

Hong Kong hospital reports possible airborne influenza transmission

November 22 2010

Direct contact and droplets are the primary ways influenza spreads. Under certain conditions, however, aerosol transmission is possible. In a study published in the current issue of *Clinical Infectious Diseases*, available online, the authors examined such an outbreak in their own hospital in Hong Kong.

On April 4, 2008, seven inpatients in the hospital's general medical ward developed fever and [respiratory symptoms](#). Ultimately, nine inpatients exhibited influenza-like symptoms and tested positive for [influenza A](#). The cause of the outbreak was believed to be an influenza patient who was admitted on March 27. He received a form of non-invasive ventilation on March 31, and was then moved to the [intensive care unit](#) after 16 hours. During that time, he was located right beside the outflow jet of an air purifier, which created an unopposed air current across the ward.

"We showed that infectious aerosols generated by a respiratory device applied to an influenza patient might have been blown across the hospital ward by an imbalanced indoor airflow, causing a major nosocomial outbreak," said study author Nelson Lee, MD, of the Chinese University of Hong Kong. "The spatial distribution of affected patients was highly consistent with an aerosol mode of transmission, as opposed to that expected from droplet transmission.

"Suitable personal protective equipment, including the use of N95 respirators, will need to be considered when aerosol-generating

procedures are performed on influenza patients," Dr. Lee added. "Avoiding such procedures in open wards and improving ventilation design in health care facilities may also help to reduce the risk of nosocomial transmission of influenza."

More information:

<http://www.journals.uchicago.edu/doi/abs/10.1086/656743>

Provided by Infectious Diseases Society of America

Citation: Hong Kong hospital reports possible airborne influenza transmission (2010, November 22) retrieved 3 May 2024 from <https://medicalxpress.com/news/2010-11-hong-kong-hospital-airborne-influenza.html>

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