

Talking and singing can also spread Covid-19



NUS researcher Douglas Tay in a hospital room at the NCID demonstrating how the Gesundheit-II exhalation aerosol particle collection equipment is used. PHOTO: NATIONAL UNIVERSITY OF SINGAPORE

A new study by a National University of Singapore (NUS) team has found that an infected person can spread Covid-19 by exhaling fine aerosol particles when breathing, talking and singing, not just through droplets when coughing or sneezing.

The authors of the study said on Wednesday that the research findings reinforce the need for infection control measures – such as social distancing, mask wearing and increased room ventilation – especially in an indoor environment where airborne transmission of the virus is most likely to occur.

The study, led by researchers from NUS and conducted at the National Centre for Infectious Dis-

eases (NCID), showed that talking and singing can produce two types of viral particles – fine aerosols (less than 5 micrometres in size) and coarse aerosols (larger than 5 micrometres).

The fine aerosols generated from both types of activities contained more viral particles than coarse aerosols, said Professor Paul Tambyah from the NUS Yong Loo Lin School of Medicine.

Prof Tambyah, a co-author of the paper, said that while there was no linear relationship between the size of an aerosol particle and the amount of virus it carries, the size can give researchers a clue as to how much virus or parts of a virus are present in an aerosol particle.

Associate Professor Tham Kwok Wai, from the Department of the Built Environment at the NUS School of Design and Environment, said that while previous studies had established the relative amount of aerosols produced through breathing, talking and singing, none of them measured the amount of virus particles each activity is able to generate.

“Therefore, our team’s work provides a foundation for estimating the risk of transmission of infection (for each activity),” said Prof Tham, who led the study.

The paper was first published online in the journal *Clinical Infectious Diseases* last Friday.

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