

COVID-19 WEBINAR SERIES



Policy Research @ HKIAPS | Hong Kong Institute of Asia-Pacific Studies
The Chinese University of Hong Kong

Integrated Vaccination and Physical Distancing Interventions to Prevent Future Waves of COVID-19

PROGRAMME

19 April 2021, 11:00 AM–12:15 PM (UTC+8)

11:00–11:05 AM

Welcoming Remark

Prof. Fanny M. CHEUNG

*Senior Advisor,
Faculty of Social Science &
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Paper Presentation

The COVID-19 pandemic poses significant challenges to the formulation of preventive interventions, especially given that the effects of physical distancing and vaccines on reducing susceptible social contacts and eventually halting transmission are still unclear. Using anonymized mobile geolocation data in China, we devised a mobility-associated social contact index to quantify the impact of both physical distancing and vaccination measures in a unified way. On this basis, our epidemiological model reveals that vaccination combined with physical distancing can contain resurgences without relying on stay-at-home restrictions, whereas a gradual vaccination process alone cannot achieve this. Further, for cities with a medium population density, vaccination can shorten the duration of physical distancing by 36%–78%, whereas for cities with a high population density, infection numbers can well be controlled through moderate physical distancing. These findings improve our understanding of the joint effects of vaccination and physical distancing with respect to a city's population density and social contact patterns.

11:05–11:25 AM

Prof. Bo HUANG

*Professor,
Department of Geography and Resource Management, CUHK*



11:25–11:45 AM

Prof. Paul K. S. CHAN

*Chairman and Professor (Clinical),
Department of Microbiology, CUHK*



11:45 AM–12:00 NN

Discussion

Prof. Martin C. S. WONG

*Professor,
The Jockey Club School of Public Health and Primary Care, CUHK*



12:00 NN–12:15 PM

Q&A Session