

SCIENTISTS WORKING ON TRACKING COVID, DENGUE THROUGH SEWAGE SURVEILLANCE

Relevant for: Developmental Issues | Topic: Health & Sanitation and related issues

To enjoy additional benefits

CONNECT WITH US

March 22, 2023 11:47 pm | Updated March 23, 2023 10:05 am IST - HYDERABAD

COMMENTS

SHARE

READ LATER

The scientists have found traces of COVID in several parts of the twin cities after picking up samples from open drains at 18 locations. | Photo Credit: Representational Photo

Scientists at the CSIR-Centre for Cellular & Molecular Biology (CCMB) here and the Tata Institute for Genetics & Society (TIGS), Bengaluru, are working on a standardised protocol for effective sewage surveillance to not only check for prevalence of COVID-19 but also diseases such as dengue, and anti-microbial resistance (AMR) among the population.

Mathematical models, which could give a forecast of the pathogens present in the population, are being developed and progress is expected in months. "It is a challenging task and the idea is to do extensive sampling of sewage in the open as well as STPs (sewage treatment plants) in urban areas to come out with proper protocols in association with municipal corporations, academic and research bodies across the country," explained TIGS director Rakesh Mishra.

"COVID is still around. While collecting samples from the STPs will give us a correct picture where we can even estimate the number of positive cases prevalent and even predict of any likely spike, the open drains, because of the continuous flow of water, makes it difficult as it depends on when the infected persons used the toilet," Mr. Mishra, who was the former director of CCMB, said in an exclusive interaction.

Along with CCMB and TIGS, Ashoka University, Pune Knowledge Cluster, National Centre for Biological Sciences, Bengaluru, and few other institutions are working on this project to collect sewage samples across the country, besides extending the ongoing surveillance beyond Bengaluru to smaller cities/towns. "It is a decent collection of geographical regions for coming out with strong standardised protocols for environmental surveillance," said Mr. Mishra.

Scientists are definitely finding traces of COVID in several parts of the twin cities after picking up samples from open drains at about 18 places. "There is positivity but it is difficult to make a precise assessment since there is continuous flow and the samples collected should match with those infected using the toilet," he pointed out.

On the other hand, in Bengaluru, due to "excellent arrangement" with the Bengaluru Municipal Corporation, scientists are allowed to pick up sewage samples from the STPs where a more accurate assessment of the cases can be deduced as the water stays for a few days and

advance warning can be given to the public health departments.

The senior scientist observed that with regard to COVID, a clear increase in the viral RNA load in environmental sample from multiple locations is being observed, although it is nothing like it was in any wave. "There should be no room for complacency and it should not be allowed a free ride. While there is no harm in taking the nasal vaccine considering it is a non-invasive one, vigil should be maintained nevertheless", said Mr. Mishra.

With regard to long COVID symptoms, he said Indian population-specific studies are yet to come out for a reliable assessment to be made.

COMMENTS

SHARE

BACK TO TOP

Comments have to be in English, and in full sentences. They cannot be abusive or personal. Please abide by our [community guidelines](#) for posting your comments.

We have migrated to a new commenting platform. If you are already a registered user of The Hindu and logged in, you may continue to engage with our articles. If you do not have an account please register and login to post comments. Users can access their older comments by logging into their accounts on Vuukle.

END

Downloaded from **crackIAS.com**

© **Zuccess App** by crackIAS.com