



COVID-19: FAQs on Serological Antibody Test for SARS COV-2 in Bhubaneswar, Odisha, India

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20 April 2020

Abstract: *This policy brief provides answers to some frequently asked question (FAQs) by lay public on the serological antibody test for COVID-19 that Odisha has started in Bhubaneswar since 18th of April, 2020. The answers point that this is a test for disease surveillance from among different categories of population who might have had the disease and have developed antibodies against the virus. It may open up avenues for treatment through further research and it is not a test for identifying people currently suffering from the disease.*

Introduction:

The Government of Odisha is known to have taken a proactive (as against reactive) role in the fight against COVID-19 (coronavirus disease 2019). Some of the initiatives, in this direction, are incentivising registration of persons with a travel history, starting a helpline and advising home quarantine to suspected cases and following up with them, one of the first states to start lockdown in high risk zones, and setting-up of specific COVID hospitals in each and every district, among others. The serological antibody test being conducted on a sample of 5,000 in Bhubaneswar, as it has 46 of the 61 positive cases of Odisha so far, is also another proactive step. The purpose of the current exercise is to provide some answers to the lay public on some frequently asked questions on the test being conducted in Bhubaneswar.

Q1: What is COVID-19?

A1: It is the acronym for coronavirus disease 2019 caused by SARS-COV-2.

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**Q2: What is SARS-COV-2?**

A2: It is the acronym for severe acute respiratory syndrome coronavirus 2, a virus.

Q3: What is serological antibody test in the context of COVID-19 or SARS-COV-2?

A3: Blood is taken from the veins and the serum/plasma put to a test to know whether the person has developed antibodies against the virus, SARS-COV-2, for the disease, COVID-19.

Q4: How long it takes to give the result of the serological antibody test?

A4: It takes 15-30 minutes to get the result of the test. So, it is a rapid diagnostic test (RDT).

Q5: Who would have developed antibodies against SARS-COV-2/COVID-19?

A5: Only people who were infected by SARS-COV-2 and had the disease COVID-19 are likely to have developed antibodies against SARS-COV-2/COVID-19.

Q6: Why is the test conducted on population who are not known to have COVID-19?

A6: Some people who might have been infected by SARS-COV-2 and have had COVID-19 but were either asymptomatic or were with symptoms but have not been tested, and hence, the test is being conducted on population who are not known to have COVID-19.

Q7: Why the test has been initiated in Bhubaneswar, not in other cities of Odisha?

A7: As Bhubaneswar has been declared as a hotspot and there is likelihood for the rapid spread in the city and from the city to other cities, the test has been initiated in Bhubaneswar.

Q8: What is the purpose of the test?

A8: The purpose of the test is to help in disease surveillance. It will help us arrive at an estimate of how many people from different categories of population in Bhubaneswar that might have been affected. For instance, the population could be those identified through contact tracing of known COVID-19 positive cases, those residing in containment zones, health care professionals taking care of COVID-19 patients, utility service providers who come in touch with larger population (police, milk outlets, vegetable/fruit vendors, and grocery shops among others), people staying in camps (for those workers who could not go back home or those under quarantine for having come from elsewhere), *bastis*/slums with limited opportunity for physical distancing, and general population.



Q9: Apart from random sampling for testing the population, who else can go for the antibody test?

A9: Samples of people with Severe Acute Respiratory Infections (SARI) and Influenza like Illness (ILI) are also being collected apart from random sampling of asymptomatic people.

Q10: Who will identify the population and design the sample to be tested?

A10: The Bhubaneswar Municipal Corporation (BMC) through experts from the health department have developed protocols for identifying population from among whom the sample is to be drawn for testing.

Q11: What will happen if the antibody test comes positive?

A11: If the antibody test comes positive, the person's swab samples may be sent for reverse transmission polymerase chain reaction (RT-PCR) test. This is another confirmatory test to know whether the person is currently suffering from COVID-19.

Q.12: Will serological antibody test help identify a person suffering from COVID-19?

A12: No, as per current practise and guidelines from the World Health Organization (WHO) and Indian Council of Medical Research (ICMR), COVID-19 positive cases are to be identified, through RT-PCR, a molecular testing to be carried out in designated laboratories/testing centres.

Q13: Will identifying people who have developed antibodies be helpful in treatment for those who are suffering from COVID-19?

A13: An independent research protocol has to be developed where plasma from those who developed antibodies can be used to treat patients.

Q14: Will those identified with antibodies for COVID-19 be immune from the disease?

A14: Further research with people who have already developed antibodies will be required.

Q.15: Whom should the residents of the city contact for the test?

A15: The residents of the city may contact their respective RWA (Resident Welfare Association), Auxiliary Nurse Midwives (ANMs), Accredited Social Health Activist (ASHA) or ward officer for the test.



Q16: Where from these rapid kits have come to the state?

A16: These rapid kits have been procured by ICMR and have been supplied to Odisha.

Q17: How many rapid kits have been provided to Government of Odisha in the first phase?

A17: ICMR has provided 6000 rapid kits for the test to Odisha in the first phase.

Conclusion

The serological antibody test being conducted in Bhubaneswar is an important step for epidemiological surveillance as it may provide an estimate of people who might have had the disease and have developed antibodies. It may lead to further research for treatment and this treatment is not a test to identify people currently suffering from the disease.

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This is the sixth NCDS policy brief in the COVID-19 series. The other five have been on analysis of cases across countries and provinces of China ([PB12NCDS](#), 20 March 2020), on behavioural biases that could lead to panic like asking health care professionals to leave rented premises ([PB13NCDS](#), 25 March 2020), on strengthening COVID hospitals and concerns of community transmission in Odisha ([PB14NCDS](#), 28 March 2020), on କୋଭିଡ -୧୯ ମହାମାରୀ ସମୟରେ ପୁଷ୍ଟିକର ଖାଦ୍ୟର ଉପଯୋଗିତା ([PB15NCDS](#), 7 April 2020), which is an Odia translation of “Maintaining a healthy diet during COVID-19 pandemic” prepared by the Food and Agriculture Organization of the United Nations, and a cross-country analysis of positive cases and testing ([PB16NCDS](#), 11 April 2020).

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