

Dissemination reports are concise informative reports of health-related research supported by funds administered by the Food and Health Bureau, namely the *Research Fund for the Control of Infectious Diseases* (RFCID), the *Health and Health Services Research Fund* (HHSRF), and the *Health Services Research Fund* (HSRF). In this edition, 12 dissemination reports of RFCID-funded projects related to respiratory infectious diseases and vector-borne diseases are presented. In particular, three projects are highlighted due to their potentially significant findings, impact on health care delivery and practice, and/or contribution to health policy formulation in Hong Kong.

Influenza vaccination for older people (age ≥ 65 years) in the community may reduce hospitalisation by 25 to 39% and overall mortality by 39 to 75% during influenza seasons. Most of these data are derived from studies in temperate regions with well-defined influenza seasons. The effectiveness of influenza vaccination in tropical and sub-tropical regions, where influenza may circulate at lower levels throughout the year, is less known. To determine whether influenza vaccination decreased hospitalisation and mortality, Schooling et al¹ examined a cohort of Elderly Health Centres in Hong Kong. In the influenza season, influenza vaccination reduced all-cause mortality by half and cardiorespiratory hospitalisation by a quarter. However, the authors caution that the extent to which influenza vaccination actually protects older people from serious morbidity and mortality needs to be confirmed in appropriately designed studies.

In 2005, investigators in Hong Kong discovered a novel human coronavirus (HCoV) named HKU1. In an attempt to discover an animal reservoir for it, Yuen et al² discovered a novel bat coronavirus closely related to the coronavirus causing severe acute respiratory syndrome (SARS). Complete genome sequencing and phylogenetic analysis showed that this bat-SARS-CoV formed a distinct cluster with SARS-CoV as a group distantly related to other known coronaviruses. This suggests that HCoV-HKU1 is closely related to SARS-CoV from humans and civets and that bats are the likely animal reservoir of SARS-CoV-like viruses. The authors suggest that continuous surveillance for coronaviruses in these flying mammals is necessary to assess their potential threat to human health.

Acute respiratory tract infections account for considerable morbidity and mortality in humans. Human coronavirus (HCoV) NL63 was discovered in 2004. Leung et al³ investigated the seasonality and epidemiology of HCoV-NL63 in local children and characterised the genetic diversity of local HCoV-NL63 isolates. The four major human coronaviruses were detected in 2.5% of 2982 local children hospitalised for acute respiratory infections from 2005 to 2007, of which 0.6% were attributable to HCoV-NL63. The peak season for HCoV-NL63 infection was autumn (September to October). HCoV-NL63 infection was associated with younger age, croup, febrile convulsion, and acute gastroenteritis. Such disease associations were not found with the other three HCoVs. With a few exceptions, most local isolates of HCoV-NL63 were closely related to the prototype strain from the Netherlands.

We hope you will enjoy this selection of research dissemination reports. Electronic copies can be downloaded from the Research Fund Secretariat website (<http://www.fhb.gov.hk/grants>). Researchers interested in the funds administered by the Food and Health Bureau may also visit the website for detailed information about application procedures.

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3. Leung TF, Chan KS, Wong WK, Ip M, Cheng WT, Ng PC. Human coronavirus NL63 in children: epidemiology, disease spectrum, and genetic diversity. *Hong Kong Med J* 2012;18(Suppl 2):27-30.