

Coronavirus outbreak: ST panel discussion

# Covid-19 likely to linger for a long time, say experts

### Hopes of quick end to outbreak dashed as number of cases worldwide grows

**The panellists**

**Associate Professor Kenneth Mak**  
Director of medical services, Ministry of Health

**Professor Leo Yee Sin**  
Executive director, National Centre for Infectious Diseases

**Professor Tikki Pangestu**  
Visiting professor, Lee Kuan Yew School of Public Policy, and former director of the World Health Organisation's Research Policy and Cooperation department

**Associate Professor Hsu Li Yang**  
Infectious diseases programme leader, NUS Saw Swee Hock School of Public Health

**Moderator: Salma Khalik**  
Senior Health Correspondent, The Straits Times

**Audrey Tan**  
Science Correspondent and Rei Kurohi

The number of people diagnosed with Covid-19 is growing around the world and, as the epicentre of the outbreak shifts away from China, it is unlikely that the disease will taper off the way that SARS did, experts said yesterday.

"We have to be mentally prepared that it is going to be here for months, if not even as a new normal - it is always going to be there with us," said Associate Professor Kenneth Mak, director of medical services at the Ministry of Health (MOH).

Prof Mak was one of four experts who spoke to The Straits Times' senior health correspondent Salma Khalik and also answered questions sent in by readers yesterday in an hour-long discussion which was broadcast live on the newspaper's social media channels.

The other three experts on the panel were Associate Professor Hsu Li Yang, infectious diseases programme leader at the National University of Singapore's Saw Swee Hock School of Public Health; Professor Leo Yee Sin, executive director of the National Centre for Infectious Diseases; and Professor Tikki Pangestu, a visiting professor at the Lee Kuan Yew School of Public Policy and former director of the World Health Organisation's Research Policy and Cooperation department.

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(From left) Straits Times senior health correspondent Salma Khalik at a discussion on the Covid-19 disease with expert panellists Hsu Li Yang, Kenneth Mak, Leo Yee Sin and Tikki Pangestu yesterday. The hour-long event was broadcast live on the newspaper's social media channels. ST PHOTO: KUA CHEE SIONG

ous Diseases; and Professor Tikki Pangestu, a visiting professor at the Lee Kuan Yew School of Public Policy and former director of the World Health Organisation's (WHO) research policy and cooperation department.

"The virus is here to stay at least until the end of the year," said Prof Hsu, adding that with the growing number of cases around the world, hopes that the outbreak will be over by next month or May will be dashed. "I think what is increasingly clear is that the epicentre of the epidemic - which is a pandemic in all but name - has spread away from China and has moved to

other parts of the world," he said, pointing to the spread of cases from Iran to the Middle East, and from Italy to other parts of Europe.

Prof Pangestu pointed to three possible scenarios in the world's battle to control the outbreak.

"One, more countries will have outbreaks, including severe cases, and it will continue to be an emergency. Two, the virus might 'disappear completely', similar to how SARS

our daily existence."

Prof Leo said scenario two - that the virus can be "pushed back" - is unlikely to happen as the disease patterns are different.

He said: "It may well be that when there are many cases in the community, we may have to look whether some patients with very mild disease might be safely managed in the community with adequate measures to isolate them and make sure they are safe and not spreading their illness to other people."

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## Patients in Safra Jurong cluster had more than just a dinner in common

Singapore's biggest cluster of Covid-19 patients, traced to a restaurant in Jurong, had more than just a dinner in common, said Ministry of Health Director of medical services Kenneth Mak yesterday.

"We've recognised that many of the individuals linked to this particular group of people getting infected had many common social activities," said Associate Professor Mak, pointing to other gatherings such as singing classes that infected individuals had taken part in together.

"So, in fact, their social interactions went well beyond the dinner in that particular location, and as a result of those close activities... that's where the spread is actually occurring," he said.

Prof Mak was responding to questions from The Straits Times' senior health correspondent Salma Khalik on Singapore's largest cluster of

**SEVERAL ACTIVITIES**

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HEALTH MINISTRY'S DIRECTOR OF MEDICAL SERVICES KENNETH MAK on the Safra Jurong cluster.

Covid-19 patients, during an hour-long panel discussion yesterday that was broadcast on the newspaper's social media channels.

Of the 160 confirmed coronavirus cases in Singapore, 36 can be traced to a Feb 15 Chinese New Year celebration at Safra Jurong, making it the nation's largest cluster.

The function, attended by members of a Hokkien singing group, was held in the ballroom of Joy Garden restaurant.

Prof Mak said it was unfortunate that it had been named the "Safra cluster", noting: "It just so happened that the dinner was held there."

Nonetheless, it was the event that led to this cluster being recognised and identified, he said.

Prof Mak said that while it was likely that some patients had been infected during the dinner, epidemiological and contact tracing found

that others could have caught the disease when they gathered for other social activities.

He said: "So, it extends well beyond that particular dinner itself - they're coming together for karaoke classes, they're going out together, they're going on social activities together. So, that seems to be the common pattern with this particular cluster."

Further investigations by the contact tracing team were under way, he said, and more people might be contacted to check if they are well.

The virus causing Covid-19 is now thought to spread mainly through respiratory droplets. Patients can, for instance, catch the disease by being exposed to an infected person's cough.

But as Professor Leo Yee Sin, executive director of the National Centre for Infectious Diseases, said yesterday, viruses can be transmitted through direct or indirect droplet transmission, and that the two are not mutually exclusive.

For example, individuals who spend time together in close proximity would be exposed to the same surfaces.

Prof Mak explained: "It's more likely in that sort of setting that if you had been coughing or sneezing... you (would have) touched surfaces. And it's likely that in that setting, I would have touched (the same) surfaces as well. So, from that point of view, it's hard to tell whether one particular mode is more important."

Prof Leo and Prof Mak were two of four experts who took part in yesterday's panel discussion.

The others were Professor Tikki Pangestu, a visiting professor at the Lee Kuan Yew School of Public Policy and former director of the World Health Organisation's research policy and cooperation department, and Associate Professor Hsu Li Yang, infectious diseases programme leader at the National University of Singapore's Saw Swee Hock School of Public Health.

The experts emphasised the importance of personal hygiene in combating the spread of the disease.

Said Prof Leo: "If you are not feeling well, remove yourself, isolate yourself, seek treatment."

**Audrey Tan**

## No evidence Covid-19 can spread through air-con systems

There is currently no evidence that Covid-19 can spread through air-conditioning systems, said Professor Leo Yee Sin, executive director of the National Centre for Infectious Diseases (NCID) yesterday.

While a recent study by NCID researchers had found that the virus causing Covid-19 could be found in isolation facilities - including in an air duct connected to the room of one of the patients - it does not prove that this disease is an airborne one, experts told The Straits Times yesterday.

Preliminary studies have shown that the main way the virus is spread is through respiratory droplets.

The findings from the NCID study, which was published in the Journal of the American Medical Association last Wednesday, had found that a Covid-19 patient with mild symptoms could cause "extensive environmental contamination" in an isolation room, before it was cleaned.

Samples taken from the toilet bowl and sink used by one patient had tested positive for the presence of the virus, although post-cleaning samples were negative, suggesting that current decontamination measures are sufficient.

The study also suggested that "small virus-laden droplets may be displaced by airflows and deposited on equipment such as vents", prompting international headlines on how this could be a route of transmission.

Prof Leo explained that the purpose of the study was to look into environment contamination rather than how the virus spreads. "It is not so much to prove if it is an airborne condition or not; it is just merely telling you that the virus is scattered around in the iso-

lation facilities."

Determining whether the virus could be an airborne one required a different set of experiments, she pointed out.

"Currently, we are progressively inching up... to answer these questions, whether or not the virus could be spread through droplets, or whether or not it is airborne transmission," she said in response to a question from The Straits Times senior health correspondent Salma Khalik, who moderated a panel discussion with four experts on Covid-19.

Associate Professor Kenneth Mak, director of medical services at the Ministry of Health, who was also on yesterday's panel, said the findings from the NCID study were consistent with what is currently known about how the virus spreads through respiratory droplets.

He noted that the air-conditioning systems in isolation rooms were not like those in homes.

Prof Mak noted that air-conditioning units in homes are usually located at the top, with air circulating around the room.

But in isolation rooms, the vents are located at the bottom, and airflow is tightly controlled so air is prevented from "spilling over" into other spaces.

"So when you take a swab and find viruses around the vents, it is actually a combination of droplets falling by gravity into those areas, as well as a bit of airflow that comes through," said Prof Mak.

"It's not the same situation as in a home where you have an air-conditioning vent and you assume therefore it's airborne. This is not. This is predominantly still droplet transmission."

**Audrey Tan**

## S'pore will continue to accept cruise ships despite higher risk of spread

Singapore will continue to accept ships that are based here, including cruise ships, said the Health Ministry's director of medical services Kenneth Mak yesterday.

He added that Singapore has had ships coming into and leaving the country since the Covid-19 outbreak began in January, just as planes have not stopped taking passengers in and out of the country.

"What's important is recognising the risk that infections may occur on ships and they can spread very easily," said Associate Professor Mak.

"What's important is that as we receive some of these ships back in Singapore, we have a high degree of vigilance to make sure that none of (the passengers) are infected, and if they are, then we must be vigilant in making sure that we're able to

identify them, isolate them and control any further spread."

Prof Mak was responding to questions from The Straits Times' senior health correspondent Salma Khalik on whether Singapore should stop cruise ships from docking here as other countries have done.

Ms Khalik also asked during yesterday's panel discussion, which was broadcast on the newspaper's social media channels, if cruise ships pose a greater danger of infection compared to planes.

Prof Mak said ships and planes are similar in that passengers cannot leave halfway through a journey, but he added that the dynamics of social interaction are very different between the two.

"If you're on a plane, you're spending most of your time... in your seat," he said. "You may get out of that seat and walk down the aisle, but most of the time you're going to the toilet and back to your seat."

The interactions one has with fellow passengers on a plane is therefore very limited, Prof Mak said. Any spread that takes place would occur in the vicinity of the seat.

He said: "Conventionally, we talk about investigating and looking at the healthcare system and re-evaluating the treatments they require. The majority of people with Covid-19 in fact have mild disease. We may have to relook paradigms in terms of how we treat this particular infection."

It may well be that when there are many cases in the community, we may have to look at whether some patients with very mild disease might be safely managed in the community with adequate measures to isolate them and make sure they are safe and not spreading their illness to other people.

**Prof Hsu:** I think if there were at least one case a day, then at some point, the healthcare system is not going to be able to cope and a different strategy will be needed.

But even before it gets there, I think we are going to see an impact on other types of diseases, like heart attack or cancer. This is the cost we will see if we are just counting Covid-19 cases.

Currently, this is not happening because there's a National Centre for Infectious Diseases that absorbs a lot of these cases.

But if the case count rises and the beds in the other hospitals, for example, are taken up by Covid-19 cases, then you can see that it will impact care for a lot of other chronic conditions.

**Q:** *Is a Covid-19 vaccine coming in the next few months and will it solve the problem?*

**Prof Hsu:** I think it's important to understand that people are announcing candidate vaccines and these have to undergo testing in animals first, and then undergo three phases of human trials, which will take place over the course of a year.

At any point, the vaccine can possibly fail. Even assuming that everything goes well, we still have to make enough vaccine because every country will be queuing up to buy them.

**Prof Mak:** If we look at the timeline when we start off with a candidate vaccine, and then work through all those studies until we reach a stage where we are confident it may be something we can

COVID-19 DIFFERS FROM SARS

This makes containment... a very difficult task. So, I think those are the characteristics of this virus that we have to bear in mind (as we look into) the trajectory of the future epidemic.

**PROFESSOR LEO YEE SIN**, executive director of the National Centre for Infectious Diseases, Prof Leo said the way the virus is "secreted" varies between patients with SARS and those with Covid-19, with patients diagnosed with the latter secreting the virus earlier.

LIVING WITH THE VIRUS

The third scenario is what the WHO is thinking of. It is going to become part of our daily existence.

**PROFESSOR TIKKI PANGESTU**, a visiting professor at the Lee Kuan Yew School of Public Policy, on the virus becoming endemic and marking possibly having to live with its continued existence like other viruses such as H1N1 or swine flu.

**Q:** *Can Singapore expect a sudden surge in new cases?*

**Prof Mak:** Yes. A surge in cases can occur for a variety of different reasons. It could be a situation where you have many cases coming from countries outside our border as a result of high numbers of community spread within those countries.

We are an international air hub, so it's difficult for us to close all our borders and therefore travellers coming from other countries may still come to Singapore. Many patients with Covid-19 in fact have very mild disease. They don't even think they're very sick. They carry on with their social activities, they go off to work, and when that happens, there's always that potential for spread.

**Q:** *Can people who do not have symptoms spread the virus?*

**Prof Hsu:** The data does show that patients can be asymptomatic and test positive for the virus. But the jury is still out on whether these people can transmit the virus to others.

**Prof Mak:** We still don't know how infectious an asymptomatic person would be. If that were the dominant part of transmission, we'd be seeing a lot more cases internationally and even in Singapore. We think there's a risk of spread but we don't know exactly how big that is.

**Q:** *Why not give the kit to GPs?*

**Prof Mak:** At this point, we don't think that's necessarily the best thing to do for GPs.

We want to empower GPs to have the ability to test this as much as possible but we are really looking at new technologies, something easy to do, which can give a result as quickly as an hour, maybe even faster, and that allows real-time decision-making.

**Prof Mak:** We need to be very careful to make sure we don't forget about patients with other medical conditions whose care otherwise will be compromised as a result of not being able to get access to the healthcare system and receive the treatments they require.

**Q:** *The Government has stopped inter-school sports activities and the like. Is that likely to go on? Are we doing enough, or should we close schools?*

**Prof Mak:** At this point in time, we don't think we've reached a stage where we need to necessarily tell all schools to close for long periods of time.

That's occurred in several other countries as an attempt to prevent further spread. We haven't reached that stage as yet but it's not a measure that we have completely dismissed.

As we have a better understanding of how the disease spreads and what the risks are for schoolchildren, there might be a possibility for us to restart some of these activities as well.

**Prof Pangestu:** Based on the evidence and epidemiology, young children are not the group that's most affected. So there are people who would say that school closure is a little bit of an overreaction in terms of the opportunity cost for children losing out on their educational opportunities.

**Q:** *What about older people? Should we think about reducing community centre activities?*

**Prof Mak:** The older population is certainly more vulnerable to infection. Many of them have other medical problems as well and, as a result, they may not have a strong immune system.

It's important that we think about what we need to do therefore to protect them, their welfare, and sometimes it would necessarily be that we may want to think about managing their activities a little bit more carefully.

These are things we're studying and we'll take the necessary measures and make the relevant announcements accordingly.

**Prof Hsu:** I think what is clear is that we are now having to consider a series of trade-offs.

If you close schools, the kids are at home, someone has to look after them, and there are consequences.

If you keep all the old people at home and they don't interact, then there are other consequences as well. So I think it's all about balancing that risk now.

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Of the 160 confirmed coronavirus cases in Singapore, 36 can be traced to a Feb 15 Chinese New Year function held in the ballroom of Joy Garden restaurant at Safra Jurong. ST PHOTO: CHONG JUN LIANG



The Costa Fortuna cruise ship will dock in Singapore as scheduled today. Passengers will undergo health checks to ensure they are healthy prior to disembarkation. PHOTO: COSTA CRUISES WEBSITE