国際
シンポジウム

COVID-19パンデミック下のマスギャザリングイベントと公衆衛生対策

International Symposium Mass Gathering and Public Health Preparedness during COVID-19 pandemic

開催日時 / Date

2022年1月13日 / January 13th, 2022

主催 / Organizer

厚生労働行政推進調査事業費「大規模イベント時の健康危機管理対策に資する研究」
研究代表者：国立感染症研究所感染症危機管理研究センター　齋藤 智也

Ministry of Health, Labour and Welfare Health Science Research Group
on “Health Security for Mass Gatherings/ High Profile Events”
Principal Investigator:
SAITO Tomoya, Director, Center for Emergency Preparedness and Response,
National Institute of Infectious Diseases, Japan

略称

COVID-19：新型コロナウイルス感染症
EOC：緊急時対応センター
IOC：国際オリンピック委員会
MCI：多数傷病者事故
WHO：世界保健機関
ラグビーワールドカップ：2019年ラグビーワールドカップ日本大会
組織委員会：公益財団法人東京オリンピック・パラリンピック競技大会組織委員会
東京2020大会：東京2020オリンピック・パラリンピック競技大会
北京2022大会：北京2022オリンピック・パラリンピック競技大会
Beijing2022: Beijing 2022 Olympic and Paralympic Games
COVID-19: Novel coronavirus disease
EBS: Event-based surveillance
EOC: Emergency Operations Center
GOJ: Government of Japan
IBS: Indicator-based surveillance
IOC: International Olympic Committee
MCI: Mass Casualty Incident
MHLW: Ministry of Health, Labour and Welfare
NIID: National Institute of Infectious Diseases
TMG: Tokyo Metropolitan Government
Tokyo 2020 Organising Committee:
The Tokyo Organising Committee of the Olympic and Paralympic Games
Tokyo 2020: Tokyo 2020 Olympic and Paralympic Games
WHO: World Health Organization

報告書作成

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Collaborator:
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National Institute of Infectious Diseases
TOKUMOTO Atsuna, Tsuchiura Kyodo General Hospital

International Symposium

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Summary

Mass gathering events, such as the Olympics and other large-scale international events, require preparation and response to various risks. In addition to securing the safety of those involved in the event, organizers should ensure that the local medical and public health systems are not negatively affected. Japan has experienced various large-scale international mass gathering events, and the focus has been on emergency medical care and mass disaster preparedness. However, the importance of preparedness for public health emergencies, such as infectious disease outbreaks, has also been highlighted. The Research Group on Health Security for Mass Gatherings/High Profile Events, funded by the Ministry of Health, Labour and Welfare (MHLW) Health Science Research Fund has investigated public health preparedness in various mass gatherings and high-profile events such as the Tokyo 2020 Olympic and Paralympic Games (Tokyo2020) and the G20 Summit. The Research Group organized the first International Symposium on Mass Gathering and Public Health Preparedness in 2019 to introduce countermeasures and lessons learned from mass-gathering events in 2019 and preparations for Tokyo2020. However, the subsequent outbreak of the novel coronavirus disease (COVID-19) spotlighted COVID-19 countermeasures at mass gatherings.

This symposium reviewed Tokyo2020, an international mass gathering event that took place in the midst of the COVID-19 pandemic, through the presentations of seven speakers. The presentations provided an overview of infection prevention and control for Tokyo2020, infectious disease surveillance and response, medical systems, efforts, achievements, and challenges from the perspectives of the International Olympic Committee, Organising Committee, and host city. It was recognized that new organizations and collaborative frameworks were introduced, functioned well, and were strengthened, and that the introduction of digital technologies such as online conferencing during the pandemic also contributed to this. The speakers also emphasized the importance of flexibility, as in the context of COVID-19, many factors were in flux. Although Tokyo2020 is considered to have been a success, issues related to risk communication to people not involved in it were also raised in the discussion.

Agenda

Presentation Title	Speaker
Opening Remarks and about our Project	SAITO Tomoya, MD, MPH, PhD Director, Center for Emergency Preparedness and Response, NIID, Japan
Keynote: Planning for the Olympic and Paralympic Games in a Pandemic; Challenges and Lessons	Brian McCloskey Public Health Advisor, International Olympic Committee and Senior Consulting Fellow, Global Health Programme, Chatham House, London, United Kingdom
COVID-19 preparedness for Tokyo 2020	SAITO Tomoya, MD, MPH, PhD Director, Center for Emergency Preparedness and Response, NIID, Japan
Infectious Disease Surveillance and Response for Tokyo 2020	SHIMADA Tomoe, MD, PhD Chief, Division for Epidemic Intelligence Training and Practice, Center for Field Epidemic Intelligence, Research and Professional Development, NIID, Japan
Activities and issues of Academic Consortium of medical preparedness during Tokyo Olympic/Paralympic Games in 2020	MORIMURA Naoto, MD, PhD Professor and Chair, Department of Emergency Medicine, Teikyo University School of Medicine, Japan
The role of Tokyo 2020 IDCC for COVID-19 preparedness and response in the Games	SHIMADA Satoshi, MD, PhD Former Director of Public Health, Department of Medical Service, Games Operation Bureau, the Tokyo 2020 Organising Committee of the Olympic and Paralympic Games
Host city's public health activities: Tokyo Metropolitan Government	SUGISHITA Yoshiyuki, MD, MPH, PhD Infectious Disease Control Division, Bureau of Social Welfare and Public Health, Tokyo Metropolitan Government
Host city's public health activities: Hokkaido Prefecture	ISHII Yasuhiko, MD Infectious Disease Control Bureau, Health and Welfare Department, Hokkaido, Japan
Discussion	Moderators and Speakers

Moderators

SAITO Tomoya (NIID)

ICHIMURA Yasunori (National Center for Global Health and Medicine)

TOMIO Jun (National Institute of Public Health)

WADA Koji (International University of Health and Welfare)

Session 1

Opening Remarks/About our Project

Director, Center for Emergency Preparedness and Response, NIID, Japan
SAITO Tomoya, MD, MPH, PhD

In Japan, several mass gatherings and high-profile events, including the Olympics and Paralympics, were scheduled for 2019–2020. With the recent global promotion to build a core capacity for health security, such mass gatherings are considered an important opportunity to strengthen the response capacity for health crises (health security). The Health and Labor Sciences Research Group "Health Security for Mass Gatherings/High Profile Events" began its activities in 2019. This symposium is part of the research project of this research group.

The objectives of the group are first, to document and review public health preparedness and response to international mass gathering events in 2019–2020, and second, to build a legacy of support for public health preparedness for mass gathering events for future countries and organizations hosting these events. In January 2020, we organized an international symposium, Mass Gathering and Public Health Measures, to review the measures taken for the G20 Osaka Summit and the Rugby World Cup 2019, as well as to discuss measures for Tokyo2020, which had been scheduled for 2020.

The purpose of this event was to review the international mass gathering event held under the COVID-19 pandemic, the overall picture of infection prevention and control measures for Tokyo2020, infectious disease surveillance and response, medical systems, and efforts from the perspectives of the International Olympic Committee, the Organising Committee, and the host city, and to share the achievements and challenges widely for future mass gathering events.

厚生労働科学研究費「大規模イベント時の健康危機管理対策に資する研究」
MHLW Health Science Research Group
on "Health Security for Mass Gatherings/ High Profile Events"

背景 Background:

- 2019~2020年にオリンピックを含む複数のマスギャザリング／注目度の高いイベントを開催
  Japan hosts several mass gathering events/high profile events in 2019 and 2020 including Olympic games.
  - 感染症アウトブレイク等健康危機のリスク
    Potential health security risks such as infectious disease outbreak
- 世界保健機関は国際保健規則に基づく健康危機コアキャパシティの構築を促進
  WHO is encouraging strengthening core capacity under International Health Regulations (IHR).
  - アフターアクションレビュー：健康危機コアキャパシティの評価とモニタリングの４本柱の一つ
    After-action-review: one of 4 pillars of monitoring and evaluation of the IHR core capacity
  - マスギャザリング：健康危機対応能力（ヘルスセキュリテイ）強化の重要な機会
    Mass gathering - crucial opportunity for reinforcing health security

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我々のミッション Our Mission

1. 2019-2020に開催される国際的マスギャザリングにおける公衆衛生事前準備と対策をレビューする
   Review public health preparedness and response for the international mass gathering events in Japan during 2019-2020
2. マスギャザリングイベントのための公衆衛生事前準備を支援するレガシーを構築する。
   Develop a legacy for guiding public health preparedness for mass gathering events.

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国際シンポジウム
マスギャザリングと公衆衛生対策
開催報告書
Report on International Symposium on Mass Gathering and Public Health Preparedness

Agenda

- Keynote
- G20 Osaka Summit
- Rugby World Cup 2019
- Towards Tokyo 2020

http://massgathering.jp/archives/430

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Public health activities
in the host cities
of the Rugby World Cup 2019
in Japan

ラグビーワールドカップ
2019 日本大会における
保健医療活動の事後評価

http://massgathering.jp/archives/482

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本日の演題
Today's Agenda

パンデミック下のマスギャザリングイベント
Mass Gathering during pandemic
・東京オリンピック・パラリンピック大会
Tokyo Olympic and Paralympic Games

- 国際オリンピック委員会の視点
  IOC's perspective
- 東京2020大会の感染対策の全体像
  Overall measures during Tokyo2020
- 感染症サーベイランスと対応
  Infectious Disease Surveillance &Response
- 組織委員会の視点
  TOCOG's perspective
- 医療体制の視点
  Medical Preparedness
- 開催都市の視点
  Host city's perspective

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Session 2 **Keynote**

Planning for the Olympic and Paralympic Games in a Pandemic; Challenges and Lessons

Public Health Adviser, International Olympic Committee and Senior Consulting Fellow, Global Health Programme, Chatham House, London

Dr. Brian McCloskey

Good morning, good afternoon, and good evening, everyone. Thank you for the opportunity to speak here today and thank you for your attendance. I just want to briefly talk about what we did lead up to Tokyo2020, from the perspective of the public health advisor to the International Olympic Committee (IOC). I also work closely with the World Health Organization on mass gatherings.

I want to show the challenges that we had in preparing for Tokyo2020 this year. The fact that the games were delayed by a year, gave us an additional 12 months to think about the planning and to get ready for what we would do in the pandemic. It also meant that we had 12 months when the pandemic itself was evolving. We were learning on a daily basis more about COVID-19, how to manage it and we were constantly trying to keep up-to-date and to adjust our plans as we learned more about what COVID-19 was and how it could be managed. We also had to try and predict how that pandemic would evolve over the period of the 12 months, and that was challenging because most people around the world were just starting to learn about COVID-19. We were trying to predict what it would be like 12 months in advance. We were also looking at an evidence base, which was not at all well developed. And some of the things that we had to think about, for example, international travel restrictions, where despite the advice of World Health Organization (WHO), a large number of countries around the world were bringing in travel restrictions, but it was not clear that the evidence justified it or that we could understand how effective it would or would not be. Similarly, we were developing a testing strategy. We knew testing would be important, but we were not sure what was the most effective strategy that would reduce the risk of COVID-19 spreading in the Games. Our main concern was to reduce spread of COVID-19 within the games itself, but also, very importantly, to avoid spread between the international community traveling to Japan and the Japanese population and bringing infection back from Japan to the rest of the world.

We were developing a vaccination policy at a time when there were no vaccines, but we knew vaccines were coming. And we knew that public health and social measures would be important, but, again, the evidence base of how effective they would be and what difference they would make, was not clear. We also had to deal with public concerns because the games at that time were not very popular with the Japanese population and as COVID-19 evolved, the population became more nervous and there were more calls for the games to be abandoned. We also had concerns raised by scientists, epidemiologists, public health around the world saying that the games were a risk for a super-spreading event and should be canceled. We had to deal with both the scientific concerns and the concerns of the population of Tokyo.

The initial approach was to use all of the standard COVID-19 counter-measures that the WHO had been advocating since the beginning of the pandemic. That meant the standard public health and social measures that everybody was becoming familiar with, such as social distancing, respiratory and hand hygiene, mask wearing and good ventilation, particularly at indoor areas. We also recognized the importance that WHO has always put on the capacity for test, trace and isolate to ensure that any possible case of COVID-19 arising would be identified, would be managed, contacts would be identified and managed, and the risk would be reduced. There was increasing evidence throughout that year from sporting events and mass gatherings around the world that testing a population regularly during the event was an important means of reducing the risk, but with very little science about how best to do that. We were also looking at vaccination, but at this stage there were no vaccines available, when we started. We knew that vaccines would be available before the games started, but they would probably not be available equitably around the world. The important message was, as WHO has always said, it requires the full package. It is not sufficient to rely on vaccination or on testing or on physical measures alone, you must do all the measures, all the time.

It was important to build a consensus to deal with the concerns of the public and concerns of scientists to ensure that everybody understood what we were trying to do, why we were trying to do it and the evidence that it would be effective. The All Partner Taskforce was a joint meeting between the organising committee in Tokyo, the IOC and the Japanese government at a very high level. It allowed all of the concerns, all of the science to be shared to ensure that everybody was reassured that the games could be held safely and that the evidence we were using was sound and robust. We had an independent expert panel from around the world that I chaired, which brought together people, not just with public health expertise, but also people from the travel industry, the hospitality industry, from people organizing large events, people organizing, for example, theme parks, etc., to bring together the expertise that was gradually building up around the world about how mass gatherings could be managed in the course of a pandemic. We needed also to do the risk communication and community engagement that is always a part of outbreak response. And, in part, this was done by developing what were called the Playbooks. The Playbooks set out for all participants at the games, what they could expect as they travelled to Tokyo, what life would be like in Tokyo, what was expected of them in terms of the way they behaved, physical distancing, etc., and what the organizers were doing to keep everybody safe.

We needed to design a screening system, a testing system. In terms of the testing program, we approached an organization called FIND – Foundation

for Innovative Diagnostics, that works with WHO and others to look at new laboratory testing emerging that would be of value to mass gatherings. They did extensive modeling for us of different scenarios of testing – testing before leaving for Tokyo, testing in Tokyo, testing every day, every two days, what sort of testing to use. They modeled about 14 different scenarios and looked for each of those, and what the likely impact would be in reducing the risk of COVID-19 spreading during the Games. Their conclusion was that the most effective strategy would be initial pre-departure testing for everybody, before they left for Tokyo, and then daily testing while they were in the Olympic village around the Games. And the final program that was put together was that everyone involved at the Games had to have two negative tests before departure for Tokyo. They were tested at the airport in Tokyo when they arrived and then went through to their hotel or the Olympic village they were tested every day for the high risk personnel.

One of our priorities was that we needed to manage the risk of spread across the interface, the meeting between the international population coming in and the domestic population in Tokyo. We used the salivary quantitative antigen test mainly because that was the test already in use by the authorities at Tokyo airport, but also because PCR with nasopharyngeal swabbing is a medical procedure in Japan that must be done by a doctor and we couldn't guarantee having sufficient doctors available. For the salivary antigen test we had 12-hour turnaround for the results, and if the result was positive, it was confirmed by a PCR on the same sample immediately, with results within 12 hours. Any positive test on the salivary PCR was confirmed by nasopharyngeal PCR with a three-hour turnaround. We had a very extensive testing program where our priorities were to minimize the risk of false positives and false negatives because either would cause disruption to the games or risk of COVID-19 spreading. The Tokyo Metropolitan Government (TMG) and the organising committee set up and infectious disease control center which collected and managed all the results because it was important that the risk of any positive result being missed was reduced and all results were acted upon quickly.

We had just over 670,000 tests done in the course of the Olympics. If you look at the Paralympics as well, there were over one million tests done on the participants, which was roughly 33,000 tests per day between the pre-departure test, airport, training camps, etc., as well as in the village. The overall positivity rate across that was 0.02%, which is much less than we anticipated and substantially less that would have happened if we had done the same number of tests in London last July. The positive tests have undergone genome sequencing by National Institute of Infectious Diseases (NIID).

The number of tests being done has raised from

early July through the time of the Games and, it peaks at around 33,000 per day and the compliance was over 93-94% across the Games, with people being tested according to the appropriate frequency. For the most high-risk people that was every day, but for some people who had less contact with the high-risk groups or the international groups, it was two or three times a week.

We ended up having 464 positives out of the 670,000 odd tests done; 37 from the airport screening, 163 within the Olympic village screening, and some from pre-games and pre-departure testing. Ultimately, among the athletes and team officials in the village, there were just 67 positive cases, 33 in athletes and 34 in team officials, which is actually an extremely small number given there were eleven-and-a-half thousand athletes in the village throughout the duration of the games. It was also interesting when we looked at the close contacts. Given that this was a closed population that was being tested every day, it was a good opportunity to look at the extent to which people who became positive did or did not pass infection on to other people. We had a total of 417 people confirmed as close contacts and only seven of those, 2%, subsequently tested positive. That figure is much lower than we generally see quoted in studies about the extent in which COVID-19 spreads amongst close contacts. Ultimately 96% of the close contacts were able to continue to train and compete and do their work as planned. We also established what was called the results analysis expert group, a group of epidemiologists and public health doctors from within Japan and from across the world, who looked at all ambiguous or complicated results to make sure that we were not missing anything significant that might indicate that there was small cluster of outbreak developing in the village and to make sure that we were not creating false positives.

We knew vaccines would come along, but we were concerned that it would not be equitably available throughout the world, and within the IOC and the organising committee it was not acceptable for a situation where, if vaccination was made compulsory, athletes from wealthy countries could be vaccinated and could come, but athletes from poorer countries would not get vaccinated and couldn't come. So vaccine would not be compulsory for the games, but would be recommended. In addition, the IOC provided 100,000 vaccine doses to 50,000 participants in 25 countries to help ensure that athletes who wanted to be vaccinated, could be. And they also worked with the government in Tokyo to increase the supply of vaccines for the workforce locally in Tokyo. Although vaccine was not compulsory, we did have about 85% of the village vaccinated last summer.

The key message which we took away from the games in Tokyo, which we are now using to help develop the preparations for the Beijing2022 Games

shortly, is that it can be done. We can run a mass gathering of this scale in a pandemic and we can do it safely - but it requires commitment, considerable planning and implementation, and a thorough risk assessment. Throughout our process we worked with WHO's mass gathering risk assessment tool. We constantly looked at what were the risks, what were the ways in which we could reduce those risks and how effective do we think those measures would be. Very importantly, we confirmed the view that we need to embrace the core message from WHO that you have to use all modalities of risk mitigation, the public health measures, the test, trace, capacity, etc. It is not sufficient to rely on any one of those. There was considerable focus from scientists elsewhere around the world on aerosol transmission and the need to use ventilation, which is true, but we can't rely on any one modality; to reduce the risk of COVID-19 you have to do all of those. It also showed the importance of risk communication and community engagement. All the participants knew what was expected. They knew what they had to do to keep themselves safe and what we would do to help them. It's also important to vaccinate, if possible, but only if it can be done equitably.

The really important message is that Tokyo Games, despite all the scientific criticism and concerns voiced before the games, did not create a super-spreader event and there was very limited import of infection into Tokyo. It was limited spread in Tokyo, in the village, and no spread from Tokyo back to the rest of the world after the games. With all that planning and implementation and consideration and risk assessment, we did get the games across the line in the end. We organized an extremely good, effective, safe Tokyo Games.

Questions and Answers

Q1: What were the strengths, issues, and challenges that you noticed among the measures taken by Tokyo?

A: I think what was important overall was risk communication, which we did with the organising committee beforehand so that everybody coming to Tokyo understood what it would be like, what testing would be done, how they would be expected to behave, etc. That was very effectively done in advance, so everybody understood what it would be like to be in Tokyo and what they would have to do. Thus, risk communication is an important factor. I think part of the weakness was that as the game progressed and people realized that the Olympic village in Tokyo was probably one of the safest places in the world from COVID-19 at that time, they started to think about relaxing the measures too soon, and we had to be vigilant to make sure that everybody did what they had to do.

Q2: Do you know why some people did not receive vaccines, were there medical reasons, religious reasons, or because vaccines were not available?

A: We did not systematically collect this information, but it is very much a combination of all those factors because at that stage, the vaccine was not easily available in all countries around the world, particularly low-income countries; however, some people had their own objections to being vaccinated, either because they had medical contraindications or simply because they were unwilling to take a vaccine that had only recently been developed.

Q3: How did you try to address the concerns of people who were afraid that the virus would spread? How did you address the concerns about the spread of the virus?

A: Primarily by regular communication, both with the participants and through press conferences with the organising committee and for the people in Tokyo themselves. We tried to convey the message that we understood why they were concerned. We understood the risks that might arise during the games, but we were putting in place good, scientific measures to reduce that risk and were constantly repeating the message to reassure them that the science was right and that they would be safe, and that this was very important to us.

Q4: Were there any systems to allow athletes to appeal after initially being tested positive?

A: There was an expert group that we set up to consider situations where the results looked complicated or unusual, like someone who had tested positive, then negative, then positive, and so on. The group could consider all the test results, including PCR CT values, to determine whether it was safe for that person to compete. If a person remained positive they were not allowed to compete. For close contacts, we developed a protocol with our organizers to ensure that people with close contacts could continue to train even though they were in the close contact group; they were closely monitored and tested and kept separate from other participants, and by and large, we were able to ensure that they were eventually able to compete in the games.

Q5: Now, we are faced with Omicron. If you were to have a chance to do so, would you change your advice, having seen how the variants are developing or evolving?

A: We are now looking at how we apply the same sort of measures to Beijing2022 and we are adopting what we did in Tokyo to suit the Beijing environment. In addition to the daily testing regime, public health measures have become even more important because we know that Omicron will spread more rapidly than the Delta variant if it enters the village. So, we are making sure that the focus is on public health and

social measures, social distancing, wearing masks, and the use of FFP2 masks in Beijing, as all these measures become even more important in the context of Omicron.

Q6: Any advice you have for the people in Beijing?

A: The primary advice is, again, that we can do this and we can do it safely, but it requires a lot of work and commitment. There will be a similar testing regime to what we had in Tokyo, with oropharyngeal PCR testing in Beijing, daily, for everybody involved in the high-risk areas for a similar, closed-loop management system. Once people get into the big village, they are allowed to move between the hotel, the village, and the venues, but they do not interact with the general population. We try to stop the interaction between domestic and international populations. This will be applied in Beijing, probably more strictly than we did in Tokyo, because of Omicron and all other things. The reinforcement of public health measures and testing will be similar to what we learned from Tokyo.

International Olympic Committee

PLANNING FOR THE OLYMPIC AND PARALYMPIC GAMES IN A PANDEMIC; CHALLENGES AND LESSONS

Dr Brian McCloskey
Public Health Advisor
13/05/2021

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CHALLENGES

Planning 12 months in advance
Global COVID predictions
COVID evidence base:
- International travel restrictions
- Testing strategy
- Vaccination policy
- Public health and social measures

Public concerns
Scientific concerns

2

TOKYO 2020 COVID-19 COUNTERMEASURES

1. Standard Public Health and Social Measures
   - Social Distancing
   - Respiratory and Hand Hygiene
   - Mask Wearing
   - Ventilation
2. Full capacity for Test, Trace and Isolate
3. Screen testing of population
4. Vaccination

It needs the full package.....

3

PREPARATION

Building Consensus
- All Partner Task Force
- Independent Expert Panel

Risk Communication and Community Engagement
- Playbooks

Designing the Screening system
Vaccination Policy

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TOKYO 2020 TESTING PROGRAMME

Modelling by FIND

Most effective strategies to reduce risk:
- Pre-departure testing
- Daily testing

Final Programme:
- Two tests before departure
- Test at Tokyo Airport on arrival
- Daily testing throughout stay for all higher risks personnel

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"VILLAGE" TESTING REGIME

For all athletes and team officials in the Villages and all those in close contact with them

(All those at the international/domestic interface)
- Daily test with salivary Quantitative Antigen Test – 12 hr turnaround for results
- All positive qAntigen tests confirmed by PCR on same sample – 12hr turnaround
- All positive salivary PCR tests confirmed by separate Naso-pharyngeal PCR – 3hr turnaround in Village

Results collated and managed by Infectious Disease Control Centre (IDCC)

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SCREEN TESTING RESULTS

~ 676,000 tests done on participants

~33k tests per day

(Includes: Pre-departure tests, airport tests (43k), Pre-Games Training Camp tests, local workforce testing outside TOCOG Programme)

Overall positivity rate in testing: 0.02%

Positive tests had genomic sequencing by Japanese MHLW/NIID

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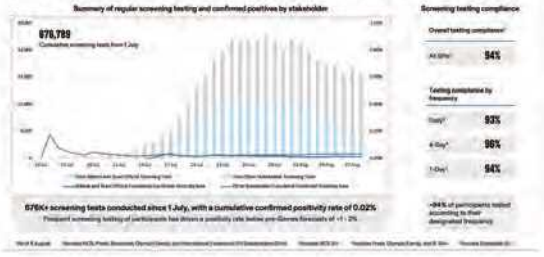
SCREEN TESTING RESULTS

HIGH REGULAR SCREENING TESTING FREQUENCY AND COMPLIANCE DRIVE LOW POSITIVITY



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RESULTS

37 confirmed positives from airport screening

163 confirmed positives from TOCOG/Village screening

6 confirmed positives from PGTC testing

3 Pre-departure testing

7 Close contact confirmatory testing

248 local health service testing

= 464 positives

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RESULTS – ATHLETES AND TEAM OFFICIALS

Athletes and Team Officials confirmed positive: 67

Athletes: 33

Team Officials: 34

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RESULTS – CLOSE CONTACTS

Close contacts of confirmed positives: 417

Subsequently tested positive: 7 (2%)

Close contacts who continued to train and compete as planned under adaptive countermeasures: 403 (96%)

(7 close contacts could not continue Games work)

Ambigous or complicated results reviewed by Results Analysis Expert Group (RAEG) to advise Japanese public health authorities

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VACCINATION

~85% of Village vaccinated

The IOC provided 100,000+ vaccine doses to over 50,000 Games participants across 25 National Olympic Committees

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COVID19 AND TOKYO 2020 - LESSONS

Key Messages:

- It can be done
- It can be done safely
- It requires commitment and considerable planning and implementation based on a thorough risk assessment
- It needs to embrace the core WHO messages:
  - Use all modalities of risk mitigation
  - Maximise test and trace capacity
  - Risk communication and community engagement
  - Vaccinate if possible and equitable

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TOKYO2020 DID NOT CREATE A SUPER-SPREADER EVENT

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International Olympic Committee

THANK YOU

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Session 3

COVID-19 preparedness for Tokyo 2020

Director, Center for Emergency Preparedness and Response, NIID, Japan
Presenter: SAITO Tomoya, MD, MPH, PhD

This presentation describes the overall framework for countermeasures against novel coronavirus infections in Tokyo 2020. Before the emergence of COVID-19, the four main public health risks for Tokyo 2020 were heat stroke, natural disasters, imported infectious diseases, and mass disasters, such as terrorism. Suddenly, however, COVID-19 has emerged as a primary public health concern.

In September 2020, discussions on COVID-19 countermeasures for Tokyo 2020 began at the government level. The Government of Japan, TMG, and the Tokyo Organising Committee of the Olympic and Paralympic Games (Tokyo 2020 organising committee) participated in the launch of the Coordination Meeting for COVID-19 Countermeasures at Tokyo 2020. At this point, there were many uncertainties in this regard. A general policy was summarized in December 2020 as the Interim Summary, and additional measures were announced in April 2021 to address the emergence of a highly transmissible variant.

The measures were discussed for each target category of athletes, game stakeholders, and spectators, and the measures were examined for each step of pre-departure, arrival, competition, and return ("journey"). The measures taken at the events associated with the Games and pre-Games camps were also summarized. In addition, the Playbook was prepared to provide participants with an overview of COVID-19 countermeasures and the rules to be obliged.

The COVID-19 measures in Japan are something of a culmination of the voluntary efforts of individuals. Therefore, there were concerns about not only the direct but also indirect impacts of holding Tokyo 2020 on Japan's COVID-19 situation. The direct impact was on medical and public health capacity. Indirectly, there was a concern that the euphoria of Tokyo 2020 may discourage people from taking various measures under a state of emergency. To curtail these impacts, multiple layers of measures were implemented in Tokyo 2020.

First, the number of game officials, excluding athletes, was reduced, and the number of travelers was drastically reduced to approximately one-third to one-fourth of the original plan. In addition, as of spring 2021, the acceptance of spectators from abroad has been abandoned. An agreement was reached to limit the domestic audience to 10,000, or within 50% of the capacity. Ultimately, a state of emergency was declared before the Olympics, and one city and three prefectures decided to have no spectators in June 2020.Only five venues in three prefectures accepted spectators, bringing the total number of spectators to about 43,000 for the Olympics. Only 15,700 spectators attended the Paralympics under the schools' spectator program. These numbers are much lower than the 8.65 million tickets sold before the Games. Live sites and other

opportunities to gather people were cancelled. Torch relays were mostly not held on public roads. For infection prevention and control, travelers were placed under self-isolation and health observation for 14 days. Athletes were allowed to leave only for specific areas for practices, based on a pre-approved plan. Screening tests were conducted during the first three days, and athletes were tested daily thereafter. Additionally, citizens were encouraged to watch games at home.

Consequently, there were few clusters within the tournament. In addition, AY.29 of the Delta strain was prevalent in Japan at the time, but was rarely seen overseas later. There have been no new outbreaks of strains other than AY.29 in Japan. This proves that the movement of participants did not have a significant impact on the COVID-19 epidemic picture. Although there were some infected people among the participants, few were hospitalized or were seriously ill.

Tokyo 2020 was a very important opportunity to hold a large-scale international sporting event during a pandemic. There are some challenges, but it is important to discuss what we have accomplished. Countermeasures from multiple aspects were put in place through close consultations among partners, and they worked to protect athletes from COVID-19 and prevent a major cluster. In addition, by reducing the number of entries by officials and spectators, we were able to limit the impact on the host city, such as the surge of infection and the burden on medical resources.

Questions and Answers

Q1: What were the challenges in Tokyo 2020?

A. We learned that the scenario of a pandemic should be included in a risk scenario and discussed in depth from the early planning stage of the Games. For future mass-gathering events, it is necessary to prepare for the risk scenario of a pandemic and communicate among all parties involved.

Q2. Is the playbook available to the public?

A. Both Japanese and English versions are provided. It was updated based on the questions and points raised by stakeholders. It was finally put into operation after three updates.

International symposium on mass gathering and public health preparedness during COVID-19 pandemic. January 13, 2022.

COVID-19 preparedness for Tokyo2020

Tomoya SAITO, MD, MPH, PhD

Director
Center for Emergency Preparedness and Response
National Institute of Infectious Diseases, JAPAN

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International Mass Gathering and High Visibility Events in Japan

Mass Gathering :
"a planned or spontaneous event where the number of people attending could strain the planning and response resources of the community or country hosting the event (WHO, 2015)"

2

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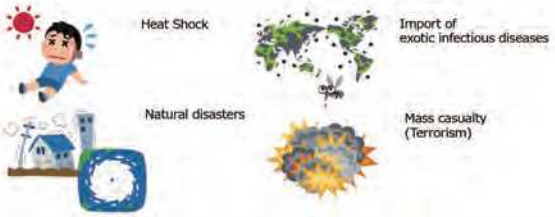
Public Health Preparedness for Tokyo2020



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Tokyo2020 postponed in 2021

- January 30, 2020
  - GOJ COVID-19 Response HQ
- March 11, 2020
  - Declaration of pandemic by WHO
- March 24, 2020
  - Games postponed in 2021
- March 30, 2020
  - New schedule in 2021 agreed

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MASS GATHERING DURING PANDEMIC

Re-planning for Tokyo2020 under COVID-19

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Coordination Meeting for COVID-19 Countermeasures at Tokyo2020 since Sept. 2020

"3-party-meeting"
- Govt. of Japan
- Tokyo Metropolitan Govt.
- Tokyo2020 Organizing Committee

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Many uncertainties

- COVID-19 situation in the World/Japan/Tokyo
- Travel restrictions/Border control
- Vaccine efficacy/effectiveness, availability, coverage
- Emergence of variants

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COVID-19 countermeasures for Tokyo2020
Interim Summary (Dec.,2020)

- COVID-19 countermeasures for
  - spectators
  - athletes
  - volunteers and games staff
  - Torch relay and live sites
  - Host towns and Pre-Games Training Camps
- Additional measures indicated to address more transmissible variants on April 28, 2021

The Coordination Meeting for COVID-19 Countermeasures at the Olympic and Paralympic Games Tokyo 2020 'Interim Summary' https://www.2020games.metro.tokyo.lg.jp/taikaijunbi/Summary_Coordination_meeting_for_COVID-19_countermeasures.pdf

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COVID-19 countermeasures for Tokyo2020
Playbooks

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COVID-19 Measures in Japan

- Border measures
- Contact tracing &Quarantine
- (quasi)State-of-emergency
  - Restrictions on opening hours of restaurants/bars
  - No alcohol policy
- State-of-emergency
  - Stay home/work-from-home
  - No lockdown measures
- Collective individual efforts
  - Universal mask (not mandate, but culture)
  - Hand washing
  - Avoid 3Cs

NIID CEPR

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Direct & indirect impact by the Games

Direct impact by the Games
- Medical & public health capacity
  - Hospital/quarantine hotels
  - Contact tracing

Indirect impact by the Games
- Concern that the "festive mood" from the Games may kill the public motivation to follow the government's indication (e.g. measures under the state-of-emergency)

NIID CEPR

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Risk reduction strategy -multiple layers of measures

- Prevention and control measures in every journey
- Downsizing
  - Game-related visitors from overseas
  - Related events
  - spectators
- Considerations on indirect negative impact

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Downsizing the event

Minimize the impact to local and global pandemic

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COVID-19 countermeasures for Tokyo2020 Visitors

Game stakeholders from abroad excluding athletes

- **Olympic**
  - Before COVID-19 141,000 from abroad
  - ⬇ −77%
  - After COVID-19 33,000 from abroad
- **Paralympic**
  - Before COVID-19 36,000 from abroad
  - ⬇ −73%
  - After COVID-19 10,000 from abroad

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COVID-19 countermeasures for Tokyo2020 Spectators

- Overseas spectators
  - Not to accept overseas spectators (March 2021)
- Domestic spectators
  - limit to be set at 50% of venue capacity
  - up to a maximum of 10,000 people at all venues (June 2021)
  - Due to the worsening COVID-19 epidemic, only 5/42 venues accepted spectators in Olympic Games (Total 43,300).
  - Not to accept spectators except for school programs (August 2021) (Total 15,700)

(Tickets sold before COVID-19: 8.65million)

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COVID-19 countermeasures for Tokyo2020 Live sites, public viewing, torch relay

- Tokyo Met Govt. canceled all live sites and public viewings.
- Tokyo Met Govt. canceled Torch relay at the public road (except for island areas).

Planned live site in Yoyogi park

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Infection Control

Quarantine, 3Cs, washing hands,

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COVID-19 countermeasures for Tokyo2020
Screening

For overseas visitors

- 14days self-quarantine (in principle)
  - Allowed to visit places and activities in special cases (practice, exercises, etc.) under the pre-approved plan
- Screening Test
  - First 3days for all
  - Everyday for athletes
  - Every 4-6 days for other stakeholders
- 1,014,170 screened, 510 positives, 304 confirmed (0.03%)
  - 14,000/day in average, 36,225/day at maximum

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COVID-19 countermeasures for Tokyo2020
Infection Prevention and Control at Village

- Check-in/out
  - Check-in: 5days before competition
  - Check-out: within 48hrs after competition
- Infection control
  - BT screening, ventilation, hand sanitation
  - Crowd information/floor sign
  - Interview at mix-zone only
- Response to COVID-19 cases
  - Screening everyday
  - Positive cases: isolated in hotel/hospital outside villages
  - Close contacts: quarantined in the village
- Special measures for close contacts
  - Isolated all the times except for games/practices
  - Negative test results 6hours before the games/practices

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Response

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Response

- Infectious Disease Control Center (IDCC) by TOCOG
- Onsite public health center by Tokyo Metropolitan Government
- Onsite clinic

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Considerations on indirect negative impacts

Does Olympic/Paralympic interfere the citizen's motivation to follow restrictive measures and raise the level of epidemic?

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Watching at home campaign e.g. marathon in Tokyo

パラマラソンは
自宅で観戦！

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COVID-19 & OTHERS

Epidemiology in Tokyo

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Surveillance/Monitoring/Early response for outbreaks in NIID EOC during Tokyo2020

- **Enhanced surveillance**
  - July 1st ~ September 19th , 2021
  - 6 priority diseases
    - COVID-19, MERS, Invasive Meningococcal Diseases, EHEC, Measles, Rubella
  - Daily reporting and assessment for cases related to Tokyo2020
- **Event-based surveillance**
  - Media, bluedot dashboard, EIOS by WPRO
- **Pathogen Genome Analysis for COVID-19 cases**
- **Technical support for local governments and TOCOG**

NIID Tokyo2020 EOC

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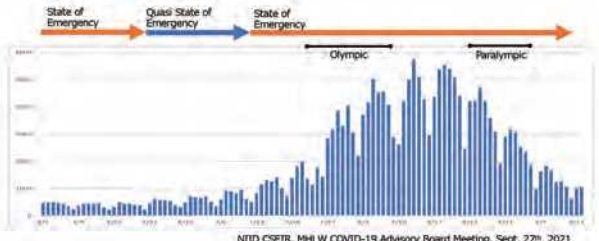
COVID-19 cases in Tokyo (by reporting date)



NIID CSEIR. MHLW COVID-19 Advisory Board Meeting. Sept, 27th, 2021

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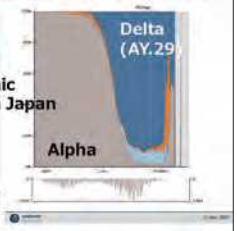
SARS-CoV-2 variant situation in Japan supports effectiveness of the Olympic bubble.

AY. 29 cumulative prevalence by country

Lineage prevalence in Japan last 60days



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COVID-19 case count by TOCOG

- **Olympic (July 1st ~ Aug 11th)**
  - From abroad 174
  - domestic 373
- **Paralympic (Aug 12th ~ Sept. 8th)**
  - from abroad 80
  - domestic 243

- Hospitalized among stakeholders from overseas
  - Olympic : 2
  - Paralympic : 3
- Severe cases among stakeholders
  - 0

*excluding cases in host towns

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Summary

- Hosting a major international sporting event under a pandemic was unusual and challenging.
- Athletes were well protected from COVID-19 by **layers of measures** -prevention/early detection by an intensive screening/early response.
  No chain of clusters among athletes were reported during the Olympic and Paralympic games.
- Many efforts for down-sizing the event might have reduced the negative impact to the society but indirect adverse effects to COVID-19 epidemic should be reviewed carefully.
- Pandemic should be included in a risk scenario for future mass gathering events.

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Session 4

Tokyo2020 preparedness and response efforts in the NIID

Chief, Division for Epidemic Intelligence Training and Practice, Center for Field Epidemic Intelligence, Research and Professional Development, NIID, Japan

Presenter: SHIMADA Tomoe, MD, PhD

Outbreaks of infectious diseases are often reported during religious events, such as the Hajj, or during large international sporting events. Enhanced surveillance is conducted to quickly detect outbreaks or health hazards.

There are two types of routine surveillance methods. Event-based surveillance (EBS) provides information about a health crisis event as soon as it occurs. It is not necessarily based on case definitions and information can be collected from sources other than those involved in healthcare. On the other hand, Indicator-Based Surveillance (IBS) is a survey of infectious disease outbreaks conducted routinely at a specific time based on a set of indicators or definitions; this is conducted under the Infectious Diseases Control Law in Japan. These were combined for risk assessment, response, and countermeasures.

An event in EBS is defined as a potential health crisis, a rare or undiagnosed situation, or an event or case that causes anxiety in the population. Even for health hazards that have not yet been diagnosed, information can be collected; therefore, risk assessment and response can be quickly performed.

EBS is often enhanced during international competitions and international mass gatherings. In the Rugby World Cup, approximately 400,000 spectators from at least 30 countries were expected, and the tournament was unique in that spectators stayed for a long time in various locations. The Epidemic Intelligence from Open Sources (EIOS) developed by the WHO was used as a source of information for the Rugby World Cup. It is a tool that obtains information from open sources and comprehensively examines it. In addition, information was collected and evaluated from local governments and other sources and returned to the relevant parties through daily reports.

Although the Tokyo Games were postponed for one year, the enhanced surveillance envisioned for 2019 was carried out as planned. We held daily meetings with the TMG and the Tokyo 2020 Organising Committee to share information. As COVID-19 required manpower, we outsourced EBS to collect information from overseas; we requested the WHO to collect overseas information through EIOS, and private sector epidemic intelligence obtained information directly. An Emergency Operations Center (EOC) was set up at the NIID to collect daily information related to infectious diseases. As a result, approximately 800 cases were detected and assessed by screening, 100 cases were alerted by daily reports, 8 cases were monitored instrumentally, and epidemiological investigation was actually carried out for a single case. All were domestic COVID-19 related cases. During the Rugby World Cup, two people spent approximately three hours per day on EBS, but during the Tokyo Games, due to outsourcing, three people spent only one hour.

In summary, an enhanced surveillance was conducted during the Tokyo Games. By utilizing

external sources, we were able to allocate sufficient human resources to COVID-19 during the Olympic Games in Japan. It is also useful to evaluate events through multiple sources of information. In addition, sharing and confirming information with related parties through the EOC, which was set up for the first time in the NIID, led to very effective countermeasures.

Questions and Answers

Q1: What were some of the difficulties in conducting enhanced surveillance?

A. In Tokyo2020, most of the enhanced surveillance was outsourced, so there were few difficulties. If we had done this on our own, it would have required a lot of manpower and time, which may have affected the COVID-19 response.

Q2. When preparing for Tokyo2020, did you conduct training or simulations and rebuild the countermeasures?

A. Initially, we had planned to train NIID staff to use the EIOS in 2019. However, in early 2020, the COVID-19 outbreak occurred and training was no longer possible; therefore, we outsourced the EBS to the WHO.

Q3: Did Tokyo2020 have any impact on diseases other than COVID-19?

A. A small number of cases of dengue fever and malaria were detected in the outbreak trend survey in Japan, and there was some evidence that dengue fever activity might be high during this period. It was determined that the risk was low due to the small number of travelers and preparations made in the village. As a result, there was no impact.

International symposium on mass gathering and public health preparedness during COVID-19 pandemic. January 13, 2022

Tokyo2020 preparedness and response efforts in NIID - Enhancing surveillance -

Tomoe SHIMADA, MD, MPH, PhD
Center for Field Epidemic Intelligence, Research and Professional Development, National Institute of Infectious Diseases, Japan

Opinions expressed during the presentation do not necessarily represent those of NIID.
*There is no COI to disclose

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Contents

- Mass gathering and infectious diseases
- Surveillance
  - Event-based surveillance(EBS)、Indicator-based surveillance、Public health Intelligence activity
- Enhanced surveillance implemented in the past for international sports events
- Enhanced surveillance for Tokyo 2020

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Mass gatherings and infectious diseases

- Outbreaks sometimes occur at Muslim, Christian, and Hindu religious events, at sports events, and at large-scale open air festivals.
- Many outbreaks occurring at mass gatherings result in the international spread of communicable diseases.

Gautret P et al. Int J Infect Dis. 2016;47:46–52. doi:10.1016/j.ijid.2016.03.007.



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Outbreaks at mass gathering sport events

Year	Event, Place	Cumulated number of attendees	Syndromic classification (pathogen involved)	Case numbers	Estimated incidence per 100 000 attendees
1991	International Special Olympics, USA	200,000	Respiratory (measles virus)	25	13
2002	Winter Olympiad, USA	ND	Respiratory (influenza)	36	ND
2007	International youth sporting event, USA	265,000	Respiratory (measles virus)	7	3
2015	International youth ice hockey competition, Latvia	5000	Gastrointestinal (Salmonella enteritidis)	214	4280

Gautret P et al. Int J Infect Dis. 2016;47:46–52. doi:10.1016/j.ijid.2016.03.007.

For early detection and response for outbreaks, surveillance system were enhanced(e.g. London2012 Summer Olympics).

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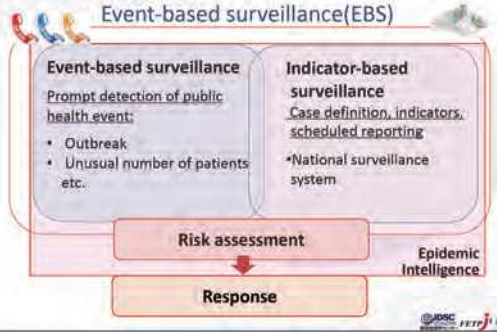
Indicator based surveillance(IBS) and Event-based surveillance(EBS)



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"Event" in EBS - Definition

A Guide to Establishing Event-based Surveillance (WPRO, 2008)

- Events related to the occurrence of disease in humans, such as **clustered cases** of a disease or syndromes, **unusual** disease patterns or **unexpected** deaths as recognized by health workers and other key informants in the country;
- Events related to **potential exposure** for humans, such as events related to diseases and deaths in animals, contaminated food products or water, and environmental hazards including chemical and radio-nuclear events.

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Event-based surveillance(EBS)

A Guide to Establishing Event-based Surveillance (WPRO, 2008)

- Consists of the capture and analysis of any report from outside the health system related to acute health events or health-related events and which could represent an immediate threat to human health.

Media search,
Rumor surveillance

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Advantage of Event-based surveillance(EBS)

- Syndromic approach can be used
- Information of undiagnosed health condition can be captured
- Prompt information collection, risk assessment and response

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Enhanced surveillance for Rugby World Cup(RWC) 2019 in Japan

- 20 Sep- 2 Nov, 2019.
- Participant countries:18
- Match venue: 12 stadium from Hokkaido to Kyusyu
- Expected spectators:
  - **Over 1.8 million spectators were expected, 400,000 were from overseas.**

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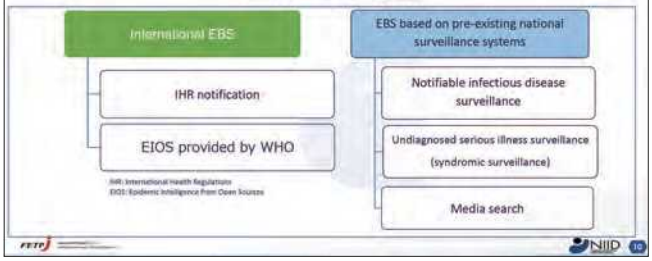
Enhanced surveillance for Rugby World Cup(RWC) 2019 in Japan

How to detect "Signals"



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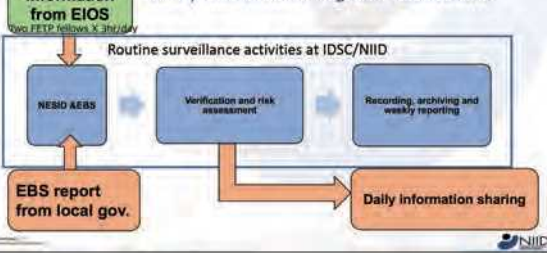
Enhanced surveillance for Rugby World Cup(RWC) 2019 in Japan

Verify and assess "signals" and share



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Detected events, verification and risk assessment

Examples

Event	Info source	Verification	Risk assessment	Post to daily report
"White Powder" in Italy	EIOS	Tried to obtain official report	Low but need further information	YES
Hepatitis A in South Korea	EIOS	Official report (KCDC)*	Moderate	Yes
Hepatitis E in Zambia	EIOS		Low but useful info	Yes
Contaminated food with Listeria - Nation wide distribution including tourist site in France and Spain	EIOS	Official report	Low but useful info	Yes
Contaminated food with hepatitis A virus in a popular restaurant in London	EIOS	Official report	Low but useful info	Yes
Measles in New Zealand	NFP		Moderate	Yes (based on published report)
Measles in Tokyo metropolitan area	Local government	Official report	Moderate~High	Yes**

* With assistance from WPRO ** Information was shared with NFPs and posted on NIID website

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Enhanced surveillance for Tokyo 2020 Olympic and Paralympic Summer Games (the Games)

Note: Several part of PPT was presented at TEPHINET in October 2021 by Dr. Kasamatsu(FETP fellow)

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Overview the Games

- The 2020 Tokyo Olympic and Paralympic Summer Games (the Games) were held from **23 July to 5 September 2021**
- The attendance of spectators from abroad not permitted
- **Several tens of thousands of Games personnel from more than 200 countries and regions**

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Situation of COVID-19 in Japan

Daily new confirmed COVID-19 cases in Japan from Mar, 2020 to June, 2021

The burden of the COVID-19 pandemic on national surveillance and response teams

Enhanced EBS with increased resources was not practical for the Games

State of Emergency 8 Jan- 21 Mar

State of Emergency 25 Apr- 20 Jun

State of Emergency 7 Apr- 24 May

the Games period 23 July to 5 September

Number of reported cases

2020 2021

Date of report

https://ourworldindata.org/covid-cases

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EBS framework for the Games (1 July - 19 September, 2021)

Signal screening

International EBS	Domestic EBS	EBS based on pre-existing national surveillance systems
IHR notification	Media search	Notifiable infectious disease surveillance
Media search	Tokyo Metropolitan Government	Undiagnosed serious illness surveillance (syndromic surveillance)
EIOS/WPRO	TOCOG	Laboratory surveillance for COVID-19 among the Games personnel
EI platform		

Events

IHR: International Health Regulations
WPRO: WHO Regional Office for the Western Pacific
TOCOG: Tokyo Organising Committee of the Olympic and Paralympic Games
EI: Epidemic Intelligence

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Demands for EBS

- NIID EOC（Emergency Operations Center), 1st July – 22nd September
- Three staff members(SM)、15 FETP fellows work on EBS

Domestic EBS: 1 SM+2 FETP /day , International EBS: 1 SM+2 FETP/day

CEPR : Center for Emergency Preparedness and Response
CFEIR: Center for Field Epidemic Intelligence, Research, and Professional Development
CSIER: Center for Surveillance, Immu

FETP: Field Epidemiology Training Program

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Results

Of the domestic events that were screened and evaluated, the majority were related to COVID-19

Number of events identified by enhanced EBS for the Games during 1 July to 19 September, 2021

1 event: investigated in the field

8 events: actively monitored

100* events: published in daily reports

773* events: screened and assessed

Reponse needed

COVID-19 related

*The same event was counted as multiple events if it is evaluated and/or posted multiple times

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Results
The Games
International EBS
Time required (/day/fellow) Within 1 hour
# of people in charge 2 fellows & 1 staff
Prioritized diseases & countries 69 diseases 80 countries
Domestic EBS
Time required (/day/fellow) 3 hours
# of people in charge 2 fellows & 1 staff
RWC*
3 hours
2 fellows & 1 staff
79 diseases 30 countries
The international EBS may have been conducted efficiently
This may be partly because the events were triaged based on the WPRO's and EI platform's risk assessments
*the Rugby World Cup 2019 in Japan
NIID

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Summary
• Enhanced EBS for the Games were implemented
• Incorporating external surveillance systems for international events had the potential to allocate our time and effort to domestic COVID-19 surveillance and response
• The data triangulation may have improved confidence in risk assessment and its quality
• EOC facilitated epidemic intelligence activities such as information collection, verification and sharing
NIID

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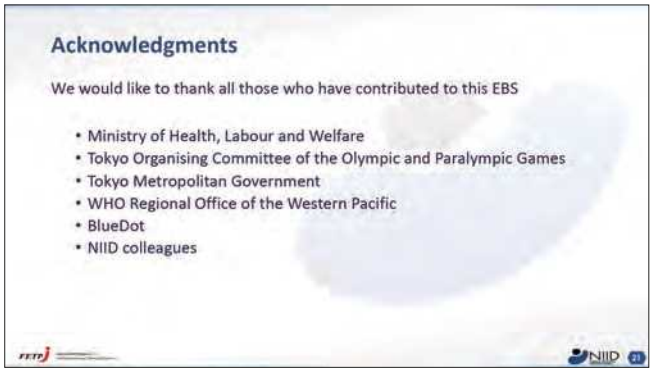
Acknowledgments
We would like to thank all those who have contributed to this EBS
• Ministry of Health, Labour and Welfare
• Tokyo Organising Committee of the Olympic and Paralympic Games
• Tokyo Metropolitan Government
• WHO Regional Office of the Western Pacific
• BlueDot
• NIID colleagues
NIID

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Session 5

Activities and issues of Academic Consortium of medical preparedness during Tokyo Olympic/Paralympic Games in 2020 Host Local Governments

Department of Acute Medicine, Graduate School of Medicine, the University of Tokyo
Presenter: Professor MORIMURA Naoto

The Academic Consortium has been working as a platform for 29 academic organizations since 2016. It has developed various recommendations and proposals, including on the impact of mass gatherings on emergency and disaster medicine. Mass gathering events have a significant impact on the healthcare delivery system in the case of emergencies. From the very beginning, the Academic Consortium emphasized the need to maintain the health care system for the local population, the "penumbra," who were not associated with the event. The first priority was to ensure a routine emergency medical system; the second was to provide medical care to event participants; and the third, to deal with MCI.

For Tokyo2020, the consortium provided advice on medical care outside the venue. Considering the demand generated by the event and medical capacity, we categorized the areas surrounding the venues to allocate medical support. Among the 33 venues in Tokyo, the bay coast areas required the most support. To prepare for medical care at the venues, the consortium and the Tokyo 2020 Organising Committee collaborated. Guidelines and manuals were also developed and disseminated for different roles. A practical training plan for the medical staff working for the audience was also presented.

It is important to focus on existing plans when determining risk, ensure that vaccines and infection protection measures are in place for those involved in the event, limit the number of domestic spectators, ensure that infection protection is in place, and be prepared to respond domestically in the event that the infection spreads during or after the event. As of May 2021, the Academic Consortium had made the above recommendations, and experts had made similar recommendations to the government or the Tokyo 2020 Organising Committee.

For infectious diseases, simulations of surges were repeated. During the epidemic period, manuals were prepared for last-mile care and for measures in first aid stations and in the medical room in the competition venue. From the preparatory stage, a system was created to ensure real-time coordination between the Medical Coordination Headquarters in the Main Operation Center located in the Games Organising Committee and the Medical Section in the City Operation Center, which looks after the entire TMG.

The number of injuries and illnesses at all venues during the Olympic Games was 1,099 (628 in the medical office for athletes and 471 in the medical office for spectators), and 403 during the Paralympic Games was (193 in the medical office for athletes and 210 in the medical office for spectators). Two patients with cardiac arrest recovered fully neurologically. The number of ambulances transported to the hospital during the Olympic Games was 71, with 18 hospitalizations, and the number during the Paralympic Games was 28, with 12 hospitalizations.

Finally, regarding COVID-19 cases in Japan, a

large wave of epidemics was observed, even though the effective reproduction number (Rt) dropped just before Tokyo2020. However, the increase in the number of cases up to that point may have been due to behavioral changes caused by Tokyo2020.

In summary, the direct impact of Tokyo2020 was not significant, but considering the indirect impact, Rt continued to rise until just before Tokyo2020. Changes in people's behavior need to be studied from various perspectives, including the social and psychological standpoints. If a mass gathering is to be held during an epidemic, it is important to take measures not only within the venue, but also to thoroughly communicate the risks to the "penumbra," the citizens.

Questions and Answers

Q1: Was there any difficulty or ingenuity in switching the medical response preparation from the original mass gathering to the event during COVID-19?

A. As it turned out, we managed it, but we were treading on thin ice. Japan has a very strong framework for collaborating with the normal emergency medical system and the medical system in the event of a natural disaster, but there is a weakness in the administrative framework that separates the cooperation between infectious disease response and normal medical care. In the initial response, I felt that the sharing of plans was slower than in other natural disasters.

Q2: There were two medical headquarters, the Tokyo 2020 Organising Committee and TMG, but were they set up physically close to each other?

A. Although they were physically far from each other, they were able to share information using various means such as SNS. This is one of the points that must be lauded.

On-line international symposium on mass gathering and public health preparedness during COVID-19 pandemic Jan 13, 2022.

Activities and issues of Academic Consortium of medical preparedness during Tokyo Olympic/Paralympic Games in 2020

The Joint Committee of the Academic Consortium on Emergency Medical Service and Disaster Medical Response Plan during the Tokyo Olympics and Paralympic Games in 2020
Department of Emergency Medicine
Teikyo University School of Medicine
Naoto Morimura MD, PhD

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COI Disclosure

Name: Naoto Morimura

The author have no financial conflicts of interest to disclose concening the presentation.

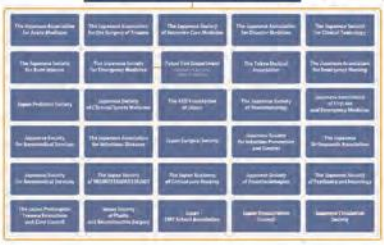
2

http://2020ac.com/

The Academic Consortium on Emergency Medical Service and Disaster Medical Response Plan during the Tokyo Olympic and Paralympic Games in 2020

Joint Committee for the Emergency Medical Service System and Disaster Medical Response System during the Tokyo Olympic and Paralympic Games in 2020

29 associations : As of January, 2021



3

Medical demand increases during mass gathering

- Increased daily emergency demand
  - Because of a temporary population increase in the area ...
    - Infectious/digestive/food-related diseases, etc.
- Difficult access to the venue may cause
  - Trauma, heat stroke, fatigue, etc.
- An exciting event may relate to
  - ACS, stroke, trauma, etc.
- Abnormal weather conditions may increase
  - Heat stroke, hypothermia, respiratory complications, etc.
- Alcohol served event ...
  - Trauma, acute alcohol poisoning, etc.
- Possibility of Mass Casualty Incident (MCI)
  - Crowd avalanches caused by temporary population increase
  - Terrorism related to high interest and international affairs

4

Provision of emergency medical care may be delayed during mass gathering

- Restricted access due to mass gathering may delay emergency medical services not only for crowds but **citizens not associated with the event** in the host area

N Engl J Med 2017;376:3441-50.
DOI: 10.1056/NEJMsa1614078

5

Risk of travel-associated infectious disease caused by mass gathering at international conventions

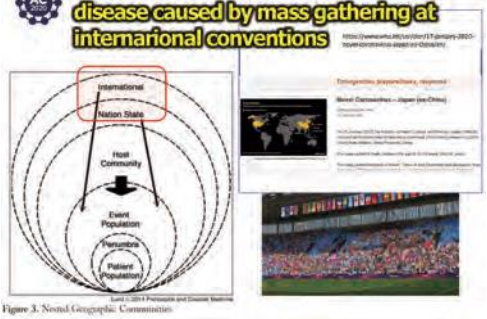
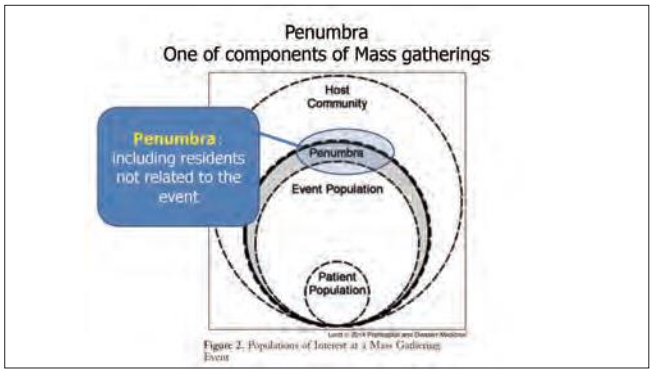
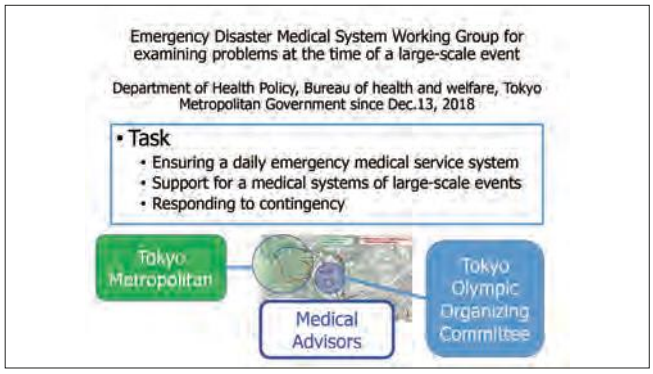


Figure 3. Nested Geographic Communities

6


Penumbra
One of components of Mass gatherings
Host Community
Penumbra: including residents not related to the event
Penumbra
Event Population
Patient Population

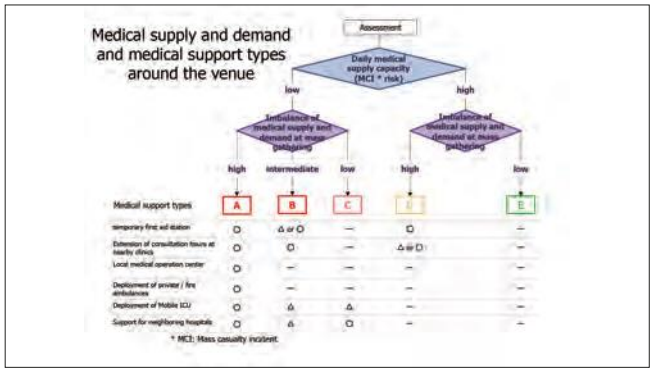
7


Emergency Disaster Medical System Working Group for examining problems at the time of a large-scale event
Department of Health Policy, Bureau of health and welfare, Tokyo Metropolitan Government since Dec.13, 2018
• Task
• Ensuring a daily emergency medical service system
• Support for a medical systems of large-scale events
• Responding to contingency
Tokyo Metropolitan
Medical Advisors
Tokyo Olympic Organizing Committee

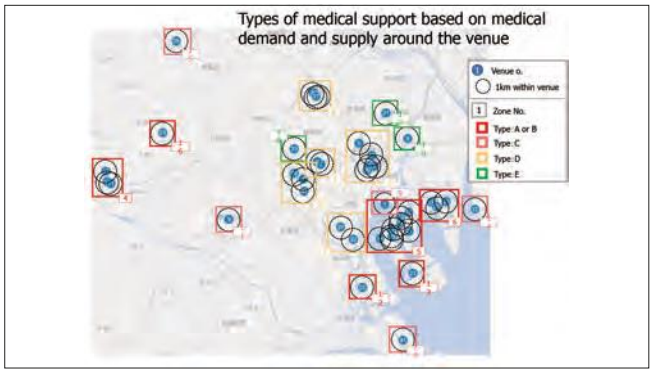
8


Medical Risks identified by AC2020: Cause
Population increase in venue and surrounding area related
Impact on daily emergency medical system
Increase of #7119-119 usage
Ambulance usage
Hospitals burden
Impact on disaster medical system at the time of assumed natural disaster
Earthquake, flood
Weather condition related
heatstroke
Lightning strike
Increase of tourists related
Impact on daily emergency medical system
Visiting foreiners: communication, religion, insurance, repatriation
Infectious disease
High proflie event related
Multisite Mass Casualty Incident caused by terrorism
Explosion, gunshot wound, special disaster, cyber
RISK

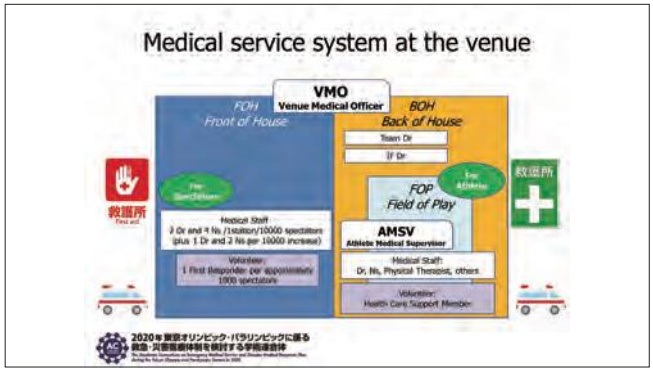
9


Medical supply and demand and medical support types around the venue
Assessment
Daily medical supply capacity (MCI * risk)
low
high
high
intermediate
low
high
low
A
B
C
D
E
Medical support types
* MCI: Mass casualty incident

10

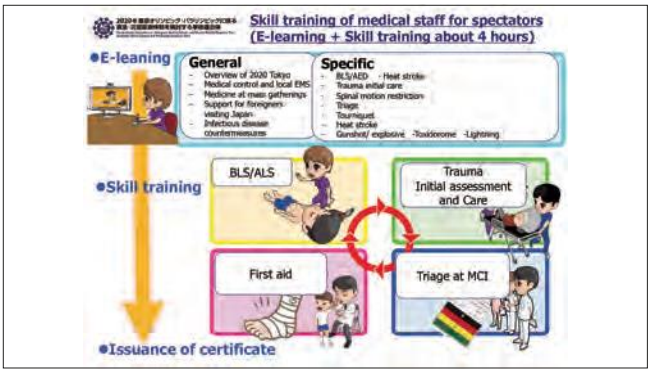

Types of medical support based on medical demand and supply around the venue
Venue o.
1km within venue
Zone No.
Type: A or B
Type: C
Type: D
Type: E

11


Medical service system at the venue
VMO
Venue Medical Officer
FOH
Front of House
BOH
Back of House
Team Dr
IF Dr
FOP
Field of Play
AMSV
Athlete Medical Supervisor
救護所
First aid
救護所

12

13



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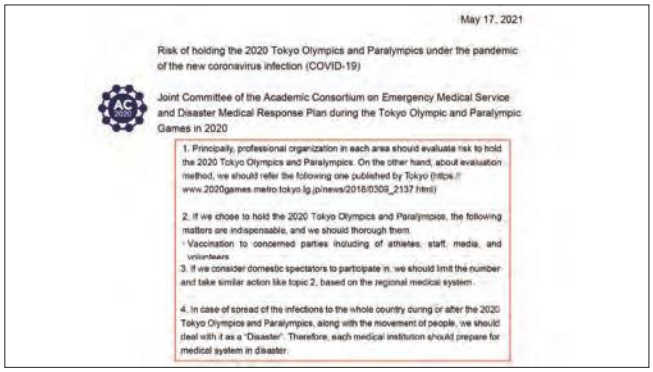

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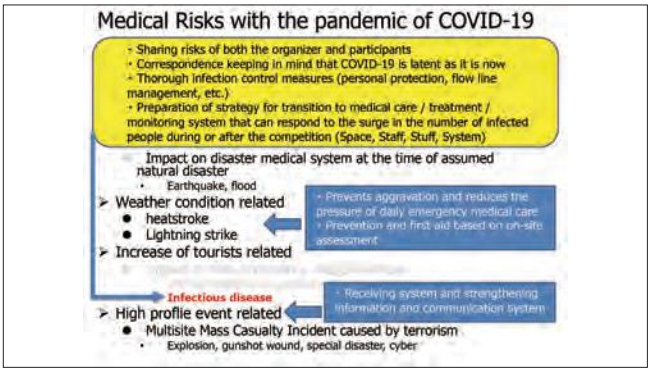

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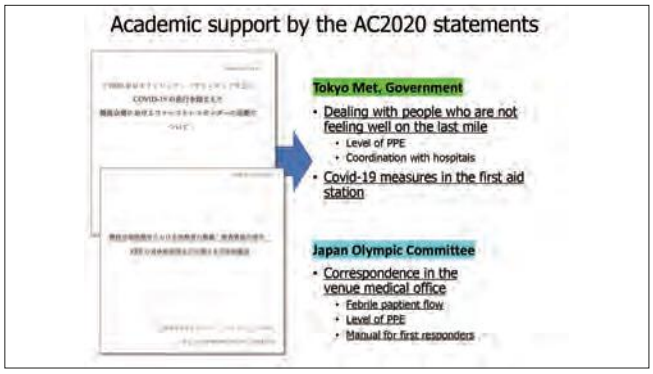

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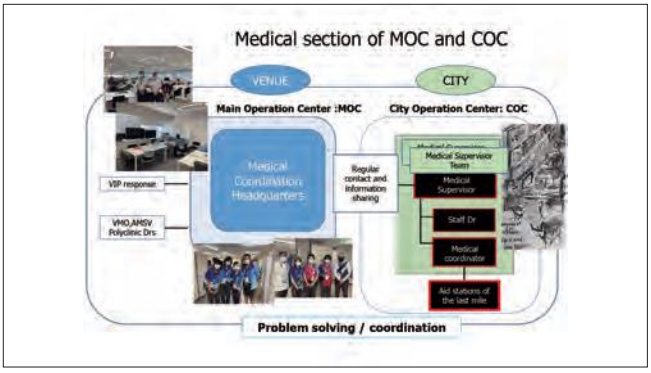

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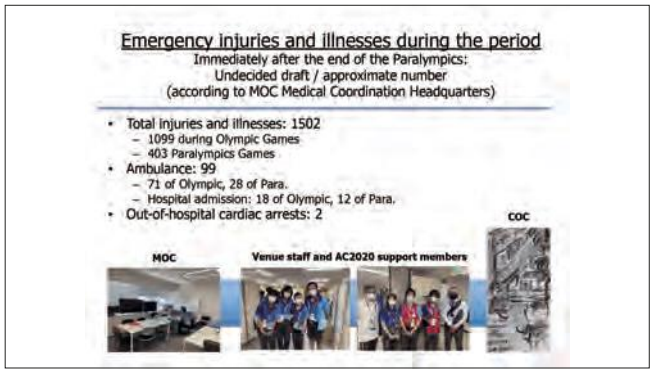

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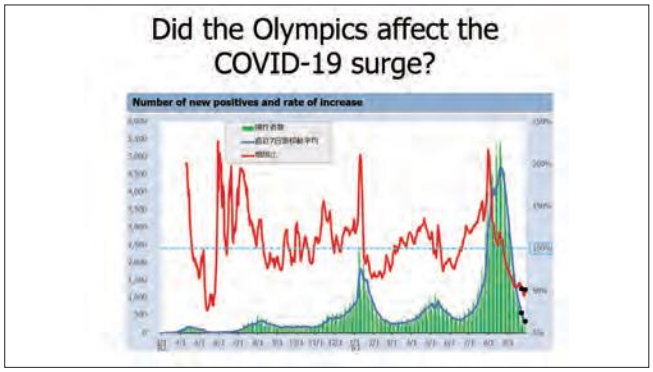

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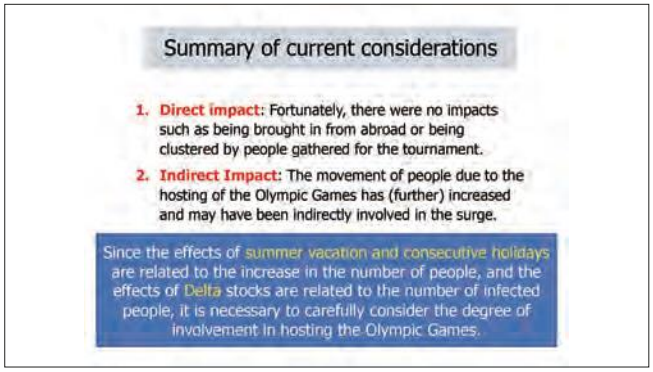

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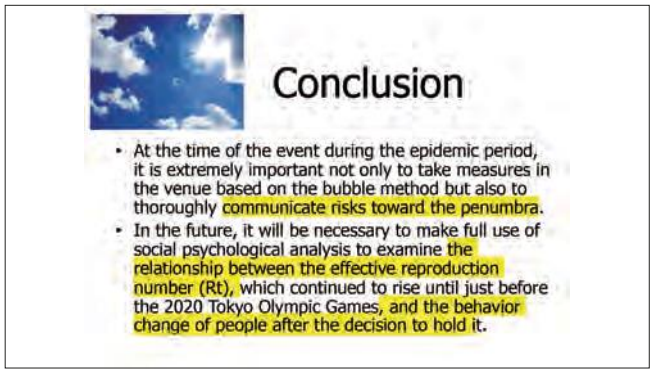

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Session 6

The role of Tokyo2020 IDCC for COVID-19 preparedness and response in the Games

Former Director of Public Health, Department of Medical Service, Games Operation Bureau, the Tokyo Organising Committee of the Olympic and Paralympic Games

Presenter: SHIMADA Satoshi, MD, PhD

The organising committee established the IDCC, which was positioned within the main operational center of the organising committee during Tokyo2020. It served as a hub for all organizations.

The IDCC had three main functions: surveillance, health monitoring, and incident response. The incident response team was divided into teams for laboratory, transport, isolation, and epidemiological investigation. Prevention, detection, and response were carried out through the daily screening, examination, transport, and isolation of each team; daily surveillance; and preparation of daily infection reports. In the case of a positive diagnosis, we responded promptly with retesting, definitive testing, transportation, and isolation. We also collaborated with the TMG to provide epidemiological information in a short period.

With regard to testing, players and team officials were tested daily. We used PCR and quantitative antigen testing to build a system that could provide accurate and prompt results. For example, in the case of athletes, the screening test took 12 h and the definitive test took 2-3 hours. Although the use of saliva specimens is rare worldwide and difficult to explain, it is an effective screening method as it does not require medical personnel to collect the sample.

We developed ICON, a software tool for information linkage between IDCCs and stakeholder representatives for incident response. In addition, a COVID-19 Liaison Officer (CLO) was appointed. This system reduces the burden on the local government by having the CLO and the staff of the organising committee conduct an epidemiological investigation of the cases. The CLO was also mentioned in the latest Beijing2022 Playbook and is a legacy of Tokyo2020.

An outpatient fever clinic and PCR laboratory for definitive diagnosis were established in the Olympic Village. A mobile testing unit was also set up for emergencies. The laboratory was equipped with a safety cabinet and several thermal cyclers. Domestically approved instruments and reagents were used for high accuracy. A negative pressure vehicle was also prepared. We also operated our own isolation hotel for athletes. Medical personnel were on hand 24 hours a day, and multilingual translation devices were available. In addition, a testing company performed PCR and sequencing of the variants, and the NIID analyzed them. The results showed that most of the infections were caused by the Delta strain.

As a result, the total number of screening tests during the games exceeded one million. In particular, during the Olympic Games, the number of tests was more than 25,000 every day, with a maximum of 36,000 tests per day. The number of positive cases was maintained at approximately 10 per day even when the number was high. The number of confirmed positive screening results was 299 (53 for athletes and 246 for others). If other confirmed

diagnoses are included, the total number of positive results among all related personnel during the opening period was 869.

Overall, it was important to not only introduce a large number of tests but also implement measures after detecting positive cases, including transportation confirmation and epidemiological surveys.

Questions and Answers

Q. How often were risk assessments conducted and what factors were considered?

A. Tokyo 2020 organising committee and the IOC utilized the WHO's mass gathering risk assessment tool to find out what the deficiencies were so that we could make up for them. In January and March, we performed frequent risk assessments including tool use.

Q. The playbook has been revised several times. To what extent were the rules determined or made flexible?

A. Basically, IDCC worked based on the playbook. The participation of close contacts was not decided until the end of the playbook; therefore, we added our own measures.

Q. What was the most important thing that you had to take care of when communicating with positive cases and close contacts?

A. There was a language barrier, but we tried to understand and convince the patient to cooperate with isolation. Both public health and individual patients who require isolation must be considered. The most important point was to look at both sides.


The role of Tokyo 2020 IDCC for COVID-19 preparedness and response in the Games
東京オリンピック・パラリンピック競技大会組織委員会の取り組み
International symposium on mass gathering and public health preparedness during the COVID-19 pandemic, January 13th 2022
Satoshi Shimada, MD, MTM, PhD* **, Chiaki Ikenoue, MD**
*a former Director of Public Health and **Public Health Manager, Department of Medical Service
The Tokyo Organising Committee of the Olympic and Paralympic Games
TOKYO 2020

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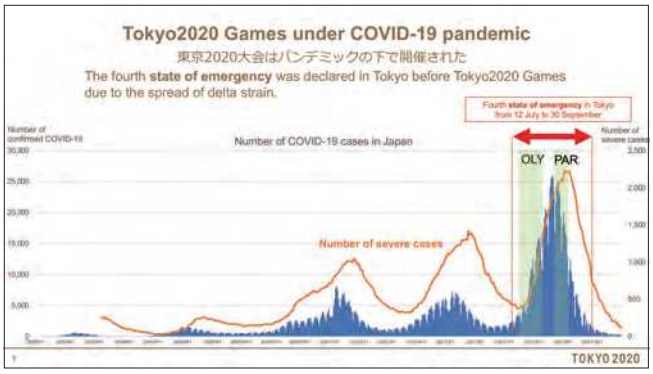
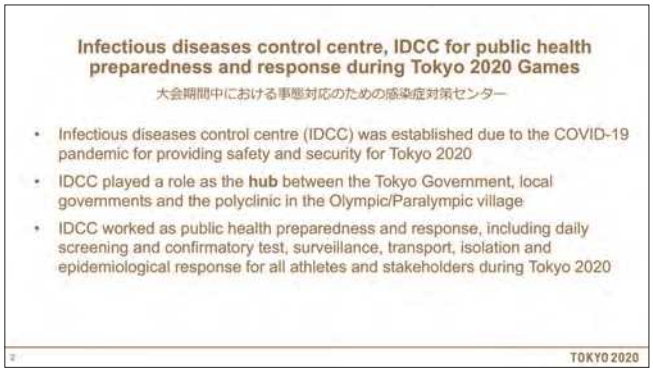
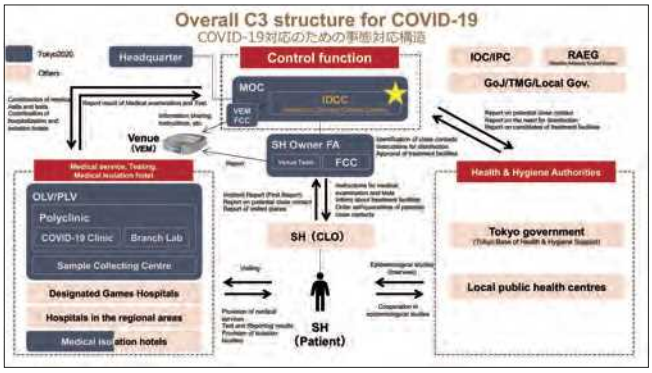

Tokyo2020 Games under COVID-19 pandemic
東京2020大会はパンデミックの下で開催された
The fourth state of emergency was declared in Tokyo before Tokyo2020 Games due to the spread of delta strain.
Number of COVID-19 cases in Japan
Number of severe cases
OLY PAR
TOKYO 2020

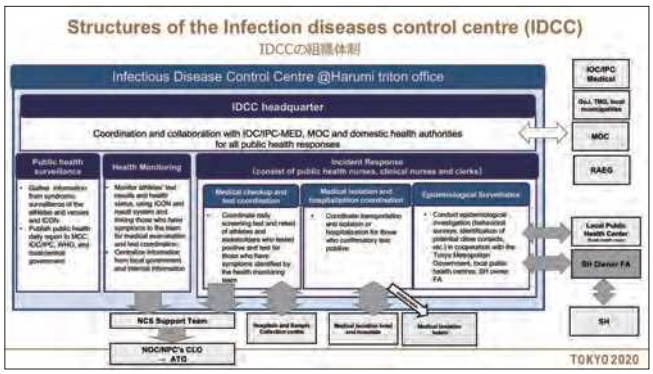
2


Infectious diseases control centre, IDCC for public health preparedness and response during Tokyo 2020 Games
大会期間中における事態対応のための感染症対策センター
Infectious diseases control centre (IDCC) was established due to the COVID-19 pandemic for providing safety and security for Tokyo 2020
IDCC played a role as the hub between the Tokyo Government, local governments and the polyclinic in the Olympic/Paralympic village
IDCC worked as public health preparedness and response, including daily screening and confirmatory test, surveillance, transport, isolation and epidemiological response for all athletes and stakeholders during Tokyo 2020
TOKYO 2020

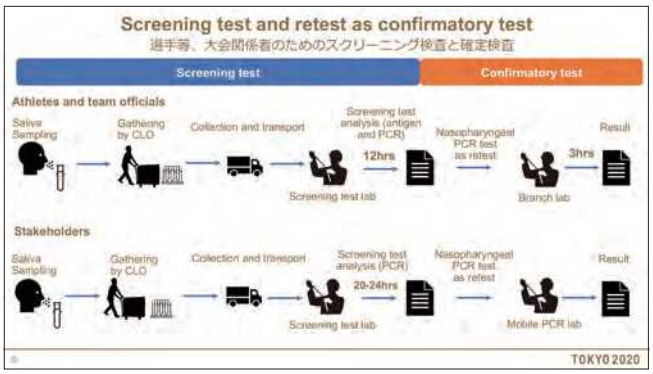
3


Overall C3 structure for COVID-19
COVID-19対応のための事態対応構造
Headquarter
Control function
IOC/IPC
RAEG
GoJ/TMG/Local Gov.
MOC
IDCC
Venue (VEM)
SH Owner FA
FCC
Health & Hygiene Authorities
OLV/PLV
Polyclinic
COVID-19 Clinic
Branch Lab
Sample Collecting Centre
SH (CLO)
Tokyo government
Local public health centres
Designated Games Hospitals
Hospitals in the regional areas
SH (Patient)

4


Structures of the Infection diseases control centre (IDCC)
IDCCの組織体制
Infectious Disease Control Centre @Harumi triton office
IDCC headquarter
Coordination and collaboration with IOC/IPC-MED, MOC and domestic health authorities for all public health responses
Public health surveillance
Health Monitoring
Incident Response
IOC/IPC Medical
MOC
RAEG
Local Public Health Center
SH Owner FA
SH
NCS Support Team
TOKYO 2020

5


Screening test and retest as confirmatory test
選手等、大会関係者のためのスクリーニング検査と確定検査
Screening test
Confirmatory test
Athletes and team officials
Saliva Sampling
Gathering by CLO
Collection and transport
Screening test analysis (antigen and PCR)
12hrs
Screening test lab
Nasopharyngeal PCR test as retest
3hrs
Branch lab
Result
Stakeholders
20-24hrs
Mobile PCR lab
TOKYO 2020

6

Information sharing system for response to infectious diseases

事態対応の情報共有　ICONとCLO

ICON

Tokyo 2020 Infection Control Support System

感染症対策支援システム（ソフトウエア）

CLO

COVID-19 Liaison Officer

COVID-19リエゾンオフィサー

TOKYO 2020

7

Branch laboratory for SARS-CoV-2 in the village

選手村における新型コロナ検査のためのブランチラボ

- Used approved PCR test for the confirmatory test and test for close contacts of a person who has tested positive
- Introduced the faster reaction for the Games - within 3 hours
- Outreach sample collection: Mobile swab unit for emergency

TOKYO 2020

8

Introduced safe transportation

陰圧機能つきの搬送車の導入

- Specific vehicles with negative pressure for infection control
- Attendance of IDCC healthcare providers
- Safe transportation: Airport - COVID-19 Clinic for retest – Isolation hotel

Example of transportation

TOKYO 2020

9

Tokyo2020 Medical isolation facility for COVID-19

組織委員会は選手等のための隔離ホテルを運営

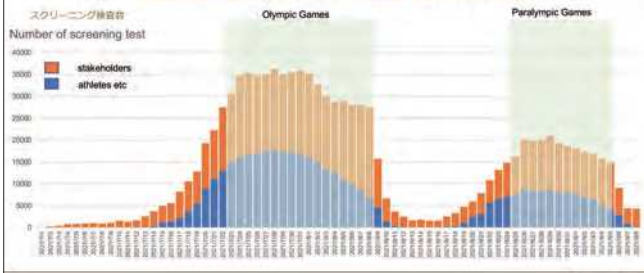
- Accommodation for people who tested positive for isolation
- Healthcare providers monitored health status for 24 hours
- Communicated using multi-lingual translator devices
- Provided PCR tests for the residents following the rule of the Japanese health authority
- Worked together with the IOC/IPC medical professional volunteers

TOKYO 2020

10

Tokyo2020 could provide max. 36,000 tests as daily screening test during the Olympic Games

組織委員会が実施したスクリーニング検査　最大36,000件実施

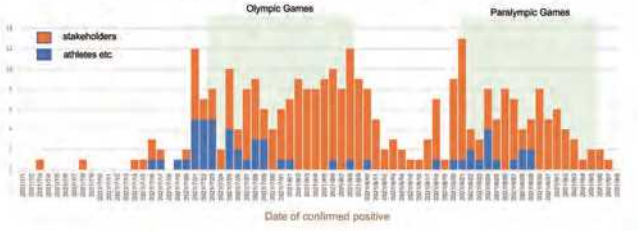


TOKYO 2020

11

Number of confirmatory results from screening test during the Games

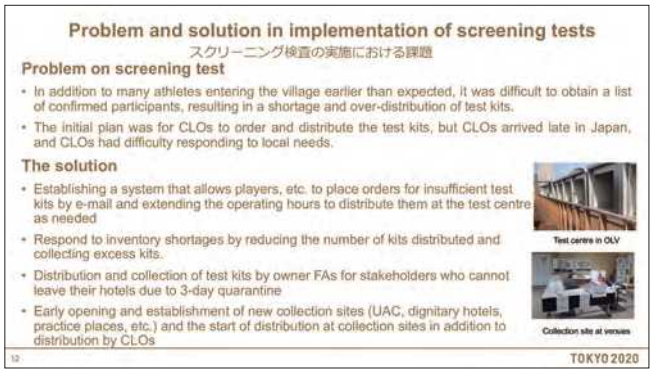
スクリーニング検査結果による陽性確定者



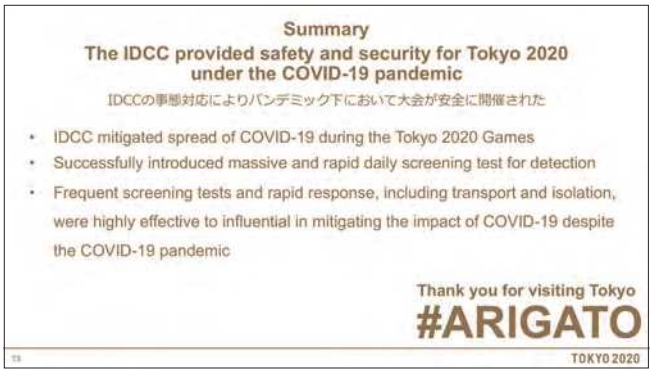
SARS-CoV-2 variant analysis revealed that 86% of the positive cases were delta strains.

TOKYO 2020

12


Problem and solution in implementation of screening tests
スクリーニング検査の実施における課題
Problem on screening test
• In addition to many athletes entering the village earlier than expected, it was difficult to obtain a list of confirmed participants, resulting in a shortage and over-distribution of test kits.
• The initial plan was for CLOs to order and distribute the test kits, but CLOs arrived late in Japan, and CLOs had difficulty responding to local needs.
The solution
• Establishing a system that allows players, etc. to place orders for insufficient test kits by e-mail and extending the operating hours to distribute them at the test centre as needed
• Respond to inventory shortages by reducing the number of kits distributed and collecting excess kits.
• Distribution and collection of test kits by owner FAs for stakeholders who cannot leave their hotels due to 3-day quarantine
• Early opening and establishment of new collection sites (UAC, dignitary hotels, practice places, etc.) and the start of distribution at collection sites in addition to distribution by CLOs
Test centre in OLV
Collection site at venues
12
TOKYO 2020

13


Summary
The IDCC provided safety and security for Tokyo 2020 under the COVID-19 pandemic
IDCCの事態対応によりパンデミック下において大会が安全に開催された
• IDCC mitigated spread of COVID-19 during the Tokyo 2020 Games
• Successfully introduced massive and rapid daily screening test for detection
• Frequent screening tests and rapid response, including transport and isolation, were highly effective to influential in mitigating the impact of COVID-19 despite the COVID-19 pandemic
Thank you for visiting Tokyo
#ARIGATO
13
TOKYO 2020

14


ARIGATO

15

Session 7

Host city's public health activities: Tokyo Metropolitan Government

Infectious Disease Control Division, Bureau of Social Welfare and Public Health, Tokyo Metropolitan Government
Presenter: SUGISHITA Yoshiyuki, MD, MPH, PhD

In the Tokyo Metropolitan Government (TMG) office, the General Coordination Center for Epidemic Control Information was established to consolidate information on infectious diseases, oversee the response, and prepare daily reports. The Tokyo Metropolitan Institute of Public Health was responsible for epidemiological surveys and data compilation. The Tokyo Base of Health Support for Tokyo 2020 Games was established for the COVID-19 response in athletes' villages. These organizations and public health centers (PHCs) collaborated closely. The daily report was prepared by the Coordination Center for Disease Control and Intelligence with data compiled by the Tokyo Metropolitan Institute of Public Health. The EOC of NIID conducted preliminary checks, and reports were provided to relevant organizations every day.

National surveillance programs include notifiable disease surveillance, pediatric sentinel surveillance, and undiagnosed serious infectious illness surveillance (USII). The USII is designed to identify outbreaks of serious diseases of unknown origin at an early stage, and 38 hospitals in Tokyo were designated as reporting sites during Tokyo2020. Additionally, Tokyo has its own outbreak reports from non-medical facilities and emergency transport surveillance data from the Tokyo Fire Department. A total of 192 notifiable diseases were identified during the study period. Enterohaemorrhagic E. coli infection was the most common, with 122 cases. There were 408 outbreak reports from non-medical facilities, 392 of which were from nurseries. There have been no reports from USII. There were five unusual detections in the emergency transport surveillance, and two COVID-19 reports from treatment facilities.

Among the convention participants, 453 COVID-19 cases were reported, of whom 32% were travelers and 68% were domestic residents. There was an increase in the number of cases over time among those who could have been working outside a specific area under the jurisdiction of the organising committee. During the domestic COVID-19 pandemic, some cases were thought to have been exposed to non-convention-related transmission opportunities.

The staff from the National Field Epidemiology Training Program (FETP) and the Tokyo Epidemic Investigation Team (TEIT) provided support to the health facilities to ensure the safe operation of the conference and prevent the spread of COVID-19. Information was collected directly from CLOs, and epidemiological information was organized, which led to effective epidemiological investigations and the identification of close contacts.

Future challenges include the following: the lack of reporting of USII requires examination of case definition, knowledge of medical institutions, and the necessity of zero reporting. The utilization of information from daily reports and the immediate release of information to citizens were also an issue. When the Games-related COVID-19 cases visited

medical institutions on their own, it was difficult to secure specimens from PHCs. Finally, cooperation within the TMG between food and environmental departments, police and fire departments, and quarantine stations should be enhanced.

In conclusion, there were no cases of infectious diseases other than COVID-19 that required treatment. In response to the COVID-19 outbreak among Games participants, we provided investigative support to PHCs. We shared this information with related organizations through web conferences. Daily reports are important for achieving a rapid response. Improvements must be made based on the issues identified in this study.

Questions and Answers

Q. With regard to the daily report, is there anything you paid attention to when making assessments or comments, especially with regard to the impact on the Games?

A. We focused our comments on whether the number of cases had increased or decreased compared to before Toky2020, and whether there were any cases of infection among the participants.

On-line international symposium
on mass gathering and public health preparedness during the COVID-19 pandemic
16:00JST-19:30JST, January 13, th2022

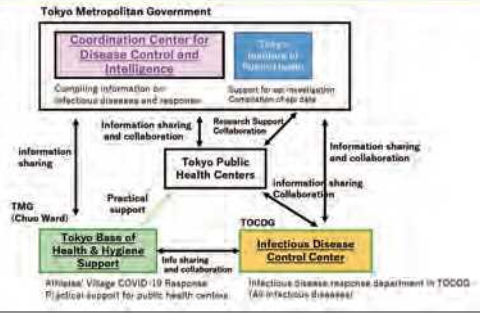
Host city's public health activities: Tokyo Metropolitan Government

Department of Infectious Disease Control, Bureau of Social Welfare and Health, Tokyo Metropolitan Government

Yoshiyuki SUGISHITA, MD, MPH, PhD
Tokyo Metropolitan Government

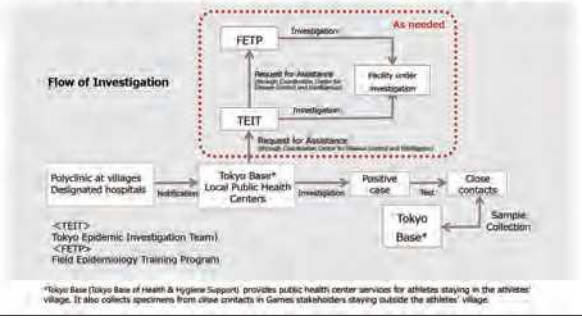
1

Roles in infectious disease control for the Games



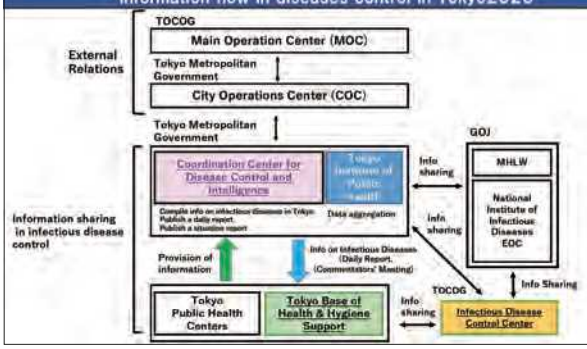
2

Field epidemic investigation during Tokyo 2020



3

Information flow in diseases control in Tokyo2020



4

Coordination Center for Disease Control and Intelligence

Aim: Communication and coordination among stakeholders during the Games, Identifying and sharing information on infectious disease outbreaks

Location: Tokyo Metropolitan Government

Terms: July 1, 2021 - September 12, 2021
Available 24 hours (on-call at night)

Task: Publishing Daily Repor on infectious diseases
Sharing information on cases related to the Games
Responding to consultations from public health centers
Tracking case management at public health centers

5

Daily Report

1 Publication of a daily report

Published between July 1, 2021 and September 12, 2021.
July13: Opening of the athletes' village (until September 8)
July 23 - August 8: Olympic Games
August 24 - September 5: Paralympic Games
Data compilation: Tokyo Institute of Public Health
Report writing: Coordination Center for Disease Control and Intelligence
Prior confirmation: National Institute of Infectious Diseases (EOC)

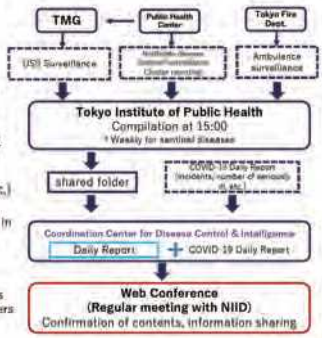
2 Distribution of Daily Report

Published by Coordination Center for Disease Control and Intelligence daily at 17:00, distributed to relevant agencies such as public health centers

6

Daily Reporting Schedule

- **15:00 Data compilation**
- **-15:30 Compiled data stored in shared folder**
- **15:30- Daily report preparation**
  (For COVID-19, use the existing daily report)
- **16:00 Check and share contents** (web meeting with National Institute of Infectious Diseases, Coordination center for disease control and intelligence, Tokyo Institute of Public Health, etc.)
- **17:00 Sent to relevant departments**
  (Relevant departments in TMG, public health centers in Tokyo, members of the Subcommittee on Infectious Disease Control, Ministry of Health, Labour and Welfare, National Institute of Infectious Diseases, Tokyo Medical Association, quarantine stations, sentinel sites for USII, designated medical institutions for infectious diseases, City Operation Center, members of Ambulance Surveillance Operational Committee)



7

Infectious disease risk assessment for Tokyo2020

		Examples of imports increase	Large group Concerns about outbreaks	High severity
Vaccine preventable disease	Measles		○	○
	Mumps		○	
	Pertussis		○	○, infant
	Chicken pox		○	
	Mumps		○	
	Invasive Meningococcal Disease	○	○	○
	Influenza		○	○
Emerging and reemerging infectious diseases	COVID-19	○	○	○, elderly
	Middle East Respiratory Syndrome	○	○	○
	Mosquito-borne infections (dengue, chikungunya, Zika)	○	○	○, Limited time
Food-borne and oral infectious disease	EHEC		○	○
	Bacterial dysentery	○		
	Typhoid fever	○		
	Infectious gastroenteritis		○	
	Hepatitis A		○	
Other*	Tuberculosis			
	Syphilis			
	HIV/AIDS			

*Others (tuberculosis, syphilis, and HIV/AIDS) are excluded from this assessment because their incubation period is long and it is difficult to conduct surveillance and other measures during the Games.

8

Daily Report: contents

- Overall comments
- Notifiable disease surveillance
  (Class 1-4, part of Class 5 [measles,Rubella, invasive meningococcal disease –daily report]
- Sentinel surveillance
  (Infectious diseases in children, etc. - weekly report)
- Undiagnosed Serious Infectious Illness Surveillance (Report from designated medical institutions)
- Outbreak report (Report from facilities)
- Infectious disease ambulance surveillance*.(Report from the fire department)

*The Tokyo Metropolitan Government's unique surveillance system, which collects and analyzes information such as symptoms at the time of emergency transport, using data provided by the Tokyo Fire Department's Emergency Information Analysis and Management System.

9

Undiagnosed Serious Infectious Illness Surveillance (USII Surveillance)

【Objective】

To detect unusual trends in outbreaks of serious diseases of unknown cause that fall under the following (1) to (3), which are suspected to be infectious diseases.

【Requirement】

All of the following (1) through (3) are to be satisfied.

① Fever, respiratory symptoms, eruption, gastrointestinal symptoms or neurological symptoms, or other symptoms that raise suspicion of infection

② A physician has determined, based on generally accepted medical knowledge, that intensive care or something similar is necessary.

③ A physician has determined that a specific infectious disease cannot be immediately diagnosed based on generally accepted medical knowledge.

38 sentinel site for USII Surveillance were designated during the Games.

10

COVID-19 Daily Report

- Total number
- Gender
- Age group
- Number of severe cases
- Number of tests

11

Summary of Daily Reports

(July 1 to September 12, 2021. for 74days, including delayed reporting within 1week)

Total number of diseases (unit: persons)

EHEC	Legionnaire's disease	hepatitis E	hepatitis A	Japanese Spotted Fever	malaria	influenza	measles	Total
122	44	10	1	2	0[a]	3[b]	4[b]	192

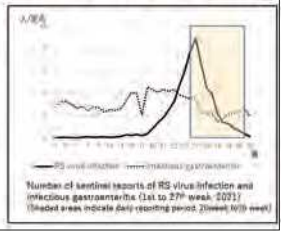
a Two of these were Games-stakeholders (infected overseas).
b Withdrawn later

Cluster Report (unit: cases, nursery 39/cases, other facilities 0)

RS Virus	infectious gastroenteritis	unknown	Other[c]	Total
282	30	78	18	408

Others (unit: case)

USII	Ambulance Surveillance	Other
0	5	0



Number of sentinel reports of RS virus infection and infectious gastroenteritis (1st to 37th week, 2021)
(Shaded areas indicate daily reporting period. [Week 1/1] week)

12

Result

【Notifiable Diseases】

- EHEC 122 cases, followed by 44 Legionnaires' disease.
- 2 of 6 malaria cases were Games Stakeholders (Media and Athlete) from Sierra Leone and Ethiopia.
- 3 case of rubella and 4 cases of measles -later withdrawn.

【Sentinel Surveillance】

- Record high RS virus infections at week28 (July 12-18) 8.92/sentinel site.

【Cluster Report】

- RS virus 282, followed by 30 infectious gastroenteritis Most of them occurred in nursery.

【Ambulance Surveillance】

- 5 signals (reported on July 6, 16, 20, Aug. 22 -2 signals) 3 were clusters of gastroenteritis, and 2 were COVID-19 clusters from isolation hotels No further spread was.

13

Web meetings for information sharing

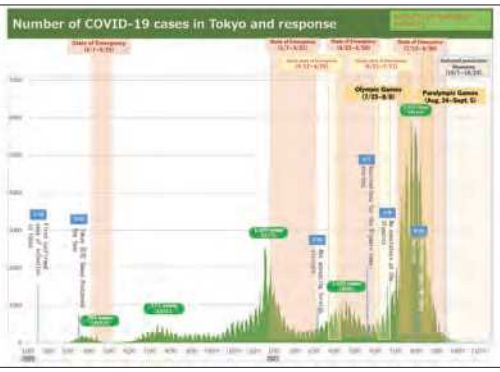
Hosted by Tokyo Metropolitan Government

1. TMG's daily report review meeting with the National Institute of Infectious Diseases (NIID).
   1. Check the contents and comments of the Daily Report.
   2. Sharing of COVID-19 cases on Games participants
   3. Assessment of COVID-19 cases with common epidemiological factors
   4. Public Health Center, Infectious Disease Control Center of the Organizing Committee, and Health and Safety Research Center also participated.
2. Regular meetings with public health centers in Tokyo, weekly1 on Fridays, from 10:00 a.1115m.
   1. Sharing of COVID-19 multiple occurrence cases among conference participants

Hosted by the National Institute of Infectious Diseases

1. Regular morning meeting from 9:30 in the Morning
2. Information Sharing among Tokyo Metropolitan Government, TOCOG, National Institute of Infectious Diseases, Ministry of Health, Labour and Welfare, on Tuesdays, from 13:15
3. 2 meetings with local governments where Olympic and Paralympic venues are located

14



15

COVID-19 among the Games participants

- Total 453 COVID-19 cases related to the Olympic Games registered in the national surveillance system from July 1 to August 8 (as of August 9)
  - Notification: Mostly in Tokyo (357cases, 79%)
  - By affiliation: Athletes, etc. 80 (18%), Game officials 373 (82%)
  - By place of residence: Overseas visitors 147(32%), domestic residents 306(68%)
- Continuous reports of COVID-19 cases from Games stakeholders.
- Perhaps reflecting the spread of the disease in Tokyo, there was an increase over time in the number of cases among Games personnel who were working outside the Specified Area (a controlled area under the jurisdiction or affiliation of TOCOG).
- Some of them involved in the Games live in groups in Tokyo, and others have no choice but to perform their duties among the crowds.
- Some cases may have been exposed during the COVID-19 epidemic in Japan outside the Games environment (family, workplace, crowds of those not associated with the Games).

Outbreaks of new coronavirus infections associated with the Tokyo Olympic Games (preliminary report), 2021 (20218Mon)20, National Institute of Infectious Diseases
https://www.niid.go.jp/niid/ja/diseases/ha/corona virus/2019 ncov/2484 idsc/10561-covid19-54.html

16

Support for field epi investigation

- Outbreak of COVID-19 among Game participants
- Professional intervention was needed to ensure safe game operations and prevent the spread of infection among the Games participants
- Started support for the Tokyo Base of Health & Hygiene Support from July 26, 201.
  - 1 from Tokyo Epidemic Investigation Team (TEIT) from Tokyo Met Inst. Public Health
  - 3 from Field Epidemiological Training Program (FETP) from NIID

Tokyo Base Health Hygiene Support ⇔ TOCOG IDCC ⇔ TOCOG Country responsible officers ⇔ COVID-19 Liaison Officer (CLO) ⇔ Cases Other stakeholders

Collect information from CLOs by TEIT and FETP
Data analysis, foreign language support

⇒Reduce the time for epi investigation and identification of close contacts

17

Challenges in collecting, sharing, and communicating information on infectious diseases

- Undiagnosed Serious Infectious Illness Surveillance (USII Surveillance)
  - No report during the Games, but…
    - Unclear case definition, lack of awareness among medical institutions, no zero reporting requirements
- Daily Report
  - Unclear how these reports were used by the recipient.
- Communication on infectious diseases
  - Information on infectious diseases related to the Games: No official mechanism for timely announcement to the citizens.
    (Number of COVID-19 cases were published daily by TOCOG website.)
- Securing specimen
  - Specimens of COVID-19 cases among Game participants: Cases outside the screening program => Difficulty in securing specimens at public health centers
- Cooperation with related departments
  - Food and Environment Division, Police and Fire Department, Quarantine Station, and other host cities.
    - Food poisoning information, mosquito surveillance

18

Concluding remarks

- There were no cases of infectious diseases other than COVID-19 that required response.
- In response to the outbreak of COVID-19 cases among the Game stakeholders, we provided support for investigation to the Tokyo Base of Health & Hygiene Support.
- Through the web conference, we could smoothly share information on cases with related organizations.
- Daily sharing of cases is important for rapid response to infectious diseases. More improvements are needed to overcome challenges raised in the Games.

19

Session 8

Host city's public health activities: Hokkaido Prefecture

Infectious Disease Control Bureau, Health and Welfare Department, Hokkaido, Japan
Presenter: Dr. ISHII Yasuhiko, MD

In Tokyo2020, soccer, marathon, and walking races took place in the Hokkaido prefecture. Soccer games were held at the venue previously used for the World Cup. The venues for marathons and walking races were changed from Tokyo to Hokkaido in October 2019. Although Hokkaido is cooler than Tokyo, the start time was changed the day before from 7:00 to 6:00 owing to heat. In addition, some athletes came into close contact with marathons and walking races, but as a result, they were able to participate in the competition.

In Hokkaido, especially in Sapporo, the number of cases of the alpha strain increased, and the fourth wave occurred in late April and lasted to the end of May. In July, when the soccer and walking races were held, the number of cases increased again due to the Delta strain, and the fifth wave was experienced. However, compared with the fourth wave, the number of new cases was low, and the medical capacity managed to endure this wave.

Since Hokkaido is geographically far from Tokyo and the contents of the games are limited, information was sometimes insufficient, so we made efforts to collect information and deepen collaboration with partners, including the Tokyo 2020 Organising Committee and Sapporo City. However, as we were occupied with the spread of the fourth wave of infection, full-scale preparations did not begin until June. After recognizing the current situation at the meeting, we confirmed with the MHLW the basic policy and our roles. At the end of June, we decided to flow for the positive case and asked the Tokyo 2020 Organising Committee to provide support, such as interpretation and meals.

During Tokyo2020, we shared information via e-mail and daily surveillance reports, monitored the schedule of close contacts, reviewed the flow of responses to positive cases, and monitored the status of test results. As a result, no athletes tested positive in Hokkaido, and close contacts were able to participate in the competition.

For the use of public roads, the mayor of Sapporo and the governor of Hokkaido made an appeal on TV for citizens to not come to see the games. Consequently, the use of stations near the course did not increase. However, the actual impact should be further analyzed.

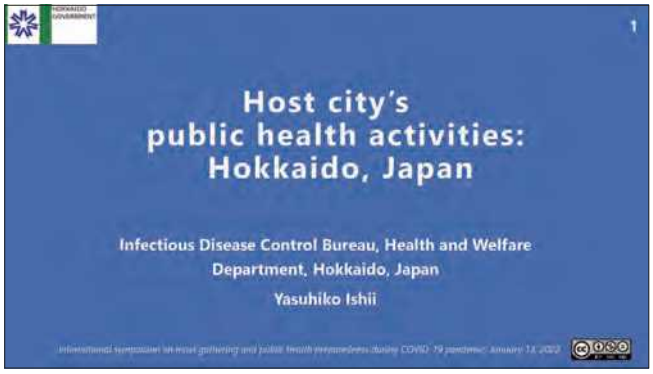
As for the challenges, it was difficult to divide the roles of related organizations. Without the results of the qualifying rounds, it was not clear whether the camp would have been held. The change in marathon time had various impacts, including on security. Coping with the regional epidemic and the event simultaneously was a challenge. Outsourcing was difficult for the local governments. Increased human flow from other regions led to the case rise and made preparation even more difficult. There was a lack of information related to distance. Medical resources were small compared with those in Tokyo. The time was limited to preparing for using public roads, and it

was difficult to minimize the number of spectators. There were many hardships, such as last-minute changes, but we were able to finish the game safely thanks to the cooperation and collaboration of all concerned.

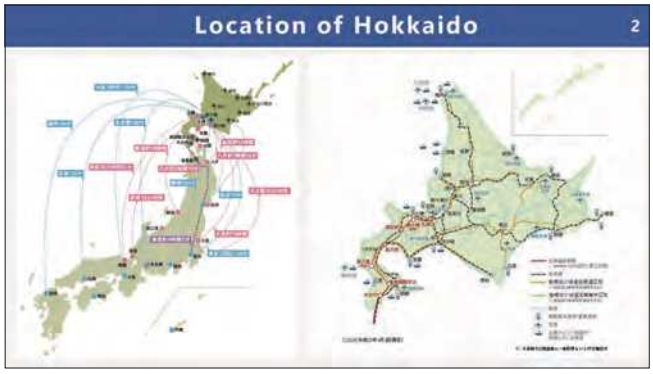
Questions and Answers

Q. Was there another department involved in the overall medical services?

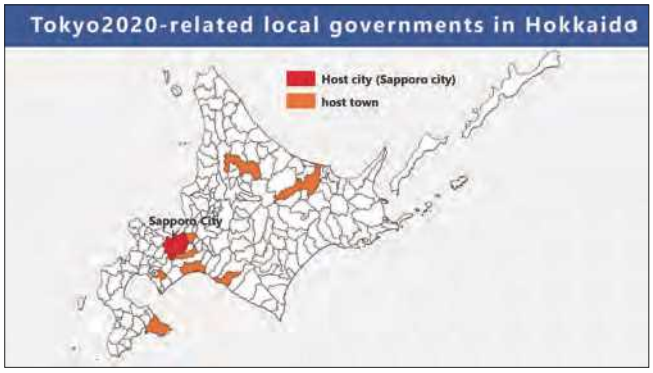
A. There was. For example, they worked for procuring doctors from all over Hokkaido for the first aid stations. Since a doctor on the team was working next to me, we shared information, but we were not able to coordinate systematically. It would have been better if we had more preparation time.


1
Host city's
public health activities:
Hokkaido, Japan
Infectious Disease Control Bureau, Health and Welfare
Department, Hokkaido, Japan
Yasuhiko Ishii

1


Location of Hokkaido
2

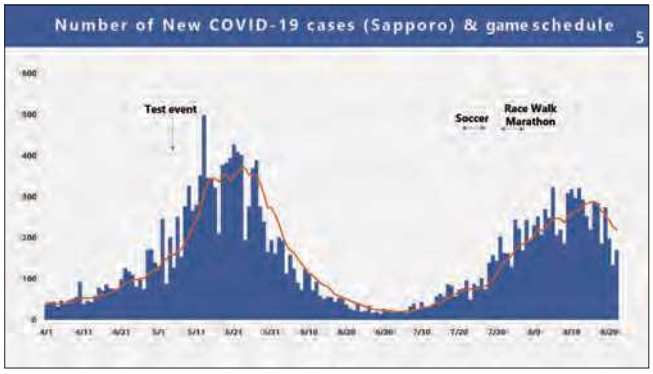
2


Tokyo2020-related local governments in Hokkaido
Host city (Sapporo city)
host town
Sapporo City

3


Tokyo2020 Olympics in Sapporo
4
Soccer
Venue: Sapporo Dome
July 21 Women
4:30–4:30 p.m.
United Kingdom x Chile
7:30 p.m.
Japan x Canada
July 24 Men
4:30–4:30 p.m.
Chile x Canada
7:30 p.m.
Japan x United Kingdom
July 22 Men
4:30–4:30 p.m.
Egypt x Spain
7:30 p.m.
Argentina x Australia
July 25 Men
4:30–4:30 p.m.
Egypt x Argentina
7:30 p.m.
Australia x Spain
July 28 Men
4:30–4:30 p.m.
Romania x New Zealand
7:30 p.m.
South Africa x Mexico
Marathon & Race walk
Change of venue
from Tokyo in Oct. 2019
Venue: Odori Park, etc.
Aug 5 Men
4:30 p.m.–
Men's 20km Race
Aug 7 Women
7:00 → 6:00–
(changed the day before)
Women's marathon
Aug 6 Women
5:30–,
Men's 50km Race
4:30–4:30 p.m.
Women's 20km Race
Aug 8 Men
7:00–
Men's marathon

4


Number of New COVID-19 cases (Sapporo) & gameschedule
5
Test event
Soccer
Race Walk
Marathon

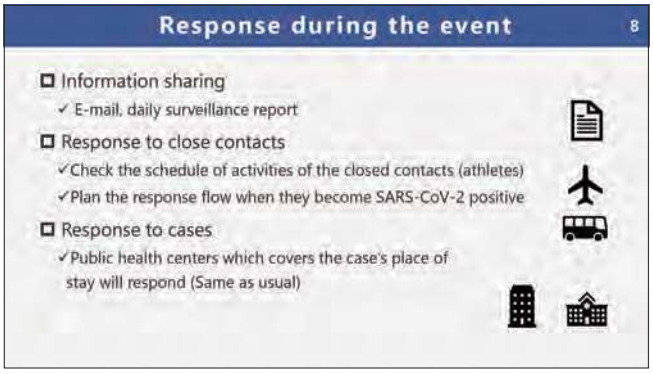
5


Preparation for Tokyo2020
6
Information gathering
✓ Basic information on the Games, policy on infectious disease control
Cooperation with stakeholders
✓ TOCOG, Sapporo City, relevant departments
Preparedness for a COVID-19 case management
✓ Learning TOCOG's policy, planning for response in Hokkaido
Securing quarantine facilities
✓ Preparing for using quarantine facilities
Full-scale preparations were delayed until June 2021 due to the 4th wave in April-May.

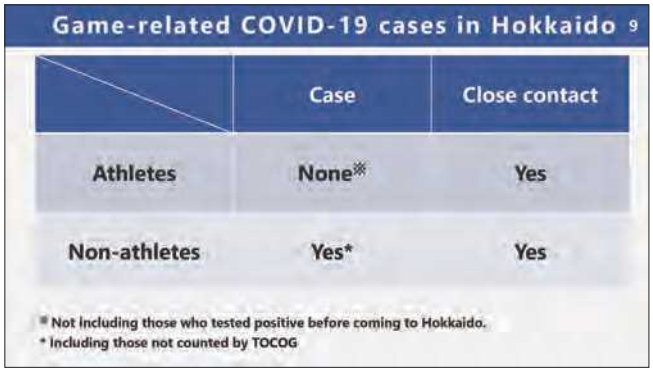
6


Planning Adjustments in June 2021 7
Date
Planning adjustments
6/9
Sharing the status regarding the Olympic preparedness within the Hokkaido Prefectural Government
Sharing of materials, ensuring basic rules and preparedness in camp sites
6/17
Sharing MHLW's policy for infection control at the Games
Demarcation of roles among TOCOG, host towns/campuses, and local governments with public health centers
6/24
Web conference with TOCOG, Hokkaido Prefectural Govt. and Sapporo City
Ensuring testing of Games personnel, medical treatment policy for COVID-19 cases and close contacts
6/25
Web conference between TOCOG and relevant local governments (public health centers)
Sharing a plan from TOCOG to relevant local governments &public health centers
6/29
Fixing a response policy for a case management
COVID-19 cases will be treated as usual, while the TOCOG provides support such as interpretation and meals.

7


Response during the event 8
Information sharing
✓ E-mail, daily surveillance report
Response to close contacts
✓Check the schedule of activities of the closed contacts (athletes)
✓Plan the response flow when they become SARS-CoV-2 positive
Response to cases
✓Public health centers which covers the case's place of stay will respond (Same as usual)

8


Game-related COVID-19 cases in Hokkaido 9
Case
Close contact
Athletes
None※
Yes
Non-athletes
Yes*
Yes
※ Not including those who tested positive before coming to Hokkaido.
* Including those not counted by TOCOG

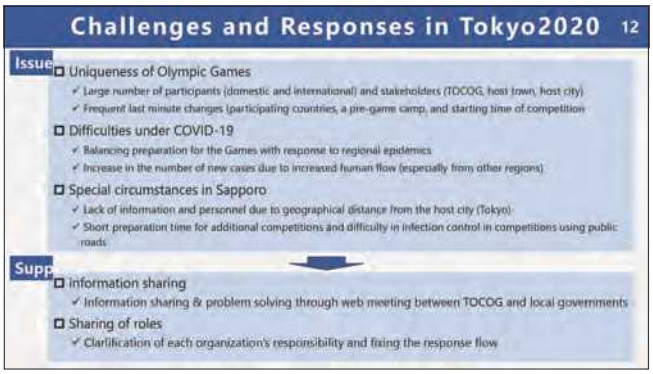
9


Request to refrain from spectating at race walks & marathons 10
governor of Hokkaido
Mayor of Sapporo
おうちでエール
Cheer from home!
自宅で、家族と、テレビで応援!
オリンピックマラソン・競歩競技は沿道での観戦自粛をお願いします
東京2020オリンピックは
ステイホームで応援しよう
マラソン・競歩のコース沿道での観戦はお控えください。
"Let's cheer from home"

10


Marathon course and crowds 11
TOKYO 2020
MARATHON COURSE
Odori Station
Games
Sapporo Station
Games
START
FINISH

11


Challenges and Responses in Tokyo2020 12
Issue
Uniqueness of Olympic Games
✓ Large number of participants (domestic and international) and stakeholders (TOCOG, host town, host city)
✓ Frequent last minute changes (participating countries, a pre-game camp, and starting time of competition
Difficulties under COVID-19
✓ Balancing preparation for the Games with response to regional epidemics
✓ Increase in the number of new cases due to increased human flow (especially from other regions)
Special circumstances in Sapporo
✓ Lack of information and personnel due to geographical distance from the host city (Tokyo)
✓ Short preparation time for additional competitions and difficulty in infection control in competitions using public roads
Supp
Information sharing
✓ Information sharing & problem solving through web meeting between TOCOG and local governments
Sharing of roles
✓ Clarification of each organization's responsibility and fixing the response flow

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Session 9

Discussion

Moderator:
Dr. SAITO Tomoya, Dr. TOMIO Jun

Dr. Saito: What have we been able to strengthen after Tokyo2020?

Dr. McCloskey: One of the challenges for all Olympic and Paralympic Games is the sheer complexity of the number of people involved, as well as the number of stakeholders. In Tokyo2020, the communication remained good between them, the IDCC worked very well, and the management of the testing and public health systems was exceptionally good.

Dr. Shimada: Unlike the Rugby World Cup, the organizers as well as the local government of the host city had very good communication. For example, even though the cases of people involved in the tournament were spread over a wide area, there was very good coordination among the parties involved, such as the TMG, NIID EOC, and local governments.

Dr. Morimura: It was a big step forward that experts formed a consortium and provided expert advice as a team, not just in their individual areas. Command and control structures and communication between different organizations are usually major challenges during events and disasters, but based on expert advice, we were able to overcome them.

The consortium will also continue to meet the needs of future major events such as the 2025 World Expo in Osaka.

Dr. Shimada: One of our strengths was that we were able to change; as COVID-19 occurred, we used more digital devices, and remote meetings became more widespread, making communication easier. We were able to respond and adapt quickly as problems arose. It was also good that the IDCC leaders, who were seconded by the TMG and MHLW, were familiar with health administration and were able to make decisions quickly.

Dr. Sugishita: We conducted risk assessments in advance and issued daily reports. It was also the first time that we set up a health and hygiene center within the athletes' village, together with the IDCC, and a general coordination center for quarantine information in the main office. It was one of the major achievements of Tokyo2020 that we were able to conduct the investigation support as planned.

Dr. Ishii: Communication has improved. In the past, information went from the central government to the prefectures, then to the municipalities, and finally to the regional PHCs. This time, using web conferences, the national government, TMG, other host municipalities, and ministries were able to meet and talk quickly. We were able to communicate, take in a variety of opinions, understand the issues, and seek solutions together.

Dr. Saito: In Tokyo2020, we had to introduce a variety of new ways of dealing with the situation, as many organizations were involved. NIID's EOC was operational for the first time at Tokyo2020, and we struggled but learned a lot. The EOC is now working well to respond to the Omicron variant. Many new things came out of Tokyo2020 and everyone involved gained a lot from this experience. The lessons learned

should be documented and applied to the next generation of organizers.

Dr. McCloskey: These are very consistent with what we learned in London in 2012 at our Olympic Games–it brings people together and creates new ways of working, which last beyond the game.

Dr. Wada: Tokyo2020 has taught us many lessons; we started thinking about Tokyo2020 about seven years ago, but suddenly COVID-19 hit us and we had to discuss many things. Unfortunately, we had to hold the event without spectators this time, but I am glad that we were able to hold Tokyo2020 successfully. I hope that this will lead to future success.

Dr. Morimura: Cooperation between emergency medicine and public health should be reviewed again for the future. It cannot be said that the fifth wave of COVID-19 that came during the Olympics had nothing to do with Tokyo2020. The social and psychological aspects and behavior of the people during Tokyo2020 need to be analyzed. There may have been issues with risk communication among people outside the Games. If MCI had occurred in Tokyo2020, the current healthcare capacity would not have been able to handle it. We were fortunate to hold the Games successfully, but we need to review this and pass it on to the next organizers.

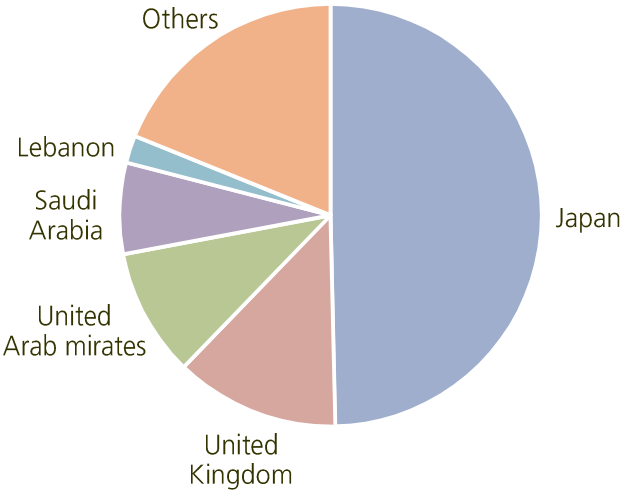
Dr. McCloskey: I have been involved in the management of the Games since Beijing2008, where there was very little engagement with the public health service at all. The main focus was on emergency medicine. This started to change in London and Rio because of the Zika virus, and then in Tokyo because of COVID-19. We are gradually recognizing that the two systems must come together and talk more, but we still have some way to go for that.

Dr. Saito: We must review both successes and failures and pass them on to future generations. This was the mission of our research team.

Summary of Activity

Number of Participants: 142

Nationality of Participants（Figure）:



Other countries:
Afghanistan, Bahrain, Cambodia, Canada, China, Egypt, Estonia, France, Germany, Hong Kong Special Administrative Region, India, Iraq, Italy, Korea, Republic of, Kuwait, Oman, Qatar, Singapore, Spain, Sweden, and the United States of America

Comments from the survey (24 respondents)

- It was a precious opportunity to listen to Dr. McCloskey's talk and learn about the behind-the-scenes preparations and countermeasures in many fields. I could reflect on important points, such as risk communication with people not involved in the conference.
- The content was interesting and would be helpful for COVID-19 countermeasures in companies.
- Prof. Morimura's comments in the final discussion are very important.
- It is important to keep a record of what we did well and what we did not do well. In addition, based on the lessons learned, I would like to see a proposal on what should be done for the next opportunity.