

**Government of India**  
**Ministry of Health and Family Welfare**

**Operational Guidelines for Revised Surveillance Strategy in context of COVID-19**

**Introduction:**

Post third surge in January 2022, SARS-CoV-2 disease (COVID-19) has entered a new phase in the country. A sustained low incidence level of mild clinical severity and very low rates of hospitalization due to various factors such as enhanced surveillance, focus on case management and high vaccination coverage has supported country's COVID-19 management efforts. Therefore, presently there is a need to have a surveillance strategy that would enable a close monitoring of the situation for early identification of cases.

**Scope:**

The present guidelines provide revised strategy for surveillance with focus on **early** detection, isolation, testing, and timely management of suspected and confirmed cases; **detect and contain outbreaks of new SARS-CoV-2 variants** and monitoring the trends of existing variants; Monitor long term epidemiologic trends through the established genomic surveillance strategy. The long-term vision is to fully integrate COVID-19 surveillance within existing IDSP surveillance mechanism.

All State and district surveillance officers need to have continued focus on surveillance in coordination with the relevant stakeholders.

**Surveillance strategy:**

**1. Surveillance of Incoming International Travelers**

Screening of incoming international travelers for COVID-19 is a pivotal part of surveillance to detect entry of the virus and its variants into the country from other parts of the world.

The following protocol shall be followed:

- i. Randomly screen 2% of passengers in each incoming flight into India by RT-PCR
- ii. Subject all positive specimens to genomic sequencing.
- iii. Keep passengers who test positive under observation/quarantine and manage as per prevailing guidelines.

(Details of the existing guidelines available at <https://www.mohfw.gov.in/pdf/GuidelinesforInternationalarrivalsupdatedon10thFebruary2022.pdf>)

**2. Sentinel Surveillance:** This shall have two components viz.

**A. Health facility based surveillance**

**B. Laboratory based surveillance**

**Health facility based surveillance:**

- i. A nationwide network of sentinel facilities to monitor influenza-like-illness (ILI) and severe acute respiratory infection (SARI) shall be operationalized.
- ii. All ILI and SARI surveillance data to be reported through IDSP-IHIP.
- iii. All healthcare facilities to report ILI cases from OPD (P form reporting units under IDSP-IHIP) - DSO will be responsible to analyze the data and a proportion (1 in 20) of such ILI cases shall be referred to lab for covid testing through RT-PCR.
- iv. Monitoring SARI cases in all district hospitals & selected tertiary hospitals (All the AIIMS, all district hospitals, large tertiary care government/Pvt Hospitals including Medical college hospitals of States/UTs) & their RT-PCR testing for COVID-19.

IDSP to share fortnightly reporting data of the aforementioned health facilities with respect to ILI and SARI cases. Reporting to be reviewed and ensured by District Collector/Magistrate and MD NHM at the State level.

**Laboratory based surveillance**

- i. Labs testing for COVID-19 should upload their data on ICMR portal.
  - a. ICMR should also provide the data through API to IDSP-IHIP for regular monitoring.
  - b. Data should also be analyzed for test positivity rates and trend of Ct values (if possible).

**3. Community-based Surveillance**

The community-based surveillance focuses on the early detection of unusual events in the community, such as large outbreaks, an unusual presentation of cases, mortality, etc. This would be achieved by:

- i. Event-based surveillance through media scanning and verification by IDSP cell
- ii. Event alert generation on IDSP-IHIP portal
- iii. Indicator based surveillance through IDSP/IHIP reporting of ILI and SARI cases

The district level rapid response teams (**RRT**) will assess the unusual events, and, if required outbreak investigations will be undertaken.

#### **4. Whole Genomic Surveillance**

- A. Continuation and expansion (need based) of laboratory network under INSACOG
- B. Three-pronged genomic surveillance strategy to be followed:
  - a. A proportion of international arrivals (based on latest guidelines of MoHFW) to be tested and all positives to be sequenced
  - b. Identified sentinel sites of INSACOG network to send samples for WGS on a routine basis
  - c. Positive samples from large clusters / outbreaks in the community and unusual events to be sent for WGS.

(Detailed guidelines available at:

<https://www.mohfw.gov.in/pdf/INSACOGGuidanceDocumentdated15July2021final.pdf>)

#### **5. Sewage / Wastewater Surveillance**

Several studies have demonstrated that increases in SARS-CoV-2 RNA can be detected in environmental samples several days before detection of COVID-19 through clinical surveillance. The Revised Surveillance Strategy for COVID-19 envisages integrating the multiple systems presently existing for a pan-India sewage/wastewater surveillance with the following objectives:

- i. Provide early warning on the impending local surge of COVID-19
- ii. Provide an estimate of the virus load in local circulation
- iii. Provide virus isolates for their genomic characterization to detect circulating mutations/variants

To have a standard methodology and avoid duplications, the activities proposed in the project will be carried out as an integrated network. The system can be adapted to antimicrobial resistance monitoring activities in the future. As of now, this component

is on a pilot basis. The network of sites for sewage/waste water samples would be finalized by INSACOG & the data from the sewage surveillance network shall be assessed for its effectiveness in guiding the public health response.

#### **6. Sero-surveillance**

Sero-surveillance is a useful tool to assess exposure to the virus (and /or to vaccination). A decision for any future sero-survey may be taken on the basis of added value that this activity shall provide in the future prevailing situation. The guidelines for the sero-surveillance activity shall be decided by the National Task Force (NTF) constituted for this purpose.

#### **Reporting requirements:**

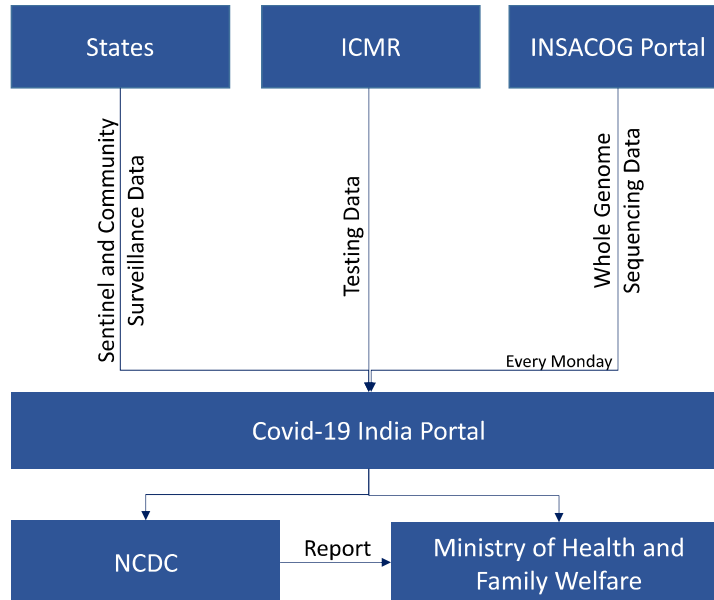
##### **A. Daily**

- Daily report from Districts and States on number of new cases, discharges/recovered, deaths and hospitalized covid cases.
- Hospitalized cases to be categorized as those cases requiring oxygen, ICU and Ventilator supported

##### **B. Weekly**

- Weekly epidemiological report of COVID-19 cases and deaths
- Trend of ILI/SARI cases at the district and state level
- Weekly report on samples sent for whole genome sequencing from the State level
- Weekly report from laboratories on sample positivity rate
- INSACOG WGS report

## Flowchart



**DBT & NCDC to coordinate INSACOG portal & a weekly report to be submitted** to Ministry of Health & Family Welfare (every Monday) indicating not only the samples analyzed but gaps if any in receipt of samples from the identified locations

**NCDC to analyze the surveillance data & data from ICMR on a weekly basis & submit a detailed report to Ministry of Health & Family Welfare (every Monday).**