CHP investigates outbreak of Carbapenemase-producing Enterobacteriaceae at elderly home in Sai Wan

The Centre for Health Protection (CHP) of the Department of Health is today (April 15) investigating an outbreak of Carbapenemase-producing Enterobacteriaceae (CPE) at a residential care home for the elderly (RCHE) in Sai Wan, and reminded the public on maintaining strict personal and environmental hygiene, and proper use of antibiotics.

The outbreak involves one male and four female residents aged 58 to 86. Four of the residents were admitted to public hospitals for their underlying illnesses respectively during the period between April 5 and 9. Their rectal swabs taken on admission screening tested positive for CPE upon laboratory testing. The CHP conducted contact tracing and screening at the RCHE and found another carrier case involving a female resident aged 86. She was admitted to a public hospital for underlying illnesses on April 12 last year and her rectal swab taken on admission screening then tested positive for CPE. All patients remain asymptomatic and are in stable condition.

The CHP is continuing its investigation on the infection source of the outbreak and a site inspection has been conducted. It is found that the RCHE has yet to fully implement relevant infection control measures and thus the possibility of transmission in the RCHE is not ruled out. The CHP has advised the RCHE to adopt necessary infection control measures against CPE, including maintaining good environmental hygiene and hand hygiene for staff and residents. The RCHE has been put under medical surveillance.

The CHP's investigations are ongoing.

RCHEs are reminded to follow the <u>Guidelines on Prevention of Communicable Diseases in Residential Care Homes for the Elderly</u> 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."

â€<aê€<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 multidrug 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.