



## Implications of an Imported Measles Outbreak in Taiwan

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### Dear Editor-in-Chief

Measles is an acute viral disease which is highly contagious and can cause fever, rash, diarrhea, pneumonia and even death. It's one of the dominant causes of death among young children despite safe and affordable vaccination is widespread. WHO estimates that measles caused 89,780 deaths worldwide in 2016 – mostly children under the age of 5 yr (1). In Taiwan, beginning from 1993, the annual number of confirmed measles cases was <20 by the end of 2017(2).

On Mar 4, 2018, a 30-year-old male returned to northern Taiwan after a 3-day trip in Thailand, and had prodromal symptoms such as cough and fever shortly afterward. Resulting from deteriorating symptoms, he sought medical help on Mar 16 and set off for Okinawa on the next day. On Mar 19, when developing rashes on limbs, he went to a local hospital in Japan for treatment and was laboratory confirmed with measles infection. He returned to Taiwan one week later and was reported to the competent authority that immediately conducted an epidemiological investigation, results of which showed that the case acquired his infection in Thailand. Twenty-four cases (no deaths) were identified with measles according to statistics of Taiwan Centers for Disease Control so far, of whom mostly were passengers and crews on the same flight, mainly located in New Taipei, Taoyuan and Taipei. The outbreak included 3 clustered cases through the watch list created by local health departments that put on 8456 people, of whom 7549 were re-

moved from the list after the observation period ended. Meanwhile in Okinawa Japan, 99 measles cases were confirmed after the index case was reported (2).

From this severe breakout we can learn a lot. For individual residents, the MMR vaccination is recommended before traveling to measles-endemic countries or regions (3). For workers in health care institutes, vaccination should be enhanced to prevent nosocomial infection. For the government, efforts should be made at 1) detection of real-time index cases, 2) prevention of imported measles and its spread and 3) cooperation with surrounding areas to control measles in their territories (4).

In the future, strict immigration clearance globally, full-scale epidemiological surveillance system and precise diagnosis will further reduce measles deaths from the vaccine-preventable disease and ultimately achieve measles elimination in the worldwide (5).

### Conflict of interest

The authors declare that there is no conflict of interest.

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