# Tokyo influenza "outbreak alert"



# Take all infection prevention measures including ventilation and handwashing.

# Influenza – World influenza surveillance report-

- Globally, influenza continues to be detected at low levels
- Most northern hemisphere regions reported low levels, while overall the southern hemisphere is <u>declining</u> (because summer is coming)
- > In East Asia, prevalence was high in Hong Kong and there has been a slight rise in southern China
- In Southeast Asia, high prevalence continued







Source:WHO FluNet(https://www.who.int/tools/flunet)

# **Influenza** – Urgent request to Government regarding influenza -

## **Context of request**

- Influenza season usually lasts from December to March, but since April the number of reported patients at fixed point sites across Japan has exceeded the level of outbreak
- The number of reported patients in Tokyo has continuously exceeded the outbreak level, but it spiked in late August and has exceeded the "warning level" since
- While COVID-19 transmission has been declining again lately, it has been trending up since the transition to class 5, with increased pressure on healthcare

#### Specific request

• September 26: Urgent request to Keizo Takemi, Minister of Health in the name of Yuriko Koike, Governor of Tokyo

In order to protect the lives and health of the people of Tokyo and Japan, and to reduce pressure on the healthcare system, in view of the need to promote the influenza vaccine as an effective way to prevent spread and severe cases of influenza, as well as a stable supply of treatments, we request that:

- 1 Influenza shots are promoted
- (1) advocacy for early vaccination
- (2) vaccines are secured

#### 2 Stable supply of treatments

- (1) proper supply of anti-influenza drugs
- (2) more organized supply of cough medicines, fever medicines, etc.
- (3) more resilient supply chain

Information about preventing influenza infection (Tokyo Metropolitan Infectious Disease Surveillance Center)

Link https://idsc.tmiph.metro.tokyolg.jp/diseases/flu/flu/



# Pharyngoconjunctival fever (pool fever) - Class 5 infectious disease -



- Typically infections begin to increase from around June, peaking in July or August.
- Most infections occur in summer and as can be spread in pools, also called "pool fever"
- In Tokyo, a sudden increase since August puts it at warning level (No. of reported patients exceeds 3.0 in Osaka and Fukuoka)
- Since records began in 1999, this is the first time reports of infection have reached warning level in Tokyo

#### **Key infection routes**

Pathogen: Adenovirus (extremely infectious)

Droplet transmission: virus contained in spray from infected person's cough or sneeze

Contact transmission: from handling a towel or other object with the virus after being handled by an infected person

# Pharyngoconjunctival fever (pool fever) – symptoms and prevention-

#### Symptoms

ef: MHLW website, Tokyo Metropolitan Infectious Disease Surveillance Center website

- Fever, headache, sore throat, conjunctivitis
- High fever can last relatively long (lasting about 5 days)
- No particular treatments, usually resolves by itself

### Prevention

- During the season, wash hands with soap and running water, gargle
- Avoid close contact with infected persons (do not share a towel, etc.)



- When leaving the pool, take a shower and gargle
- If high fever continues, with severe lethargy, cough, nausea or headache, contact a doctor

# The response of the Tokyo Metropolitan Government to Mpox

- 1. What is Mpox?
- 2. Incidence of Patients Worldwide
- 3.1 Cases in Tokyo and in Japan
- 3.2 Genomic Sequencing of Samples From Patients in Tokyo (Analysis of Molecular Lineage)
- 4.0 Response by Tokyo Metropolitan Government (TMG)
- 4.1 Initial Response and Response upon Infection Spread
- 4.2 Raising Awareness and Moving Towards a Response

## 1. What is Mpox - Category IV Infectious Disease -

- Japan now refers to "Monkeypox" as "Mpox"
- based on a revision to the Order for Enforcement of the Act on the Prevention of Infectious Diseases (May 26, 2023)
- Reported in patients who have not traveled to previously endemic countries since May 2022
- The World Health Organization (WHO) declared a Public Health Emergency of International Concern (PHEIC) on July 23, 2022 due to the continued

disease spread. The PHEIC was declared over on May 11, 2023

## **Mpox Symptoms**

(Source: Ministry of Health, Labour and Welfare, and the National Institute of Infectious Diseases)

- Caused by the Mpox virus.
- Prevalent throughout central and western Africa since the discovery of infection in humans in 1970
- The virus can be divided largely into two groups: the Congo Basin clade (clade I), and the West African clade (clade II)
  - Clade II has two further subclades: clade IIa and clade IIb
  - Clade I is often more severe than clade II, and is more contagious from person to person
  - (Clade II has been detected in cases in Japan)
- Humans have become infected through contact with rodents and squirrels from Africa, as well as monkeys, rabbits, and other animals that carry the virus
  - Coming into contact (including sexual contact) with skin lesions, bodily fluids, or the blood of an infected person or animal, prolonged exposure to droplets in close proximity to a patient, or contact with a patient's bedding or bed clothes can cause infection
- Symptoms generally develop after an incubation period of 6-13 days following exposure to the virus (max 5-21 days)
  - Symptoms, such as fever, headache, and swollen lymph nodes, last 0-5 days. A rash appears 1-3 days after the fever
  - In most cases, symptoms persist for 2-4 weeks and resolve on their own. However, the symptoms may turn into severe illness depending on the degree of exposure
- In Japan, the main method of treatment is symptomatic treatment, as there is no specific treatment for Class IV Infectious Diseases under the Act on the Prevention of Infectious Diseases. However, Europe has approved the drug Tecovirimat as a therapeutic agent, and is currently running clinical trials

# 2. Incidence of Mpox in Patients Worldwide

(Source: Ministry of Health, Labour and Welfare, the National Institute of Infectious Diseases, and various municipal websites)

- More than 90,000 cases have been reported worldwide since the epidemic began in May 2022.
  While most cases, according to WHO, are found in males, there have also been cases reported in women and children
- Most cases of infection resolve on their own; however, children, pregnant women, and immunocompromised individuals may become seriously ill. There were 130 deaths worldwide between January 1, 2022, to May 2, 2023 (none of these deaths occurred in Japan)
- All cases of infection reported in Japan were in men



# 3.1 Mpox in Tokyo and in Japan

• A traveler who stayed in Europe from the end of June to the middle of July, 2022, visited a medical institution in Tokyo on July 25 due to fatigue upon returning to Japan

Number of cases

- A same-day sample was taken and tested positive for the Mpox virus (Japan's first case of infection)
- A small number of cases were subsequently confirmed throughout 2022, and numbers were increasing into 2023
- The number of reported cases in Tokyo increased from March 2023, but decreased from June



## **3.2 Genomic Sequencing of Samples From Patients in Tokyo** (Analysis of Molecular Lineage)

#### From Analysis by the Tokyo Metropolitan Institute of Public Health

- Genomic sequencing was conducted on the 45 different strains of the mpox virus detected in cases in Tokyo
  - The first case from July 2022 was the B.1 strain
  - Those from September to October 2022, and after February 2023 were the B.1.3 strain
- The strain found in cases subsequent to September 2022 had accumulated a few mutations in the gene sequence; however, it was otherwise relatively close to the initial strain. Although the domestic epidemic ended at the end of 2022, the infection had spread from imported cases around February 2023
- Three of the four strains detected in September 2023 (the blue line) had different gene sequences from those detected in Japan so far



# 4.1 Initial Response and Response as the Infection Spread

#### TMG's Response (Initial Response)

- Requested medical support from designated Medical Institutions for Infectious Diseases (June 23, 2022)
- Built a system for conducting tests at the Tokyo Metropolitan Institute of Public Health
- Held the Tokyo iCDC One Health Approach Promotion Task Force (July 11, 2022)
  - Discussed measures to be taken in the event of an Mpox outbreak (risk assessment, TMG's response, etc.)
- Held the Tokyo Monkeypox Liaison Conference to share information (July 26, 2022) (Japan's first case of infection was confirmed in Tokyo on July 25)

\* The Tokyo Monkeypox Liaison Conference was abolished on May 8, 2023, and amalgamated into the Tokyo Infectious Diseases Liaison Conference

Advised the citizens of Tokyo regarding precautions against symptoms and sources of infection

#### TMG's Response (As the Infection Spread)

- Built systems for consultation and treatment
  - Built systems for consultation and treatment at TMG hospitals. Published these as designated medical institutions on TMG's website
  - Medical institutions: Hiroo Hospital, Komagome Hospital, Toshima Hospital, Ebara Hospital, Bokutoh Hospital, Tama Medical Center, Children's Medical Center, and Matsuzawa Hospital (8 hospitals in total)
  - Non-TMG medical institutions that agreed to publish information were also published on the TMG website Medical institutions: The University of Tokyo, The Institute of Medical Science, Keio University Hospital, and St. Luke's International Hospital
- Public Awareness
  - Held training sessions for medical institutions

(June 2023 / Lecturer: Dr. Satoshi Kutsuna, Department of Infection Control, Graduate School of Medicine, Osaka University)

 Created and distributed leaflets for event organizers and store owners in cooperation with relevant agencies\* to educate high-risk groups (those identifying as men who have sex with men (MSM) with multiple sexual partners, bisexual people, etc., see next page)

\* The National Institute of Infectious Diseases, NCGM, MSM Community-based Organizations (CBOs), the Ministry of Health, Labour and Welfare, and local governments working together to disseminate information

#### **4.2. TMG's Response** - Raising awareness and moving towards a response -

## **Educational leaflets**



#### Moving towards a response

- Continue to raise awareness of infection prevention measures
- Use what we have learned from the Mpox outbreak to respond to emerging infectious diseases