

# Global outbreak of Measles

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Measles is an infectious disease that is now prevalent around the world. The severity of this disease has long been known as a "deadly disease," and even now with advances in medical treatment, the severity of this disease remains unchanged, and the countermeasures against measles are being focused on. In recent years, there has been a decline in measles vaccination rates and several restrictions on visiting medical institutions and testing systems due to the COVID-19 pandemic, and since the relaxation of social-distancing restrictions and border measures after the COVID-19 pandemic the worldwide increase in the number of measles cases is attracting the attention of health-related workers both domestically and internationally. In 2023, the annual reported number of measles increased from the previous year in Japan. From an international perspective, the main epidemic regions in 2023 include Southeast Asia, the Eastern Mediterranean region, and Africa. In addition, the number of reported cases in Europe has increased rapidly by more than 30 times compared to the previous year, and serious cases requiring hospitalization and deaths have also been reported. Even in Japan, the number of case reports that are thought to be imported from overseas is increasing, and there are some concerns that the numbers of cases of infection transmission within Japan will increase in the near future.

## About Measles

- An infectious disease caused by the measles virus, which is highly contagious. It is transmitted not only by droplet infection but also by airborne infection, so handwashing and masks alone cannot prevent the infection. In addition, it is thought that over 90% of people who do not have immunity will develop specific symptoms of measles if they are infected.
- Once getting the measles infection, cold-like symptoms such as a fever of around 38°C, cough, runny nose, and congested eyes will appear after the incubation period of 10 to 12 days. This fever continues for 2-3 days. Afterwards, a high fever of 39°C or higher and a skin rash appears. High fever persists for 3 to 4 days while the rash spreads throughout the body.
- During the clinical course of measles, several complications often occur, including pneumonia, enteritis, otitis media, croup, myocarditis, and encephalitis, which can become severe and can even lead to death.
- The period during which there is a possibility of infecting others is said to be from 1 day

before symptoms appear (3 to 5 days before the appearance of the skin rash) to about 4 days after the skin rash disappears or until about 3 days after the fever subsides.

- There is no specific treatment; but treatment is performed to alleviate painful symptoms. If some complications have occurred, treatment will be provided according to each case.
- Vaccination is the most effective way to prevent a measles infection.

#### Recommendation of the Measles Vaccination

- The measles vaccine is administered in two doses as a routine vaccination: the first period (for children aged between 12 months and 24 months) and the second period (for children aged between 5 years and 7 years old; one year before entering elementary school).
- Some generations received only one dose of the routine vaccination, and there are a certain number of people who have not completed the vaccination even if they are eligible for two doses of the routine vaccination. If you do not have a history of measles and do not have a clear history of receiving two measles vaccines based on the mother-child health book, please consider getting the vaccination. Alternatively, please check for antibodies against measles with a blood test, and if immunity for measles is not enough, please actively consider getting the vaccination.

#### If you have developed or are suspected of having measles

- If you are diagnosed with measles or are suspected of having measles, please promptly notify the University Health Care Center.
- If you have measles or are suspected of having measles and are planning to visit a medical institution, firstly, please tell them in advance that you have or are suspected of having measles and check with the medical facility in advance whether or not you need to be examined and what precautions should be taken, and follow their instructions.
- When traveling to a medical facility, please wear a mask and avoid using public transportation as much as possible to prevent infecting those around you.
- If you have developed measles, you will be suspended from class attendance (until 3 days have passed after your fever subsides) according to the School Health and Safety Act. In this case, it will be treated as an "official absence."
- If you are suspected of having measles, your condition will be checked, and attendance will be suspended if necessary.

If you have any questions, please consult the Health Care Center, TUFS.

#### References

# Guidelines for measurement of measles in school. The 2<sup>nd</sup> version. The National Institute of

Infectious Disease.

# Risk assessment of occurrence of measles. February 22, 2024. The National Institute of Infectious Disease.

# Alerts due to the increase in measles both domestically and internationally (re-notification). Administrative communication. February 26, 2020. Ministry of Labor, Health and Human Services Bureau, Infectious Disease Control Department, Infectious Disease Control Division/Immunization Division.

# Measles Q & A I Basic information of measles [in Japanese] Tokyo Metropolitan Infectious Disease Surveillance Center

<https://idsc.tmiph.metro.tokyo.lg.jp/diseases/measles/measlesqa/mashinqa1/>

# About measles [in Japanese] Ministry of Health, Labour and welfare web page  
[https://www.mhlw.go.jp/seisakunitsuite/bunya/kenkou\\_iryuu/kenkou/kekaku-kansenshou/measles/index.htm](https://www.mhlw.go.jp/seisakunitsuite/bunya/kenkou_iryuu/kenkou/kekaku-kansenshou/measles/index.htm) 1

# Measles Q & A [in Japanese] National Institute of Infectious Diseases

<https://www.niid.go.jp/niid/ja/measles-qa.html#Q1-03>