

Second wave: Rate of spread is a concern

Reproductive Number in Karnataka is 1.6 as of March 25



A woman receiving the vaccine at K.C. General Hospital, Malleswaram, in Bengaluru on Saturday. ■ K. MURALI KUMAR

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While some argue that second wave in Karnataka will not be as severe as the first outbreak, epidemiologists say that the second wave, on the contrary, could be worse.

This is mainly because the Reproductive Number (R. No) in Karnataka stands at 1.6 as on March 25. This means for every 10 people infected, a further 16 persons will be infected by them. The last time Karnataka had a similar R. No. was on July 19, 2020, when the State had a total of 59,625. On that day (July 19, 2020) as many as 4,120 cases were reported. Karnataka's R. No as on March 25 is higher than the national average of 1.48. Besides, it is the third highest after Bihar (2.21) and Chhattisgarh (2.07).

Rate of infection

R. No describes how many people each infected person will infect on an average. It is often estimated using three factors: the duration of contagiousness after a person becomes infected, the likelihood of infection in each contact between a susceptible person and an infectious person, and the frequency of

contact.

Giridhara R Babu, member of the State's COVID-19 Technical Advisory Committee, told *The Hindu* that an increasing R. No is a cause of concern as the jump has been rapid. The number has crossed 1 in at least 19 States, he said. In Karnataka, the reproductive number has increased from 0.9 on January 17 to 1.6 on March 25. "After July 19, the R. No in Karnataka has only dropped. It started rising again from March 1 onwards. This means the transmission is high in the State and it is a clear indication that the second wave has set in. In the days to come we can expect a steep rise in cases," he said.

"This is a worrying situation unless we take tough measures. The next two months are extremely crucial and people also have to behave responsibly," said Dr. Babu, who heads Lifecourse Epidemiology at the Indian Institute of Public Health in Bengaluru.

V. Ravi, nodal officer for genomic confirmation of SARS-COV-2 in Karnataka who is also a TAC member, said ideally R. No should be less than one. "If it crosses

one, then the propensity for the infection to spread is very high," he explained.

Hurdles ahead

Dr. Ravi said, "Pandemics of respiratory infections come in waves over a period of two to five years. We had a second wave of Influenza 'A' H1N1 in 2012, three years after the first outbreak in 2009. The 1918 Spanish Flu also lasted for two years."

"This is a road with multiple speed breakers and we have to be careful all along. We should expect repeated outbreaks in the next one to two years till we will reach herd immunity. And, herd immunity is possible only through repeated infections and/or vaccinations," Dr Ravi explained.

Revised testing targets

With the rapid spread, the Technical Advisory Committee has now recommended the State government revise its testing targets further.

The TAC that met on Friday night recommended that the State should set a target of conducting 1.27 lakh tests daily. As of now the State is conducting over one lakh tests.