

Investigation and Prevention Measures of the First Aircraft Coronavirus Disease (COVID-19) Cluster Infection in Taiwan, December 2020

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Abstract

On December 17, 2020, a hospital reported that a 31-year-old flight crew returned to Taiwan on December 16 was diagnosed with Coronavirus Disease (COVID-19). The Northern Regional Center of Taiwan Centers for Disease Control, Taoyuan Department of Public Health, and the crew's airline company immediately conducted an epidemiological investigation, contact tracing, and sample collection. As of January 18, 2021, a total of 154 contacts were monitored, and 106 were tested for SARS-CoV-2. Among the four confirmed cases, two were aircraft-related transmissions, one was imported, and one was a domestic case. No other domestic cases were identified by the end of the monitoring period, indicating that the outbreak did not further spread to the community.

The crew member involved in this case failed to comply with prevention and control regulations by not wearing a mask while contacting individuals at an outstation. Additionally, symptomatic individuals continued to work without wearing masks. Considering the prolonged exposure in enclosed spaces during flights without adequate protection based on the investigation findings, we recommended that personnel should wear masks throughout the entire duty period and implement relevant protective measures.

Furthermore, the Central Epidemic Command Center required the airline company to review the flight dispatch management mechanism to reduce the risk of COVID-19 transmission on board.

Keywords: Severe specific infectious pneumonia, novel coronavirus, COVID-19, crew, aircraft, cluster infection

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