

## Investigation of an Indigenous Case of Dengue Fever and Control Measures, Taichung City, 2019

Min-Tsung Lin<sup>1</sup>, Kung-Ching Wang<sup>1</sup>, Pei-Fang Lai<sup>1</sup>, Pi-Long Liu<sup>1</sup>, Ching-Fen Ko<sup>1,2\*</sup>

### Abstract

On October 12, 2019, we confirmed an indigenous case (Case A) of dengue fever (DF) who lived in the faculty residence of University X in Xitun District, Taichung City. After epidemiologic investigation, we found that the primary case might be an imported DF case (Case B) who had traveled to India earlier. During Case B's viremic period, she went to study at University X and the classroom was only 200 meters away from the residence of Case A.

Both cases were infected by the type 2 dengue virus and had an epidemiological link, so we concluded that Case B was the infectious source of Case A. To mitigate this outbreak, the Taiwan Centers for Disease Control, Taichung City Government, and University X worked together to eliminate the breeding sites, apply chemical spray, trace contacts, and implement health surveillance. Since Dengue NS1 antigen rapid test (NS1 test) assists doctors in diagnosing and shortening the time to report. We recommend encouraging physicians in clinics to use the NS1 test and schools should have DF prevention strategies and random inspection programs to prevent DF.

**Keywords:** indigenous, dengue fever, epidemiology investigation, NS1 antigen rapid test, campus

<sup>1</sup>Central Region Center, Centers for Disease Control, Ministry of Health and Welfare, Taiwan

<sup>2</sup>Department of Public Health, Tzu Chi University, Taiwan  
DOI: 10.6525/TEB.202308\_39(16).0002

Corresponding author: Ching-Fen Ko<sup>1,2\*</sup>

E-mail: koko@cdc.gov.tw

Received: Jul. 21, 2020

Accepted: Nov. 02, 2020