

CHP investigates clusters of Carbapenemase-producing Enterobacteriaceae at two elderly homes

The Centre for Health Protection (CHP) of the Department of Health is today (September 30) investigating clusters of Carbapenemase-producing Enterobacteriaceae (CPE) at two residential care homes for the elderly (RCHE), and reminded the public on maintaining strict personal and environmental hygiene, and proper use of antibiotics.

The first cluster involves an RCHE in Central and Western District affecting a male resident and four female residents aged 73 to 100. They were admitted to public hospitals for their underlying illnesses during the period between June 5 and August 29. Their rectal swabs taken on admission screening tested positive for CPE upon laboratory testing. One patient passed away on September 4 due to her underlying disease, while the other patients remain asymptomatic and are in stable condition.

The second cluster involves an RCHE in North District affecting two male residents aged 73 and 79. They were admitted to public hospitals for their underlying illnesses during the period between September 7 and 29. Their rectal swabs taken on admission screening tested positive for CPE upon laboratory testing. Both of them remain asymptomatic and are in stable condition.

Officers of the CHP have conducted site visits and advised both RCHEs to adopt necessary infection control measures against CPE, including maintaining good environmental hygiene and hand hygiene for staff and residents. The RCHEs have been put under medical surveillance.

The CHP's investigations are ongoing.

RCHEs are reminded to follow the [Guidelines on Prevention of Communicable Diseases in Residential Care Homes for the Elderly](#) on detection, prevention and control of infections. If there is suspicion of an infectious disease outbreak, the institution should report to the CHP promptly for follow-up.

A spokesman for the CHP said, "Enterobacteriaceae (for example, E. coli and Klebsiella) are common pathogens that can cause infections at different body sites including urinary tract infections, intra-abdominal infections or bacteraemia. CPE are enterobacteriaceae that produce carbapenemase – an enzyme that can deactivate carbapenems and other beta-lactam antibiotics such as penicillins. These bacteria are commonly resistant to multiple antibiotics, limiting therapeutic options, and may render severe clinical infections difficult to treat. The range of diseases associated with CPE

varies from asymptomatic carriage to potentially life-threatening or fatal infections. The level of risk depends on which part of the body is affected by the infection and the general health of the patient."

The spokesman added that proper use of antibiotics and maintaining good personal and environmental hygiene, especially hand hygiene, are important for the prevention of emergence and cross-transmission of multi-drug resistant organisms (MDROs) like CPE. In addition, susceptible individuals such as the elderly, infants and young children, pregnant women and people with weakened immunity can lower the risk of contracting MDROs by not eating raw or undercooked foods.