

Laboratory diagnosis and analysis of a Legionella infection event in a
public swimming pool in Nantou County

Jui-Hsin Chang, Lei-Ron Tseng, Shih-Jhan Zeng, Ying-Yan Chen, Chung-Hsing Hwang,
Jung-Jung Mu, Chuen-Sheue Chiang, Ho-Sheng Wu

Research and Diagnostic Center, Centers for Disease Control, Department of Health

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Legionellosis is caused by Legionella. The main route of transmission is through cooling water towers, faucets and shower equipment. Hot springs and swimming pools may also become a medium for transmitting the disease. On November 25, 2006, the CDC received a clinical specimen from Chu Shang Show Chwan Hospital. *Legionella pneumophila* was isolated from the urine specimen of the case, which tested positive for Type 1 serum antibody. *L. pneumophila* serotype I was later identified in the sputum specimen of the case. Days later, *L. pneumophila* serotype I was also isolated in the environmental specimens from a swimming pool in an elementary school in the Chu Shang Township. Pulse-field electrophoresis showed that the strain isolated from the case had identical restriction pattern with the strain isolated from the pool, confirming the relationship between the two strains.

Keywords: Legionellosis, *Legionella pneumophila*, pulse-field electrophoresis, molecular typing, swimming pool

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Correspondence author: Chuen-Sheue Chiang; Address: No.161, Kun-Yang Street, Taipei City, Taiwan, R.O.C.

E-mail: cschiang10@cdc.gov.tw