

Dengue can take a toll on hospitals, economy: Experts

They warn of disease's potential impact, urge people to take threat seriously as cases soar

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Although dengue is not the “next Covid-19”, the threat it poses must still be taken seriously as the disease can kill and may impose a burden on hospitals and the economy, experts said.

However, they noted that because of the nature of dengue, any public health measures taken are unlikely to be the same as those im-

plemented to combat the coronavirus pandemic.

Since the start of the year, Singapore has recorded over 8,500 cases of dengue – more cases than in the whole of last year, and higher than the total for the same time period each year from 2018 to last year.

The National Environment Agency (NEA) has warned that Singapore could see a major dengue outbreak this year, especially since cases have surged even before the traditional peak dengue season from June to October.

Asked about the surge and its potential impact on public health here, Associate Professor Alex Cook, vice-dean of research at the National University of Singapore's (NUS) Saw Swee Hock School of Public Health, said broad restrictions like those for Covid-19 will not be needed to curb dengue.

Covid-19, he pointed out, is very transmissible and typically gets transmitted from person to person. This meant that before vaccines were available, the only way to stop it was through non-pharmaceutical interventions such as safe management measures, requiring people to make great changes to their lives.

However, as dengue is transmitted to humans from the bite of an

infective mosquito, it can be controlled through environmental non-pharmaceutical measures.

Dr Ruklanthi de Alwis, senior research fellow with Duke-NUS Medical School's Emerging Infectious Diseases Programme, agreed. She noted that the prevalence of dengue did not drop during the circuit breaker period when Covid-19 measures were at their tightest, unlike infections from other diseases.

Dengue could impact Singapore in three ways, said Prof Cook.

First, some dengue cases need to be hospitalised, so in a big outbreak, the number of hospitalised dengue patients can affect hospitals' regular functioning by taking up beds for people with other conditions.

Second, dengue is a serious condition that could lead to patients requiring time off work or having to find alternative care arrangements for their family members.

Third, the disease has an economic cost. Citing a recent study by NEA, he said dengue may cost the economy over \$100 million a year.

Dr de Alwis said about 75 per cent of dengue cases are asymptomatic or otherwise unreported – allowing them to act as a large hidden reservoir of the virus for mosquitoes to get infected.

There is also transmission between infected mosquitoes and animals in the wild, which is not as well monitored and could potentially result in mutations emerging.

Prof Cook said this year's surge in cases is likely the combined effect of various factors.

Dr de Alwis cited an increase in mosquitoes, the prevalence of a new dengue serotype – DenV-3 – to which not many here have immunity, a proportion of the population continuing to work from home, and more people going out to places in nature following the easing of safe management measures.

Asked why Singapore has been

unable to eradicate dengue, both experts said the nation has actually done very well. But Prof Cook said the country has been the “victim of its past successes”, with lower levels of immunity in the population as a result of effective mosquito control campaigns in the past.

Dr de Alwis said being infected with dengue once generally grants immunity against all four serotypes for around one year. Afterwards, someone will still have lifelong immunity from the serotype he was infected with, but his next infection with a different serotype is likely to be more severe.

Prof Cook suggested that people install NEA's MyEnv app to be alerted to nearby clusters, consider installing mosquito netting over windows, and wear long pants and sleeves and apply repellent if there is a cluster nearby.

Dr de Alwis said: “Just because dengue is an old enemy, we shouldn't forget it does kill, especially with new serotypes – so people should be aware.”

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