## Prevention And Control of Dengue Fever at The Vegetable Orchards in Metropolitan Areas, 2018

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## Abstract

The vegetable orchard is considered to be a high-risk area for dengue fever since people using various types of water containers for irrigation. In view of this, the National Mosquito-borne Diseases Control Research Center and the South Regional Center, Centers for Disease Control, Taiwan (TCDC), followed the resolution of the 26th meeting of the Executive Yuan Committee on the Prevention and Control of Important Mosquito Infectious Diseases in 2018, developed a full process with high efficiency and feasible management system, including surveillance, investigation, risk assessment, data filing and geographical distribution, and drafted a guideline for the prevention and control of dengue fever in vegetable orchards. After the meeting with the Public Health Bureau of Tainan City, Chiayi City, Chiayi County and Yunlin County governments, they jointly held a discussion on the management and guidance to classify the risks of the vegetable orchards in accordance with actual situation of each county and city, enlisted the high-risk vegetable orchards, established a geographic information (GIS) epidemic map, planned management rules, and simultaneously updated a county/city work plan in prevention of dengue fever. Based on the project of the vegetable orchards, each county and city government assigned the authority and management unit, conducted education trainings, ensured proper maintenance of the water containers in high-risk fields, and provided patient instructions. In addition, the South Regional Center of TCDC conducted a spot check on the high-risk vegetable orchards. Among the 167 high-risk areas in four counties/cities, the number of water tanks decreased and tanks were properly covered to reduce mosquitoes breeding. Although current implementation time is too limited to assess the overall benefits, the basic framework should be helpful as a reference in prevention of dengue fever at the vegetable orchards for other counties and cities.

**Keywords:** Dengue fever, water storage container management, metropolitan vegetable orchard, geographic information

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DOI: 10.6525/TEB.202106\_37(11).0002

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E-mail: meid5616@cdc.gov.tw Received: Mar. 26, 2019

Accepted: Agu. 07, 2019