Up to 70% of those infected may show no symptoms, making virus tough to tackle

Jayson Teo and Timothy Goh

Asymptomatic persons with the coronavirus disease are more common than previously thought — some research says potentially as many as 75 per cent of those infected are asymptomatic — and they can pass the virus on without even realizing it.

It is one of three reasons that make Covid-19 such a challenging disease to tackle, National Centre for Infectious Diseases executive director Leo Yee Sin told The Straits Times yesterday.

The other two — that the virus can remain viable on surfaces for a long time and in aerosols in the air — also mean it numbers itself as an innovative and deadly illness, but has high virus transmission at dosage.

"This means infected individuals are more likely to get infected than their contacts, and it has a tendency to continue in close situations without realizing the danger of spreading the infection," he said.

People can get infected even before they develop symptoms, so they can be a source of transmission, he said.

"Any one of us can be infected and, if we are not careful, can serve as a transmitter passing on the virus," he said. "When that happens, there is a risk that we are too close to the individuals who are infected, or we have infected family members, who are more at risk of complications from the disease."

While it was previously unclear how asymptomatic cases were spread, the issue is now understood to mean that results in transmission, he said, "with transmission occurring in the community, or in hospitals and healthcare environments, which is why the virus is so deadly and difficult to control."

He said the virus can spread rapidly, with one infected person possibly infecting up to 3.5 people in the next generation. Asymptomatic transmission has also been identified in the community, with the virus spreading without causing illness, he said.

"The community is a common site for transmission and it is important to note that the virus can spread through asymptomatic cases," he said.

Dr Leong Ruey Sun, an infectious diseases expert who practices at Raffles Clinic at Mount Elizabeth Novena Hospital, said that studies done in the United States, China, and India show that more than half of all cases, or up to 79 per cent, of those with Covid-19 are asymptomatic or have mild symptoms.

He said this would mean that about 70 per cent of people infected by asymptomatic cases would develop symptoms, while the other 30 per cent would not. This is why border controls are in place and people are asked to isolate once they test positive for the virus.

"At this stage, it could take at least two to three weeks for the person to develop symptoms," he said.

People should adhered to the strict circuit breaker measures to restrict such potentially asymptomatic persons, he added.

Assistant Professor Hua Li Yang, programme leader of the infectious diseases programme at the National University of Singapore’s Yale-NUS College of Public Health, said people who do not show symptoms throughout their infection period can escape detecton.

However, it is known that a significant proportion of such asymptomatic infections exist because the virus is more commonly transmitted through asymptomatic transmission than previously thought, such as the Diamond Princess cruise ship, in countries such as South Korea, China, and countries with high numbers of cases.

"We know from work by MOH (Ministry of Health) that pre-symptomatic transmission of the virus to others is possible. This is also true for asymptomatic cases," said Prof Hu.

There have been about 1,500 cases of Covid-19 in Singapore. An article in the medical journal BMJ noted that about 10 per cent of the asymptomatic infections in China were in Hubei.

On April 3, China began publishing daily figures on the number of new asymptomatic infections. According to those reports, the number of new asymptomatic cases has dropped to only about 8 per cent of the total of new infections identified in the 24 hours to the afternoon of April 3.

Dr Leong said the Singaporean figures are not enough to draw similar conclusions.

"We need a larger number of cases to draw a conclusion, but what we have seen is consistent with the suggestion," he said.

ASSOCIATE PROFESSOR HUA LI YANG, programme leader of the infectious diseases programme at the National University of Singapore’s Yale-NUS College of Public Health

Symptoms: fever, cough, sore throat, headache, muscle aches

Asymptomatic cases:

- Persons who test positive on a polymerase chain reaction test for the virus but who are asymptomatic
- Persons who have had close contact with confirmed cases and who test positive but who are asymptomatic

For more information, visit https://www.moh.gov.sg/covid19