.jp/lb_virus/mutation/

- Since the emergence of sub-lineages of the Omicron variant, TMG has conducted its own variant PCR testing focused on characteristic variants in order to quickly assess the status of their emergence.

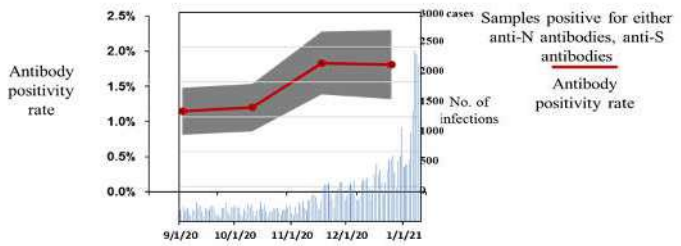


Large-Scale Seroepidemiological COVID-19 Study in Tokyo

- **The Tokyo Metropolitan Institute of Medical Science conducted a study using residual serum samples (14,096 samples collected between September 1 and December 31, 2020) from blood tests conducted on general patients visiting outpatient clinics at 8 Tokyo metropolitan hospitals and 6 public hospitals.**

(Reported at the 30th Monitoring Meeting held on January 28, 2021)
https://www.bousai.metro.tokyo.lg.jp/_res/projects/default_project/_page_/001/012/907/30kai/2021012807.pdf

Antibody positivity rate and changes in no. of infections

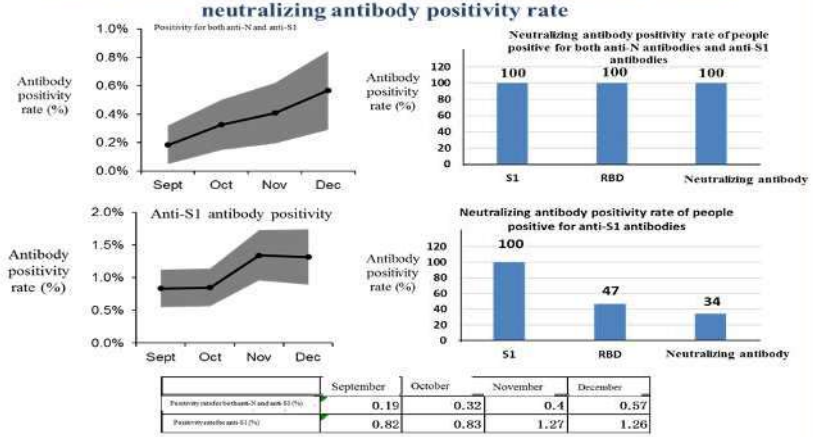


	September	October	November	December	All periods
Total no. of samples	3837	4006	3438	2815	14096
Positivity rate (%)	1.15	1.2	1.82	1.8	

The following was clarified through this research

- **There was an increase in the positivity rate from 1.2%→1.8% in November and December compared with September and October**
- **The spread of infections in cities is estimated from the antibody positivity rate**

People positive for anti-N antibodies and anti-S1 antibodies, and the neutralizing antibody positivity rate

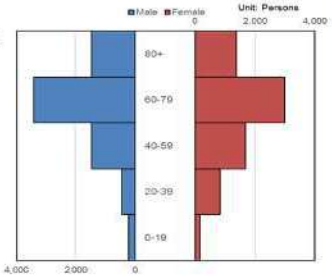


	September	October	November	December
Positivity rate for both anti-N and anti-S1 (%)	0.19	0.32	0.4	0.57
Positivity rate for anti-S1 (%)	0.82	0.83	1.27	1.26

- **People positive for both anti-N antibodies and anti-S1 antibodies show a high antibody possession rate for neutralizing antibodies, but this rate declines in people only positive for S1**

Samples used for this research

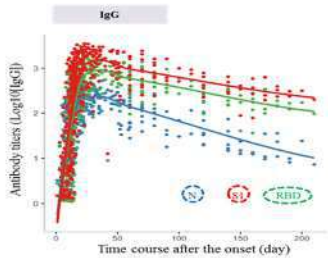
	Sept	Oct	Nov	Dec	Total
No. of samples	3,837	4,006	3,438	2,815	14,096
Sex					
Male	1,933	1,986	1,732	1,367	7,018
Female	1,904	2,020	1,706	1,448	7,078
Age					
0-19	99	114	118	65	396
20-39	317	408	311	255	1,291
40-59	829	928	753	636	3,146
60-79	1,770	1,771	1,556	1,319	6,416
80+	822	785	700	540	2,847
Area					
Eastern part of the 23 Wards	1,065	1,154	1,131	938	4,288
Western part of the 23 Wards	1,350	1,499	1,206	912	4,967
Tama	1,422	1,353	1,101	965	4,841



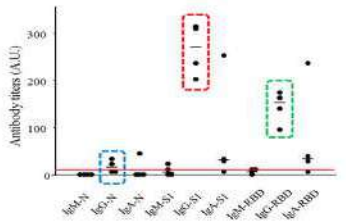
Age range: 0-103
Median: 69
IQR: 53-78

Ref: SARS-CoV-2 antibody types and continuation

1. Changes in antibody titer after onset



2. Antibody titers six months after infection



Professor Makoto Kurano, Department of Clinical Laboratory, The University of Tokyo Hospital

- **IgG antibody titers against S1 proteins and RBD were adequately maintained even in cases in which more than six months had passed. On the other hand, there were some cases in which IgG antibody titers against N proteins fell to less than the cut-off value.**

Antibody Retention Investigation at Tokyo Metropolitan Institute of Medical Science (1st)

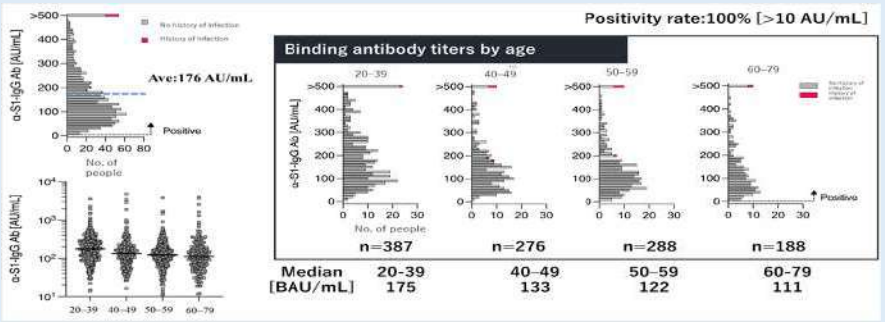
- Specimens (serum) from Tokyo Metropolitan Hospital personnel were used to measure antibodies about 7 months after receiving the 2nd dose of COVID-19 vaccine.
- Based on the results, which showed a decrease in antibodies after 7 months in all age groups, and lower numbers with increasing age, TMG promoted early additional vaccination (3rd dose), particularly for the elderly.
(Reported at the 80th Monitoring Meeting held on November 25, 2021)
https://www.bousai.metro.tokyo.lg.jp/_res/projects/default_project/_page_/001/020/622/70/20211125_07.pdf

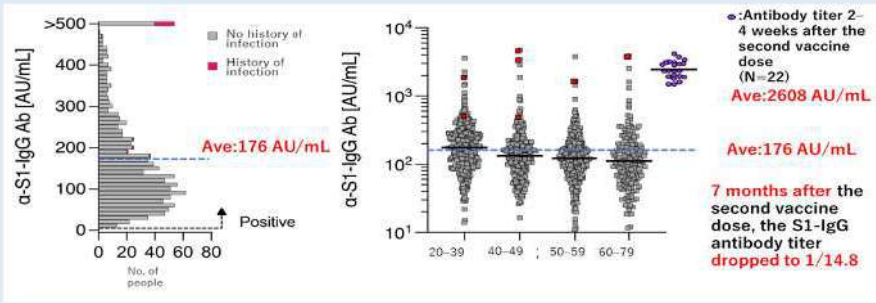
Specimen Information

- 1,139 Tokyo Metropolitan Hospital personnel (910 women, 229 men)　*Persons who received 2 doses of Pfizer mRNA vaccine
- Approximately 7 months since the last vaccination (180-220 days since vaccination (median of 213 days))

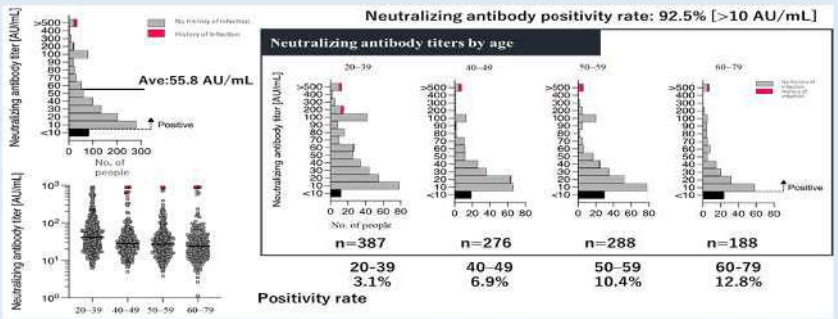
Results

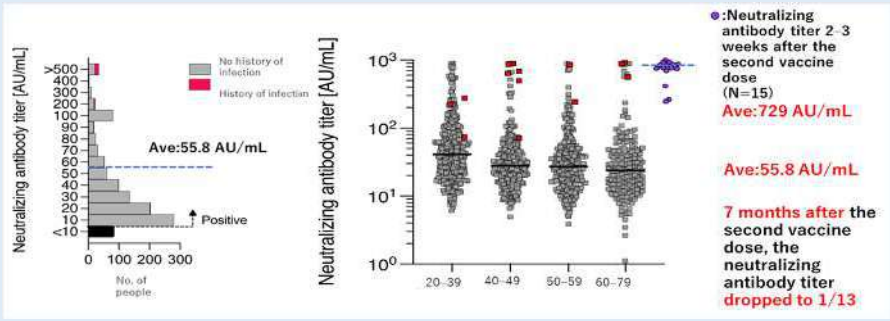
- Spike protein binding antibody titers (S1-IgG) averaged 176 AU/mL, with the levels decreasing with increasing age.
- This antibody titer was 1/14.8 lower than the mean of 2608 AU/mL of antibody titer 2-4 weeks after the 2nd dose of vaccine in 22 cases at the Tokyo Metropolitan Institute of Medical Science





- The mean neutralizing antibody (Nab) titer was 55.8 AU/mL, with the level decreasing with increasing age
- This neutralizing antibody titer was 1/13 lower than the mean value of 729 AU/mL of the antibody titer 2-3 weeks after the second dose of vaccine in 15 cases at the Tokyo Metropolitan Institute of Medical Science.





Microbiological Analysis Team
Vaccination Information Task Force

Antibody Retention Investigation at Tokyo Metropolitan Institute of Medical Science (2nd)

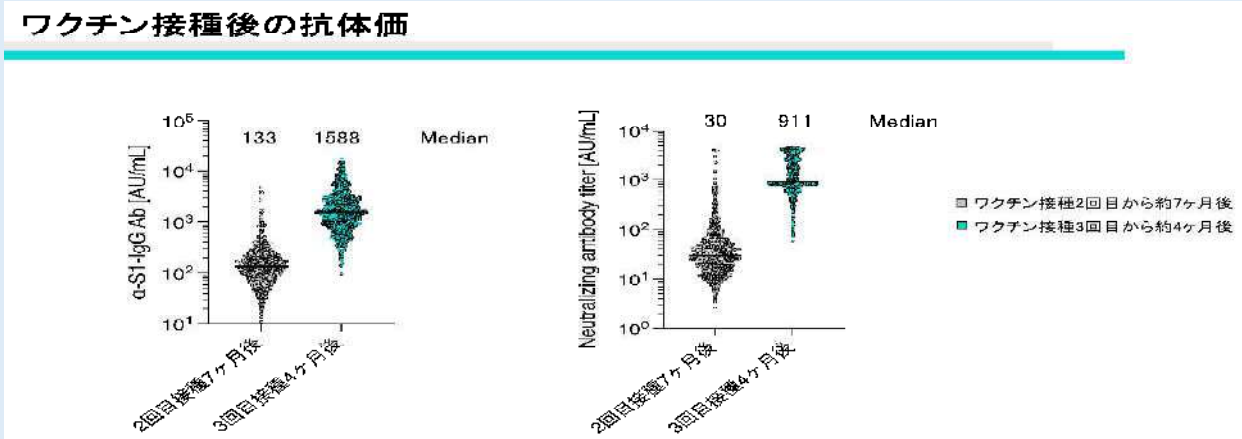
- **Specimens (serum) of Tokyo health care workers whose antibody levels were measured after receiving the 2nd dose of vaccine were used to measure antibodies 4 months after receiving the 3rd dose of vaccine.** (Reported at the 86th Monitoring Meeting held on April 21, 2022)
  https://www.bousai.metro.tokyo.lg.jp/_res/projects/default_project/_page_/001/021/411/85/20220421_10.pdf

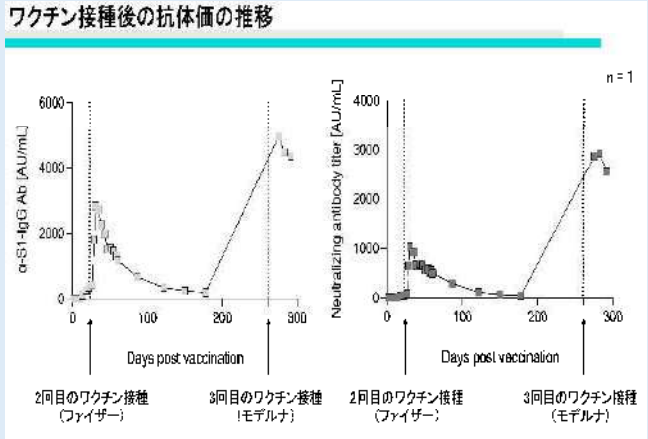
Specimen information

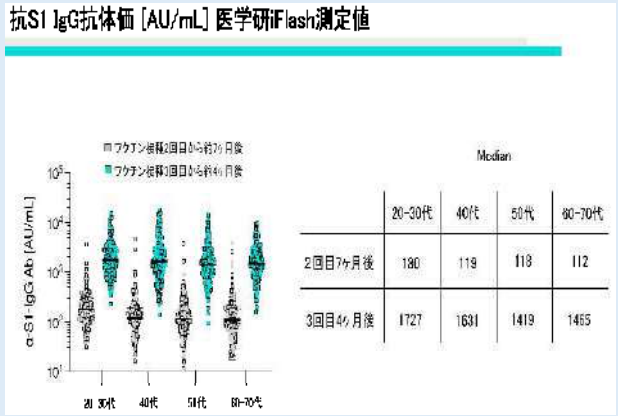
- 704 Tokyo health care workers (581 women, 123 men)
- Blood was taken 4 months after receiving the 3rd dose of vaccine (median of 119 days)
  *For reference, blood was taken 7 months after the 2nd dose of vaccine (median of 213 days)

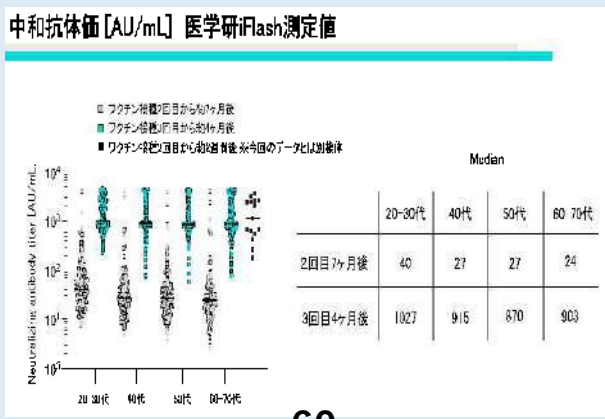
Results

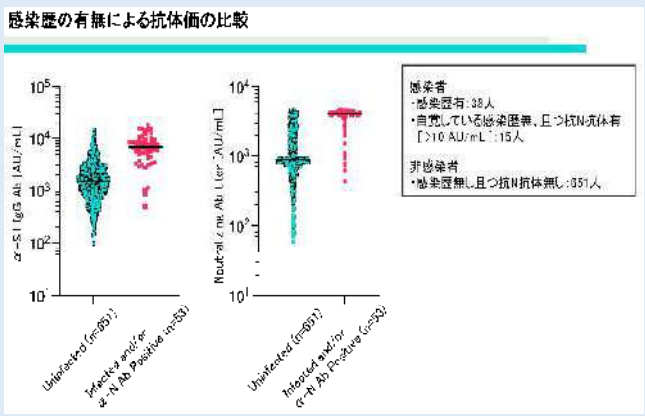
- Anti-S1 antibody titers increased after the 3rd dose of vaccine. Positive neutralizing antibody titers were also observed in all samples.
- After receiving the 3rd dose of vaccine, both anti-S1 and neutralizing antibodies tended to remain high.
- Both anti-S1 and neutralizing antibodies tended to be higher when there was a history of infection before or after vaccination.











Antibody Retention Investigation at Tokyo Metropolitan Institute of Medical Science (3rd)

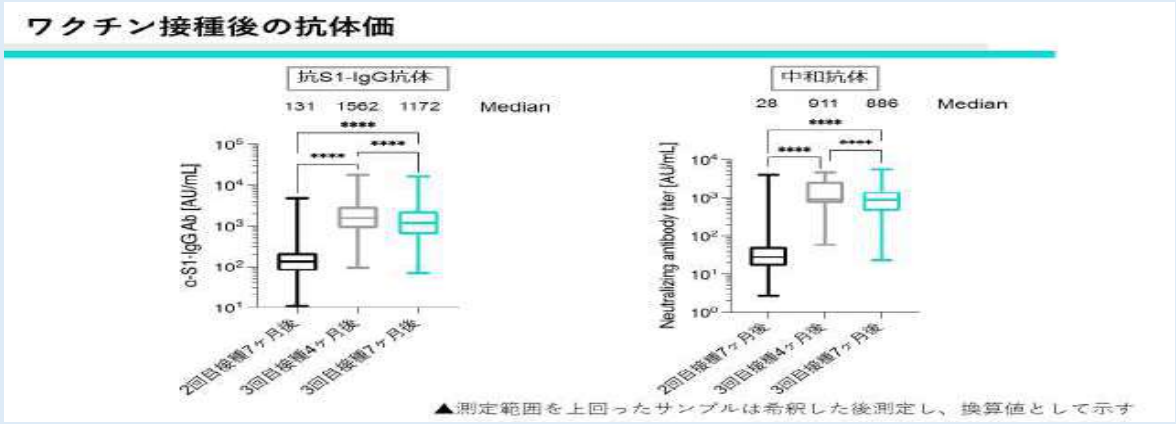
- **Specimens (serum) of Tokyo health care workers whose antibody levels were measured approximately 7 months after receiving the 2nd dose of vaccine and approximately 4 months after receiving the 3rd dose were used to measure antibodies 7 months after receiving the 3rd dose, or at least 1 week after receiving the 4th dose.**
  (Reported at the 93rd Monitoring Meeting held on July 14, 2022)
  https://www.bousai.metro.tokyo.lg.jp/_res/projects/default_project/_page_/001/021/840/93/20220714_08.pdf

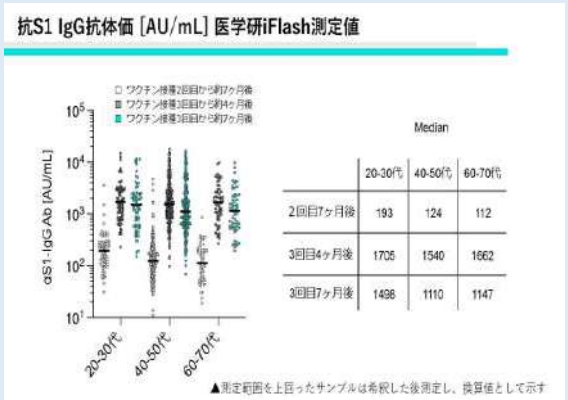
Specimen information

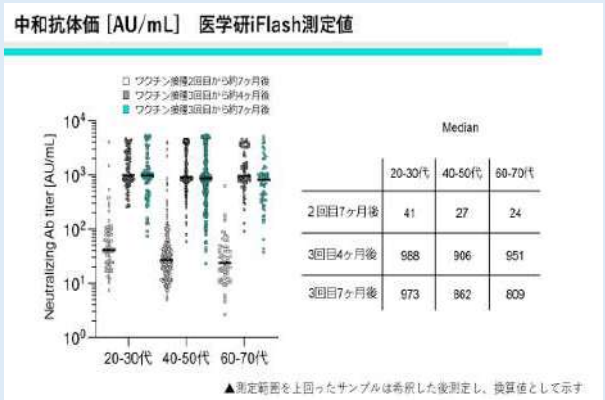
- 421 Tokyo health care workers (345 women, 76 men)
- Blood was taken on the day 7 months after receiving the 3rd dose of vaccine (median of 195 days, 378 people) or at least 1 week after the 4th dose (median of 17 days, 38 people)
  *For reference, blood was taken on the day 7 months after receiving the 2nd dose (median of 213 days), and 4 months after receiving the 3rd dose

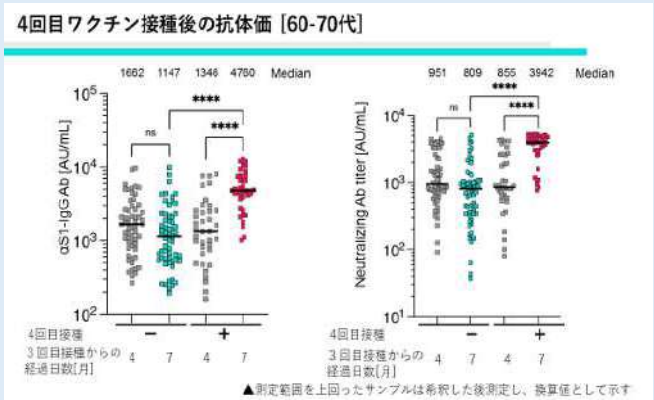
Results

- Anti-S1 antibody titers 7 months after the 3rd dose of vaccine declined significantly in comparison to 4 months after, but remained higher than the levels 7 months after the 2nd dose of vaccine.
- Neutralizing antibody titers 7 months after the 3rd dose of vaccine were also significantly lower than at 4 months, but remained higher than the levels 7 months after the 2nd dose of vaccine.
- After receiving a 4th dose of vaccine, anti-S1 antibodies and neutralizing antibodies both increased significantly compared to those who did not receive the vaccination.









Antibody Retention Investigation at Tokyo Metropolitan Institute of Medical Science (4th)

- **Specimens (serum) of Tokyo health care workers 3-4 months after receiving the 4th dose of vaccine and 1-18 days after receiving the 5th dose were used to measure antibodies.**

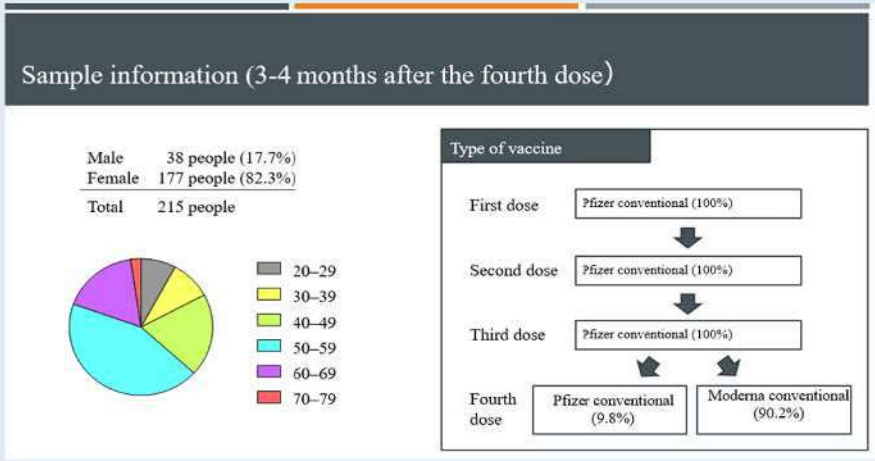
(Reported at the 108th Monitoring Meeting held on December 1, 2022)
https://www.bousai.metro.tokyo.lg.jp/_res/projects/default_project/_page_/001/022/682/20221201_08.pdf

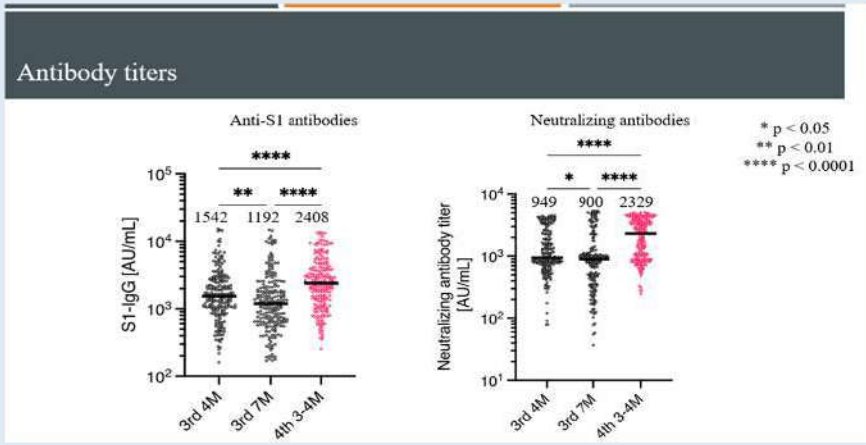
Specimen information

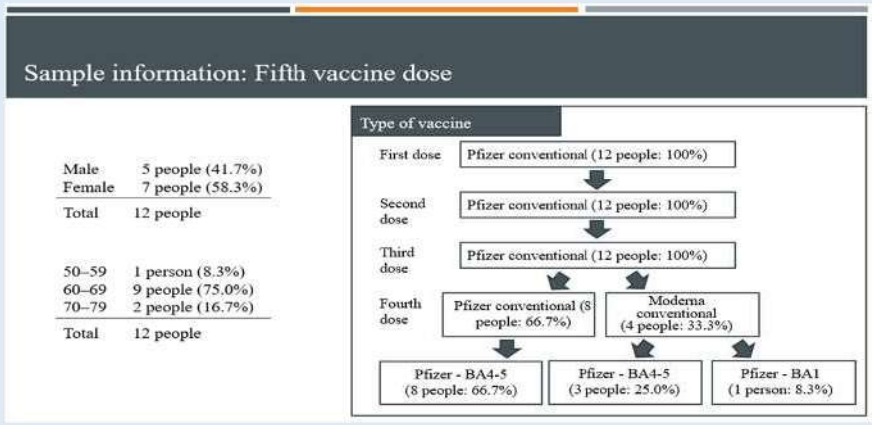
- 215 Tokyo health care workers (177 women, 38 men), 3-4 months after receiving the 4th dose of vaccine
- Blood samples from 12 health care workers (7 women, 5 men) 1-18 days after the 5th dose of vaccine

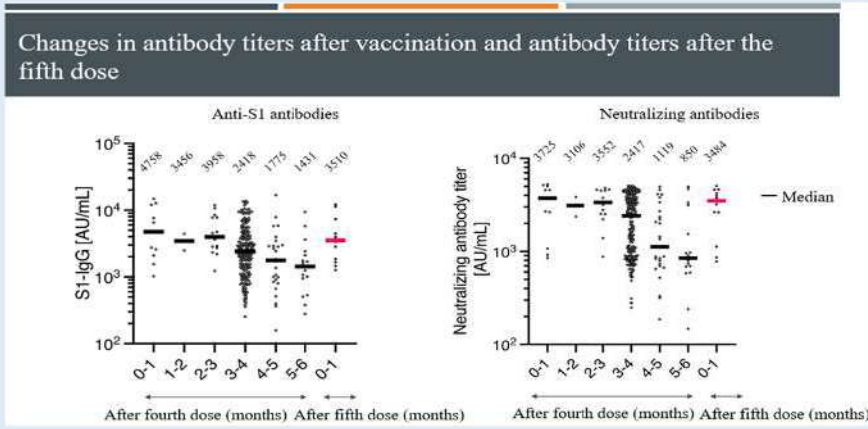
Results

- S1-IgG antibody titers and neutralizing antibody titers 3-4 months after the 4th dose of vaccine increased significantly compared to 4 months after the 3rd dose.
- Antibody titers after the 4th dose of vaccine were almost unchanged until 3 months after vaccination and then declined rapidly, albeit still at high levels, but increased after the 5th dose of vaccine to the same level 1-3 months after the 4th dose.









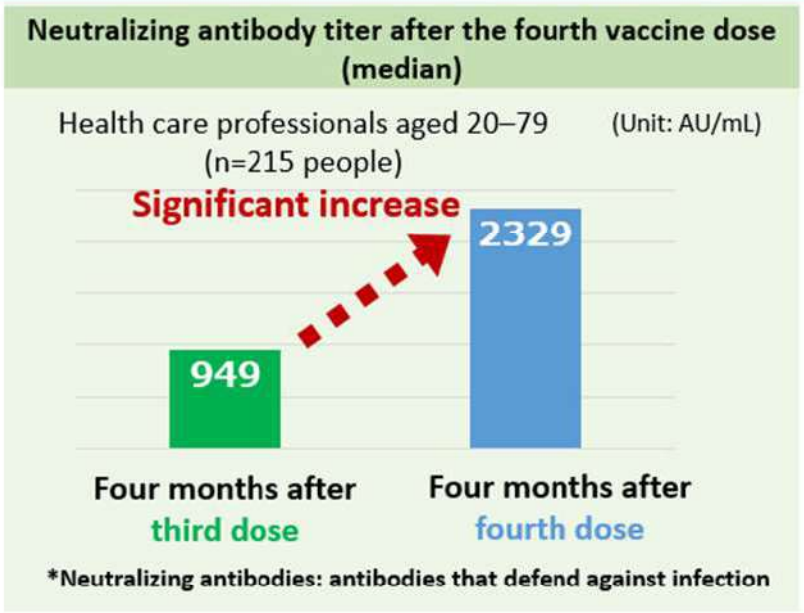
Antibody Retention Investigation at Tokyo Metropolitan Institute of Medical Science (4th) ②

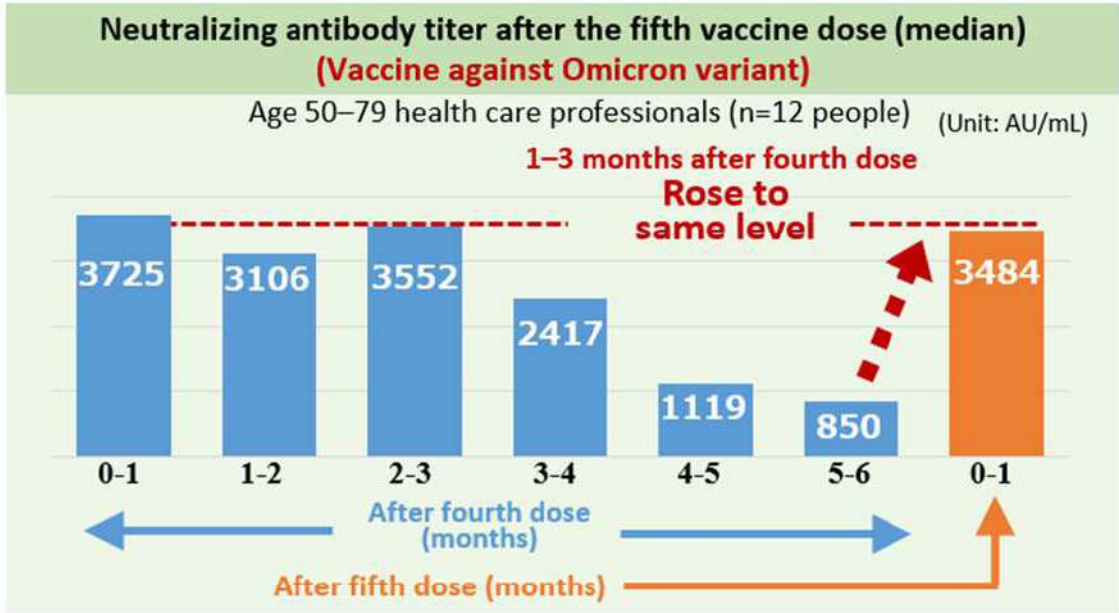
- **Information was disseminated to promote additional vaccination based on the results of the 4th antibody retention investigation at the Tokyo Metropolitan Institute of Medical Science, etc.**

(Governor's press conference held on December 2, 2022)

https://www.metro.tokyo.lg.jp/tosei/governor/governor/kishakaiken/2022/12/documents/20221202_01.pdf

Neutralizing antibody titers after the fourth and fifth vaccine dose





- The neutralizing antibody titer may decrease some time after the third dose
  - ➢ **Administer fourth dose in preparation for the spread of infection in the winter**
- Thanks to the fifth dose, it rose to the same level as 1–3 months after the fourth dose
  - ➢ **Administer the fifth dose early for people with a high risk of serious illness, such as the elderly**

*From "Changes in anti-S1-IgG antibodies and neutralizing antibody titers after the mRNA vaccine" Tokyo Metropolitan Institute of Medical Science (created based on materials from the 108th Tokyo Metropolitan COVID-19 infection monitoring meeting)

Publicizing of COVID-19 Vaccination

- **Expert opinions on the effectiveness and safety of vaccines were included in the August 2021 issue of the TMG News.**

  https://www.koho.metro.tokyo.lg.jp/2021/08/documents/202108.pdf

8月号は7月15日時点の情報に基づき作成しています。　東京都のホームページ https://www.metro.tokyo.lg.jp/　都庁の代表電話 ☎03-5321-1111

新型コロナウイルス　ワクチンについて

ワクチンの効果や安全性について、感染症の専門家に意見を伺いました。

賀来満夫先生

東京iCDC 専門家ボード座長・
東北医科薬科大特任教授

濱田篤郎先生

東京医科大学病院
渡航者医療センター特任教授

ワクチン接種が推奨される理由

- 一つ目に、接種を受けることによって、発症や重症化を防ぐことが期待される、ということがあります。つらい症状に苦しまなくて済む、という接種を受けた人のメリットと同時に、患者さんを受け入れる医療機関の負担軽減にもつながります。
- 二つ目に、「集団免疫」の獲得が期待される、ということです。「集団免疫」とは、多くの人が免疫を持つことで感染症が流行しなくなる状態のことで、ワクチン接種が進むことで、その効果が得られるといわれています。
- 新型コロナウイルスに特効薬はありません。苦しむ人を少なくするため、多くの方にワクチンを接種していただきたいと思います。

接種後も感染対策は必要

- 現在のワクチンは、発症を予防したり重症化を防いだりする効果は期待されていますが、感染そのものを防ぐ効果や、他の人に感染させない効果があるのかについては、まだ分かっていません。
- このため、マスクの着用やこまめな手洗い、3密を避けるといった基本的な感染対策は続けることが必要です。

ワクチンの効果について

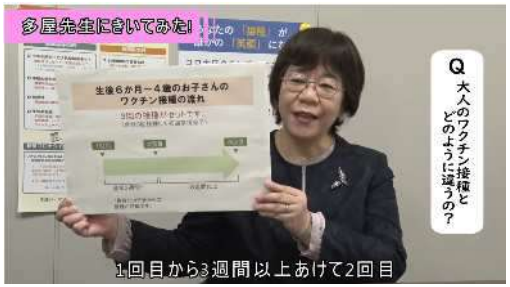
- 現在接種されている2種類のワクチン（ファイザー社製、武田／モデルナ社製）には、かなり効果があるといわれています。海外での臨床試験では、ファイザー社製のワクチンでは約95%、武田／モデルナ社製のワクチンでは約94%の発症予防効果が確認されています。
- これまでの研究から発症予防に加えて重症化予防の効果も期待されていますが、現時点では、感染自体を防ぐ効果があるかどうかまでは分かっていません。

副反応について

- 接種後の軽い副反応は、打ったところが腫れる、痛くなる、熱が出る、体のだるさなどで、接種した半数程度の人に起こりますが、若い人だけでなく、高齢でも元気な人は1日か2日で消えていきます。
- 重症な副反応ではアナフィラキシーというアレルギー反応があります。アナフィラキシーは接種後、比較的短い時間で発生しますので、接種後は会場でしばらく待機してください。症状が出ても、すぐ処置を受けることで対処できます。
- アナフィラキシーがどういう人に起こりやすいのか、さまざまなデータが集まって来ていますので、心配な方は、接種前の問診で医師に相談してください。なお、アレルギー体質の人は注意が必要です。問診で必ず申告してください。

Publicizing of COVID-19 Vaccination (YouTube)

- TMG staff served as anchors for three-part interviews sessions with Tokyo iCDC experts, Professor Mitsuo Kaku and Professor Keiko Taya, one about COVID-19 measures and the other on the vaccination of children, which were distributed via the TMG Official Video Channel and YouTube.



● Distributed since November 25, 2022

Video 1: Relationship between COVID and the flu
Video 2: Preparation
Video 3: Vaccination
https://tokyodouga.jp/8yind0wys4w.html

● Distributed since December 14, 2022

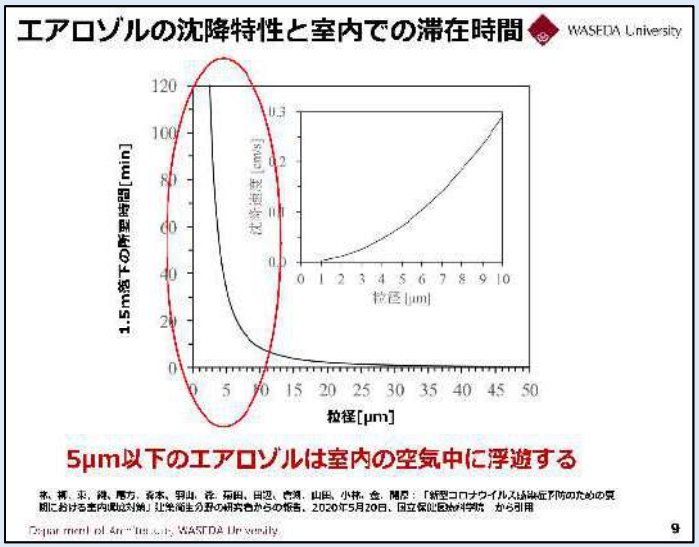
Video 1: Vaccination of infants and toddlers
Video 2: Vaccine side effects among infants and toddlers
Video 3: Vaccination of 5-year olds
https://tokyodouga.jp/hyxdvtx9zhy.html

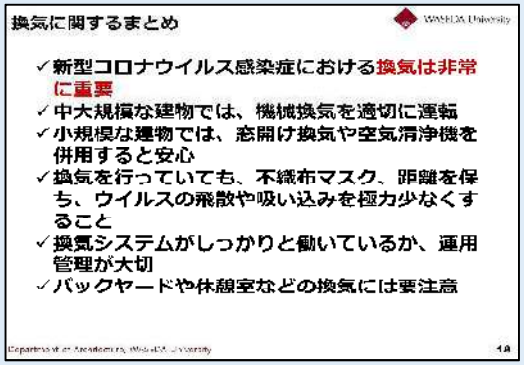
R&D Team
Ventilation & Indoor Infection Measures TF

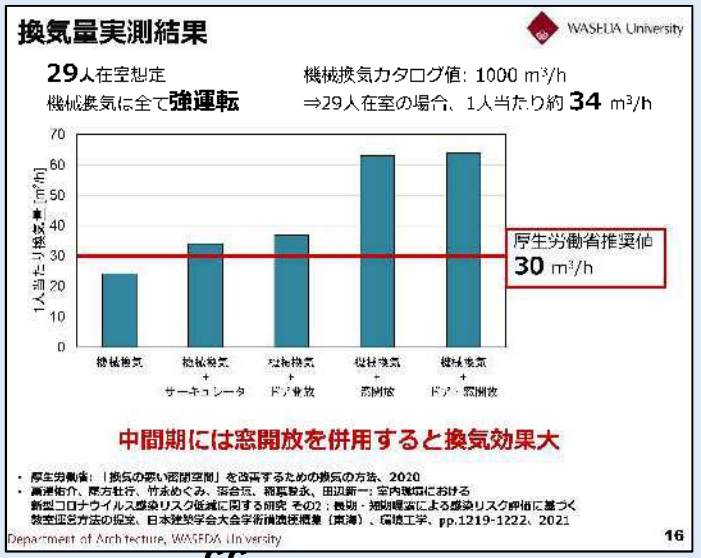
The Importance of Ventilation in COVID-19 Infection Control

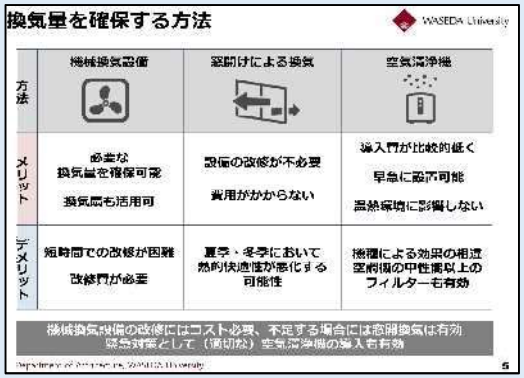
- **The importance of ventilation as a measure against COVID-19 was stressed based on studies on the settling characteristics of airborne particles (aerosols) and time spent indoors, and on the dispersal of aerosols and droplets during breathing and conversation, as well as the results of ventilation measurements in classrooms (on university campuses).**
  (Reported at the 68th Monitoring Meeting held on October 21, 2021)
  https://www.bousai.metro.tokyo.lg.jp/_res/projects/default_project/_page_/001/020/461/68/20211021_09.pdf

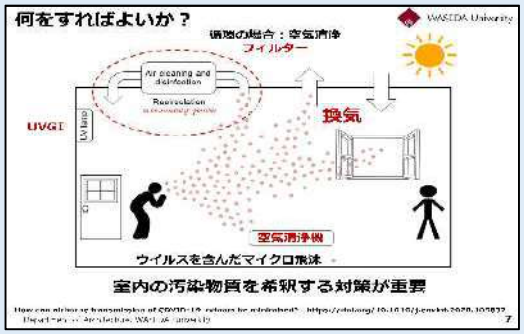
＜Excerpt from Monitoring Meeting materials＞







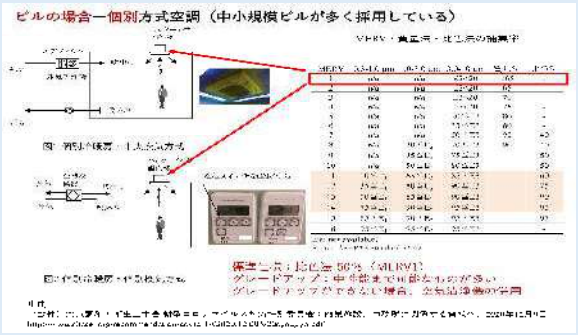


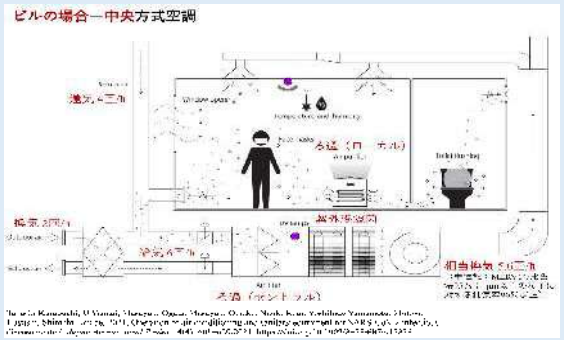


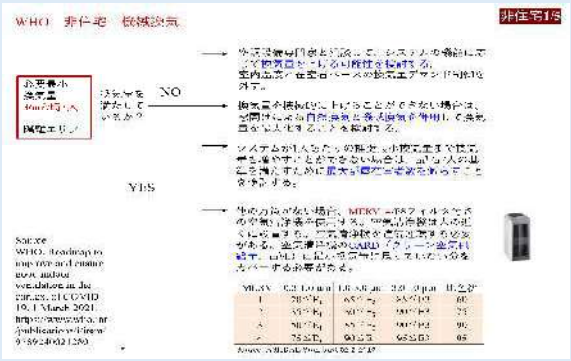
Indoor Infection Control Measures at Home and in the Workplace

- A report was made at the 68th Monitoring Meeting held on October 21, 2021, on effective infection control measures at home and in the workplace based on the characteristics of aerosols, the effectiveness of ventilation using a range hood based on a ventilation simulation, etc.
  https://www.bousai.metro.tokyo.lg.jp/_res/projects/default_project/_page_/001/020/461/68/20211021_10.pdf

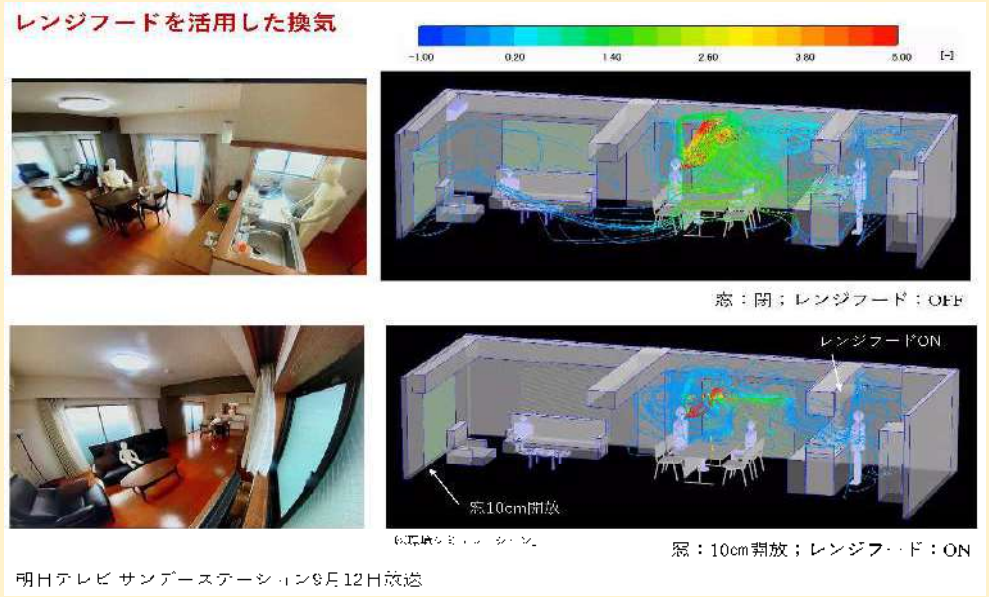
【In the Workplace】

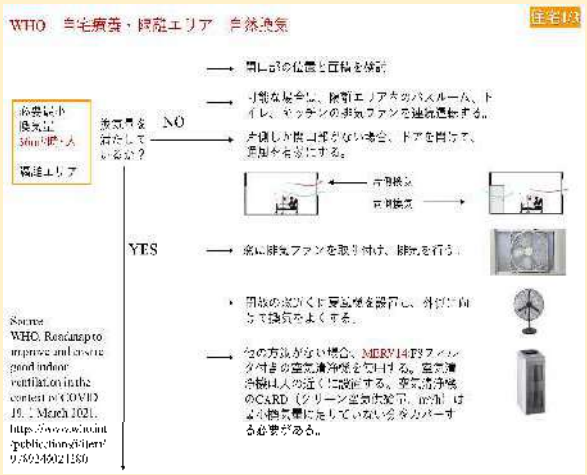


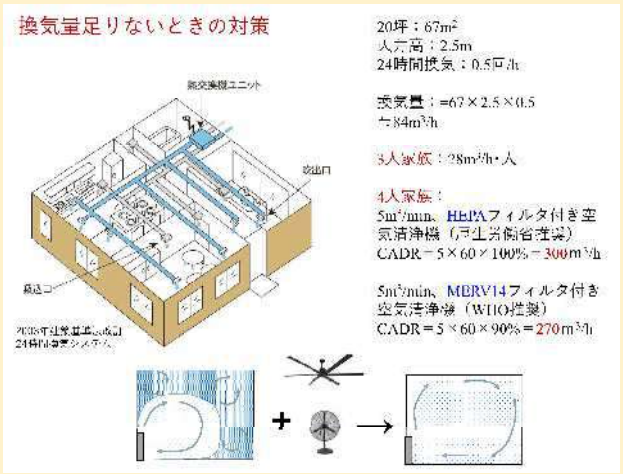




【At Home】







Key Points for Ventilation at Home (dissemination of information on the “Tokyo iCDC blog”)

- Easy-to-understand information on ventilation in the office and preventing infection while commuting was disseminated, presented in the form of an interview with an expert.

https://note.com/tokyo_icdc/n/nf01ac9038ded

1. Recommendation to operate a convenient, 24-hour ventilation system

2. Something many people don’t know: what is the right way to open a window for ventilation?

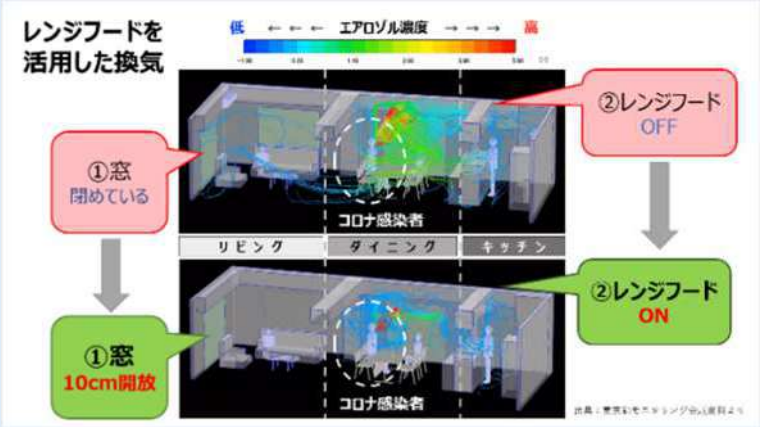
3. How should I ventilate on a cold day?

Set the room temperature to 18℃ or higher and the humidity to 40% or more.

4. How to select and use an air purifier

【Recommendation】① HEPA filter ② Airflow capacity of 5 cubic meters per minute or more

5. You can use equipment that you have in the kitchen!



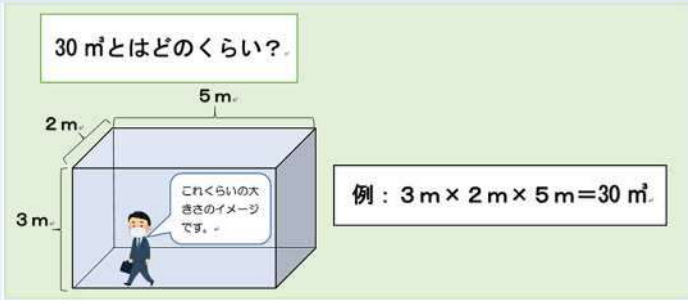
Office Ventilation and Preventing Infection when Commuting (dissemination of information on the “Tokyo iCDC blog”)

- Easy-to-understand information regarding ventilation in the office and preventing infection while commuting was disseminated, presented in the form of an interview with an expert.

https://note.com/tokyo_icdc/n/nf876d41ff994

1. What are the key points for ventilation in the office?

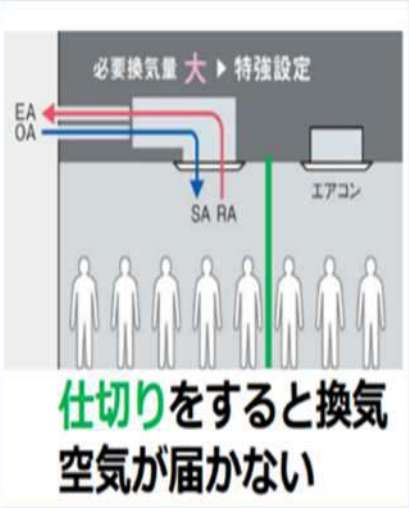
The ventilation rate should be 30 ㎥/h per person as a general rule.
The concentration of carbon dioxide should be less than 1,000 ppm.



2. How to ensure proper ventilation if you can’t open a window

Ventilation is possible by using mechanical ventilation.
① Central air system ⇒ Turn both the heating/cooling and ventilation switches on, <u>at the same time</u>.
② Ventilation with an individually distributed air conditioning system ⇒ Turn both the heating/cooling and ventilation switches on, <u>one at a time</u>

The location of supply/exhaust and air conditioners is also important during mechanical ventilation.



3. Is the ventilation on commuter trains safe?

Trains are basically ventilated by mechanical system and opening windows and through the opening and closing of the car doors, but avoiding crowding is also effective in reducing the risk of infection.

R&D Team
Ventilation & Indoor Infection Measures TF

Created a Ventilation Checklist for Care Facilities for the Elderly and Facilities for Persons with Disabilities

- In view of the importance of ventilation as a basic measure for preventing infection, along with the elderly and persons with disabilities being at high risk of developing severe symptoms if they contract COVID-19 and the existence of cases in which once there was an infection in a facility, a cluster followed, a ventilation checklist for care facilities for the elderly and facilities for persons with disabilities was created and reported at the 90th Monitoring Meeting held on June 23, 2022.
- The checklist was disseminated to facilities, and was also used for online training for facilities which was held in early July 2022.
  https://www.hokeniryo.metro.tokyo.lg.jp/kansen/corona_portal/iryokikan/koureisyachecklist.html


高齢者施設・障害者施設における換気のチェックリスト

季節を問わず、新型コロナウイルス感染症対策には、こまめな換気が重要です。高齢者施設や障害者施設には、重症化リスクの高い方や基礎疾患のある方がいらっしゃるため「換気の悪い密閉空間」を改善するよう、十分に対策を講じましょう。

機械換気設備を確認しましょう
※ 高齢者施設・障害者施設では、機械換気設備による換気が基本です。

□ 機械換気設備（換気扇など）の設置場所を把握していますか？
□ 機械換気設備の点検はしていますか？
➢老朽化やメンテナンス不良により、必要な換気量（一時間で居室空気の半分以上）の入れ替えが出来ないことがあります。フィルタの清掃・交換は忘れずに！
➢機械換気設備の設置場所や点検についての御不明な点は、設計会社や空調設備の専門家等に御確認ください。

□ 機械換気設備は２４時間稼働していますか？
➢機械換気設備は、24時間稼働させることを前提に設計されています。
➢機械換気設備の種類は、①中央式空調（冷暖房と一緒に換気）②個別分散空調があります。2の場合は、冷暖房のスイッチと換気スイッチが別になっている場合があります。換気スイッチは常にON！

○ 中央式空調（例）

機械換気設備のない部屋では、窓開け換気をしましょう
□ ２方向の窓や扉を開けて、室内全体に空気の流れを作っていますか？ ①
□ 高い位置の窓を開け、天井にこもりやすい空気を外に出していますか？②
□ 窓際に扇風機やサーキュレーターを外向きに設置し、室内の空気を排出していますか？③

①　②　③

➢目安として、日中は1~2時間ごとに5~10分間、窓や扉を開ける、または常時5~10ｃｍほど開けておくなどして部屋の空気を新鮮に保ちましょう。

レンジフードを利用した換気では
□ ユニット内の共同生活室のキッチンの換気扇を利用していますか？
□ その場合、離れた場所の窓を開放していますか？
➢レンジフードは吸い込む風量が大きいので、窓開け換気と併用することにより、効果的に換気ができます。


換気などについての留意事項

● パーテーションやアクリル板が換気を遮らないようにしましょう
➢パーテーションなどが高すぎると空気が滞留し換気を阻害する可能性があります。人の顔の位置を目安に、飛沫がかかる可能性のある場所に適宜、置いてください。

● 夏場は熱中症に気を付けましょう
➢夏場は熱中症予防のため、適切な冷房に加えて扇風機やサーキュレーターを併用して空気を循環させましょう。水分補給も忘れずに
➢暑い時は無理をせず、熱中症に十分注意してこの夏を過ごしましょう。

● 空気清浄機の活用も有効です
➢換気を補うため、窓開け換気に加え空気清浄機の活用が有効です。
【望ましい配置】
・人の居場所から１０m（６畳）程度の範囲内に空気清浄機を設置しましょう。
・空気のよどみを発生させないように、外気を取り入れる側向きと空気清浄機の風向きを一致させましょう。

空気清浄機置き方のイメージ図
10m

（参考）換気状態を確認する方法
◇ CO2センサー（CO2濃度測定器）を使うことで、CO2濃度を測定でき、室内の換気状態を確認できます。
◇ 建築物衛生法に基づくCO2濃度基準値1,000ppmを超える場合は、換気量が不足しています。測定値が800ppmを超えている場合には、窓開け換気など追加の換気対策をお勧めします。

【センサーが正常に動作しているかの確認】
・屋外のCO2濃度を測定したとき、測定値が外気のCO2濃度（415ppm~450ppm 程度）に近いか確認しましょう。
・センサーに呼気を吹きかけて、測定値が大きく増加することを確認しましょう。
・消毒用アルコールをかけた手を近づけても、測定値が大きく変化しないことを確認しましょう。

Key Points

Check the mechanical ventilation system

- ✓ Do you know where it is installed?
- ✓ Have you inspected it? Don't forget to clean and replace the filters!
- ✓ Does it run 24 hours a day? The ventilation switch should be set to "on" at all times!

For rooms without mechanical ventilation equipment, open a window to ventilate!

- ✓ Are you creating air flow by opening a window and a door that face in two directions?
- ✓ Use a fan, circulator, range hood etc. together for the best results!

R&D Team
Ventilation & Indoor Infection Measures TF

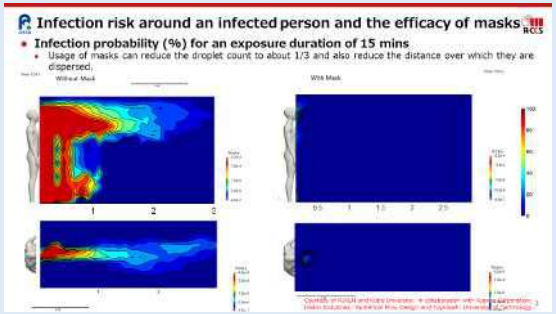
Simulations of Airborne Droplets Using the Supercomputer Fugaku to Prevent the Spread of Infection

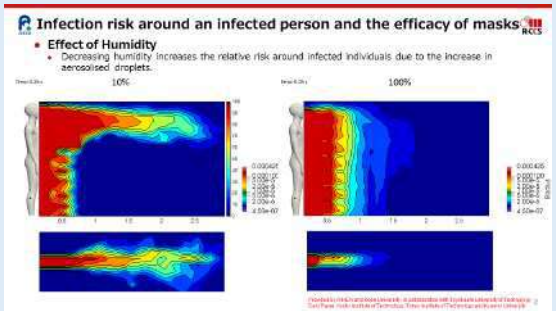
- **Simulations conducted with the RIKEN supercomputer Fugaku useful for preventing the spread of infection during the 8th wave of the COVID-19 pandemic, such as the effectiveness of masks and measures to reduce risks in small stores, on public transportation, and in banquet halls were reported at the 108th Monitoring Meeting held on December 1, 2022.**

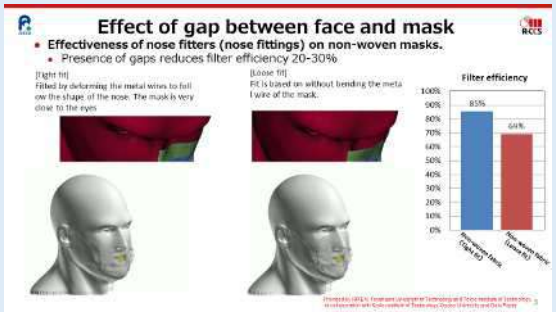
https://www.bousai.metro.tokyo.lg.jp/_res/projects/default_project/_page_/001/022/682/20221212_01.pdf

＜Excerpt from Monitoring Meeting materials＞

【Mask Effectiveness】

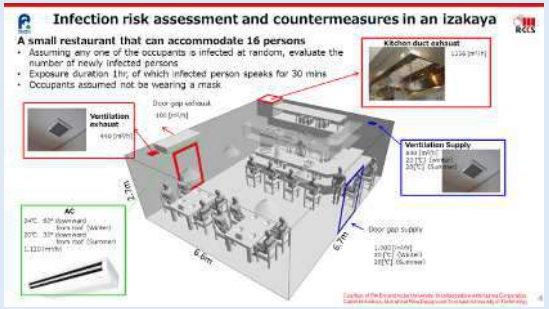


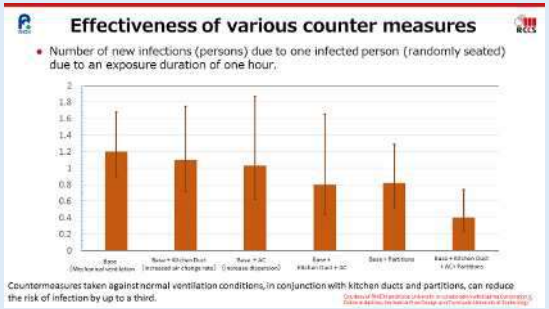




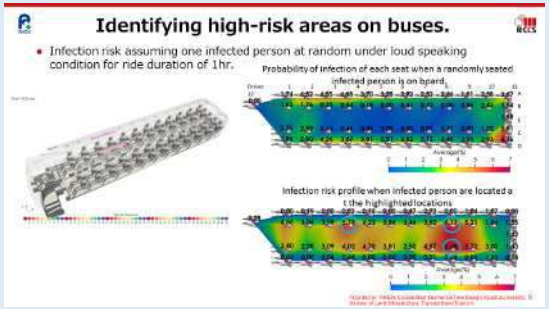
【Measures to reduce risks in small stores, public transportation, banquet halls, etc.】

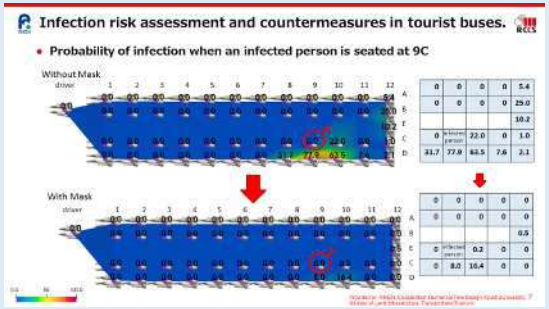
● Small store



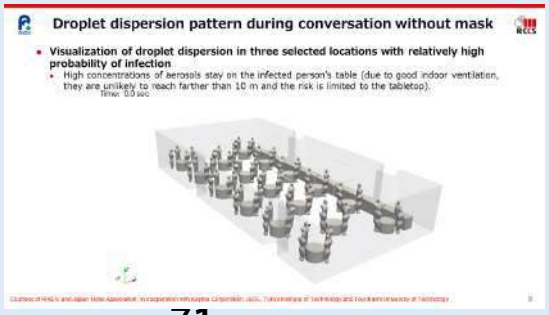


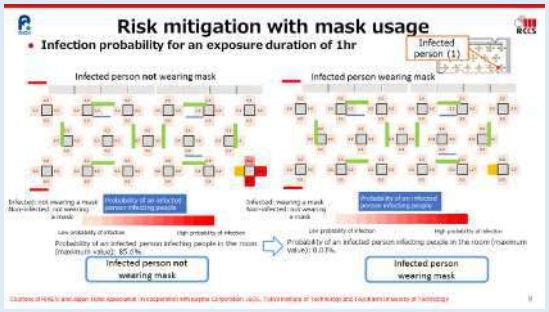
● Transportation facilities





● Banquet halls





The Tokyo Program for Infectious Diseases Doctors

- **This program aims to train medical doctors as infectious disease specialist and public health specialist**

The program is to train doctors to lead the response of TMG, at the time of outbreaks of serious infections diseases in Tokyo.

Training program (5 years)

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.**

(Example of a training module)

Receive specialist course at university hospital		Receive specialist course at another hospital	Work at Tokyo Metropolitan Hospital	
Year 1	Year 2	Year 3	Year 4	Year 5

Training Module	Specific contents	Activities
Infectious diseases knowledge	○ Acquire basic knowledge of infectious disease	○ Provide infectious disease consultation to patients ○ Conduct outpatient clinical practice (General infectious diseases, HIV and STD vaccines, and occupational infection) ○ Manage hospitalization of people living with HIV ○ Learn about the appropriate use of antimicrobial drugs ○ Collaborate with other local medical facilities
Infectious disease testing and diagnosis	○ Gain skills on accurate medical interview to patient's previous and current medical history and antibiotic use ○ Understand various types of tests for infectious diseases ○ Understand the characteristics of pathogens (TB and imported infectious disease) ○ Acquire knowledge on vaccines	
Infectious disease treatment	○ Understand the characteristics of antimicrobial drugs and their side-effects	
Infection prevention and control	○ Work with nurses and clinical lab technicians to implement appropriate infection control in facility	

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.**

(Example of a training module)

Receive specialist course at public health center		Receive specialist course at NIID	Work at public health center or TMG	
Year 1	Year 2	Year 3	Year 4	Year 5

Training Module	Specific contents	Activities
Epidemiological investigation in infectious disease outbreak	○ Understand the basic of epidemiological investigation, e.g. collect, analyse and interpret of epidemiological data ○ Facilitate activities with various stakeholders ○ Appropriate time management	○ Learn epidemiological and statistical methods, pathogens, relevant legislation ○ Conducts case studies
Surveillance	○ Describe and interpret surveillance data ○ Facilitate activities with various stakeholders	○ Evaluate surveillance system
Epidemiological research	○ Interpret medical and public health papers ○ Understand the limitations of research ○ Understand of causal inference	○ Conduct epidemiological study
Risk assessment	○ Conduct risk assessment of public health emergencies in Japan and abroad	○ Conduct of risk assessment of various infectious diseases

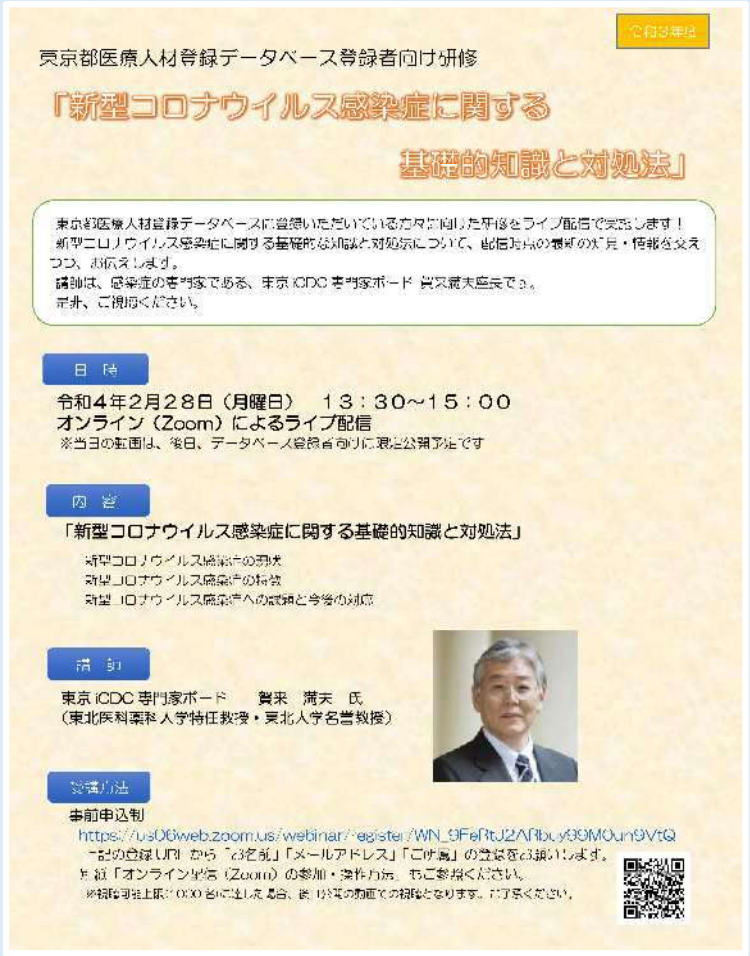
HR Development Team

Training for Individuals Registered in the Tokyo Medical Personnel Registration Database

- **Training by Tokyo iCDC experts on COVID-19 was conducted for persons registered in the Tokyo Healthcare Provider Database.***

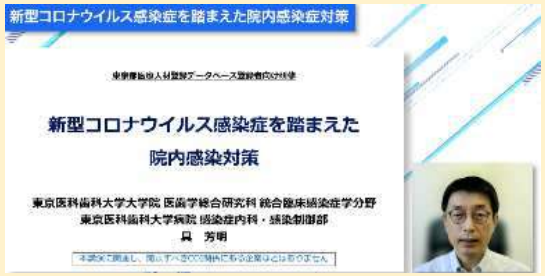
*In November 2021, TMG established the **Tokyo Healthcare Provider Database** to prepare for the spread of COVID-19 and to have medical institutions, doctors, nurses, and other personnel register personnel information in advance to allow them to promptly start work at the facilities requested by TMG.

【1st Session】 February 28, 2022 Live broadcast



【2nd Session】 November 22, 2022 distribution of video recording

Training videos by iCDC experts on characteristics of the Omicron variant, vaccines, treatment, infection control in hospitals, and infection after-effects were disseminated.



COVID-19-Influenza Twindemic Countermeasures

- **Studies about the consultation and testing structures as well as the consultation structure for patients with a fever in preparation for 2020-21 seasonal influenza**

https://www.hokeniryo.metro.tokyo.lg.jp/kansen/icdc/tokyoicdcuneiiinnkai.files/1029shiryou3.pdf

新型コロナウイルス感染症とインフルエンザの同時流行に関するタスクフォースによる検討について

次のインフルエンザに備えた体制整備について、都ではどのように対応するかを検討するため、専門家メンバーによるタスクフォースを立ち上げて、都の担当者と議論し検討を進めてきた。

1　座長：森村　尚登　氏（東京大学大学院医学系研究科　救急医学教授）　※委員は「資料４」のとおり

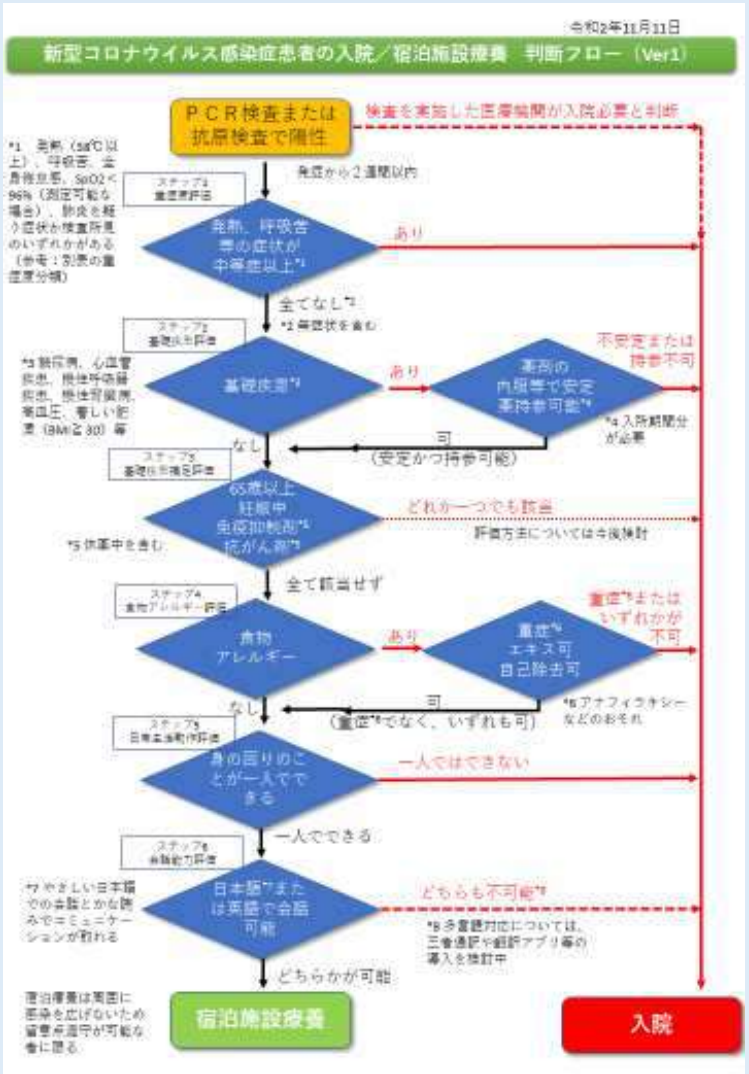
2　タスクフォース会議の開催：計３回（9/23・9/30・10/7）

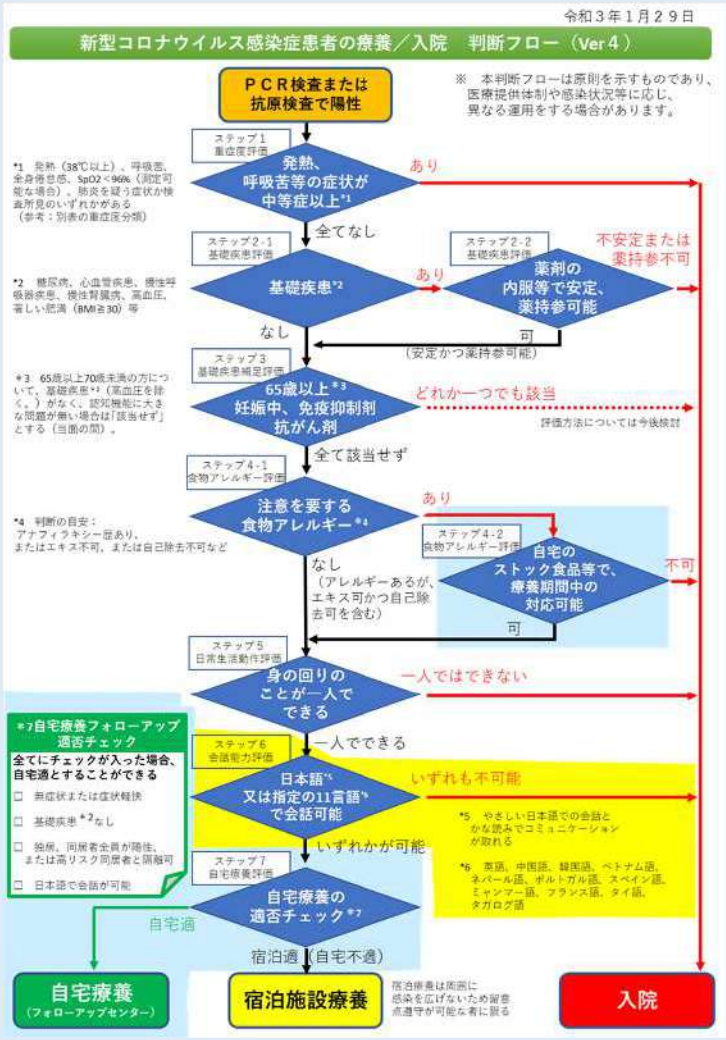
＜タスクフォースによる主な意見＞

事項	意見の概要
医療提供体制 （相談・診療・検査）	**○需要の想定** ・過去から推計される最大値で想定することは妥当（発熱患者の受診率が上がれば、更なる需要増の可能性） ・土日夜間の医療提供体制は急には増やせないので、注意が必要 **○診療等の体制** ・インフルもコロナも「重症化予防」を第一の目的に対応を検討すべき ・間口を広げ、原則全ての医療機関で診療するとの方針でいくべき。特定の機関のみでは対応できない ・PCRセンターや新コロ外来の検査能力は診療所より高く活用すべき ・かかりつけ医では基礎疾患等を踏まえ重症化リスクを判定し、必要な方に確実にコロナ検査を受けられる流れを作る（PCRセンターや診診連携） **○診療・検査（コロナ迅速キットの活用）** ・かかりつけ医など診療所ではPCR検査、コロナの抗原キットは、入院時など迅速性が求められる医療機関での活用を優先する方向性でよい ・インフル、コロナとも重症化のリスクの高い層にはコロナ検査を実施するなどフローを作成
周知・広報	○発熱患者は「かかりつけ医・地域の医療機関を利用しましょう」というメッセージを発し、流れを作ることが必要 ・「診療・検査医療機関」を公表するとこの流れが作れない（公表すべきでない） ・「診療・検査医療機関」情報は、公表せず関係機関で共有し活用 ○すべて電話相談で医療機関を紹介するのではなく、都民が自ら医療機関を探すよう周知すべき （⇒ひまわりも活用）

Creating a Decision-making Flow about Hotel Recovery or Hospitalization

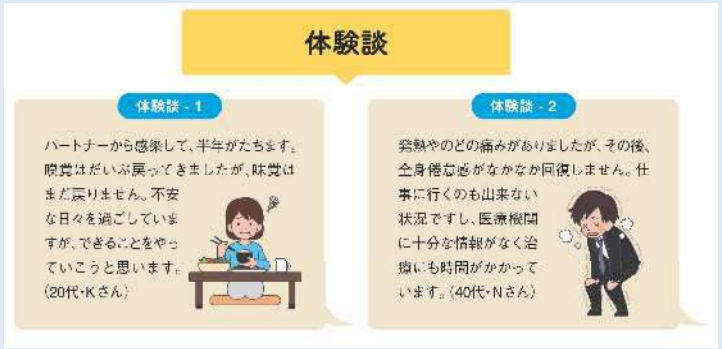
- **Creating a decision-making flow about COVID-19 designated hotel recovery or hospitalization from the perspective of prioritizing medical resources to people who are serious cases and at risk of developing serious illness (for distribution to Public Health Centers)**
- **Updated as necessary based on exchange of opinions with Public Health Centers etc. in response to the infection situation**

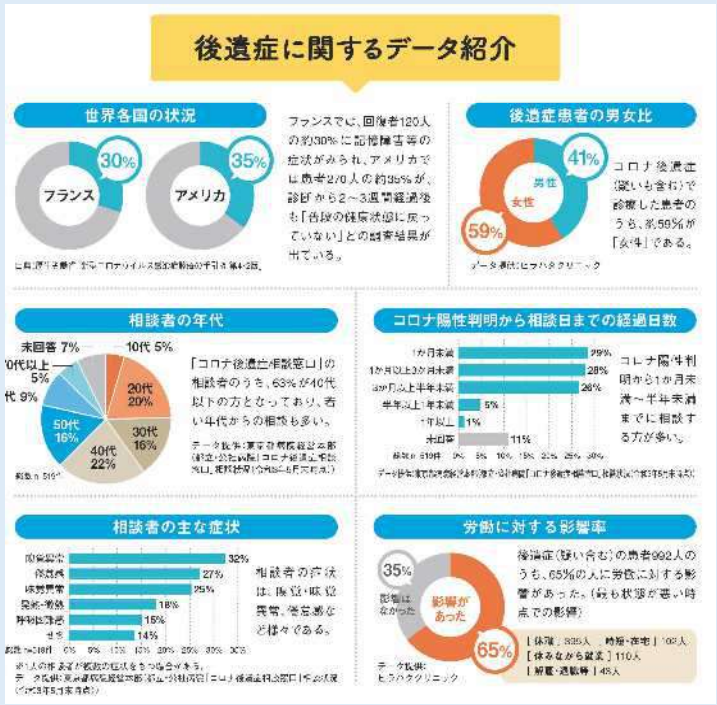




Leaflet about Long COVID (June 2021)

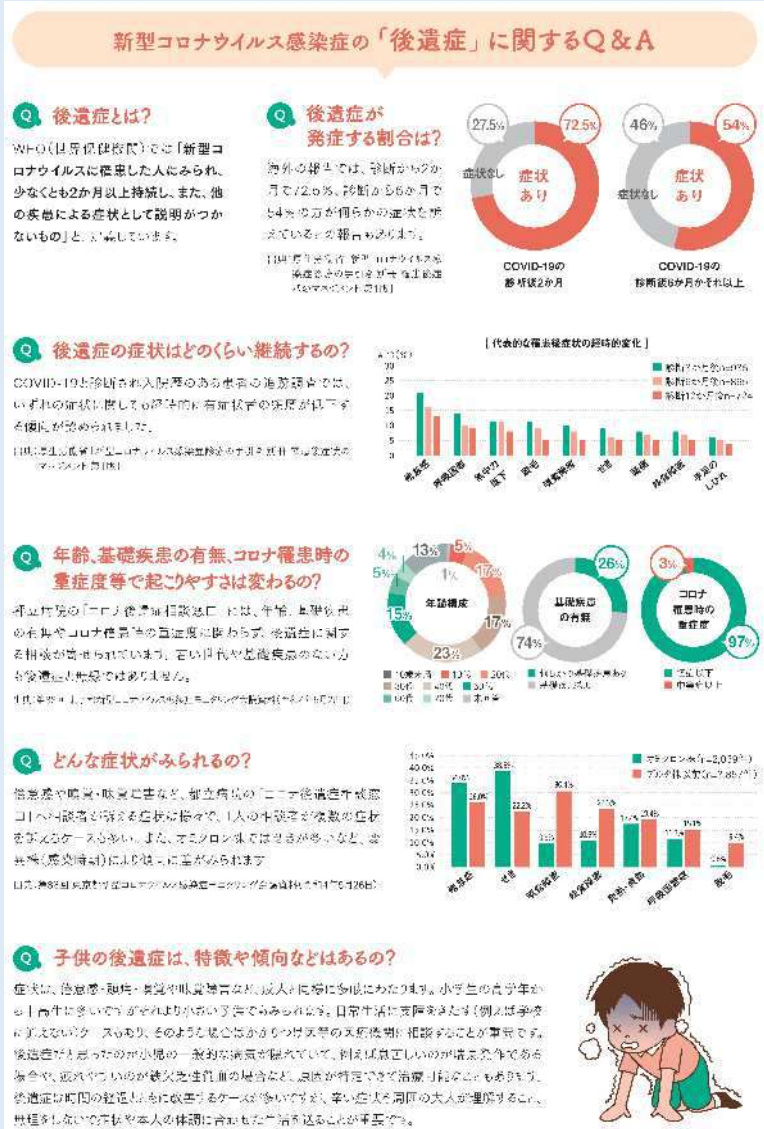
- **Produced a leaflet which provides easy-to-understand information of long COVID patients stories, data and symptoms.**（Reported at the 51st Monitoring Meeting on June 24, 2021）
  https://note.com/tokyo_icdc/n/nd566ada200c4





Revising Leaflet about Long COVID (September 2022)

- **Implementing long COVID leaflet revision, expanding the Q&A section** (Reported at the 101st Monitoring Meeting on September 8, 2022)
  https://www.hokeniryo.metro.tokyo.lg.jp/kansen/corona_portal/link/kouisyou.html

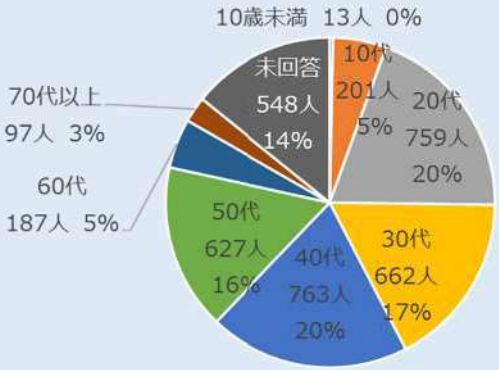


Data Analysis of Long COVID Telephone Consultations (February 2022)

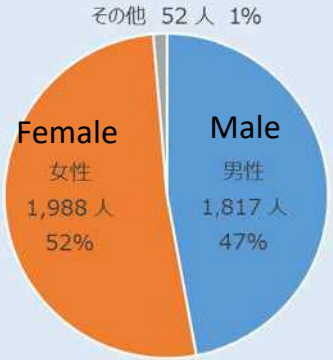
- **Analysis of the 3,857 cases to Tokyo Metropolitan Hospitals' Long COVID Free Telephone Consultation Desks from March 30 to October 31, 2021 (before the appearance of the Delta variant)** (Reported at the 77th Monitoring Meeting on February 3, 2022)https://www.bousai.metro.tokyo.lg.jp/_res/projects/default_project/_page_/001/020/964/77/20220203_11.pdf

Number of calls and Positive Cases of COVID-19

Age



Sex



Previous illness(se)

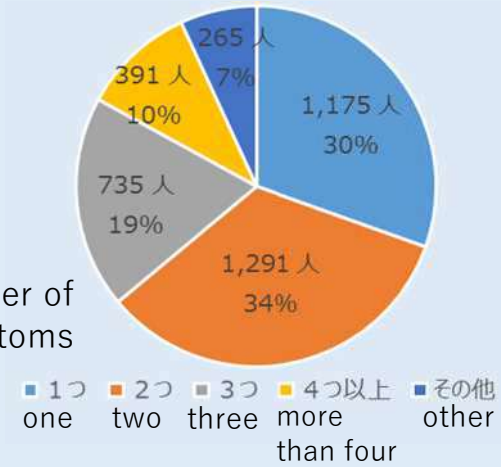
Symptoms consulted about

*Multiple responses were possible as some callers complained of multiple symptoms

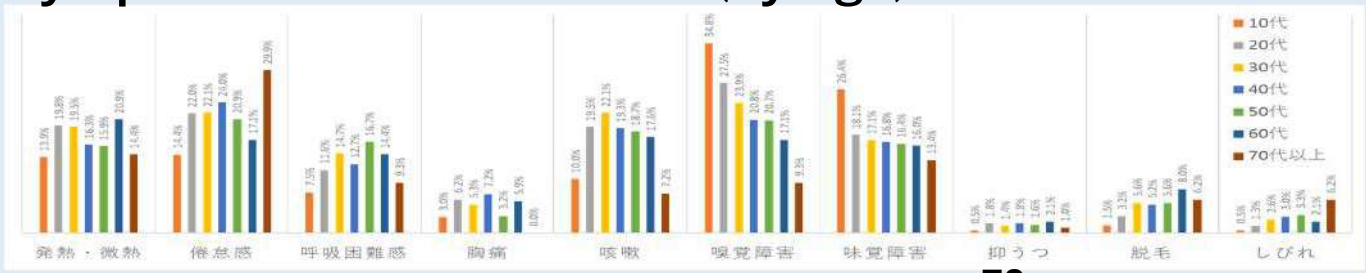
Olfactory disorder	Fatigue and exhaustion	Taste disorder	Coughing	High or slight fever	Difficulty breathing
1,174	1,002	900	858	738	581
30.4%	26.0%	23.2%	22.2%	19.1%	15.1%

Hair loss	Chest pain	Numbness	Depression	Other
361	242	112	75	1630
9.4%	6.3%	2.9%	1.9%	42.3%

Consulted about



Symptoms consulted about (by age)

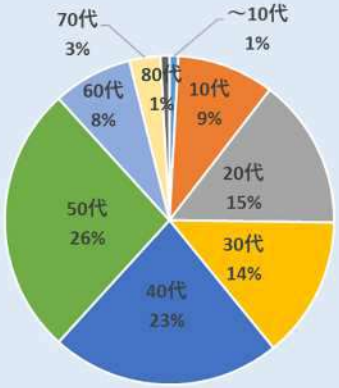


***All information may not have been ascertained due to being a telephone consultation service**

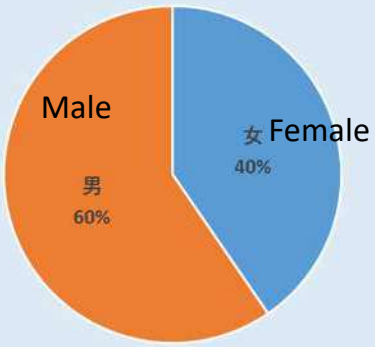
Detailed Case Analyses of Long COVID Outpatients at Tokyo Metropolitan Hospitals (March 2022)

- **Detailed case analyses of 230 outpatients suspected long COVID at metropolitan hospitals from May 10, 2021 to January 28, 2022 (before the appearance of the Delta variant)** (Reported at the 84th Monitoring Meeting on March 24, 2022)
  https://www.bousai.metro.tokyo.lg.jp/_res/projects/default_project/_page_/001/021/271/84/20220324_10.pdf

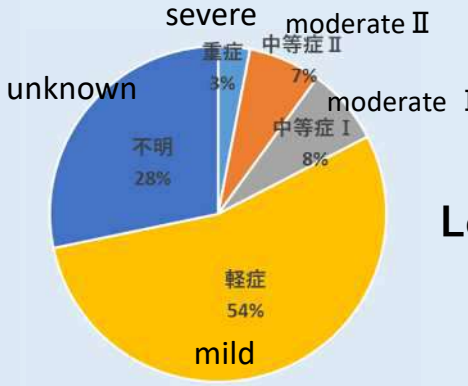
Age



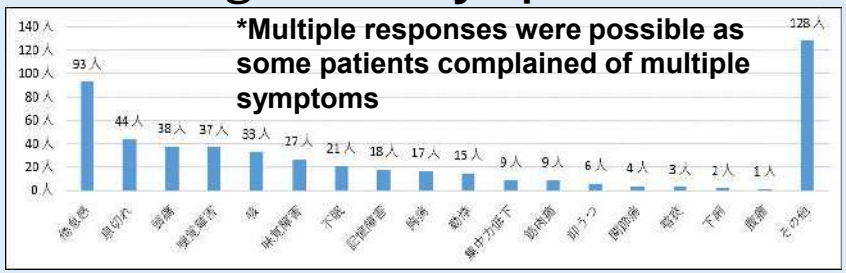
Sex



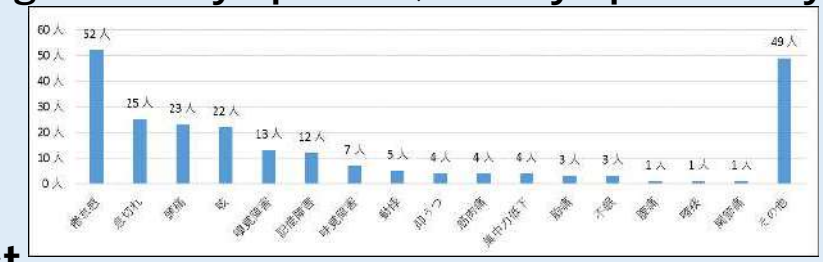
Severity of COVID-19 when infected



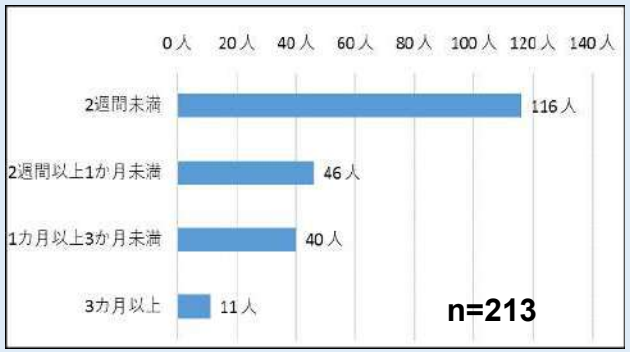
Long COVID symptoms



Long COVID symptoms (main symptoms only)



Timing of Long COVID onset



Improvement status at most recent treatment date

後遺症発症～直近受診日	受診後の状況			総計
	改善	症状継続	他院紹介	
1か月以上3か月未満	32	22	3	57
3か月以上6か月未満	31	25		56
6か月以上1年未満	5	6		11
1年以上		1		1
総計	68	54	3	125

Improvement status at most recent treatment date by symptoms

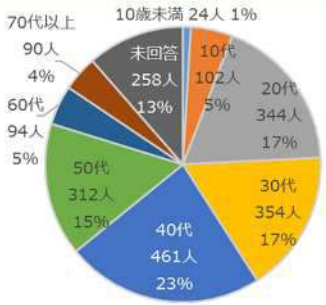
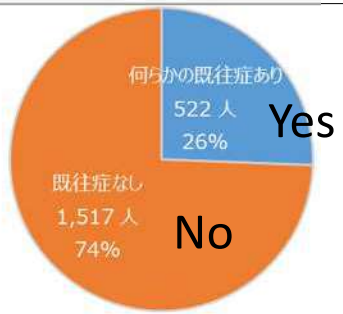
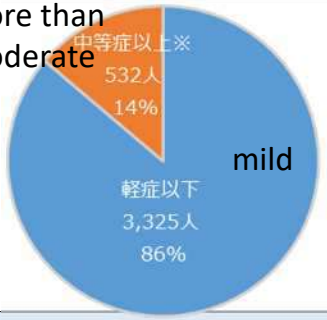
後遺症発症～直近受診日	倦怠感		息切れ		頭痛	
	改善	症状継続	改善	症状継続	改善	症状継続
1か月以上3か月未満	9	5	6	2	1	1
3か月以上6か月未満	8	4	2	1	9	5
6か月以上1年未満	1	1	1	2	2	2
1年以上		3				
計	18	13	9	5	12	8

*Excludes cases where the period from contracting COVID-19 until treatment date or the improvement status is unclear and until the most recent treatment date is less than one month.

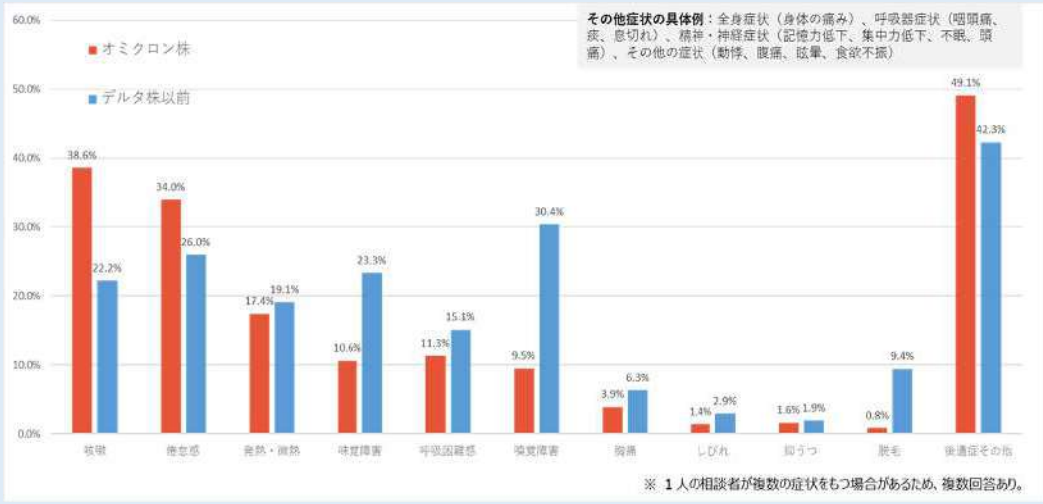
Data Analysis of Long COVID Telephone Consultations (May 2022)

- **Analysis of the 2,039 cases to Tokyo Metropolitan Hospitals' long COVID Free Telephone Consultation Desks from January 1 to April 30, 2022 (after the appearance of the Omicron variant) (Reported at the 88th Monitoring Meeting on May 26, 2022)**
  https://www.bousai.metro.tokyo.lg.jp/_res/projects/default_project/_page_/001/021/633/88/20220526_12.pdf

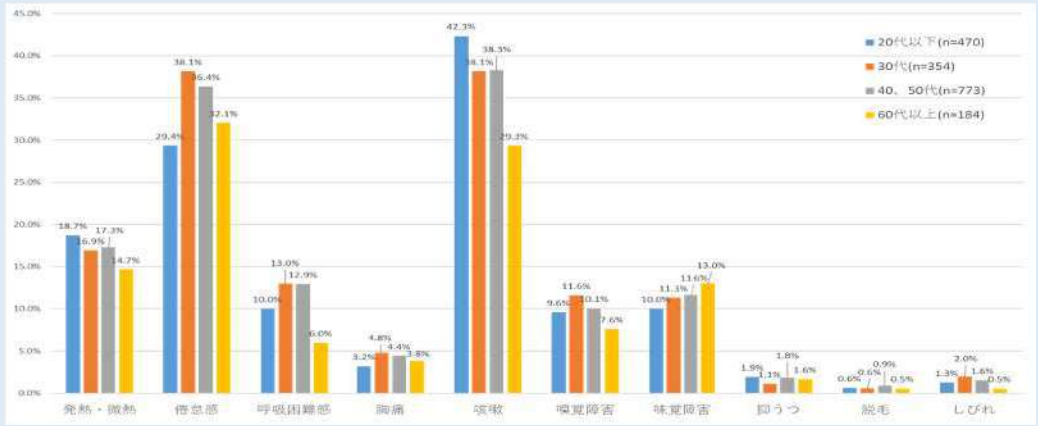
Basic information of consulted persons

	Omicron variant n=2039	Reference: Delta variant n=3857
Age		
Previous illness(es) yes/no		
Severity when infected		more than moderate 

Symptoms by variant



Symptoms by age



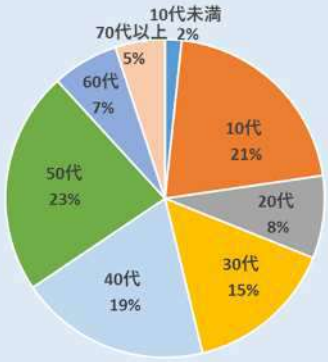
*Not all information about the caller may have been ascertained due to being a phone consultation service

Detailed Case Analyses of long COVID at Tokyo Metropolitan Hospitals

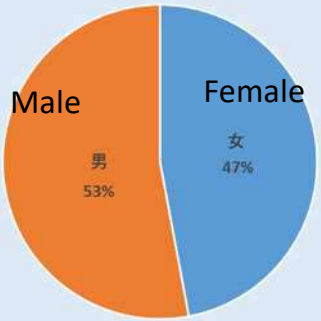
(August 2022)

- Detailed case analyses of 119 outpatients suspected long COVID at Tokyo Metropolitan Hospitals before July 20, 2022, who diagnose as COVID-19 (suspected the Omicron variant) after January 1, 2022.
  (Reported at the 99th Monitoring Meeting on August 25, 2022)
  https://www.bousai.metro.tokyo.lg.jp/_res/projects/default_project/_page_/001/022/059/99/20220825_10.pdf

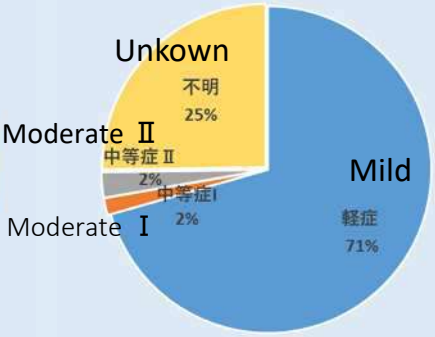
Age



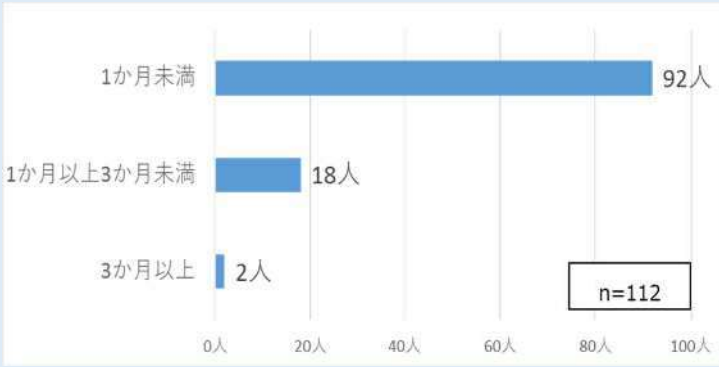
Sex



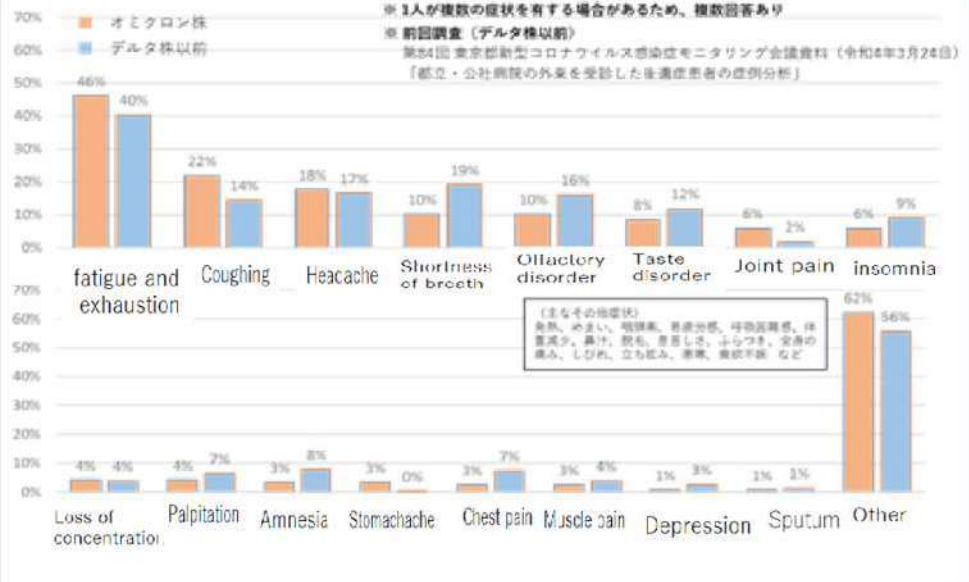
Severity of COVID-19 when infected



Timing of Long COVID onset



Long COVID symptoms



Improvement status at most recent treatment date by symptoms

直近受診日における改善状況

※発症～直近受診日が2か月未満の症例は除く。
※発症～受診日までの期間や、改善状況が「不明」の症例は除く。

咳・息切れについては、他の症状に比べて改善する割合が高い。

(倦怠感)

後遺症発症から直近受診日	受診状況	
	改善	症状継続
2か月から3か月	0	6
3か月から4か月	2	9
4か月から5か月	0	13
5か月から6か月	1	4
計	3	32

(咳)

後遺症発症から直近受診日	受診状況	
	改善	症状継続
2か月から3か月	2	2
3か月から4か月	1	2
4か月から5か月	2	3
5か月から6か月	0	1
計	5	8

(頭痛)

後遺症発症から直近受診日	受診状況	
	改善	症状継続
2か月から3か月	0	5
3か月から4か月	0	3
4か月から5か月	1	4
5か月から6か月	1	0
計	2	12

(息切れ)

後遺症発症から直近受診日	受診状況	
	改善	症状継続
2か月から3か月	1	1
3か月から4か月	0	0
4か月から5か月	1	0
5か月から6か月	2	2
計	4	3

(味覚障害)

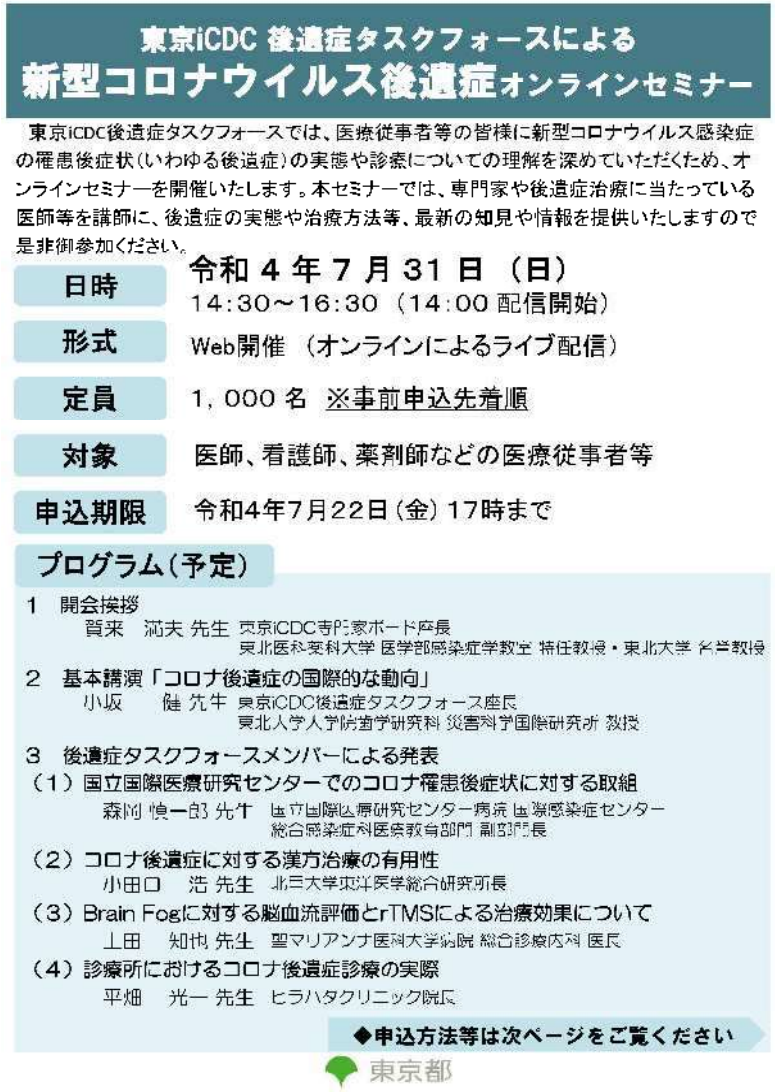
後遺症発症から直近受診日	受診状況	
	改善	症状継続
2か月から3か月	0	0
3か月から4か月	0	2
4か月から5か月	0	2
5か月から6か月	0	0
計	0	4

(嗅覚障害)

後遺症発症から直近受診日	受診状況	
	改善	症状継続
2か月から3か月	0	1
3か月から4か月	1	1
4か月から5か月	0	1
5か月から6か月	0	0
計	1	3

Long COVID Online Seminar (July 2022)

- **An online seminar was held in July 2022 for medical professionals etc. to deepen their understanding of the state and treatment of symptoms after COVID-19 infection**
- **The seminar featured lectures from specialists and doctors engaged in long COVID. As well as sharing the latest knowledge and information about the state of long COVID and treatment methods, the seminar is currently available as video on the website of TMG**
  https://www.hokeniryo.metro.tokyo.lg.jp/kansen/corona_portal/link/kouisyou.html



東京iCDC 後遺症タスクフォースによる
新型コロナウイルス後遺症オンラインセミナー

東京iCDC後遺症タスクフォースでは、医療従事者等の皆様に新型コロナウイルス感染症の罹患後症状（いわゆる後遺症）の実態や診療についての理解を深めていただくため、オンラインセミナーを開催いたします。本セミナーでは、専門家や後遺症治療に当たっている医師等を講師に、後遺症の実態や治療方法等、最新の知見や情報を提供いたしますので是非御参加ください。

日時　令和４年７月31日（日）
14:30～16:30（14:00配信開始）

形式　Web開催（オンラインによるライブ配信）

定員　1,000名 ※事前申込先着順

対象　医師、看護師、薬剤師などの医療従事者等

申込期限　令和4年7月22日（金）17時まで

プログラム（予定）

1　開会挨拶
　貫来　滿夫 先生 東京iCDC専門家ボード座長
　東北医科薬科大学 医学部感染症学教室 特任教授・東北大学 名誉教授

2　基本講演「コロナ後遺症の国際的な動向」
　小坂　健 先生 東京iCDC後遺症タスクフォース座長
　東北大学大学院歯学研究科 災害科学国際研究所 教授

3　後遺症タスクフォースメンバーによる発表
（1）国立国際医療研究センターでのコロナ罹患後症状に対する取組
　森岡 慎一郎 先生 国立国際医療研究センター病院 国際感染症センター
　総合感染症科医療教育部門 副部門長
（2）コロナ後遺症に対する漢方治療の有用性
　小田口　浩 先生 北三大学東洋医学総合研究所長
（3）Brain Fogに対する脳血流評価とrTMSによる治療効果について
　上田　知也 先生 聖マリアンナ医科大学病院 総合診療内科 医長
（4）診療所におけるコロナ後遺症診療の実際
　平畑　光一 先生 ヒラハタクリニック院長

◆申込方法等は次ページをご覧ください

東京都

Number of seminar participants

Occupation etc.	number of participants
Doctors(working at hospitals)	135
Doctors(working at clinics)	287
Doctors(working at research institutes at university,etc.)	14
Pharmacists	241
Nurses	144
Licensed social insurance consultant	45
Staff at Public Health Centers	23
Media	11
Other	76
Total	976

Long COVID Online Seminar (November 2022)

- **From the perspectives of further understanding of long COVID and sharing information between medical institutions, this online workshop in November 2022 - led by doctors on the front line of long COVID - provided information about effective treatment and testing**
- **This workshop aimed to share information with medical institutions. It provided reporting on survey results (including responses from 195 medical institutions) about the treatment actually being carried out at medical institutions responding to long COVID, and the workshop is currently available on the website on video of TMG**
  https://www.hokeniryo.metro.tokyo.lg.jp/kansen/corona_portal/link/kouisyou.html

新型コロナウイルス後遺症 オンライン研修会

新型コロナウイルス感染症の罹患後症状（いわゆる後遺症）への対応は、現在は対症療法が中心でありますが、医療機関によっては様々な取組が行われています。今般、後遺症に関する更なる理解や医療機関同士の情報共有の観点から、後遺症に対応している医療機関の現場医師を講師に、効果的な治療方法、検査等について情報を提供します。

日時 令和４年11月20日（日）
14:30～16:30（14:00配信開始）

形式 Web開催（オンラインによるライブ配信）

対象 医師、看護師、薬剤師などの医療従事者等

プログラム（予定）

1 東京iCDC後遺症タスクフォースの取組
小坂 健 先生 東京iCDC後遺症タスクフォース座長
東北大学大学院歯学研究科 災害科学国際研究所 教授

2 後遺症対応医療機関による発表
① 診療所におけるコロナ後遺症診療の実際
平畑 光一 先生 ヒラハタクリニック 院長
② コロナ後遺症に対する上咽頭擦過療法について
茂木立 学 先生 もぎたて耳鼻咽喉科 院長
③ 小児における罹患後症状への診療
堀越 裕歩 先生 東京都立小児総合医療センター感染症科 医長

Survey results related to long COVID treatment

Survey carried out from October 21 to November 7, 2022

Symptoms	Testing	Treatment
Feeling of fatigue and exhaustion	Blood tests (86%), X-rays (32%), ECGs (16%)	Traditional Chinese treatments (bu-zhong-yi-qi-tang, shi-quan-da-bu-tang, shimbu-to, kami-kihi-tō, ren-shen-yang-rong-tang, yi-gan-san, etc.), internal treatments (steriodal medications, antiallergic agents, iron preparations, vitamin compounds, etc.), epipharyngeal abrasive therapy, environmental control and pacing, nasal rinse, lifestyle guidance, psychotherapy, breathing exercises
Coughing	X-rays (75%), blood tests (54%), respiratory function tests (23%), chest CTs (20%)	Internal medicine (anti-inflammatory agents, antibiotics, cough medicines, expectorants, bronchodilators, anti-allergic agents, etc.), inhalants (steroid drugs, beta-adrenoceptor stimulants, etc.), traditional Chinese medicine (mai-men-dong-tang, chai-pu-tang, ban-xia-hou-pu-tang, goko-tō、, ma-kyō-kan-seki-tō, etc.), epipharyngeal abrasive therapy
Shortness of breath(difficulty breathing)	Blood tests (76%), X-rays (72%), respiratory function tests (44%), ECGs (36%), chest CTs (24%)	Inhalation treatment (steroids, bronchodilators), traditional Chinese medicine (ren-shen-yang-rong-tang), epipharyngeal abrasive therapy, administering oxygen
Expectoration	Blood tests (47%), X-rays (44%), endoscopes (22%)	Internal treatments (expectorants, cough medicines, respiratory tract mucosa restoratives, etc.), traditional Chinese medicine (mai-men-dong-tang, xiao-qing-long-tang, etc.), epipharyngeal abrasive therapy, inhalation treatment
Olfactory disorder	Blood tests (47%), others (olfactometry, nasopharyngolaryngoscope, etc.) (44%), endoscopes (42%)	Internal (antihistamine, Methycobal, zinc, vitamin B12), nasal drip (rinderon), inhalation (nebulizer), traditional Chinese medicine (dang-gui-shao-yao-san, ren-shen-yang-rong-tang, ge-gen-tang), olfactory sense rehab, nasal irrigation, gargling, epipharyngeal abrasive therapy
Taste disorder	Blood tests (88%), endoscopes (19%)	Internal medicine (zinc preparations, vitamin tablets, etc.), epipharyngeal abrasive therapy, traditional Chinese medicine (dang-gui-shao-yao-san), nasal irrigation, gustatory sensation rehab, stellate ganglion blocking injections
Hair loss	Blood tests (100%), ECGs (16%), X-rays (16%), respiratory function tests (16%)	Prescription of zinc preparations, administering medication (antiallergic agents, medication for spot baldness), stellate ganglion blocking injections, traditional Chinese medicine (shi-quan-da-bu-tang, ren-shen-yang-rong-tang)
Chest pain	Blood tests (77%), ECGs (77%), X-rays (66%), chest CTs (33%)	Traditional Chinese medicine (Saiko-ka-ryūkotsu-borei-tō, ban-xia-hou-pu-tang, etc.), internal treatments
High or slight fever	Blood tests (94%), X-rays (29%), chest CTs (17%)	Traditional Chinese medicine (chai-hu-gui-zhi-tang, bu-zhong-yi-qi-tang, etc.), administering medication (fever medicine, etc.), epipharyngeal abrasive therapy
Brain fog	Blood tests (75%), head MRIs (62%)	Traditional Chinese medicine (kami-kihi-tō, zhong-yi-qi-tang, ba-wei-di-huang-wan, ren-shen-yang-rong-tang, shi-quan-da-bu-tang, etc.), epipharyngeal abrasive therapy, pharmacotherapy, psychotherapy
Headache	Head MRIs (55%), blood tests (44%), X-rays (33%), endoscopes (22%)	Traditional Chinese medicine (wu-ling-san, Tsumura #82, Tsumura #23, ge-gen-tang, goshūyu-tō, etc.), internal treatments (vasodilator agents, antiplatelet drugs, antiepileptic drugs, analgesic drugs, NSAID, SG dosing), epipharyngeal abrasive therapy
Loss of concentration	Blood tests (88%), head MRIs (22%)	Traditional Chinese medicine (Saiko-ka-ryūkotsu-borei-tō, ren-shen-yang-rong-tang, bu-zhong-yi-qi-tang, yoku-kan-san-ka-chinpi-hange, etc.), Cortril replacement therapy, epipharyngeal abrasive therapy
Depression	Blood tests (75%)	Psychotherapy, pharmacotherapy (antidepressants, antianxiety agents, sleeping pills, etc.), traditional Chinese medicine (jiā wèi xiāo yáo wán, etc.), counseling

Number of Participants

Doctors	437	Other medical professionals	70
Pharmacists	230	Licensed social insurance consultant	12
Nurses	80	Other	37
Total			866

Map of Healthcare facilities providing Long COVID Services

- **Created a map showing the healthcare facilities providing long COVID services on TMG website for residents with long COVID.**

Other information dissemination

Internet Questionnaire Relating to the Actions of People Recovering from COVID-19 (hotel recovery/recovery at home)

- **With the cooperation of people recovering at a hotel or at home, internet questionnaires were carried out on an ongoing basis about their actions before becoming infected, infection prevention measures taken, and noticeable symptoms**
- **Responses were received from 203,191 people by May 7, 2023 and reported at Tokyo Metropolitan Government Monitoring Meetings**

*45th Monitoring Meeting on May 13, 2021 https://www.bousai.metro.tokyo.lg.jp/_res/projects/default_project/_page_/001/013/767/45kai/2021051309.pdf
*56th Monitoring Meeting on July 29, 2021 https://www.bousai.metro.tokyo.lg.jp/_res/projects/default_project/_page_/001/014/349/56kai/20210729_09.pdf
*63rd Monitoring Meeting on September 16, 2021 https://www.bousai.metro.tokyo.lg.jp/_res/projects/default_project/_page_/001/015/548/63/20210916_09.pdf
*69th Monitoring Meeting on November 11, 2021 https://www.bousai.metro.tokyo.lg.jp/_res/projects/default_project/_page_/001/020/578/69/20211111_08.pdf
*78th Monitoring Meeting on February 10, 2022 https://www.bousai.metro.tokyo.lg.jp/_res/projects/default_project/_page_/001/021/014/78/20220210_10.pdf

Responses during each wave

Wave*	Number of responses *	14 days immediately preceding the date of disease onset (test date for people with no symptoms)						Top five symptoms complained of by people recovering at a hotel or at home (multiple responses are possible)				
		Participated in "parties involving alcoholic drinks" or "eating and drinking in large numbers or for a long period"	Talked without wearing a mask with people other than those listed on the left or the people they live with	Proportion of people who answered "I always did this"								
				Masking	Hand washing	Ventilation	Avoiding the three Cs	1	2	3	4	5
3rd wave	150	11.3%	21.3%	70.0%	76.0%	41.3%	45.3%	Fever	Feeling of fatigue	Coughing	Headache	Olfactory disorder
5th wave	15,397	14.1%	30.3%	63.5%	67.3%	43.6%	41.7%	Fever	Feeling of fatigue	Coughing	Headache	Sore throat
6th wave	59,016	12.1%	23.3%	70.0%	71.8%	38.6%	47.2%	Fever	Sore throat	Coughing	Feeling of fatigue	Headache
7th wave	65,970	21.1%	33.8%	61.5%	71.0%	42.0%	41.2%	Fever	Sore throat	Coughing	Feeling of fatigue	Sputum
8th wave	27,796	27.0%	39.9%	62.6%	70.3%	34.4%	35.2%	Fever	Sore throat	Coughing	Feeling of fatigue	Nasal discharge

*The number of responses for each wave is collated into the number of people who began responding in the following periods as at May 2, 2023.
3rd wave: December 1, 2020 to February 28, 2021 5th wave: July 1 to September 30, 2021
6th wave: January 1 to March 31, 2022 7th wave: July 1 to September 30, 2022 8th wave: November 1, 2022 to January 31, 2023

Other information dissemination

Spreading Awareness of Seeking Medical Care for Noticeable Symptoms of People Recovering from COVID-19

- Based on the results of the September 2021 internet questionnaire relating to the actions of people recovering from COVID-19 (hotel recovery/recovery at home), encouraging people to see their family doctor without hesitation if their noticeable symptoms fit the distinctive pattern
- Also releasing checklists on the TMG website and LINE

Materials from the Governor's regular press conference

Extract from Monitoring Meeting materials

自覚症状

感染したことがわかる１４日前から現在までにおいて、自覚のあった症状について教えてください。（複数回答可）

5～6月回答分（n=3,171）

	自覚症状	回答者数	割合
1	発熱	2,135名	67.3%
2	倦怠感（体のだるさ）	1,823名	57.5%
3	頭痛	1,805名	56.9%
4	咳嗽（せき）	1,381名	43.6%
5	咽頭痛（のどの痛み）	1,179名	37.2%
6	関節痛	989名	31.2%
7	喀痰（たん）	835名	26.3%
8	鼻汁	774名	24.4%
9	筋肉痛	687名	21.7%
10	嗅覚障害（臭いの感じにくさ）	676名	21.3%

7~8月回答分（n=11,726）

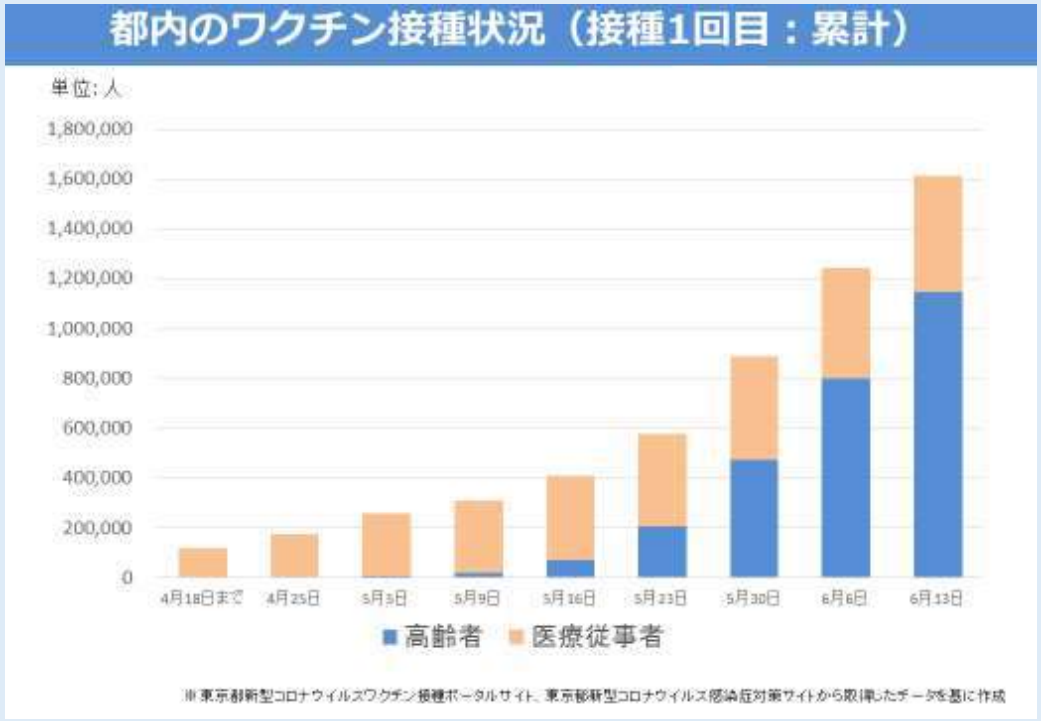
	自覚症状	回答者数	割合
1	発熱	9,089名	77.5%
2	頭痛	7,667名	65.4%
3	倦怠感（体のだるさ）	7,521名	64.1%
4	咳嗽（せき）	6,626名	56.5%
5	咽頭痛（のどの痛み）	5,295名	45.2%
6	喀痰（たん）	4,428名	37.8%
7	嗅覚障害（臭いの感じにくさ）	4,416名	37.7%
8	関節痛	4,271名	36.4%
9	鼻汁	3,630名	31.0%
10	味覚障害（味のわかりにくさ）	3,597名	30.7%

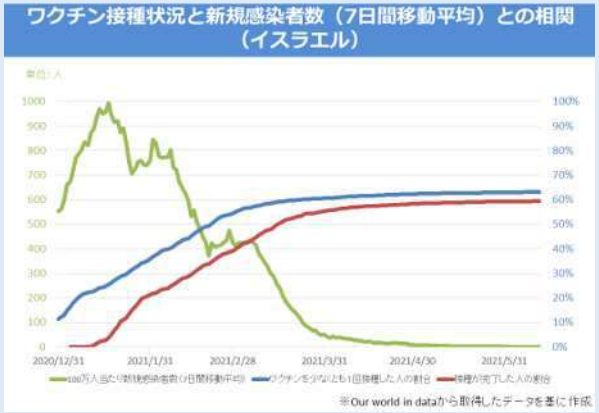
◆自覚症状は、宿泊療養者・自宅療養者の半数以上の方が、発熱、頭痛、倦怠感（体のだるさ）を訴えている。

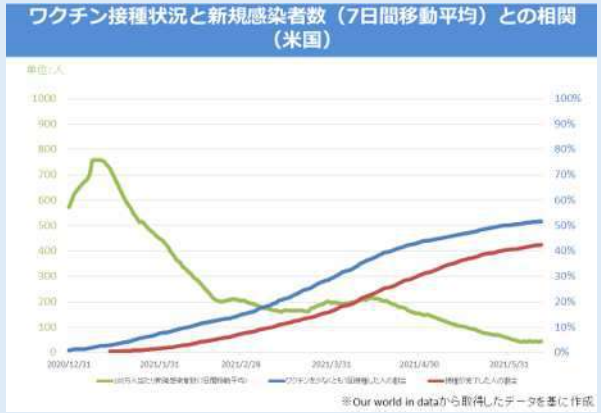
Vaccination Situation in Tokyo and Comparable Countries Overseas (June 2021)

- **Vaccination began with the elderly and health workers. A report was made to the 50th Monitoring Meeting on June 17, 2021 regarding the June 2021 vaccination situation in Tokyo and comparable countries overseas**

https://www.bousai.metro.tokyo.lg.jp/_res/projects/default_project/_page_/001/014/026/49kai/2021061709.pdf







Trends in Serious Illnesses and Deaths (September 2021)

- **Trends in serious illnesses and deaths were divided into three 3-month periods between December 15, 2020 and September 14, 2021 and the incidence rate per 100,000 people calculated by age**
- **On charting the vaccination rates for people aged 65 and over and under 65, it was reported at the 65th Monitoring Meeting on September 30, 2021 that the rate of deaths appeared to be on a decreasing trend as second vaccinations progressed, providing further impetus to promote vaccination**

https://www.bousai.metro.tokyo.lg.jp/_res/projects/default_project/_page_/001/015/652/64/20210930g.pdf

重症者数の推移

年代	12月15日～3月14日			3月15日～6月14日			6月15日～9月14日		
	陽性者数	重症者数	対陽性者数比	陽性者数	重症者数	対陽性者数比	陽性者数	重症者数	対陽性者数比
全年齢	67,857	629	0.93%	51,168	426	0.83%	201,320	1,337	0.66%
30代以下 (5,458千人)	33,862 (620.41人)	4 (0.07人)	0.01%	29,044 (532.14人)	14 (0.26人)	0.05%	132,973 (2436.30人)	148 (2.71人)	0.11%
40代・50代 (4,043千人)	19,371 (479.07人)	107 (2.65人)	0.55%	14,369 (355.36人)	119 (2.94人)	0.83%	55,351 (1368.89人)	764 (18.89人)	1.38%
60代以上 (3,796千人)	14,624 (385.29人)	518 (13.65人)	3.54%	7,755 (204.32人)	293 (7.72人)	3.78%	12,996 (342.40人)	425 (11.20人)	3.27%

※陽性者数は、報告日別の件数（東京都コロナウイルス感染症対策サイト）
※新規重症者数は、都内医療機関の調査報告に基づき算出（人工呼吸器管理（ECMOを含む）が必要な患者）
※ワクチン接種率は、12歳以上の接種対象者で算出（接種者数はVRSデータに登録された人数（9/26時点））
※人口は東京都総務局統計部「住民基本台帳による東京都の世帯と人口 令和3年1月 第6表 区市町村、年齢（各歳）及び男女別日本人口」に基づく

死亡者数の推移

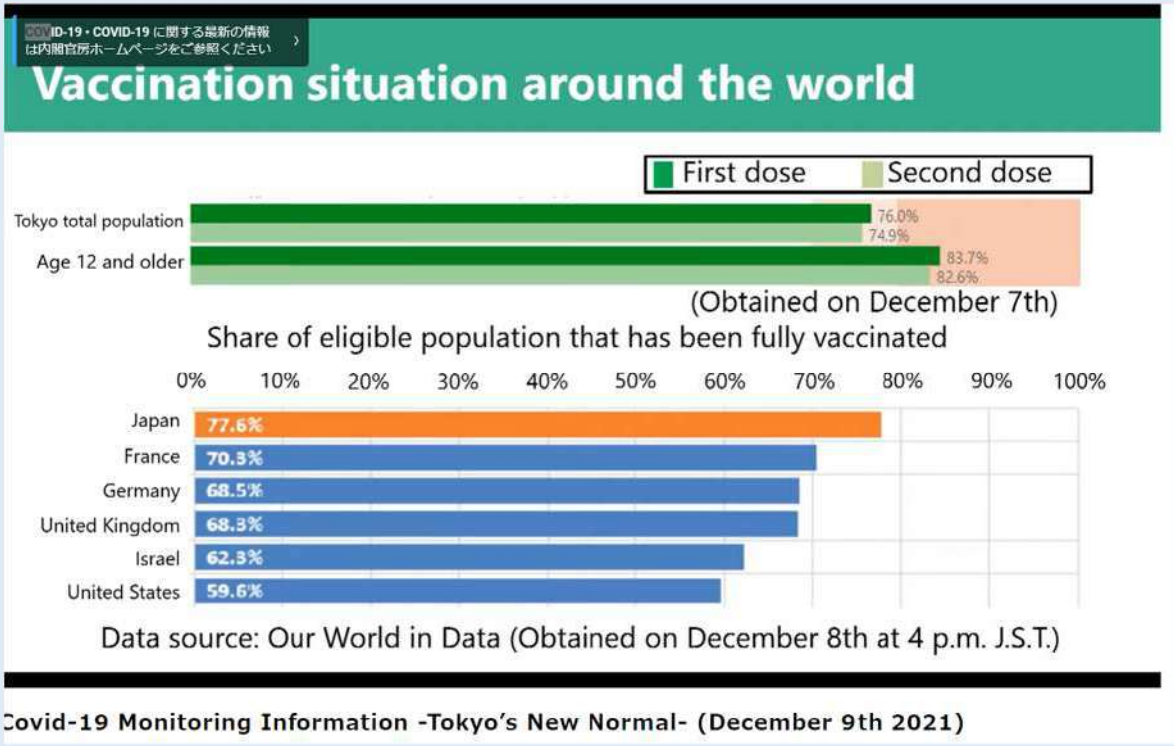
年代	12月15日～3月14日			3月15日～6月14日			6月15日～9月14日		
	陽性者数	死亡者数	対陽性者数比	陽性者数	死亡者数	対陽性者数比	陽性者数	死亡者数	対陽性者数比
全年齢	67,857	1,155	1.70%	51,168	496	0.97%	201,320	632	0.31%
30代以下 (5,458千人)	33,862 (620.41人)	1 (0.02人)	0.00%	29,044 (532.14人)	1 (0.02人)	0.00%	132,973 (2436.30人)	20 (0.37人)	0.02%
40代・50代 (4,043千人)	19,371 (479.07人)	35 (0.87人)	0.18%	14,369 (355.36人)	24 (0.59人)	0.17%	55,351 (1368.89人)	137 (3.39人)	0.25%
60代以上 (3,796千人)	14,624 (385.29人)	1,118 (29.46人)	7.65%	7,755 (204.32人)	471 (12.41人)	6.07%	12,996 (342.40人)	475 (12.51人)	3.65%

※陽性者数は、報告日別の件数（東京都コロナウイルス感染症対策サイト）
※死亡者数は、発生日別（死亡日別）の件数（9/26時点の報告数のため、今後更新される場合がある）。
※ワクチン接種率は、12歳以上の接種対象者で算出（接種者数はVRSデータに登録された人数（9/26時点））
※人口は東京都総務局統計部「住民基本台帳による東京都の世帯と人口 令和3年1月 第6表 区市町村、年齢（各歳）及び男女別日本人口」に基づく

Other information dissemination

Raising Awareness about Breakthrough Infections (December 2021)

- **While the number of new positive cases was being reduced due to the vaccination rollout, it was reported that the proportion of new infections among people who had been vaccinated twice (breakthrough infections) was increasing due to the growing number of people who had been vaccinated** (71st Monitoring Meeting on December 9, 2021)
  https://www.bousai.metro.tokyo.lg.jp/_res/projects/default_project/_page_/001/020/679/71/20211209_09.pdf
- **As well as discussing the possibility of infection after being vaccinated twice, the Infection Prevention and Control Team's report focused on the key points of promoting third vaccinations and the importance of basic infection prevention measures even after vaccination. This report was also disseminated on the iCDC blog**
  https://note.com/tokyo_icdc/n/nae99ff0089dc



Covid-19 Monitoring Information -Tokyo's New Normal- (December 9th 2021)
https://tokyodouga.jp/b8uolnzpj6s.html

Explaining the Key Points about Ventilation Before the New Year's Holidays (December 2021)

- **The Ventilation and Indoor Infection Measures Taskforce provided reports to Monitoring Meetings about the importance of ventilation and how to make it happen. Given that ventilation tends to be neglected during cold times of the year such as New Year, it was reported on at the 72nd Monitoring Meeting on December 23, 2021**

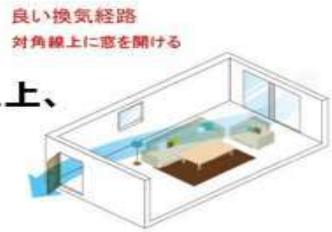
https://www.bousai.metro.tokyo.lg.jp/_res/projects/default_project/_page_/001/020/757/72/20211223_09.pdf

換気の基本的なポイント

✓ 換気が悪いと、空気中に長時間、ウイルスが漂っていることも。**部屋の十分な換気が必要。**

✓ 部屋の**対角線にある2か所の窓や扉**を**常時5~10cm開ける。**

✓ 寒い日でも、**室温は18℃以上、湿度は40%以上**に。



24時間換気システムを活用した換気

✓ **24時間換気システム**が正常に稼働していれば、十分な換気量を得ることが可能。**常時オン**に。

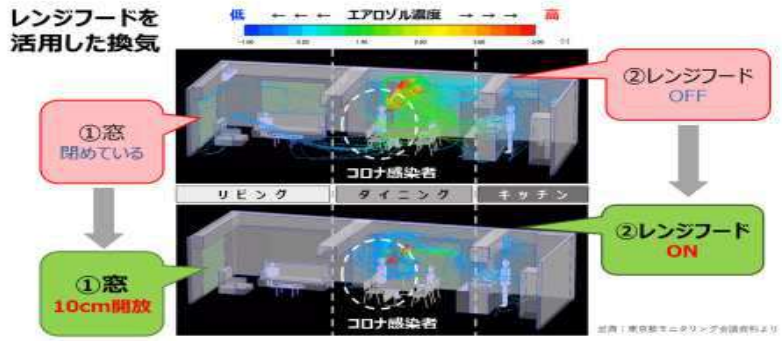
✓ 換気システムの寿命は一般的に10年程度。正常に動作しているか、注意して管理が必要。

✓ **換気口**の**フィルタ**を**定期的に清掃**し、換気量を確保。

※24時間換気システムは、建築基準法により、2003年以降に建設された住宅への設置が義務づけられています。

レンジフードを活用した換気

✓キッチンのレンジフードは、吸い込む風量が大きいので、**窓開けとの併用**により、換気が効果的に実施できる。



空気清浄機の活用

窓を十分に開けられない場合等、換気不足を補うため、**空気清浄機の併用が有効**

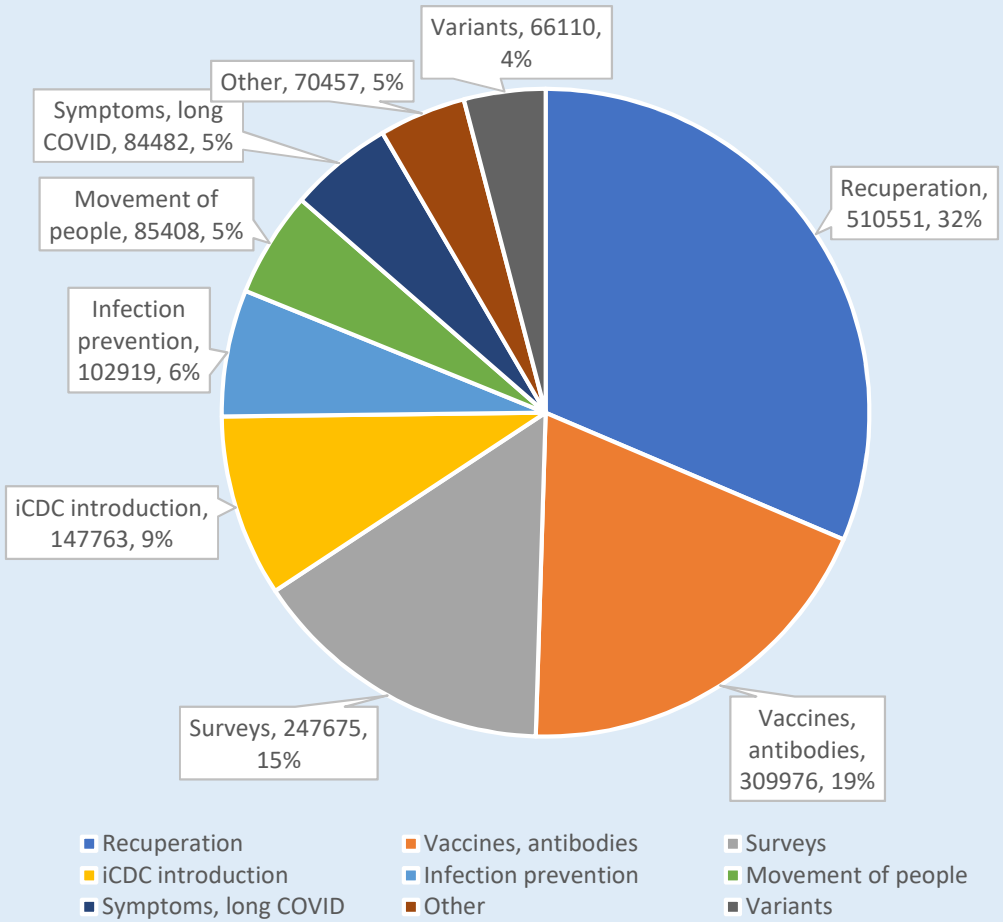
✓ 人の居場所から**約10㎡（６畳）以内**に設置

✓ サーキュレータなどを使い、きれいな空気が室内に行き渡るようにするとより効果的

Information Dissemination Using the Tokyo iCDC blog

- **The Tokyo Center for Infectious Diseases Prevention and Control account on the Tokyo iCDC blog - an information dissemination tool - was launched in order to enhance public education about infectious diseases**
- **A Tokyo iCDC initiative to provide information to residents in an easy-to-understand format**
- **Total number of views: 1,638,021 (as at July 26, 2023)** https://note.com/tokyo_icdc/

Proportion of articles by category



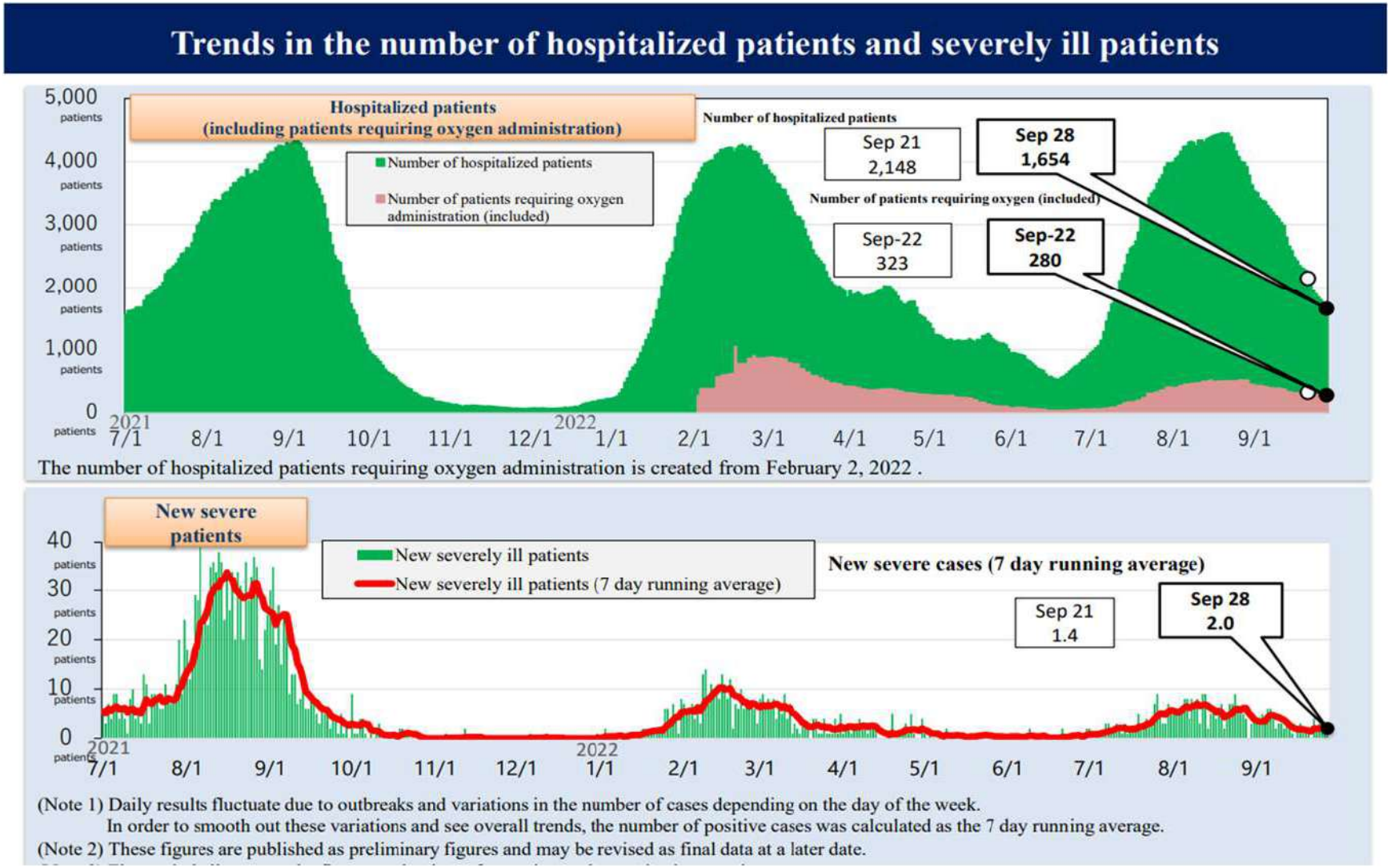
List of top ten viewed articles

Articles	Number of views
If you need to recover at a hotel, here's what you need to know about staying there! (March 16, 2021)	**464,375**
How many people have COVID-19 antibodies? We asked Professor Obara. (February 2, 2021)	**157,097**
Not much has been reported about them, but expectations are rising for Japanese-made COVID vaccines(January 12, 2021)	**153,173**
New team established in the Expert Board (November 27, 2020)	**46,977**
We've created the COVID-19 Home Recovery Handbook so you can recuperate in peace of mind (January 22, 2021)	**45,397**
We take a look at how people's patterns of movements have changed during the state of emergency (January 26, 2021)	**44,117**
The fear of long COVID: We asked Professor Omagari about the virus and what happens after you get it. (November 19, 2021)	**37,810**
What you need to know about home ventilation! Interviews with ventilation experts, part 1 (November 19, 2021)	**36,449**
Announcing the COVID-19 Infection Prevention Handbook for Tokyo Citizens! (December 17, 2020)	**35,961**
Messages from people in their 20s and 30s who've had COVID to people their age (March 10, 2021)	**32,665**

Differences in People Hospitalized During the 5th and 6th Waves (January 27, 2022)

- **Comparison between the 5th wave (July and August 2021) and 6th wave (January 2022) regarding the differences in people hospitalized (proportion of light vs moderate to severe illness), expressed in terms of the hospital bed occupancy rate (status of medical institutions) due to the increase in hospitalizations**

(Report of the 76th Monitoring Meeting on January 27, 2022)
https://www.bousai.metro.tokyo.lg.jp/_res/projects/default_project/_page_/001/020/922/76/20220127_10.pdf

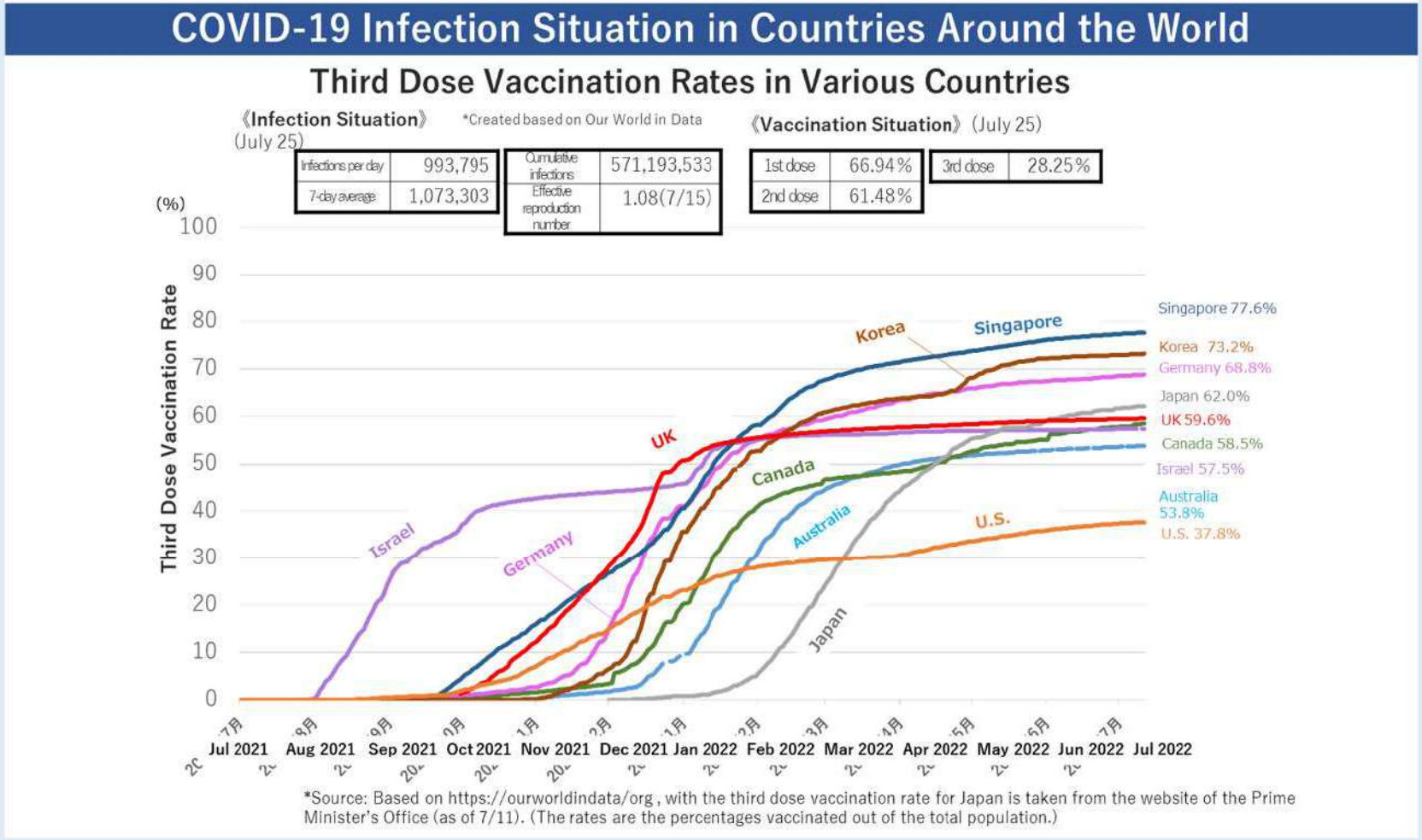


(Note 1) Daily results fluctuate due to outbreaks and variations in the number of cases depending on the day of the week.
In order to smooth out these variations and see overall trends, the number of positive cases was calculated as the 7 day running average.
(Note 2) These figures are published as preliminary figures and may be revised as final data at a later date.

Infection Situation Overseas (January 2022)

- **In January 2022, in many countries overseas infections continued to spread despite increasing vaccination rates (including third vaccinations). The World Health Organization Director-General Tedros Adhanom Ghebreyesus stated at the Executive Board meeting that if all nations take measures such as vaccinating at least 70% of their populations, the global health emergency may end this year. Based on this view, the infection situation, vaccination rollout progress, and infection prevention measures being taken in various countries overseas were reported at the 76th Monitoring Meeting on January 27, 2022**

https://www.bousai.metro.tokyo.lg.jp/_res/projects/default_project/_page_/001/020/922/76/20220127_13.pdf



Proportion of New Positive Cases and Serious Cases by Vaccination Status

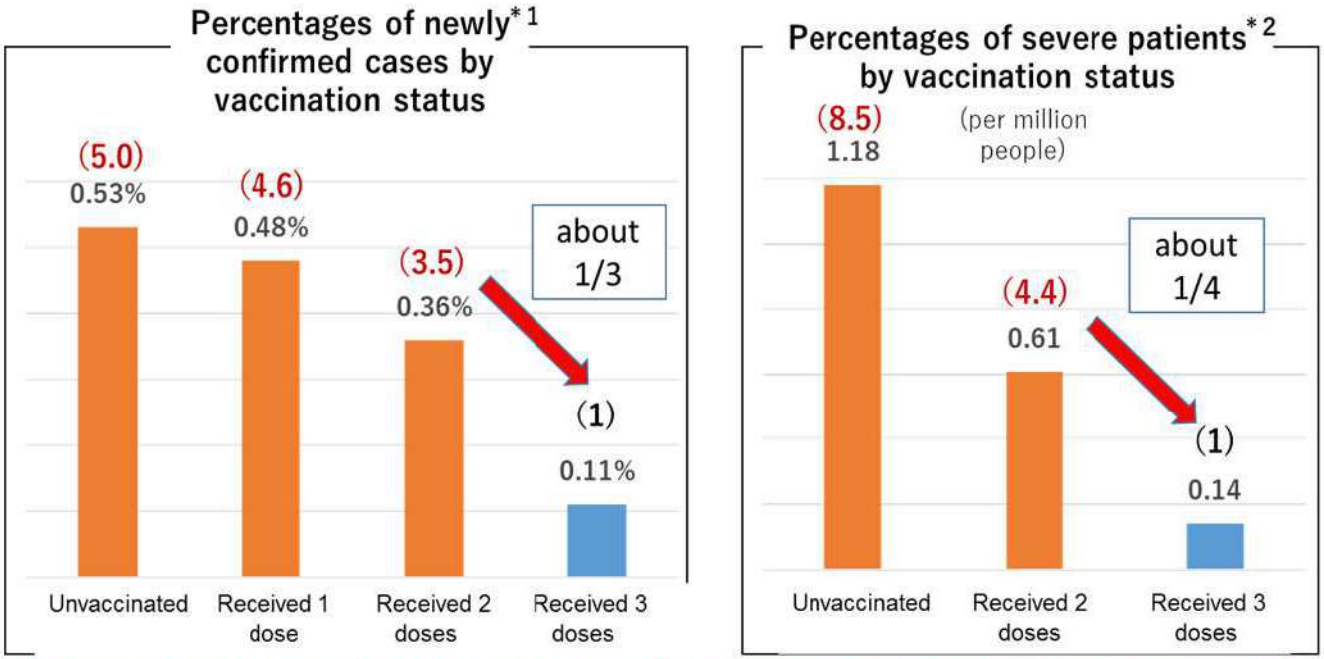
(April 2022)

- **The proportion of new positive cases and serious cases by vaccination status were reported. Further support was given to promoting vaccination given the importance of additional vaccinations (3rd vaccinations)**

(86th Monitoring Meeting on April 21, 2022)

https://www.bousai.metro.tokyo.lg.jp/_res/projects/default_project/_page_/001/021/411/85/20220421_09.pdf

Percentages of Confirmed Cases and Severe Patients by Vaccination Status



Numbers in parentheses ( ) are the figures if the rate for persons administered 3 doses of vaccine is "1."

1. Incidence rates for confirmed cases are average values calculated by dividing the total number of confirmed cases (on the reporting date) during each weekly period from March 1 to April 18, broken down by vaccination status, including cases whose vaccination status is unknown, by the population of Tokyo on the last day of each period, also broken down by vaccination status. Caution should be exercised when interpreting the results.
2. Incidence rates for severe patients are calculated by dividing the number of newly confirmed cases who developed severe symptoms (patients on a ventilator or using ECMO)* between March 1 and April 18, broken down by vaccination status, including cases whose vaccination status is unknown, by the population of Tokyo on April 12, also broken down by vaccination status (taking into account the effects of vaccination). Caution should be exercised when interpreting the results. The graph excludes people who only received one dose of vaccine as the incidence rate was zero.
3. The numbers of people by vaccination status uses data reported by TMG based on VRS data.

*This document was compiled based on data as of April 21.

Reference: Confirmed Cases by Vaccination Status

Percentages of Confirmed Cases by Vaccination Status

● Confirmed cases were tallied by vaccination status, including cases whose vaccination status is unknown, in order to calculate the percentages of confirmed cases by vaccination status.

● Numbers in parentheses ( ) are the figures if the rate for persons who have received 3 doses of vaccine is "1."

*Example: Incidence rate during March 1-7 among those who have received a 2nd dose of vaccine (29,685/7,150,600) ÷ incidence rate among those who have received a 3rd dose of vaccine (4,088/3,680,915)=3.7

Period	Total Number	3rd Dose			2nd Dose (excludes people who have received a 3rd dose of vaccine)			1st Dose (excludes people who have received a 3rd or 2nd dose of vaccine)			Unvaccinated			Unknown
		Confirmed Cases	Vaccinated Persons	Percentage	Confirmed Cases	Vaccinated Persons	Percentage	Confirmed Cases	Vaccinated Persons	Percentage	Confirmed Cases	Unvaccinated	Percentage	
Mar 1-7	72,743	4,088	3,680,915	0.11%(-)	29,685	7,150,600	0.42%(3.7)	401	87,589	0.46%(4.2)	20,326	2,924,289	0.70%(6.3)	18,237
Mar 8-14	60,423	4,060	4,394,681	0.09%(-)	22,993	6,447,413	0.36%(3.9)	413	88,453	0.47%(5.1)	17,692	2,912,782	0.61%(6.6)	15,269
Mar 15-21	52,144	4,466	5,036,015	0.09%(-)	19,031	5,814,605	0.33%(3.7)	483	85,581	0.56%(6.4)	15,337	2,907,128	0.53%(5.9)	12,827
Mar 22-28	45,955	4,701	5,684,700	0.08%(-)	16,300	5,178,826	0.31%(3.8)	493	135,159	0.36%(4.4)	12,973	2,844,644	0.46%(5.5)	11,488
Mar 29-Apr 4	53,252	7,073	6,096,526	0.12%(-)	18,695	4,788,218	0.39%(3.4)	720	135,403	0.53%(4.6)	14,120	2,823,182	0.50%(4.3)	12,643
Apr 5-11	53,175	8,173	6,449,971	0.13%(-)	17,785	4,456,615	0.40%(3.1)	652	129,760	0.50%(3.8)	13,728	2,806,983	0.49%(3.9)	12,837
Apr 12-18	45,979	8,096	6,791,825	0.12%(-)	14,045	4,138,334	0.34%(2.9)	578	119,448	0.48%(4.1)	12,167	2,793,722	0.44%(3.7)	11,183
Average	–	–	–	0.11%(-)	–	–	0.36%(3.5)	–	–	0.48%(4.6)	–	–	0.53%(5.0)	–

*Incidence rates are calculated by dividing the seven-day total number of confirmed cases (on the reporting date), broken down by vaccination status, by the population of Tokyo on the last day of each period, also broken down by vaccination status. Caution should be exercised when interpreting the results.

*The numbers of people by vaccination status is based on data reported by TMG based on VRS data. The numbers of unvaccinated persons are calculated by subtracting the number of people who have received at least one dose of vaccine from the total population of Tokyo, 13,843,329 people (the reference date for the data is April 19. Because data is updated daily, there is a time lag between vaccination and recording, and these numbers will be updated in the future).

*This document was compiled based on data as of April 21.

Reference: Severe Patients by Vaccination Status

Severe patients by vaccination status (severe cases per million people)

● Patients with severe symptoms (on a ventilator or using ECMO)* were tallied separately by vaccination status, including patients whose vaccination status is unknown, in order to calculate the number of severe patients per million people by vaccination. *Newly confirmed positive cases since March 1 who developed severe symptoms (through April 18).

● Numbers in parentheses ( ) are the figures if the rate for persons who have received 3 doses of vaccine is "1."

	Total	3rd Dose	2nd Dose (excludes people who have received a 3rd dose of vaccine)	1st Dose (excludes people who have received a 3rd or 2nd dose of vaccine)	Unvaccinated	Unknown
Number of vaccinated persons (as of April 12)	13,843,329	6,506,760	4,402,075	129,402	2,805,092	–
Number of severe patients	107	9	27	0	33	38
Severe patients per million	–	0.14(-)	0.61(4.4)	– (-)	1.18(8.5)	–

*Incidence rates are calculated by dividing the total number of severe patients up to April 18, broken down by vaccination status, by the population of Tokyo on April 12, also broken down by vaccination status taking into account the effects of vaccination, and converting those figures into the numbers per million people. Caution should be exercised when interpreting the results, as about 35% of severe patients had an unknown vaccination status.

*The numbers of people by vaccination status is based on data reported by TMG based on VRS data. The numbers of unvaccinated persons are calculated by subtracting the number of people who have received at least one dose of vaccine from the population of Tokyo, 13,843,329 people (the reference date for the data is April 19. Because data is updated daily, there is a time lag between vaccination and recording, and these numbers will be updated in the future).

*This document was compiled based on data as of April 21.

Mask-wearing Situation in Various Countries (May 2022)

- **With the risk of heat stroke increasing and other concerns heading into summer, the wearing of masks has become an issue. Based on this, whether countries overseas require people to wear a mask or not was reported on at the 87th Monitoring Meeting on May 12, 2022**

https://www.bousai.metro.tokyo.lg.jp/_res/projects/default_project/_page_/001/021/537/85/20220512_06-3.pdf

Mask-Wearing Situation in Various Countries (as of May 11, 2022)

	Mask Mandates	Places Where Wearing a Mask is Required
UK	None	–
U.S.	None (*Recommended in certain settings)	※〔Wearing a mask continues to be recommended when using public transportation (airplanes, trains, etc.) and indoors transit areas〕
France	In certain settings	Medical facilities and nursing homes for the elderly ※The mask mandate for public transportation was lifted on May 16
Germany	In certain settings	Specific settings such as public transportation, medical facilities, and nursing homes *The requirement to wear a mask is strengthened in areas where the infection situation has worsened.
Israel	In certain settings	Medical-related facilities such as hospitals and certain other facilities such as onboard aircraft
Korea	Exist to a certain extent	・Indoors* ・When participating in an outdoor gathering of more than 50 people or when 50 or more people are watching a performance or sports outdoors (※) Inside structures such as buses, taxis, trains, ships, airplanes and other vehicles, and all structures that are demarcated on all sides and separated from the outside.

*Sources: U.S. CDC, Japanese embassies in each country, JETRO, and various news reports

Basic Approach to Wearing Masks (May 2022)

- **Based on the approach to wearing masks laid out by the national government in May 2022, three key points taking the risk of infection into account, key settings in which to wear a mask, and children wearing masks were summarized in an easy-to-understand manner**

(Report of the 88th Monitoring Meeting on May 26, 2022)
https://www.bousai.metro.tokyo.lg.jp/_res/projects/default_project/_page_/001/020/922/76/20220127_10.pdf

Basic Concept of Wearing Masks

- Mask Wearing is important as a Basic Infection Control Measure
- Three points to consider when thinking about wearing a mask, taking into account the risk of infection

Is the "physical distance" secured	Droplets, one of the routes of infection, are said to reach 1m to 2m away, so it is important to keep a distance of at least 2m from uninfected person
Outdoor? or Indoor?	The risk of infection is lower in Outdoor settings than indoors due to air circulation.
Conversation or No Converdation	The infection can be transmitted through conversation or vocalization. If there is no conversation, the risk of infection is low.

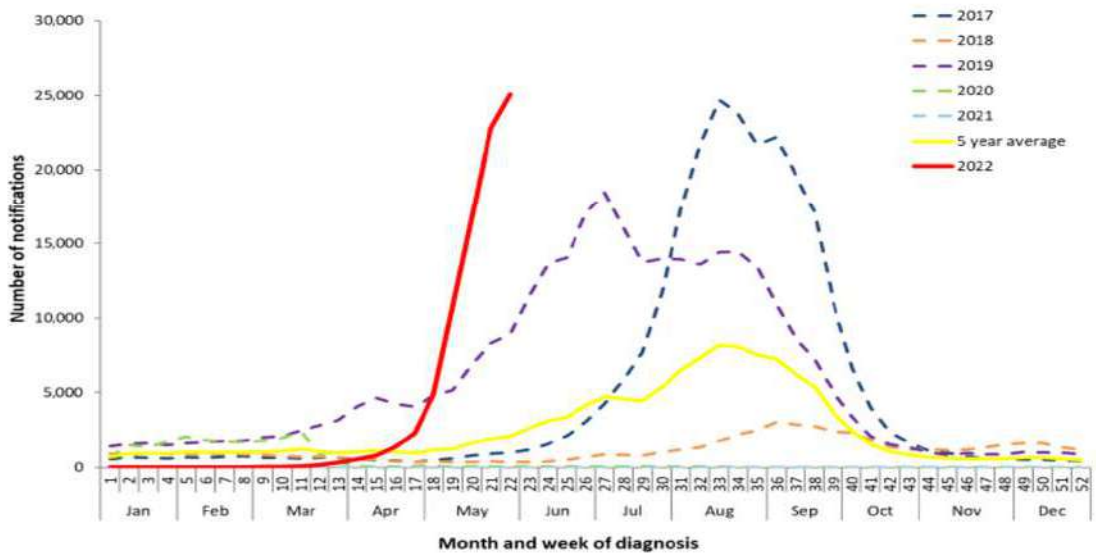
Influenza Prevalence in Australia (June 2022)

- **The situation in the Southern Hemisphere is a valuable reference point for predicting the prevalence of influenza in the coming Northern Hemisphere winter. Community transmission of influenza, which had been minimal in Australia the previous two seasons, was evident in June 2022**
- **Due to concerns about the future prevalence of influenza in Japan as well, the situation in Australia was reported on at the 90th Monitoring Meeting on June 23, 2022**
  https://www.bousai.metro.tokyo.lg.jp/_res/projects/default_project/_page_/001/021/756/90/20220623_10.pdf

オーストラリアにおけるインフルエンザの流行状況について

2017年1月1日～2022年6月5日、診断月・週別（暫定値）

Figure 4. Notifications of laboratory-confirmed influenza, Australia, 01 January 2017 to 05 June 2022, by month and week of diagnosis*



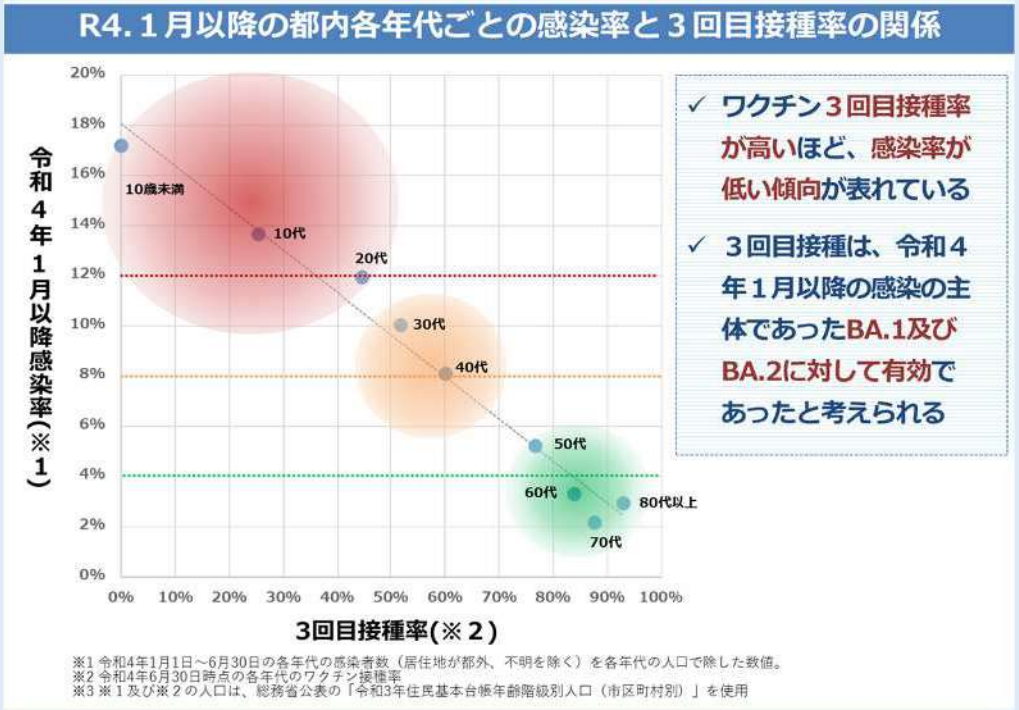
Source: NNDSS

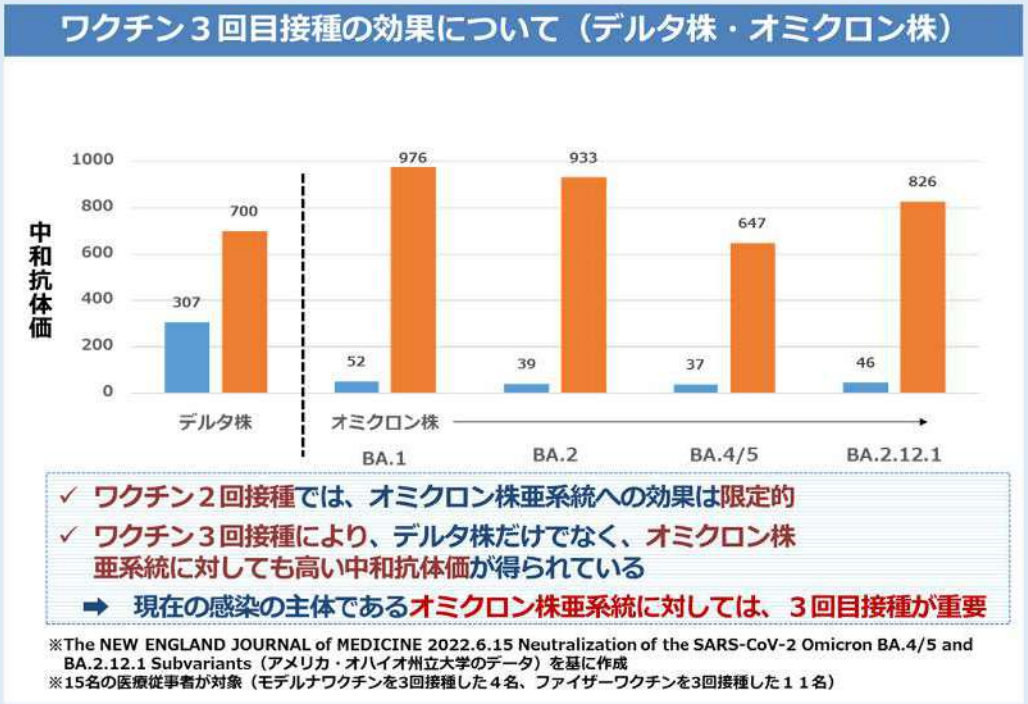
*NNDSS notification data provided for the current and most recent weeks may be incomplete. All data are preliminary and subject to change as updates are received, with most recent weeks considered particularly subject to revisions. Please refer to Data considerations for interpretation of the 5 year average.

https://www1.health.gov.au/internet/main/publishing.nsf/Content/cda-surveil-ozflu-flucurr.htm/$File/flu-05-2022.pdf

Effects of 3rd Vaccinations (July 2022)

- Graphs were created to represent the relationship between the infection rate in various age groups and the rate of 3rd vaccinations since January 2022, when Omicron became the predominant strain
- The rate of 3rd vaccinations is higher in older age groups, and the infection rate accordingly tends to be lower. It was reported at the 92nd Monitoring Meeting on July 7, 2022 that it is therefore believed that additional vaccinations (3rd vaccinations) are effective against Omicron, providing further support to promoting vaccination
- At the same time, overseas research results about the benefits of 3rd vaccinations were also presented
  https://www.bousai.metro.tokyo.lg.jp/_res/projects/default_project/_page_/001/021/822/92/20220707_13.pdf





Infection Situation Around the World (July 28, 2022)

- **In July 2022, Japan's cumulative deaths per million people became the lowest among the 38 member countries of the OECD. However, Japan's daily number of new positive cases* reached its highest-ever point**
  (*as of July 28, 2022)
- **Report on comparison of the infection situation and vaccination rate around the world**
  (Report of the 95th Monitoring Meeting on July 28, 2022)
  https://www.bousai.metro.tokyo.lg.jp/_res/projects/default_project/_page_/001/021/904/09.pdf

COVID-19 Infection Situation in Countries Around the World

	U.S.	Canada	UK	Germany	Australia	Israel	Korea	Singapore	Japan
Confirmed cases (daily)	166,598	7,385	738	121,780	49,460	5,990	100,182	12,419	196,362
Confirmed cases per million people (7-day average)	382 →	129 →	295 →	1,033 ↓	1,780 ↑	589 ↓	1,402 ↑	1,599 ↓	1,414 ↑
Deaths (cumulative: people)	1,027,369	42,695	182,912	143,364	11,300	11,300	24,907	1,483	31,946
Deaths per million (cumulative: people)	3,050	1,120	2,718	1,720	439	1,219	481	272	257
Percentage of BA.5 strain[3]	81.9% ↑	78.3% ↑	81.8% ↑	88.8% ↑	69.7% ↑	79.1% ↑	81.0% ↑	45.9% ↓	83.3% ↑
Vaccination rate									
1st dose	78.7%	86.0%	79.8%	77.6%	86.4%	72.3%	87.0%	92.1%	83.3%
2nd dose	67.2%	82.5%	74.8%	76.0%	83.8%	66.2%	86.1%	91.7%	82.2%
3rd dose	37.8%	58.5%	59.6%	68.8%	53.8%	57.5%	73.2%	77.6%	62.0%

1. The figures for confirmed cases uses data from July 26, 2022 (excluding certain countries *The figure for the UK uses data from July 22). *Source for 1, 2, 4: https://ourworldindata/org)
2. Deaths (cumulative) are based on data up to July 25, 2022.
3. Data for the U.S. is genome analysis results from July 17 to July 23 (source: CDC website). Data for Japan is variant PCR testing results at the Tokyo Metropolitan Institute of Public Health from July 12 to July 18. Data for other countries is genome analysis results from July 11 to July 17. *For Korea, data is from June 27 to July 3. (Source: covSPECTRUM)
4. Vaccination rates are based on data up to July 11. (The third dose vaccination rate for Japan is from the website of the Prime Minister's Office (as of July 11). The rates are the percentages vaccinated out of the total population.))

The Impact of COVID-19 on Society (1)

- COVID-19 has had significant effects not only on the fields of health care and public health, but across society, including on the economy, behavioral patterns, and how children live. In addition, it has catalyzed social changes which are likely to continue and further develop in the future, including tele-health and remote learning enabled by digital transformation, as well as greater diversity in working styles such as remote working
- The Tokyo Metropolitan Government has hosted round-table discussions featuring specialists from the Tokyo iCDC and experts from many fields, analyzing COVID's various effects on society from a wide range of angles based on three themes: (1) Society and economy, (2) behavior patterns and digitization, and (3) children and education

Experts and Main Comments

Tokyo iCDC Experts

Mr. Mitsuo Kaku
(Director of Tokyo iCDC)

Mr. Norio Ohmagari
(Infectious Disease Medical Treatment Team)

Mr. Hiroshige Mikamo
(Testing and Diagnosis Team)

Mr. Tetsuya Matsumoto
(Infection Prevention and Control Team)

Ms. Yumiko Nara
(Risk Communication Team)

Mr. Mikihito Tanaka
(Risk Communication Team)

Ms. Kaori Muto
(Risk Communication Team)

[Establishing basic infection prevention measures, etc.]

- In one sense, **infection was limited compared with other countries** because **the Japanese people already had high risk awareness.**
- We are under the impression that actual experiences such as our own infection and that of family members **gradually enabled normal risk assessment.**
- There is a **trade-off between infection prevention and continuing economic activities**; the priority also depends on the position.

[Coexisting with COVID-19]

- Japanese society will slowly return. **It is important to consider how society will change in the meantime.**
- Which diseases will we always exist with? We must face the next pandemic **from the perspective of this "with."**
- The fact that **Tokyo took up leadership and held the Olympics by combining the power and wisdom of other regions will have a major effect on the future development of Japan.**

[Realizing a sustainable recovery]

- For Tokyo to further increase its resilience in the future, it needs to create **comfortable spaces and pandemic-ready spaces.**
- With the advancement of digitalization, **public awareness of ways to use AI** will be important.
- Tokyo should appeal to the world with its **value creation through DX and its safety.**
- How to assess the **impact on children**? We **need to see this in the medium- and long-term.**

https://www.seisakukikaku.metro.tokyo.lg.jp/cross-efforts/corona/torikumi.html

The Impact of COVID-19 on Society (2)

*Source: Supplement to ”Initiatives Taken by the Tokyo Metropolitan Government for COVID-19 Response,” “Special Feature ‘Analyzing the impact of the COVID-19 pandemic on society from a wide range of angles’”

Theme 1 COVID-19 Society and the Economy

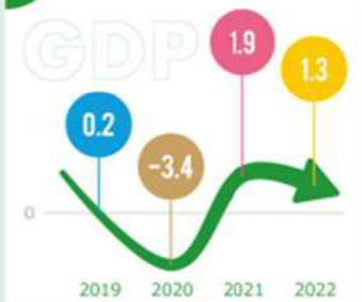
The impacts of COVID-19 on society and the economy include the following.

- **The number of cases and the mortality rate have been kept at low levels in Japan and Tokyo compared to the rest of the world.**
- **Japan’s global brand appeal is rising** due to its success in containing COVID-19 and hosting the Tokyo 2020 Games amid the pandemic.
- On the other hand, **Japan’s economic growth rate declined due to the pandemic, and although it is recovering, the growth rate is low when compared internationally.**
- Regarding the trade in goods balance, **although exports remain healthy, a record trade deficit was posted due to an excess of imports.** However, there is a current account balance surplus due to net income from abroad.
- **Consumer spending**, which has been sluggish for over the past two decades, **fell even more due to COVID-19.** It grew in 2022 due to rising prices, but in terms of the US dollar, it has dropped.
- There has been **a pronounced decline in service spending**, including the tourism industry which was impacted by COVID-19.
- **The Japanese economy as a whole is contracting considerably when viewed on an international scale.**
- It is speculated that **the people’s overestimation of the risks of COVID-19** could be a factor behind this.
- On the other hand, **this overestimation of the risks also helped Japan in keeping the virus more contained than in other countries.**
- There is a **trade-off between COVID-19 control and ongoing economic activities.**

Japan's economic growth rate

- Japan's economic growth rate declined with COVID-19.
- While this is recovering, the growth rate is low compared to other countries.

01 Japan's nominal economic growth rate



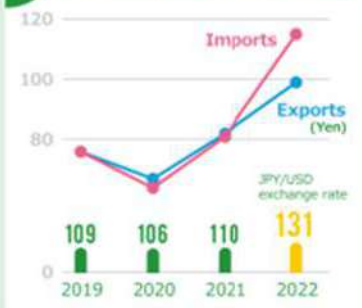
02 IMF economic growth projections

	2022	2023	2024
World output	3.4%	2.8%	3.0%
Japan	1.1%	1.3%	1.0%
United States	2.1%	1.6%	1.1%
Euro Area	3.5%	0.8%	1.4%

Trade in goods balance

- Exports remain healthy, even in US dollars.
- A record trade deficit was posted due to increased imports.

03 Yen fluctuations and Japan's exports/imports



Balance of payments

- The trade in goods balance is in the red, the income balance, which is interest and dividends from overseas, is growing, and the current account is in the black.

04 Japan's balance of payments