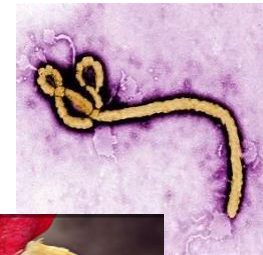


Tokyo's Initiatives to Prevent Infectious Diseases

Contents:

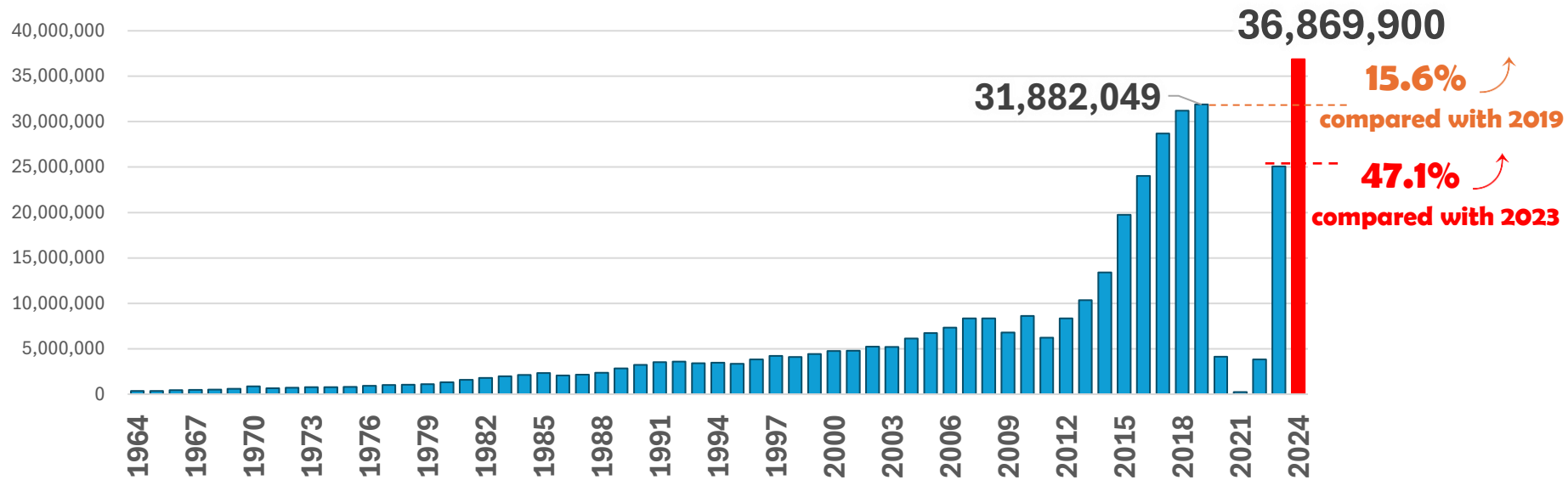
- i. Hemorrhagic fever
- ii. A(H5N1) Influenza
- iii. Dengue Fever
- iv. Syphilis



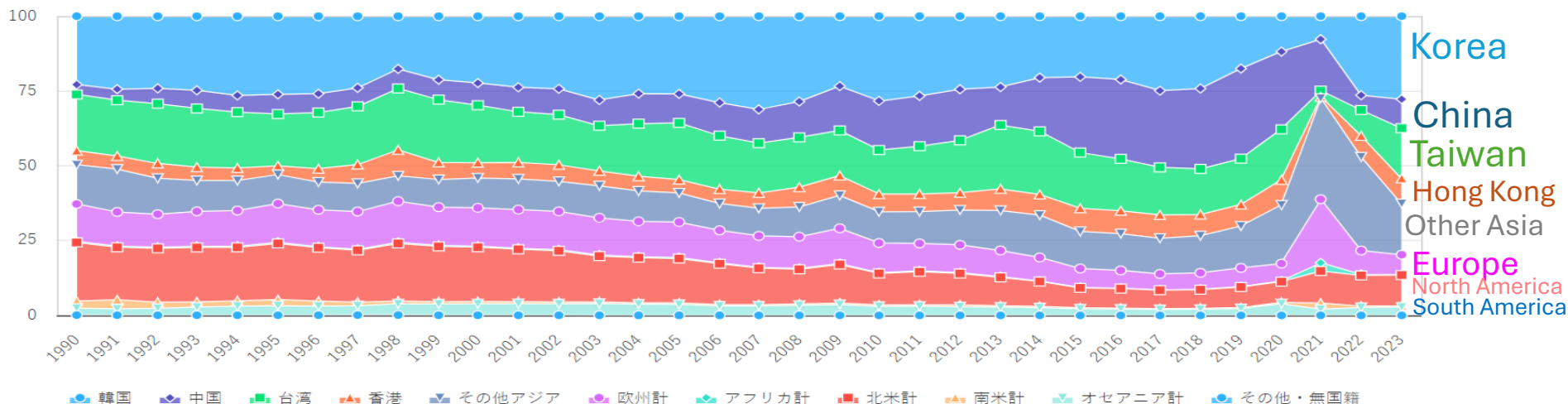
Nishizuka I., M.D., Ph.D.
Tokyo Metropolitan Government (TMG)

Background: Statistics on foreign visitors to Japan

■ The number of foreign visitors to Japan in 2024: **36,869,900** (new record)



■ Trends in the number of foreign visitors to Japan by area (1990-2023)



**Hemorrhagic
fever**

**A(H5N1)
Influenza**

Dengue Fever

Syphilis

Summary

Hemorrhagic fever

A group of healthcare workers wearing full personal protective equipment (PPE), including white hoods, goggles, masks, and yellow protective suits with green gloves, are walking under a white tarp. The scene appears to be an outdoor medical or research facility.

Hemorrhagic
fever

A(H5N1)
Influenza

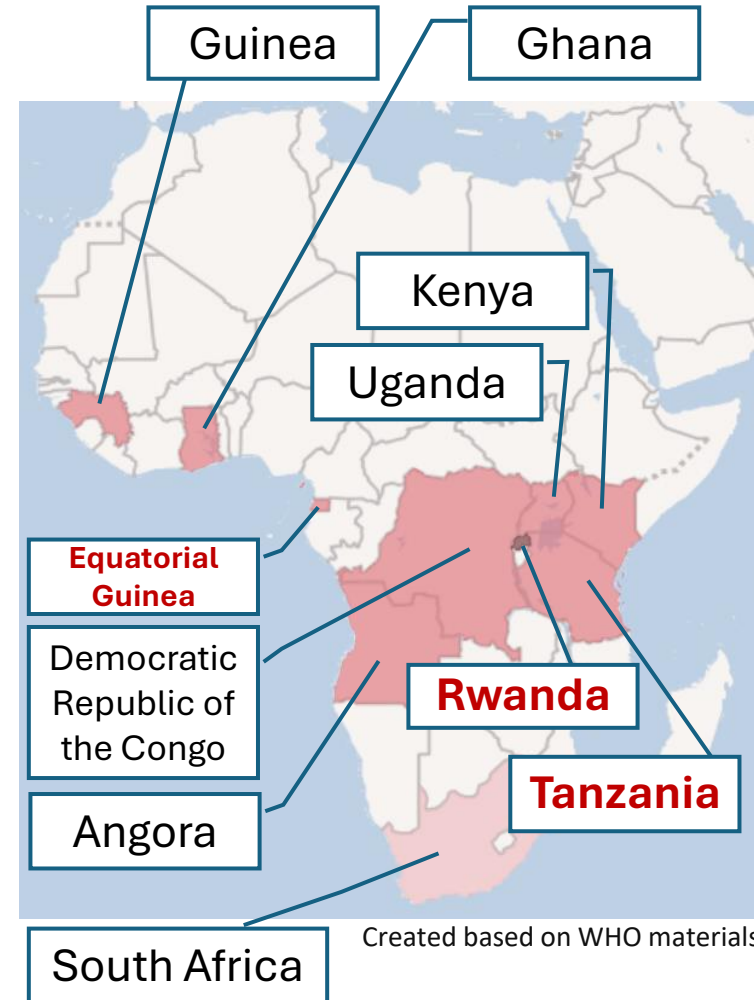
Dengue Fever

Syphilis

Summary

Marburg virus disease

year	Countries	Case	Death
1967	Yugoslavia	2	0
1967	Germany	29	7
1975	South Africa	3	1
1980 '87	Kenya	3	2
1998 to 2000	Democratic Republic of the Congo	154	128
2005	Angola	374	329
2007 '12 '14 '17	Uganda	23	10
2008	Netherland	1	1
2008	United States of America	1	0
2021 '22	Ghana	4	3
2023	Tanzania	9	6
2023	Equatorial Guinea	40	35
2024	Rwanda	66	15
TOTAL		709	537



Ebola Outbreak Caused by Sudan virus in Uganda



February 06, 2025

On January 29, 2025, the Ministry of Health of Uganda officially declared an **Ebola outbreak** caused by the **Sudan virus**, in the nation's capital, Kampala. This is the **eighth** Ebola outbreak in Uganda since 2000.

The confirmed case of SVD was in a 32-year-old man who worked as a nurse at the Mulago National Referral Hospital. The man initially developed high fever, chest pain, difficulty in breathing and bleeding from multiple body sites and sought treatment at multiple health facilities, including Mulago Referral Hospital in Kampala, Saidina Abubakar Islamic Hospital in Matugga in Wakiso District, and Mbale Regional Referral Hospital in Mbale City. He also sought treatment from a traditional healer. The patient **died** on January 29.



<https://www.cdc.gov/han/2025/han00521.html>

Hemorrhagic
fever

A(H5N1)
Influenza

Dengue Fever

Syphilis

Summary

"Designated infectious disease **medical institutions**" in Tokyo

- We examined the series of responses to verify the TMG's manual based on a scenario in which an Ebola virus disease outbreak overseas was confirmed in Tokyo.

Number: Capacity

Designated Medical Institutions for **Specified** Infectious Diseases

National Center for Global Health and Medicine	4
--	---

Designated Medical Institutions for **Class 1** Infectious Diseases

Tokyo Metropolitan Komagome Hospital	2
Tokyo Metropolitan Ebara Hospital	2
Tokyo Metropolitan Bokutoh Hospital	2
Self-Defense Forces Central Hospital	2



Designated Medical Institutions for **Class 2** Infectious Diseases

Tokyo Metropolitan Komagome Hospital	28
Tokyo Metropolitan Ebara Hospital	18
Tokyo Metropolitan Bokutoh Hospital	8
Tokyo Metropolitan Toshima Hospital	20
Ome Medical Center	6
Tokyo Medical University Hachioji Medical Center	8
Tachikawa Hospital	6
Japanese Red Cross Musashino Hospital	6
Tokyo Metropolitan Tama Medical Center	19
Showa General Hospital	6
Hachijo Municipal Hospital	2

"Category I infectious disease response **training**"

October 24, 2024. @Tokyo Metropolitan Cancer and Infectious Diseases Center Komagome Hospital

- We examined the series of responses to verify the TMG's manual based on a scenario in which an Ebola virus disease outbreak overseas was confirmed in Tokyo.
- The TMG, the 23 wards, designated medical institutions, and fire departments participated in the training.
- We have been conducting training every year since the TMG's Category I Infectious Disease Response Council was established in 2015.

Category I infectious disease response training

<Simulations of initial response assuming the first case in Japan>

Multi-agency
communication



Transfer Ebola patient



Cremation of infected
corpses



"Tokyo iCDC"

established on October 1, 2020

Never-Ending Battle Against Infectious Diseases

Tokyo iCDC is a network of experts who provide advice based on scientific evidence on infectious disease control measures of the Tokyo Metropolitan Government.

The Tokyo Center for Infectious Diseases Prevention and Control, known as Tokyo iCDC, was established in October 2020 amid the COVID-19 pandemic at the initiative of the Tokyo Metropolitan Government (TMG).

"Normally, a national center for infectious disease control is created by a country, but the fact that this system has been established by the TMG is quite a milestone," said Tokyo iCDC Director Kaku Mitsuo.

The center has nine teams of experts as well as individual task forces, involving more than 80 experts.

"Tokyo iCDC is a virtual intelligence network that brings together experts in various areas of infectious diseases from all over Japan online," Kaku explained. "It is a brand new, unprecedented organization."

Since its establishment, Tokyo iCDC has, via the TMG's monitoring conferences, analyzed relationships between the movement of people and the spread of

infection, while providing detailed information on mutant strains.

During the pandemic, the center also offered direct support at elderly care facilities and hospitals where mass infections occurred, while distributing brochures to residents to share information about COVID-19. "We were very active in information literacy and risk communications," he recalled.

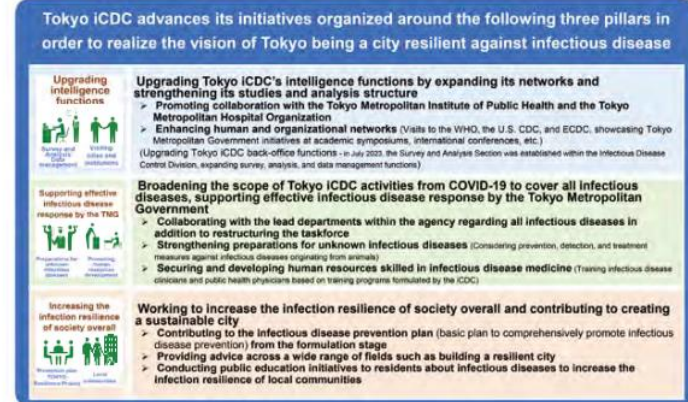
The TMG has established the "Tokyo Model" as a comprehensive health and medical care delivery system for COVID-19. The administration, medical institutions, the people of Tokyo, and experts from Tokyo iCDC have formed a united front to deal with the disease.

"Front-line experts fully engage in discussions with the TMG, and then present the results to citizens of Tokyo and to medical professionals," he said. "The comprehensive response is a very important feature.



Dr. Mitsuo KAKU,
The Director of Tokyo iCDC

Pillars of Future Tokyo iCDC Initiatives



Pillars of Future Tokyo iCDC Initiatives

We believe this has led to Japan and Tokyo, along with New Zealand, having an extremely low mortality rate compared with other OECD members," Kaku said in his evaluation of the Tokyo Model.

As COVID-19 was downgraded in May 2023 in Japan to class 5, the same level as seasonal influenza, the role of Tokyo iCDC has changed. "We are moving from contingency to normal circumstances," he said. "We have faced a variety of challenges, so it is necessary to create a robust system during normal times," he continued. "We must look ahead to the next pandemic."

Tokyo iCDC currently has three pillars of future initiatives. The first is to upgrade its intelligence functions: the center will strengthen its study and analysis function as well as expand its networks. It will also cooperate with similar facilities at home and abroad, while introducing the TMG's initiatives to academic conferences.

The second is to broaden the scope of its activities from COVID-19 to cover all infectious diseases. It will strengthen its preparations for unknown infectious diseases and work to secure and help develop human resources.

Thirdly, it aims to increase the infection resilience of society overall and contribute to creating a sustainable city. The center will advise the TMG on medium- and

long-term infection control measures and help boost awareness about infectious diseases in an effort to increase the infection resilience of local communities.

The TMG has also made efforts to disseminate information to travelers from overseas and foreign residents in the capital. "Tokyo is a cosmopolitan metropolis with some 700,000 people from other countries," he said. The TMG sends out information not only in English but also in various other languages, while providing information to embassies in Tokyo. "We would like to provide the same kind of information not only within Japan but also to the rest of the world, and work to create a system that allows people to live a safe and secure life in Tokyo," he said.

In order to achieve its objectives, the data and knowledge accumulated to date are regarded as significant assets. "We must not lose what we have gained over the past four years. The lessons learnt at the risk of life will be invaluable in the next step," he said.

"Infectious diseases are an eternal challenge. There is no end to the battle. No one knows what will happen in the future. We will overcome these challenges through our network, which will also encourage people to work together with a spirit of caring for each other. That is the best vaccine. I am convinced that we can create a resilient society."

Hemorrhagic
fever viruses

A(H5N1)
Influenza

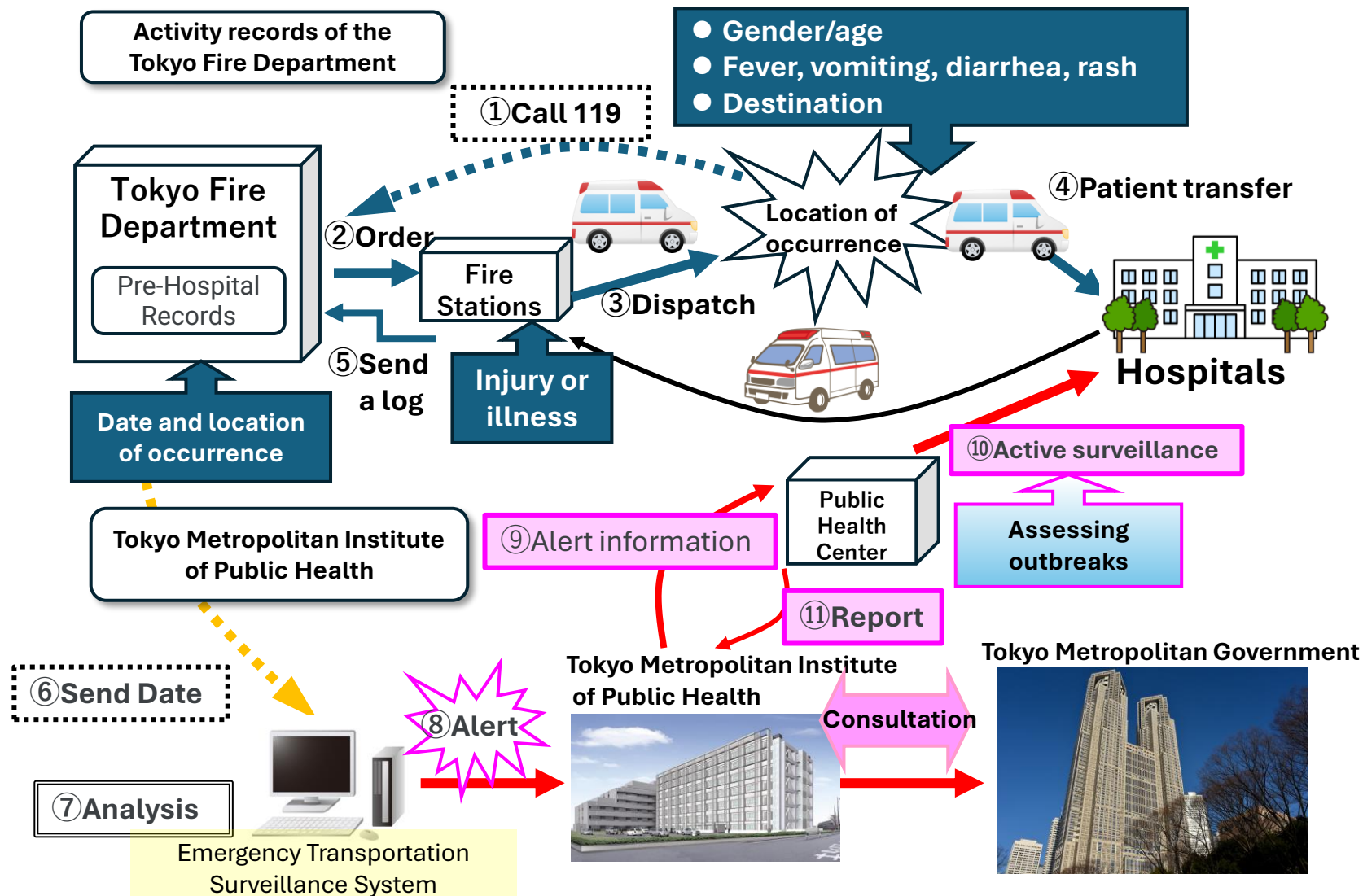
Dengue Fever

Syphilis

Summary

“Emergency Patients Surveillance of infectious disease”

Syndromic surveillance to detect infectious diseases of unknown pathogens. Launched in December 2020



Hemorrhagic
fever

A(H5N1)
Influenza

Dengue Fever

Syphilis

Summary

Bird Flu / H5N1 Influenza



cdc.gov/bird-flu

citation : CDC



Hemorrhagic
fever

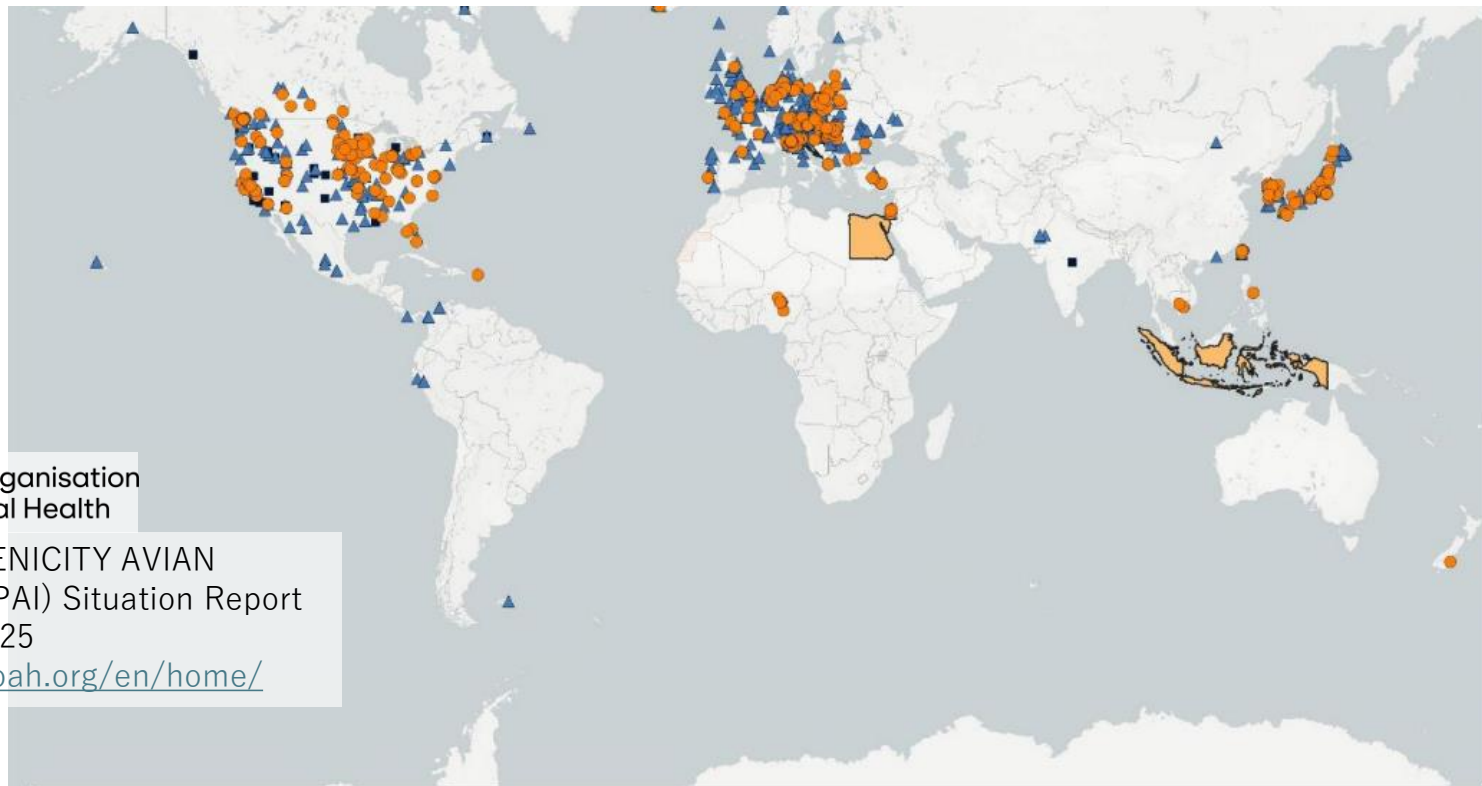
A(H5N1)
Influenza

Dengue Fever

Syphilis

Summary

Highly pathogenic **avian influenza** (HPAI) map for the current seasonal wave (Oct 2024-Sep 2025)



World Organisation
for Animal Health

HIGH PATHOGENICITY AVIAN
INFLUENZA (HPAI) Situation Report
67, January 2025

<https://www.woah.org/en/home/>

- Outbreak in poultry
- ▲ Outbreak in non poultry birds
- Outbreak in mammals
- HPAI declared sufficiently stable for information to be reported on six-monthly basis without geocoordinates
- HPAI in non-poultry declared sufficiently stable for information to be reported on six-monthly basis without geocoordinates*

Hemorrhagic
fever viruses

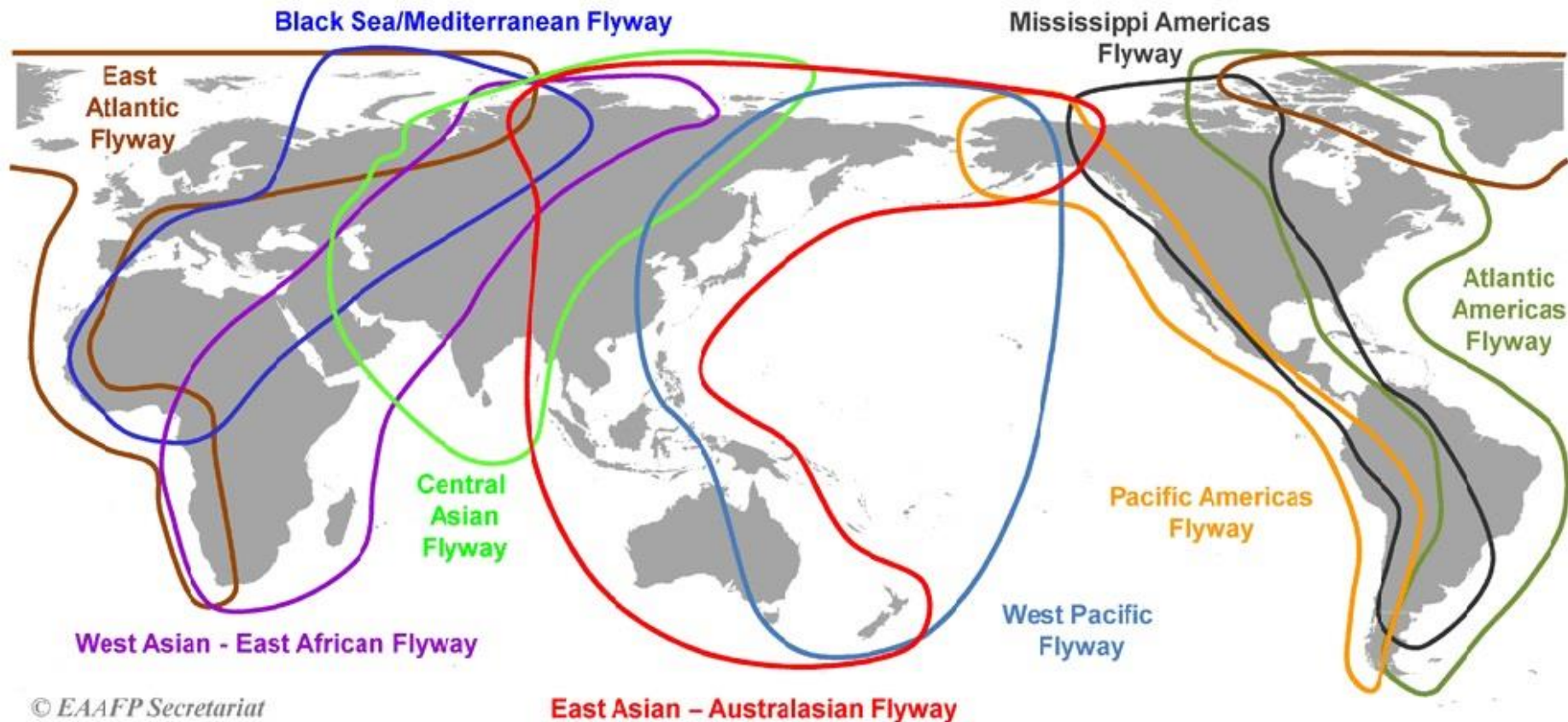
A(H5N1)
Influenza

Dengue Fever

Syphilis

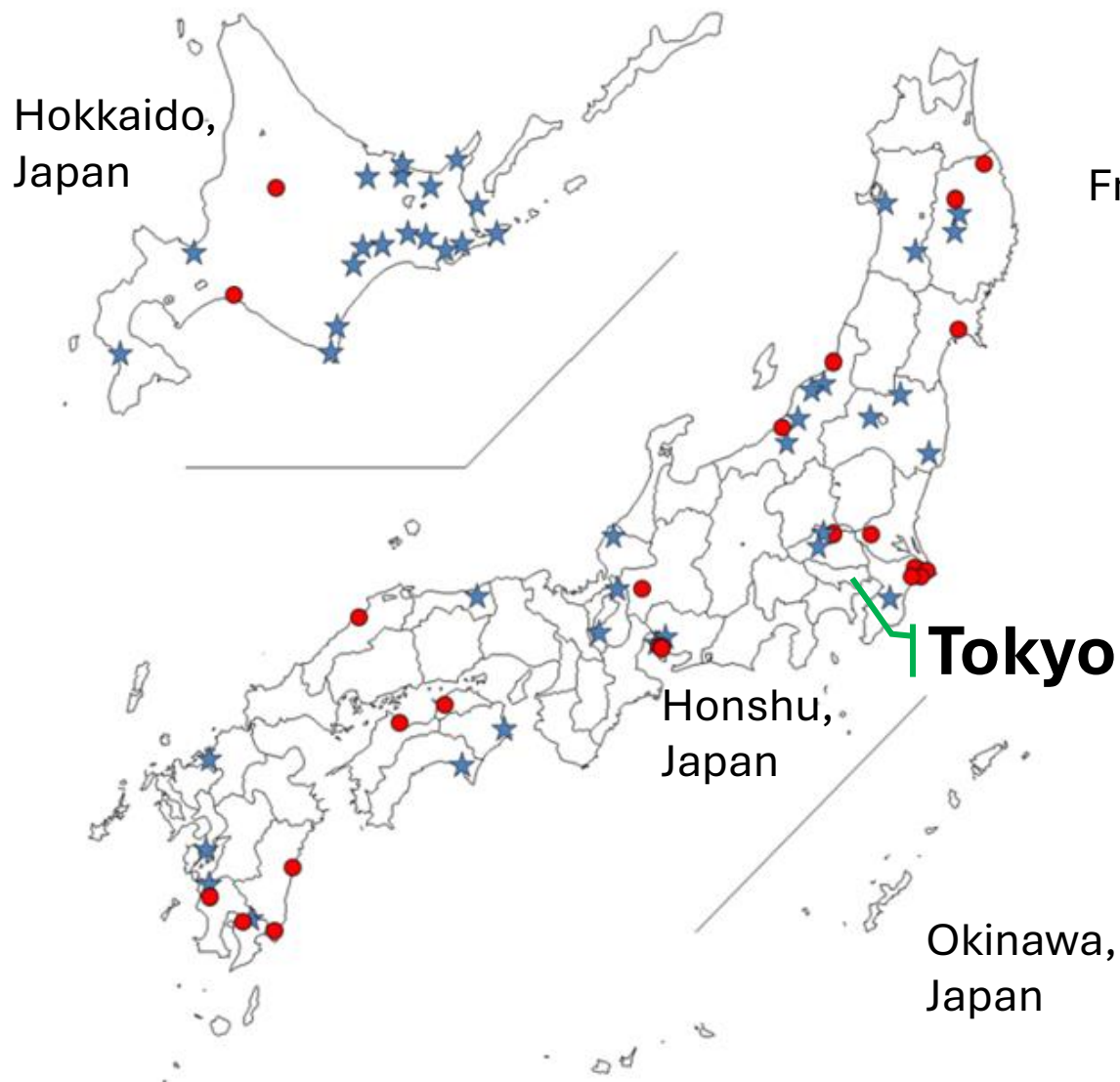
The Flyway

The routes that migratory waterbirds traverse on an annual basis are known as 'flyways.' There are nine major flyways around the world. The East Asian - Australasian Flyway (EAAF) stretches from the Russian Far East and Alaska, southwards through East Asia and South-east Asia, to Australia and New Zealand and encompasses 22 countries.



© EAAFP Secretariat

Current status of Avian Influenza in Japan (2024/25 season)



From 1st Sep 2024 to 1st Feb, 2025

-  **Domestic birds**
51 cases
in 14 prefectures
(of 47 prefectures)
-  **Wild birds**
109 cases
in 16 prefectures
(of 47 prefectures)

Hemorrhagic
fever virusesA(H5N1)
Influenza

Dengue Fever

Syphilis

Summary

Anti-influenza virus drugs for administrative stockpiling

Product Name	Common Name	Stockpiles (For people)	
		Nationwide	Of these, Tokyo
TAMIFLU Capsules®	Oseltamivir Phosphate	11.33 million	200 thousand
TAMIFLU Dry Syrup®	Oseltamivir Phosphate	5.77 million	364.4 thousand
RELENZA®	Zanamivir Hydrate	4.09 million	837.2 thousand
INAVIR DRY POWDER INHALER®	Laninamivir Octanoate Hydrate	12.05 million	1.26 million
RAPIACTA for Intravenous Drip Infusion®	Peramivir Hydrate	1.85 million	140.2 thousand
XOFLUZA Tablets®	Baloxavir Marboxil	1.92 million	93.5 thousand
Tamiflu concentrate	Oseltamivir	1.18 million	-
Tamiflu dry syrup concentrate	Oseltamivir	230 thousand	-
Anti-influenza virus drugs for administrative stockpiling		38.42 million	2.90 million

通常流通用抗インフルエンザウイルス薬の供給状況（１０月分）について

Tokyo's medical resources needed for the next emerging infectious disease

- ◆ Tokyo Metropolitan Government has secured temporary medical infrastructure based on its experience with the COVID-19 pandemic.

Medical resources needed during pandemic		Securing target
Medical Institutions	Inpatient treatment	6,000 beds
	Outpatient treatment	4,900 facilities
Hospital transfer acceptance medical institution		310 facilities
Temporary staffing	Physician	300 doctors
	Nurse	160 nurses
Laboratory Tests that can be contracted out		59,000 tests/day
Accommodation Treatment Facility		9,500 rooms

Hemorrhagic
fever

A(H5N1)
Influenza

Dengue Fever

Syphilis

Summary



ANN

NEWS
午後5時すぎ
東京・渋谷区

デング熱 代々木公園の駆除作業は

新たに2人感染…3人とも蚊に刺され

Dengue Fever

Source: TV Asahi, August 28, 2014

Hemorrhagic
fever

A(H5N1)
Influenza

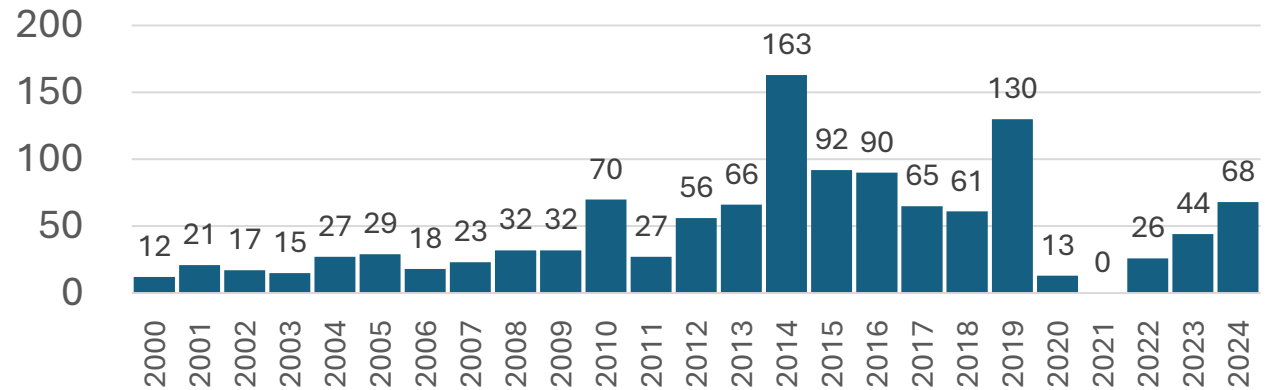
Dengue Fever

Syphilis

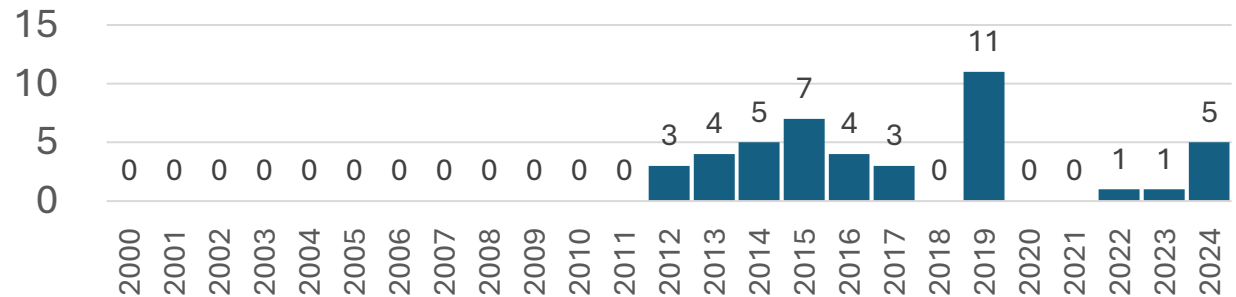
Summary

Trends in reported cases of mosquito-borne infectious diseases in Tokyo

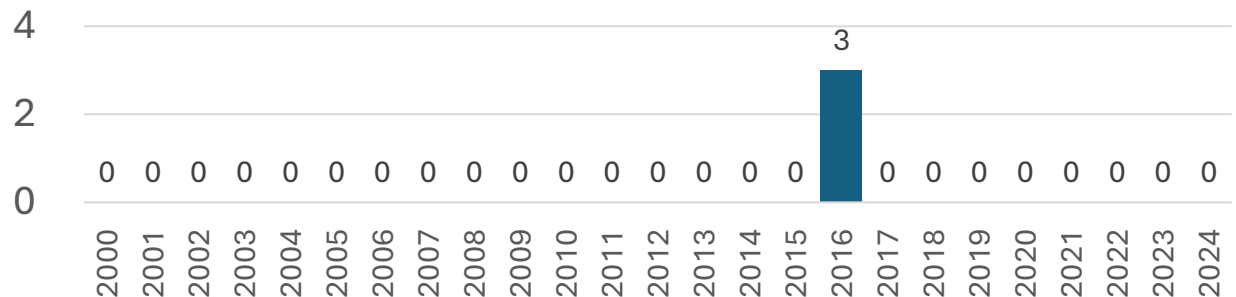
Dengue Fever



Chikungunya fever

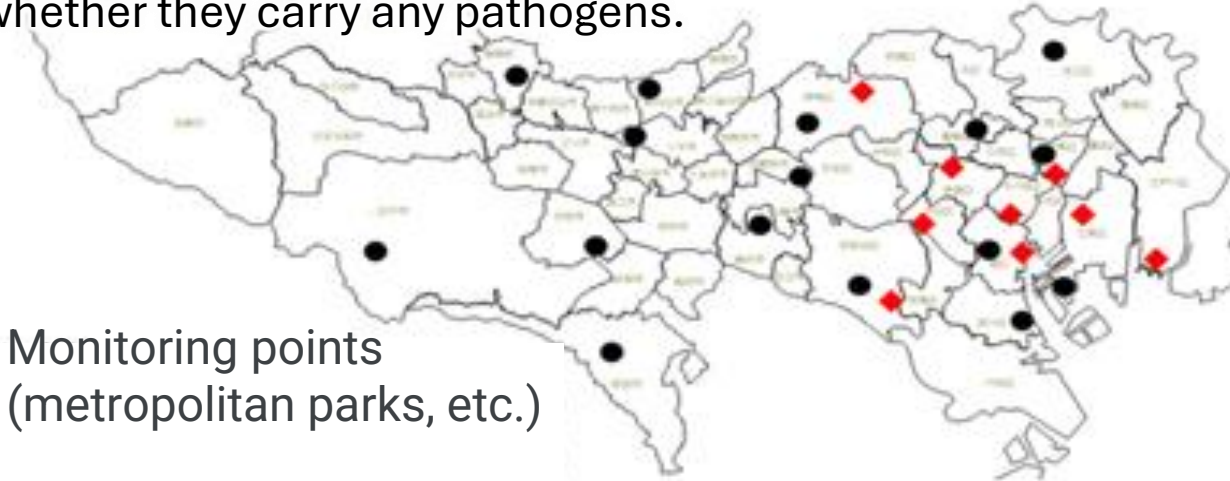


Zika fever



Vector mosquito surveillance sites in Tokyo

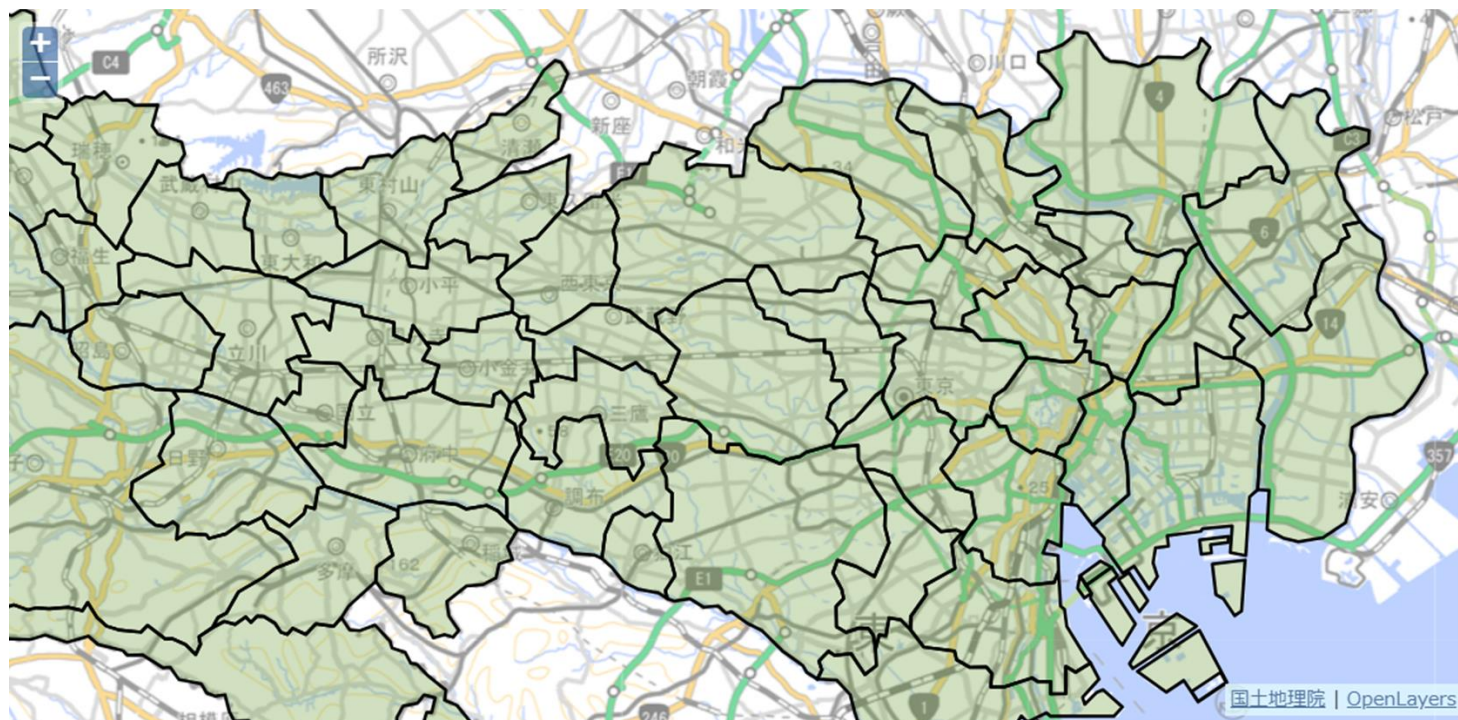
- In order to prevent the spread of mosquito-borne infectious diseases, the Tokyo Metropolitan Institute of Public Health regularly captures mosquitoes and investigates whether they carry any pathogens.



	Category	Facilities	Points	Pathogens Tested
◆	Focused Surveillance	9 facilities	50 points	Dengue Virus, Chikungunya Virus, Zika Virus
●	Wide-Area Surveillance	16 facilities	16 points	West Nile Virus, Dengue Virus, Chikungunya Virus, Zika Virus, Malaria Parasite

High-risk spot information for mosquito-borne infectious diseases in Tokyo

- ◆ The Tokyo Metropolitan Government provides information to the public about locations where virus-carrying mosquitoes may be present regarding dengue fever, Zika virus infection, and chikungunya fever.



凡 例

棒グラフ



棒グラフ

当該施設及びその周辺
において複数の患者が
発生し、ハイリスクと
された地点



黄色の円

当該施設で実施した調査に
より、ウイルス保有蚊が確
認され、ハイリスクとされ
た地点

棒グラフ
+
黄色の円

当該施設及びその周辺におい
て複数の患者が発生し、かつ、ウ
イルス保有蚊が確認され、ハイリ
スクとされた地点

+ 大きく

- 小さく

Leaflet

Hemorrhagic
fever viruses

A(H5N1)
Influenza

Dengue Fever

Syphilis

Summary

ABEMAnews/ 梅毒患者が急増 都が無料の臨時検査会場を設置

梅毒即日検査会場
東京・新宿区 /3日

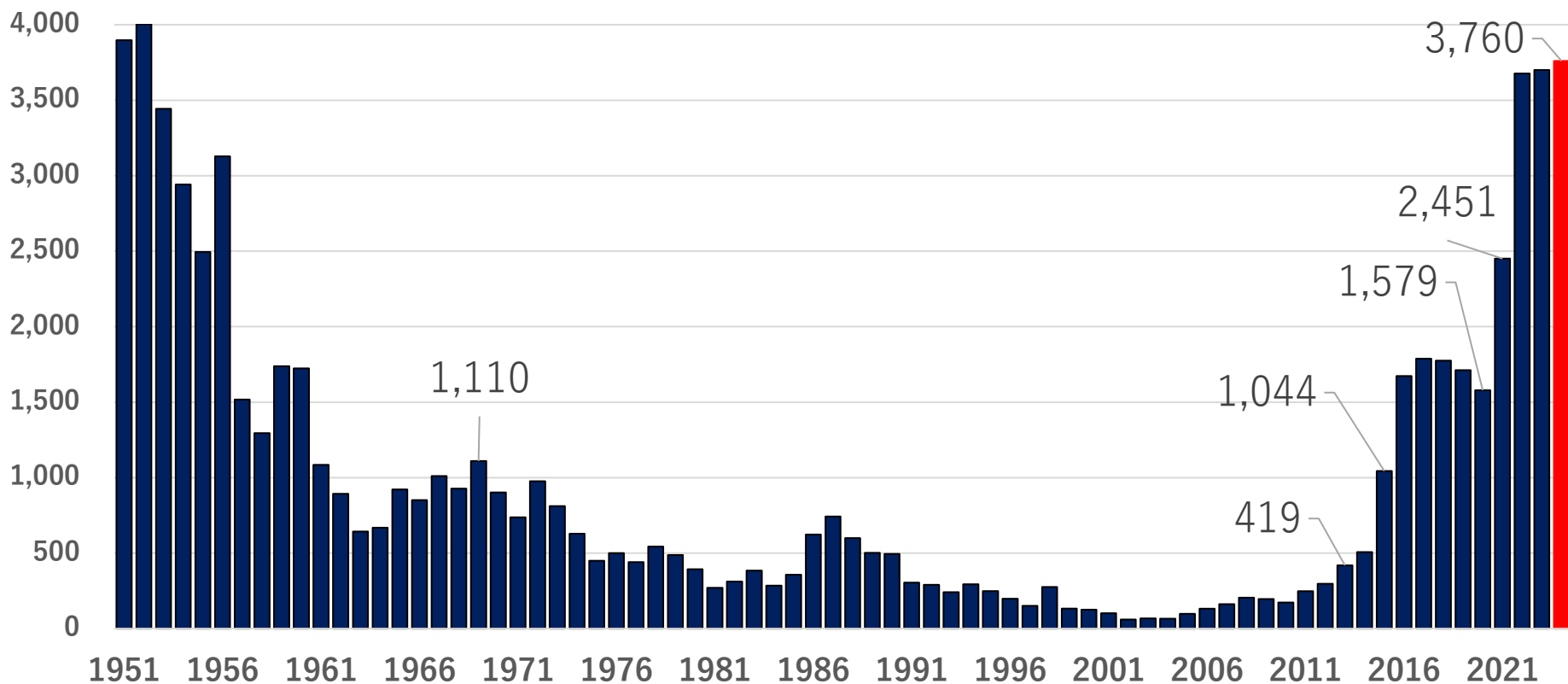


Syphilis

Source: TV Asahi (Japan), March 3, 2023

Trends in reported syphilis cases in Tokyo (1951 to 2024)

- ◆ Japan has had a reporting system for syphilis cases since 1948, and the number of reported cases had been decreasing since 1969, when 1,110 cases were reported.
- ◆ However, the number of reported cases began to increase again from 2011, and in 2024, the number of reported cases was 3,760, matching the level after World War II..



Hemorrhagic
fever viruses

A(H5N1)
Influenza

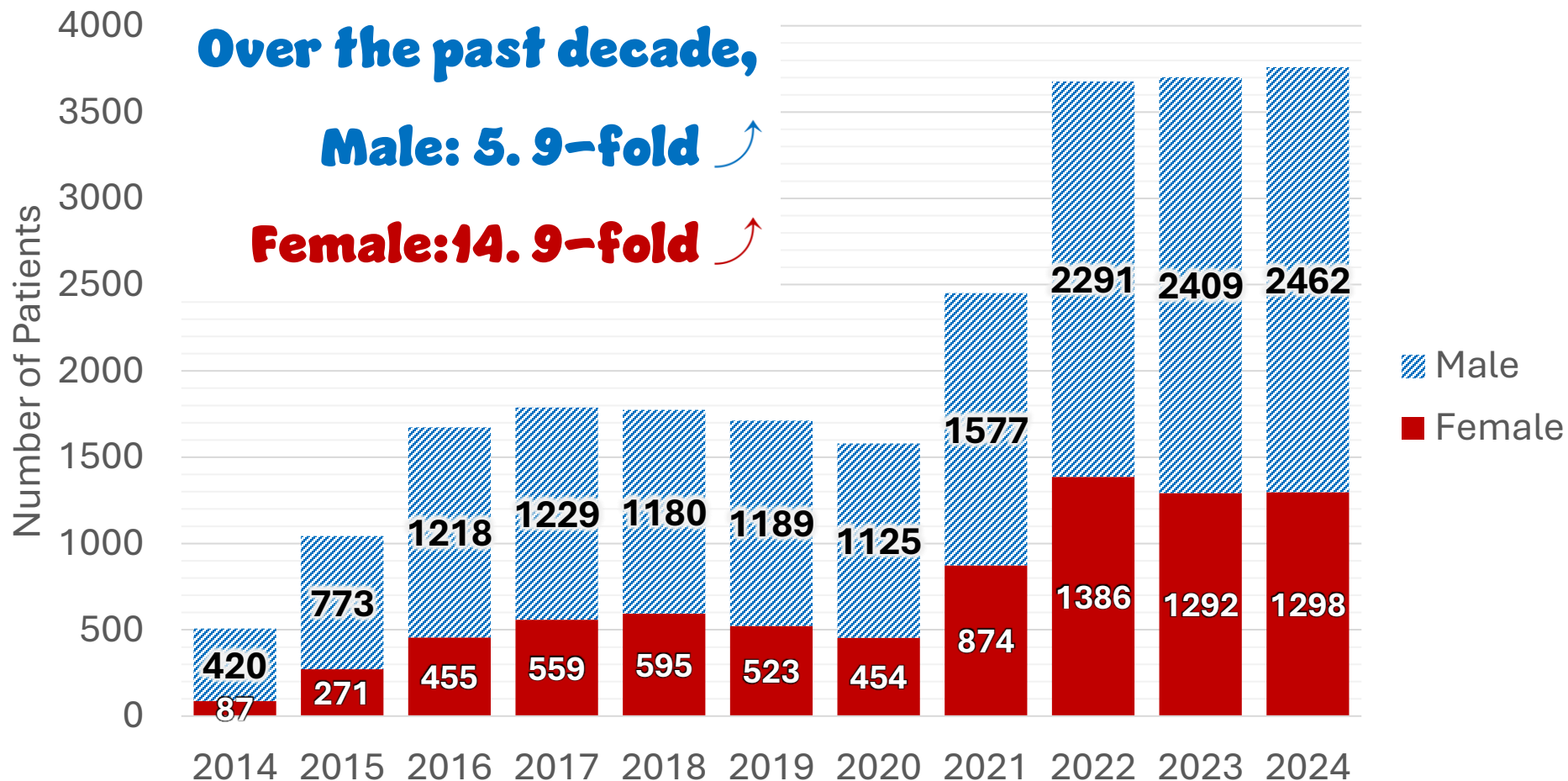
Dengue Fever

Syphilis

Summary

Trends in reported syphilis cases in Tokyo (2014 to 2024)

- ◆ Over the past decade, the number of syphilis cases among **male** has increased **5.9-fold**, while the number among **female** has increased **14.9-fold**.



Why did syphilis become so widespread?

1. **Misinformation** have led young people to **lose interest** in syphilis.
 - Many people may recognize the syphilis epidemic as a problem of the past.
2. The format of adult entertainment establishments may have changed.
 - **Occupational Health does not have access** to relationships between individuals in which older men date younger women in exchange for financial support ("**papa-katsu**" or sugar dating).
3. Physicians may not be aware of syphilis and may miss it when examining syphilis patients.
 - **Low coverage**: syphilis surveillance estimates range from 12 to 25%.

Encouraging preventive behavior and testing by providing accurate information to young people

Publication of accurate
information



Effective approaches to encourage behavior
change among apathetic groups

◆ Population-Wide
Targeted Strategies

**Awareness
events**

- ① **Summer focused awareness**
- ② **Intensive Winter enlightenment**

**Improving
STD test
services**

- ① **Holidays/Night hours**
- ② **Women's only venue**
- ③ **Centralized reservation counter**

**Collaborate
with various
groups**

- ① **With Commercial Sex Worker
support organizations**
- ② **With Youth support groups**
- ③ **With High Schools**

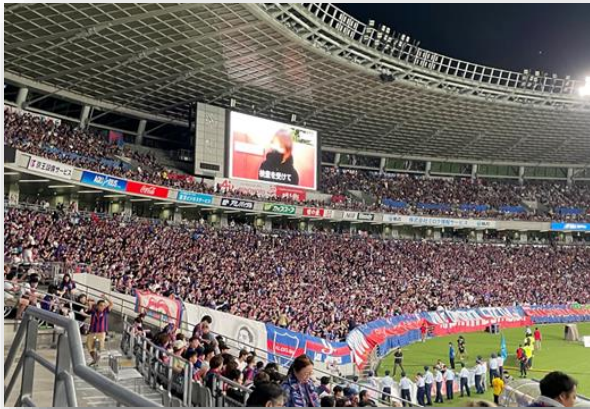
Training

- ① **For Obstetrician Doctors**
- ② **For Dermatologist and Physician**
- ③ **For (Occupation) Health Nurse**

◆ High-Risk Targeted
Strategies

Awareness Events

Summer Campaign



We held an awareness campaign...

- In a crowded downtown area during the summer vacation.
- At a professional soccer stadium.
- Utilizing large-scale vision of downtown area
- Providing “Manga” for young people

Winter Campaign



- Collaboration with the Red Ribbon Campaign
- By professional performers
- On YouTube ad

➡ **For young people, effectively**

Improving STI test services

Tokyo STI test reservation site



The application accomplished the following:

- Integrated reservation counter
- Reminder e-mail service
- Multilingual support
- 24-hour reception

➡ **More people get tested**

Improving STD test services



Tokyo Metropolitan Examination Room

We have improved the following services:

- Holidays/Night hours
- Increasing inspection capacity
- Women's only venue/Ladies' Day
- Same-day STI testing

➡ **Establishing behavioral change**

Collaborate with various groups

Commercial Sex Worker support Groups



For commercial sex workers, we:

- YouTube ad showing the examination room
- Provided information to an adult entertainment establishment

➡ **Approach high-risk populations**

Youth Support Groups



We supported young people's sexual concerns :

- Tokyo Youth Health Support, “Waka-sapo”
- Peer support organization

➡ **Reproductive Health Rights**

Training session to learn about syphilis

Targeted at obstetricians



Obstetricians have learned:

- Clinical symptoms and treatment of syphilis
- About notification obligation
- On the importance of supporting women

➔ **Prevent congenital syphilis**

For Public Health Nurse



We asked the Health Nurse to:

- Comprehensive health and welfare support for pregnant women with syphilis

➔ **Build a regional support system**

Take Home Message

- TMG has conducted training to prepare for a domestic outbreak of **viral hemorrhagic fever**.
- TMG has prepared its medical system in preparation for the **H5N1 influenza** pandemic.
- TMG has worked with residents to control mosquitoes as a **Dengue Fever** prevention measure.
- TMG has conducted **Syphilis** awareness campaigns and youth health support.