

# Lifting of measures would 'allow virus to recirculate'

Removing safe distancing could lead to another infection peak, says expert in infectious disease modelling

✓ VANESSALIU

If all safe distancing measures were lifted and life were to go back to normal following the end of the circuit breaker on June 1, it is likely that Singapore's efforts to stem the Covid-19 outbreak so far would only have postponed a peak in the number of daily transmissions.

Associate Professor Alex Cook, vice-dean of research at the National University of Singapore's (NUS) Saw Swee Hock School of Public Health, said the virus would be able to recirculate if there were no more distancing measures, setting the stage for another peak in infections.

To avoid this, Singapore needs to move to "sustainable distancing measures" after the circuit breaker ends. This could entail the reopening of schools, for example, while white-collar workers could continue work-

ing from home if their workplaces allow for it, he said.

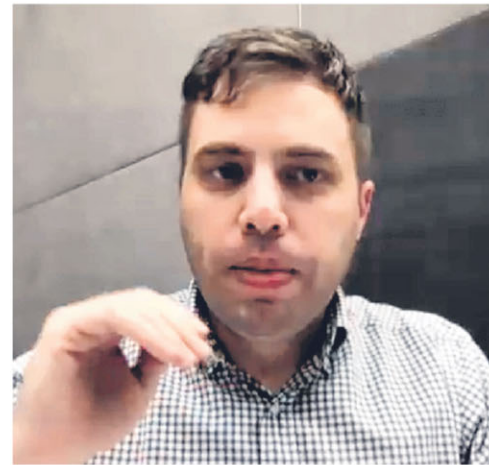
How transmissible a virus is in a population depends on its  $R_0$ , or the basic reproduction number, said Prof Cook.

"For a virus with an  $R_0$  of 2 – which is what we think the Covid-19 virus has – you need to reduce transmissibility by 50 per cent if you want to prevent an epidemic," he said.

## REDUCING

"When we impose a circuit breaker, we are reducing the reproduction number from 2 down to 0.8, for example, but only for the period of the circuit breaker," he said.

"If we go back to life as normal after the circuit breaker ends, what's going to happen is that we will see an epidemic of the same size and the same duration but just pushed further back in time, by a little bit over two months, or the duration of the circuit breaker itself.



Associate Professor Alex Cook. PHOTO: NUS

"So this approach is not going to reduce the overall number of infections at all. We're going to have the same size of an epidemic, same number of deaths, same number of people in ICU (intensive care units). All we are doing is pushing it back further and buying a little bit of time."

Prof Cook was speaking at the latest episode of a webinar series organised by the National University of Singapore (NUS), National University Health System and the World Health Organ-

isation's Global Outbreak Alert and Response Network.

Without circuit breakers in place, the virus will be able to spread as rampantly as it did back in the beginning, he added.

## PREDICTED

An expert in infectious disease modelling, Prof Cook had earlier predicted that infections here could reach 10,000 or 20,000 by the end of April.

Using mathematical modelling, Prof Cook showed audiences the scenarios that could take place depending on the policies that were to be adopted following the end of circuit breaking measures.

However, all models are approximations of reality and hence a mathematical model of an epidemic would not be a "perfect representation of how the epidemic would progress over time", he stressed.

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