Influenza Transmission

Document 5

No. of patients reported weekly in Tokyo per sentinel

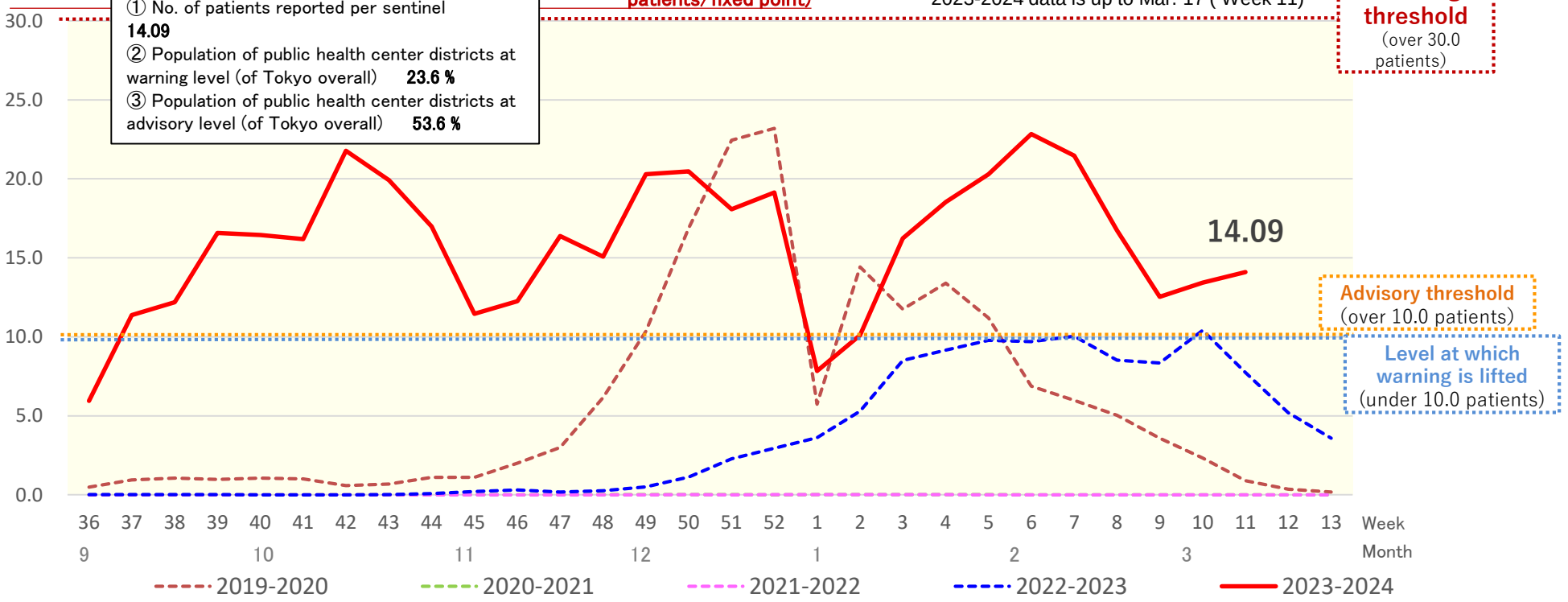
(Advisory level threshold: 10.0 patients/fixed point)

(Warning level threshold: 30.0 patients/fixed point)

Advisory Level
(Week 37 onward, 2023)

2023-2024 data is up to Mar. 17 (Week 11)

① No. of patients reported per sentinel **14.09**
② Population of public health center districts at warning level (of Tokyo overall) **23.6 %**
③ Population of public health center districts at advisory level (of Tokyo overall) **53.6 %**



***Advisory level retained**

In the 11th week of 2024, the number of reported patients per sentinel was 14.09, exceeding the level of 10.0 at which the warning is lifted, and the number of public health center districts over the advisory threshold was 6 with 23.6% of Tokyo's population, and not satisfying the 30.0% threshold. Therefore, **the advisory level is retained**.

➢ **Take all infection prevention measures including masking up where appropriate, handwashing, and ventilation!**

Measles and Rubella - Class 5 Infectious Disease -

Measles Symptoms

Ref: Tokyo Metropolitan Infectious Disease Surveillance Center website, National Institute of Infectious Diseases website, MHLW Contact Office (Feb. 26, 2024)

Symptoms	・**Following a latency period of 10–12 days, there is fever and cold symptoms (cough, runny nose, bloodshot eyes, etc.) for 2–4 days, then** high fever over 39℃ together with an outbreak of measles rash ・Main symptoms are fever, measles rash, cough, runny nose, bloodshot eyes, etc. ・**Typically, recovery occurs in 7–10 days, but** complications with serious symptoms can arise, such as pneumonia and encephalitis, etc.
Infection pathways	・**Airborne, droplets, contact** (person-to-person transmission) ・Infectivity extremely strong, almost 100% of those without immunity are infected ・Over 90% of infected people develop symptoms ***Measles is most infectious before symptoms onset**
Overseas epidemic situation	・**In Europe,** the cases reported were **30 times greater than the number of cases reported the previous year, and serious cases needing hospitalization and deaths are confirmed.** ・**Southeast Asia,** where many visitors to Japan come from, **is a region with one of the highest cases of measles reported worldwide.** ・There are reports of cases where infection from **imported cases of the disease coming into Japan is suspected**, adding concern of a rise in import cases and transmission in Japan in the future.

Measles and Rubella – Infections Trends in Tokyo and Japan -

Several cases of measles reported in Japan

○ **Confirmed a measles case of a passenger on board Etihad Airways Flight 830 arriving on Feb. 24, 2024, from UAE to Kansai International Airport**
(Announced on Mar. 1 by the Osaka Prefectural Government)

○ **Number tested positive concerning to the above: 10 people**
(Announced on Mar. 13 by the Osaka Prefectural Government)

Infection trends in Tokyo

○ **Confirmed a measles case of a person traveling in Tokyo, who was onboard the same plane as the measles patient reported on Mar. 1, 2024, by Osaka.** (Announced on Mar. 11)

○ **A measles case of a child under 5 residing in Tokyo with a history of overseas travel** (South Asia) (Announced on Mar. 12)

○ **Confirmed 5 measles cases in Tokyo from Feb. 2024** (Announced on Mar. 22)

● If **signs of measles (fever, rash, cough, runny nose, bloodshot eyes, etc.)** appear, **be sure to contact a medical facility beforehand and tell them there is a suspected case of measles.**

● When seeing a doctor, **avoid using public transportation and follow the instructions of the medical facility.**

Measles and Rubella - Prevention Measures・Immunization -

Measles and rubella are vaccine-preventable diseases.
Getting vaccinated is something you can do to stop them!

・**Two shots result in antibodies in around 99% of people, giving sustained immunity**

Eligibility for Scheduled Immunization

- **Stage 1: 12-24 months**
- **Stage 2: 5-6 years of age and before starting school (older kindergarten children)**

・The MR vaccination consists of one shot at each stage.
・Your municipality will send you a vaccination voucher with guidance as to where to receive the vaccine.

Inquire to your municipality

TMG Initiative

- **Subsidy system for measles immunization**

A system of **receiving vaccination at a lower cost than the normal cost** using the municipality's subsidy is available for those who have not received their scheduled immunization.

Link:
https://www.hokeniryo.metro.tokyo.lg.jp/kansen/measles-rubella/mashinfuusin_information.html

Check your vaccination records and consider receiving an antibody test and vaccination.

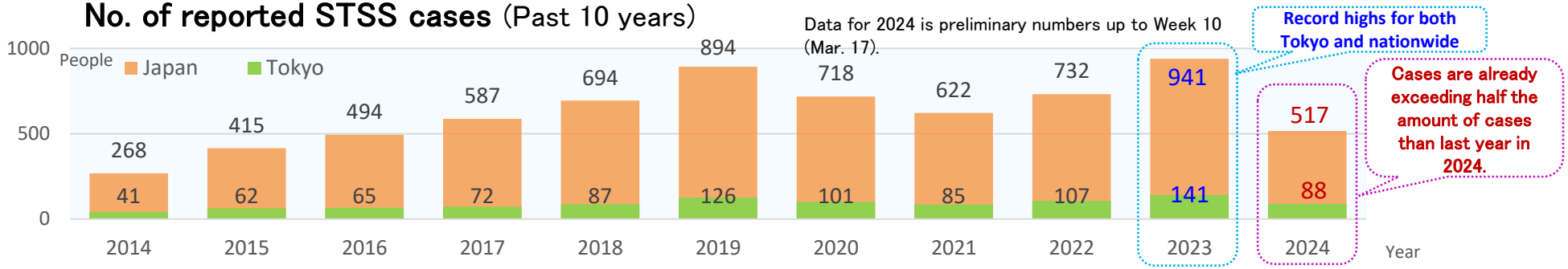
Streptococcal Toxic Shock Syndrome (STSS) - Class 5 Infectious Disease -

Ref:: National Institute of Infectious Diseases website,
Tokyo Metropolitan Infectious Disease Surveillance Center website

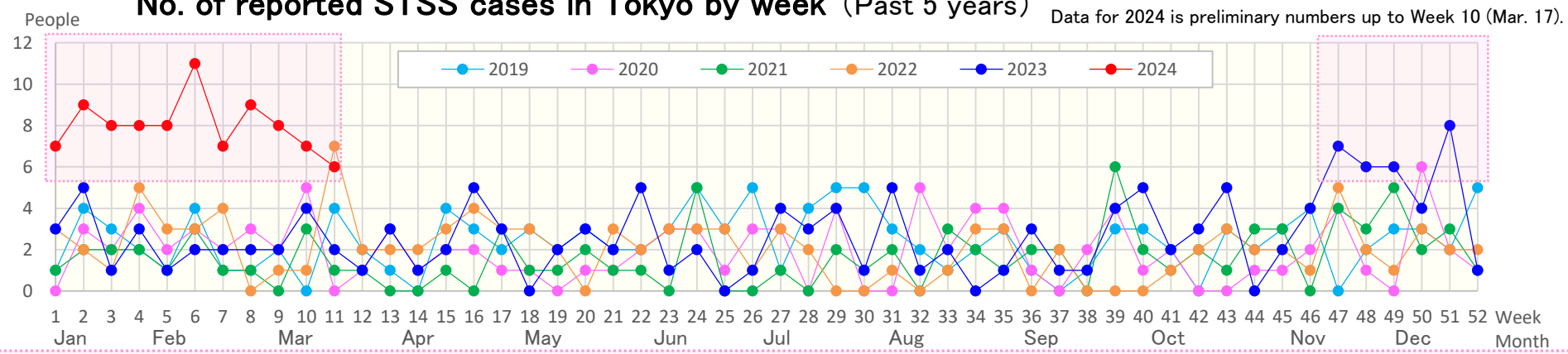
About Streptococcal Toxic Shock Syndrome

- Group A strep bacteria, Group B, C, and G strep bacteria cause STSS.
- Streptococcal Toxic Shock Syndrome (STSS), which is caused by β-hemolytic streptococci, starts suddenly and leads to septic shock and results in multiple organ failures.
- As many as 3 out of 10 people with STSS die, making STSS an infectious disease with an extremely high mortality rate.
- The number of patients in 2023 was 941 cases nationwide, among them 141 cases were in Tokyo, with both being record highs.

No. of reported STSS cases (Past 10 years)



No. of reported STSS cases in Tokyo by week (Past 5 years)

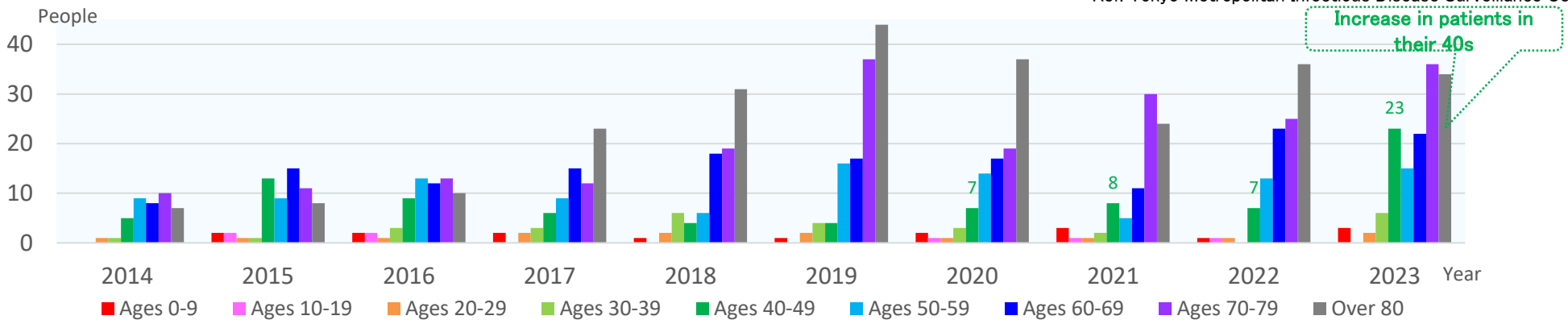


＊ Reported cases from mid-November 2023 per week: Increase in frequency exceeding 6 cases

Streptococcal Toxic Shock Syndrome (STSS) - Class 5 Infectious Disease -

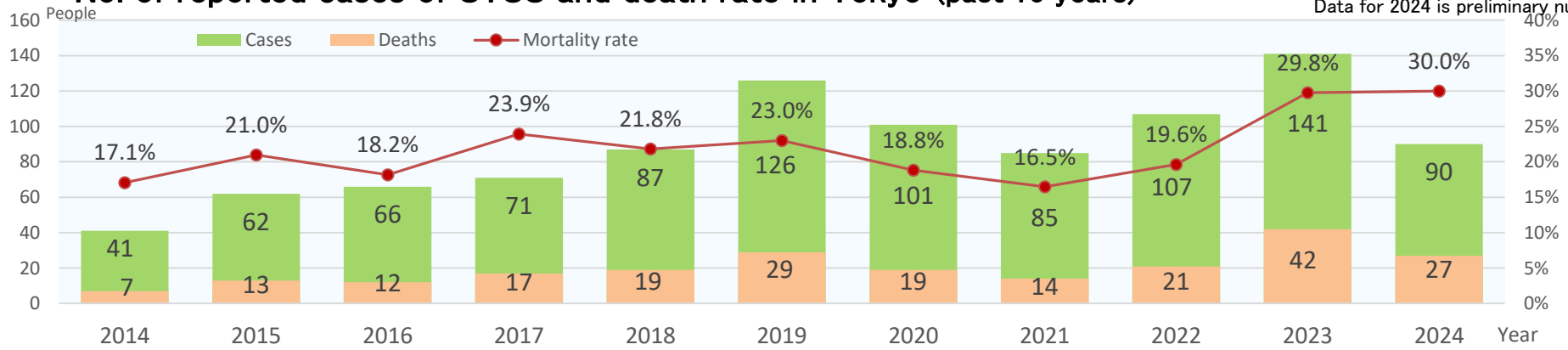
No. of reported cases of STSS in Tokyo (Past 10 years according to age group)

Ref: Tokyo Metropolitan Infectious Disease Surveillance Center website



No. of reported cases of STSS and death rate in Tokyo (past 10 years)

Data for 2024 is preliminary numbers up to Week 10 (Mar. 17).



Situation of cases in Tokyo

- People of all ages can become infected with STSS but most infections occur in adults.
- For the past 10 years in Tokyo, 90% of all cases are people over 40 each year.
- Compared to previous years, 2023 saw a significant increase in cases of people in their 40s. (2022: 7 cases ⇒ 2023: 23 cases)
- Of the 142 cases in Tokyo, there were 42 deaths in 2023. (1 in their 30s, 7 in their 40s, 2 in their 50s, 6 in their 60s, 11 in their 70s, and 15 patients aged 80 and older)

Streptococcal Toxic Shock Syndrome (STSS) - Class 5 Infectious Diseases -

Analysis of the Isolated strain (M1uk strain) of Group A Streptococcus

Ref: National Institute of Infectious Diseases website, MHLW Contact Office

○ From July 2023, reported cases of STSS caused by Group A Streptococcus have increased in Japan, especially among people under 50.

In addition, an increase in reported cases of group A hemolytic streptococcal pharyngitis at fixed points and a regional accumulation of the M1UK strain have been confirmed.

○ The **M1UK strain may be causing the increase of STSS** because it is a highly transmissible strain among the group A hemolytic streptococcus strains and has seen a rise in the United Kingdom since 2010.

○ **When an outbreak of STSS occurs,** Japan issues an administrative circular to **conduct strain analysis, etc.** (Jan. 17, 2024)

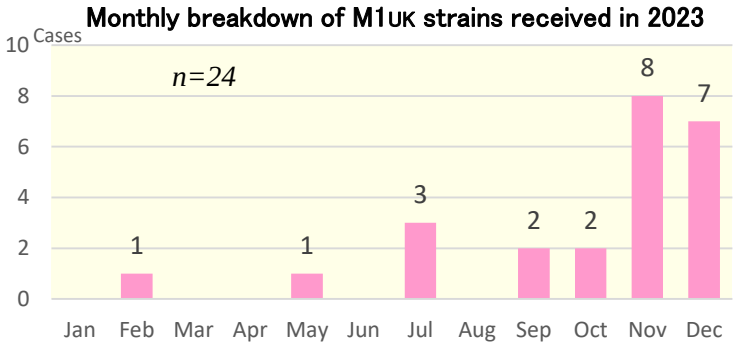
⇒ **Strain analyses are conducted at the Tokyo Metropolitan Institute of Public Health as well.**

Situation of STSS-derived strains received from medical facilities in Tokyo

Source: Tokyo Metropolitan Institute of Public Health

Received in 2023

STSS cases	133
S. pyogenes	76
emm 1 type	26
M1UK(+)	24
M1UK(−)	2



Received in 2024 (as of Feb. 21)

STSS cases	23
S. pyogenes	16
emm 1 type	12
M1UK(+)	12
M1UK(−)	0

- Since STSS cases have increased from mid-November 2023, the number of M1UK strain cases detected has increased as well.
- In less than 2 months in 2024, the number of M1UK strain cases detected reached 50% (12 cases) of cases detected in 2023.
- In Tokyo, the increase in the M1UK strain may be linked to the rise in STSS cases.

Streptococcal Toxic Shock Syndrome (STSS) - Class 5 Infectious Diseases -

TMG's response situation

○ On Feb. 29, Tokyo iCDC's Public Meeting on the Response to STSS in the Future was held.

【Main opinions from experts】

● **The method of gathering information from medical facilities needs to be reviewed.**

⇒ Since the information collected is not recorded on an outbreak notification, information must be collected individually from selected survey items of Tokyo and medical facilities. ⇒ Analyze transmission trends using Tokyo iCDC's knowledge.

● **A plan of how to inform medical facilities is needed.**

⇒ Update information on STSS in the Tokyo Infectious Diseases Manual and hand it out to medical facilities.

STSS Symptoms

Ref:: National Institute of Infectious Diseases website, Tokyo Metropolitan Infectious Disease Surveillance Center website

● Initial symptoms include pain in the extremities, bloating, fever, decrease in blood pressure, etc.

● Since the onset of symptoms, STSS develops very rapidly and drastically.

● The disease causes soft tissue necrosis, acute kidney failure, adult respiratory distress syndrome (ARDS), multiple organ failure (MOF), etc. within dozens of hours after symptoms appear.

● STSS often leads to death from a state of shock.

● STSS is mainly transmitted by airborne droplets and contact, but may also be transmitted from wounds on the hands, feet, etc.

If signs of an infection such as pain in the extremities, bloating, and fever are seen,

⇒ Seek a medical facility immediately