

CHP updates investigation into case of Legionnaires' disease in Pamela Youde Nethersole Eastern Hospital

The Centre for Health Protection (CHP) of the Department of Health (DH) today (September 12) reported an update on its investigation into a case of Legionnaires' disease (LD) in Pamela Youde Nethersole Eastern Hospital (PYNEH) announced on August 23.

The case involves a female patient, aged 27 with underlying illnesses, who was admitted to PYNEH since August 7. She presented with fever and cough on August 18. Her clinical diagnosis was pneumonia and she is currently in stable condition. Her sputum specimen tested positive for *Legionella pneumophila* serogroup 1 (Lp1) upon laboratory testing.

Upon notification of the case, the CHP had immediately advised the hospital to suspend the water supply system of the concerned wards and to arrange disinfection. The CHP had also provided health advice against LD to hospital staff and inpatients, including those with weakened immunity who should use sterile or boiled water for drinking, teeth brushing and mouth rinsing.

Moreover, water samples and environmental swabs were collected from PYNEH on August 23 and 24 to test for *Legionella* in a joint investigation by the CHP and the Electrical and Mechanical Services Department on the possible source of infection and to support the implementation of control measures. Upon laboratory testing, 24 out of 30 water samples tested positive for *Legionella* species (including those collected from the tap of the basin and shower head in the two wards where the patient had stayed), with levels from 0.1 to 980 colony-forming units per millilitre (cfu/ml) and the one with highest level was collected from the tap at one of the wards that the patient had stayed. Among the 30 water samples, 12 tested positive for Lp1. Four out of nine environmental swabs tested positive for *Legionella* species including one tested positive for Lp1.

Investigations at this stage suggest that the case is a nosocomial infection. Medical surveillance in the ward to which the patient was admitted has been enhanced in collaboration with PYNEH and no additional cases have been identified thus far since the above advised interim control measures have been implemented.

In view of the laboratory findings of the water samples and environmental swabs, the CHP again advised PYNEH to urgently arrange disinfection of the affected water supply system of water system and timely implement effective control measures in order to mitigate the risk of LD infection arising from contaminated water system in hospital environment, including the installation of water filters or suspension for all affected outlets as interim measure. Meanwhile, the PYNEH is reviewing the routine

maintenance plan of the relevant water supply system with a view to find out the source of the pathogen, and to implement improvement measures to the water supply system as soon as possible. The CHP will continue to maintain close liaison with PYNEH to monitor the implementation of improvement measures.

â€‹A spokesman for the CHP said that, "Legionellae are found in various environmental settings and grow well in warm water (20 to 45 degrees Celsius). They can be found in aqueous environments such as water tanks, hot and cold water systems, cooling towers, whirlpools and spas, water fountains and home apparatus that support breathing. People may become infected when they breathe in contaminated droplets (aerosols) and mist generated by artificial water systems, or when handling garden soil, compost and potting mixes."

The public may visit the CHP's [LD page](#), the [Code of Practice for Prevention of LD](#) and the [Housekeeping Guidelines for Cold and Hot Water Systems for Building Management](#) of the Prevention of LD Committee, and the CHP's [risk-based strategy](#) for prevention and control of LD.