

## **54% of Hyderabad's population estimated to have antibodies against coronavirus**

A joint effort by CSIR-Centre for Cellular and Molecular Biology (CCMB), ICMR-National Institute of Nutrition (NIN) and Bharat Biotech has estimated the seroprevalence of antibodies against the coronavirus SARS-CoV-2 in Hyderabad. This study of around 9000 samples, finds that around 54% of Hyderabadis show antibodies against SARS-CoV-2, indicating prior exposure to the coronavirus.

Scientists checked for antibodies against the virus in people across 30 wards of the city. 300 people, from each ward, all of them older than 10 years of age, were tested. Most of the wards showed a similarly uniform range of seroprevalence, from 50-60%. However, a few wards showed as much as 70% or as low as 30% as well.

Women showed a marginally higher seropositivity rate (56%) than the men (53%). Those above 70 years of age showed a lower seropositivity (49%), perhaps because of limited mobility and extra care taken by older individuals during the pandemic. Unsurprisingly, those who had COVID-19 positive cases in their own households, showed the maximum seropositivity of 78%. This was followed by those with known COVID-19 contacts outside their household (68%). Dr. A. Laxmaiah, Scientist 'G' at NIN observed that having a larger number of rooms in houses and small family size households had low prevalence of coronavirus infection.

"This multistage random sampling study on 9000 people in the city of Hyderabad showed that more than 75% of the seropositive population did not know that they had contracted coronavirus infection in the past. This suggests seroconversion, that is antibody formation has happened even with silent infections," said Dr. R. Hemalatha, Director, NIN. According to the study, individuals who had suffered the prominent COVID-19 symptoms as well as those who were asymptomatic, both had equivalent seroprevalence of around 54%. 18% of the study group had been tested earlier and found positive for the coronavirus. 90% of them were found to be seropositive, suggesting that they retain the antibody response.

"This study brings a comprehensive perspective of potentially protective immune response against the coronavirus in the city's population. The data indicates that the population of Hyderabad might be slowly moving towards herd immunity, which will be certainly accelerated by the ongoing vaccination effort," said Dr. Rakesh Mishra, Director, CCMB.