

### Investigation of a Multi-Drug Resistant Tuberculosis Cluster in an Entertainment Place, Southern Taiwan, 2018

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#### Abstract

In April 2018, the Kaohsiung-Pingtung Regional Center was notified of four multidrug-resistant tuberculosis (MDR-TB) cases with the same genotypes by the Diagnostics and Vaccine Development Center of the Taiwan Centers for Disease Control. In order to clarify the epidemiological relevance of these four cases, the local Public Health Bureau initiated a cross-county investigation and found that all these cases had a history of bowling alley activities. The similar activity indicated the highly probable epidemiological link between the cases. However, making the contact history of those four cases clear was difficult since the bowling alley did not have a customer record or contact information, so we cooperated with the place owner and encouraged visitors to accept chest X-ray examinations and questionnaire surveys to find out the potential high-risk contact consumers. Such strategies facilitate the identification of high-risk contacts and the two-year follow-up to detect active cases early and trace close contacts.

**Keywords:** Multi-drug resistant tuberculosis, cluster events, bowling alley