



## Editorial

### Measles Resurgence: Vaccination Remains the Best Defense

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In this issue of OSIR, we continue to report and examine different aspects of surveillance. Finding and reporting diseases are the first steps in understanding and controlling infectious diseases.

As measles outbreaks have been making headlines around the world, and the Western Pacific and Southeast Asia regions are no exception. In 2022 and 2023, India experienced significant measles transmission, followed by outbreaks in Bangladesh and the Philippines in 2023.<sup>1</sup> In Vietnam, a surge in cases in 2024 resulted in 45,550 suspected cases and 16 deaths. The situation worsened in 2025, with nearly 40,000 suspected cases and five deaths recorded by mid-March.<sup>2</sup>

With an incubation period of 7 to 21 days and short transit times between countries, measles spreads easily across international borders. Taiwan's experience clearly demonstrates this risk. During 2020 and 2021, when Taiwan's borders were closed, no measles cases were reported. However, in 2024, there were a total of 12 cases imported from Vietnam, Malaysia, Cambodia, and other countries, leading to 20 locally acquired cases. By mid-March 2025, with over 200,000 travelers from Taiwan had visited Vietnam, there have been 11 imported cases of measles, all linked to travels to Vietnam.<sup>3,4</sup> However, Taiwan has maintained measles-mumps-rubella (MMR) vaccine coverage above 98%, even during the COVID-19 pandemic, preventing sustained measles transmission despite these imported cases.<sup>5</sup>

Vaccination remains the most effective way to prevent measles. However, the COVID-19 pandemic disrupted routine immunization programs worldwide, leading to a decline in vaccination coverage for many childhood immunizations, including measles-containing vaccines. According to WHO-UNICEF estimates, Vietnam's coverage of measles-containing vaccines dropped from 95–99% between 2015 and 2020 to 89% in 2021 and further down to 82% in 2023.<sup>6</sup> This decline has directly contributed to the large outbreaks currently being observed.

In addition to immunization program disruptions, misinformation has played a significant role in lowering vaccine coverage. In some communities, measles is wrongly perceived as a mild childhood illness that only causes fever, rash, cough, coryza (runny nose), and conjunctivitis—the so-called “3Cs.” This misunderstanding leads to vaccine hesitancy, leaving populations vulnerable to outbreaks. The United States is currently experiencing measles outbreaks in areas with low MMR vaccine uptake. By 13 Mar 2025, there had been 301 reported cases, with 95% occurring in individuals who were unvaccinated or had an unknown vaccination status. Among them, 50 patients (17%) required hospitalization, and two have died.<sup>7</sup>

So, we can see that measles is far more than a febrile-rash disease that everyone recovers from. Approximately 30% of patients experience complications, with diarrhea being the most common. Other severe complications, in the short-term, include pneumonia, that can lead to death, and encephalitis, which can lead to deafness or intellectual disability. In the long-term, subacute sclerosing panencephalitis (SSPE), a rare but devastating neurological condition, can emerge 7 to 10 years after the initial infection, even in patients who had seem to make a full recovery from measles.<sup>8</sup>

Achieving and maintaining 95% immunization coverage is crucial to preventing sustained measles transmission.<sup>9</sup> However, this requires continued commitment from policymakers, public health authorities, and healthcare providers. Efforts must focus on countering misinformation about vaccine safety, ensuring vaccine accessibility, and strengthening surveillance systems to prevent future

outbreaks. Only through our collective action can we protect vulnerable populations and prevent measles from re-emerging as a significant public health threat.

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