

The Establishment And Implementation of COVID-19 Entry Quarantine System in Taiwan, 2020

Ching-Min Lu*, Ji-Jia Huang, Shin-Wei Su, Yung-Ching Lin, Wang-Ping Lee, Li-Li Ho

Abstract

At the beginning of the outbreak of coronavirus disease (COVID-19) in December 2019, Taiwan was the first country in the world to take border quarantine in response to the pandemic. With the rapid spread of outbreak from China, Hong Kong and Macau to other countries, Taiwan Centers for Disease Control monitored the pandemic trend in real time and implemented quarantine measures according to different risk levels, including issuing "Entry Health Declaration", "Home Quarantine Notice", and "Self-health Management Notice".

In the early stage of the pandemic, the health status of inbound passengers and their contact information in Taiwan were collected using paper-based format, which required extremely time-consuming manual data entry. Because such procedure was prone to typing error and unfavorable for archiving and inquiries, the Information Security Division of the Executive Yuan, worked with the Information Department of the Ministry of Health and Welfare, established an "Entry Quarantine System" to overcome the aforementioned difficulties. The system sends a text message of quarantine issues through mobile phone to inbound passengers to confirm the contact, and to provide follow-up care in communities. In addition, the system improves the efficiency of collaborations between border quarantine measures and community epidemic prevention, as well as the data quality and accuracy. Such cross-system data sharing and a complete management mechanism effectively reduce the exposure risks of COVID-19 to the public.

Division of Quarantine, Centers for Disease Control,
Ministry of Health and Welfare, Taiwan
Corresponding author: Ching-Min Lu*
E-mail: lujm@cdc.gov.tw

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Since the Entry Quarantine System was implemented on February 16, 2020, it has been continuously optimized to respond to pandemic situations accordingly. From March 19, 2020, the entry of foreigners was restricted, and from June 29, inbound foreigners must present a COVID-19 test-negative certificate and comply with quarantine regulations. Use of electronic devices enable quarantine measures respond quickly to the pandemic and the utilization rate approached to 100% by September. Then the application of Entry Quarantine System was further expanded to include seaports. In the future, the system will be adjusted in accordance with border control policies to ensure the protection of border health security.

Keywords: COVID-19, quarantine system for entry, system applications