



Media Update

ICMR scales up its capacity to fight COVID-19

The scientists are relentlessly working to ensure India flattens the growth curve of the pandemic

New Delhi, April 6, 2020: The Indian Council of Medical Research (ICMR) is working relentlessly to implement scientific interventions to combat the SARS-CoV-2 (COVID-19) pandemic. The Council has expanded its capacity to diagnose and manage COVID-19.

Samples and Laboratories

As on 6th April, 2020 at 3.45 pm, ICMR has tested 96, 264 samples of which 3718 were found positive for SARS-CoV-2. A total of 136 Government laboratories and 56 private laboratories have been made functional and are currently engaged in the testing procedure. These laboratories have testing capacity of 18,000 tests per day. In addition to this, two high throughput machine Cobass6800 have been made functional which can test 1400 samples at a time.

ICMR has prepared a data portal for streamlining the data collection from all the laboratories on a real-time basis.

Testing Strategy, Kits, Surveillance and prophylaxis treatment

ICMR has procured 10 lakh Reverse Transcription-Polymerase Chain Reaction (RT-PCR) kits used for diagnosis and 7 depots have been established for uninterrupted supply of reagents across the nation for efficient distribution to government testing laboratories.

ICMR has a constant vigil on the national testing strategy in line with the current trend of the outbreak. RT-PCR is the gold standard testing method for SARS- CoV-2 diagnosis and is in place in all the laboratories for diagnosing the disease.

New RT-PCR kits are being validated by 4 ICMR institutes for their use. Till now, 19 non-US FDA EUA/CE IVD real-time RT-PCR kits have been validated of which 05 have been recommended based on 100% concordance with positive and negative samples. The recommendations have

been shared with the Central Drugs Standard Control Organisation(CDSCO) for taking it forward.

Apart from this, antibody-based tests have also been made available for sero-surveillance. However, antibody tests are not suitable to diagnose live COVID-19 infections. ICMR has released advisory to start rapid antibody based blood test for COVID-19 as a strategy for areas reporting clusters (containment zone) and in large migration gatherings/evacuees centres. ICMR has validated and recommended 7 such test kits for use.

In addition to this, all US-FDA/EU CE approved RT-PCR and antibody kits can be used for COVID-19 diagnosis after approval from Drug Controller General of India (DCGI) and intimation to ICMR.

ICMR has developed guidelines ranging from preparation of network of government and private laboratories to ensure efficient validation/evaluation of new diagnostic kits.

ICMR has validated and recommended Truenat™ beta CoV test on Truelab™ workstation as a screening test. All positives through this platform will need to be reconfirmed by confirmatory assays for SARS-CoV-2. All negatives may not be processed further. Currently, there are nearly 300 Truelab™ workstation already deployed in country and it will be utilized for the testing.

ICMR has recommended empiric use of hydroxy-chloroquine for prophylaxis of SARS-CoV-2 infection in both asymptomatic healthcare workers involved in the care of suspected or confirmed cases of COVID-19 and asymptomatic house hold contacts of confirmed COVID-19 cases.

Preparation for worst-case scenario

With a view to preparing for the worst-case scenario, ICMR has taken a number of steps towards enhancing the number of labs, machines and test kits required to test suspected cases across the country. Some of these interventions that are being actively considered to scale-up testing capacity to 1 lakh tests/day in upcoming months are outlined below:

- ICMR has approved over ~200 labs (both public & private) for COVID-19 testing through RT-PCR machines. We are also identifying other government and private labs, research institutes & medical colleges which have the capability and infrastructure to undertake COVID-19 testing and are in conversation with them to include them in the COVID-19 testing network.
- ICMR is also considering other scale-up interventions such as moving to 24x7 working model at existing labs, coordinating with states to increase manpower for various functions including data-entry, re-deploying automated and manual RT-PCR machines already in the country to aid COVID-19 testing effort, and optimising in-lab processes such as RNA extraction to reduce turnaround time between sample receipt and testing.

- ICMR has forecasted requirements for testing equipment, kits and manpower and is actively procuring, allocating and distributing the same throughout its network of labs.
- ICMR has regular touch points with public and private labs and are resolving their issues related to logistics, approvals, reporting etc. on a continuous basis.

Disease Prevention and Management: The research aspect of the pandemic

In addition to the diagnosis, ICMR has isolated and sequenced the SARS-Cov2 virus and the scientists at ICMR are engaged in planning research studies to give insights into the virus, the disease, and its prevention and management. A review committee to formulate National Task Force studies has been constituted for the same. At the national level, ICMR is also collaborating with other science and research agencies (DST, DBT, CSIR, DRDO, DAE, ICAR) for developing research solutions to the COVID-19 situation. ICMR will also collaborate with the World Health Organization for public health emergency SOLIDARITY TRIAL – an international randomised trial of additional treatments for COVID-19 in hospitalised patients.

About ICMR: ICMR is the apex body in India for the formulation, coordination and promotion of biomedical research, is one of the oldest medical research bodies in the world. ICMR's research agenda aligns with the national health priorities. These efforts are undertaken with a view to reduce the total burden of disease and to promote health and well-being of the population. ICMR promotes biomedical research in the country through intramural as well as extramural research. Visit us at <https://icmr.nic.in/>

For more details:

Media Coordinator

Dr Lokesh Sharma, Scientist E

Email: sharma.lk@icmr.gov.in

Mobile: +91-7567311014