

**Government of West Bengal**  
**Swasthya Bhawan**  
**Block-GN, No.-29, Sector-V,**  
**Salt Lake, Kolkata-700 091**

**Memo No. HPH/9M-21/2020/112**

**Dated: 14.05.2020**

**ORDER**

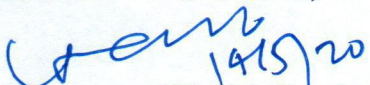
Initiating the surveillance (survey) before the exit from the lockdown provides a unique opportunity to base post-lockdown COVID-19 prevention strategies on real time evidence and trends of infection transmission with objectives To understand the presence of COVID-19 in areas with no reported cases (green zone), to measure current infection in areas reporting cases (red and orange zones) to support clinical and public health preparedness and to monitor trend of infection at the district level over period of time and help decision on lifting lock downs reinstating them in future as needed.

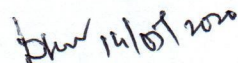
The district-wise surveillance plan along with format for reporting is attached. You are requested to identify one Nodal Officer for Facility-Based Sentinel Surveillance. He will be supported by a team of Nursing Staff – 01, Lab Technician – 02, DEO - 01 and support staff – 01 during the survey period.

The link laboratory for testing sample of sentinel surveillance is same for routine COVID 19 testing laboratory.

The 1<sup>st</sup> Round data collection will start from the 15<sup>th</sup> May 2020

For any operational detailing you may ask Dr. Asit Kumar Biswas (9434009077) or Dr. Tapas Kumar Ray (8373087377 / 9434115672)

  
**Director of Health Services**  
**Government of West Bengal**

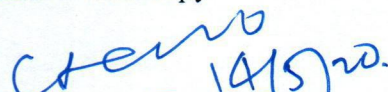
  
**Director of Medical Education**  
**Government of West Bengal**

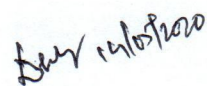
**Memo No. HPH/9M-21/2020/112/1(97)**

**Dated: 14.05.2020**

**Copy forwarded for information and necessary action please to:**

1. The Mr. Binod Kumar, Secretary to the Government of West Bengal
2. The MD (NHM) and Secretary to the Government of West Bengal
3. The Director, NICED, Kolkata
4. The Director IPGME&R, Kolkata / School of Tropical Medicine Kolkata
5. The Principal, all Medical College & Hospitals
6. The District Magistrate, all districts
7. The Jt. Director of Health Services (PH&CD), Government of West Bengal
8. The Dy. Director of Health Services (PH/Lep), Government of West Bengal
9. The Medical Superintendent cum Vice Principal, all Medical College & Hospitals
10. The Asstt. Director of Health Services (EPI), Government of West Bengal
11. The Chief Medical Officer of Health, all Districts/ Health Districts
12. The PA to the Principal Secretary
13. Office / Web copy

  
**Director of Health Services**  
**Government of West Bengal**

  
**Director of Medical Education**  
**Government of West Bengal**



## District-wise Surveillance to Monitor Trends of SARS-CoV-2 Transmission: Plan for Facility-Based Sentinel Surveillance

### Background

Initiating the survey before the exit from the lockdown provides a unique opportunity to base post-lockdown COVID-19 prevention strategies on real time evidence and trends of infection transmission. This effort will provide district-wise data on the trends of infection in low risk population – represented by the cohort of pregnant women attending antenatal clinics or undergoing institutional deliveries, OPD attendees without any Influenza Like Illnesses (ILI) or Severe Acute Respiratory Infections (SARI) or other chest symptoms suggestive of novel coronavirus disease (COVID-19)–and hence enable evidence informed decisions.

### Objectives

1. To understand the presence of COVID-19 in areas with no reported cases (green zone)
2. To measure current infection in areas reporting cases (red and orange zones) to support clinical and public health preparedness
3. To monitor trend of infection at the district level over period of time and help decision on lifting lock downs reinstating them in future as needed.

### Rationale

A low risk population is important as a marker of the general community prevalence. We propose to test non-SARI/ILI patients attending the OPD and pregnant (antenatal and perinatal) women attending district level healthcare facilities. This has several merits including a high acceptance for testing, population with generalized exposure representative of low risk groups at the community level, coverage of possibly asymptomatic COVID-19, and the ability to act rapidly based on the testing results.

A high-risk population, represented by healthcare workers, is also included in this surveillance plan. This sentinel group is important because the increased exposure or likelihood of disease will be picked up early, this is a functionally vital population, and their infection rates has implications for infection prevention and control at the facility and the community level.

### Selection Criteria

Data collection will be done, linked to the samples, using the modified ICMR Specimen Referral Forms for COVID-19 (attached separately). For comparability, same groups of sentinel populations will be sampled from the same areas in each district, at every round of surveillance. This will ensure that the different rounds of data collection may be utilized for trends analysis.

| Risk Profile | Test Group   | Total Number to be Tested Per Week               |
|--------------|--|--|
| Low          | Pregnant Women   | 50 samples x 23 districts = <b>1,150 samples</b> |
| Low          | OPD Attendees and IPD patients without any ILI/SARI/Chest Symptoms | 50 samples x 23 districts = <b>1,150 samples</b> |

|      |                    |   |
|------|--------------------|---|
| High | Healthcare Workers | 100 samples x23 districts = <b>2,300 samples</b><br>20: Doctors<br>20: Nurses<br>10: Group D Assistant Workers<br>30: ASHAs<br>20: ANMs |
|------|--------------------|---|

### *How the results will be used*

The results will help in sharpening the focus of policy decisions. In districts where there is no report of COVID-19 it would show if there is the presence of infection in the low risk population. In districts where there is already report of COVID-19 it would show the trend of infection every two weeks and help decision taking on a) lifting or restoring of lock downs b) number of severe and potential ICU beds required.

### *Quality Assurance*

Testing of samples will be done locally, at the district levels, to ensure rapid reporting of results. The data will be entered through an online portal and the case record forms will be maintained at the laboratory for safekeeping. If data conflicts are noted, then the same will be resolved using the hard copy of the data sheet. For external quality assurance of laboratory testing, 10% of samples may be transported to ICMR-NICED for testing.

### *Timelines*

Thursday, May 14:

- Identification of facilities for drawing samples from pregnant women
- List of contact officials at each of these facilities
- Initiate delivery of materials (supplies for sample collection, basic PPE) needed for the surveillance to the participating institutions.
- Planning and coordination meetings with partner sites
- Identify designated individuals for troubleshooting/decision-points
- Call with the partner sites to discuss implementation plan, sample referral form and protocol for facility-based surveillance

Friday, May 15 to Sunday, May 17:

- Continue sample collection, targeted total samples: 200 samples per district to be collected by Sunday

Wednesday, May 20:

- Analysis and reporting of interim set of results of first round of surveillance
- Planning for second round of surveillance

## **District-wise Surveillance to Monitor Trends of SARS-CoV-2 Transmission: Plan for Facility-Based Sentinel Surveillance**

### **Patient Questionnaire:**

Link to the online form: <https://forms.gle/iv1eHFfGblCDnvCz7>

- To be filled out when the sample is being collected.
- Patient identifying information, demography, history, clinical features, etc. information needed for analysis and tracing will be collecting using this form.
- This may be filled out at the bedside when the sample is being collected.
- If paper forms are used to collect data at the bedside then the Data Entry Operator can transcribe the data from the paper forms into this electronic form.
- Form can be accessed through either a phone (using a web browser to open the link) or through a computer using a web browser (any browser like Internet Explorer, Google Chrome, Safari, Firefox, etc. may be used)

### **Laboratory Questionnaire:**

Link to the online form: <https://forms.gle/y4qC8mhathED7abX9>

- To be filled out when the sample testing is done
- The data entry in this form may be done at the laboratory
- Form can be accessed through either a phone (using a web browser to open the link) or through a computer using a web browser (any browser like Internet Explorer, Google Chrome, Safari, Firefox, etc. may be used)
- Data may be reported in paper forms as well.

The data entered through the two forms can be linked using the patient ID and patient name. The report will be provided to the patient in a timely fashion. The two forms can be filled at two different locations – the patient questionnaire at the hospital/facility where the sample is being collected and the laboratory questionnaire may be filled at the laboratory where the test results are being generated. The two forms can also be filled out at the same location (usually the laboratory) if the paper case record forms are transported along with the samples to the laboratory.

For queries regarding the use of the forms, or to resolve any technical issues, please contact:

**Dr. Pranab Chatterjee**

Mobile: 8910212173

Email: [pranab.chatterjee@phi.org.in](mailto:pranab.chatterjee@phi.org.in)

## District-wise Surveillance to Monitor Trends of SARS-CoV-2 Transmission: Facility-Based Sentinel Surveillance

### A. PATIENT DETAILS

1. Patient ID:  -  -
2. Patient Name: \_\_\_\_\_
3. Age: \_\_\_\_\_ (in completed years)
4. Gender: Female / Male
5. Mobile number: \_\_\_\_\_
6. Mobile number belongs to: Self / Family
7. Village/Ward: \_\_\_\_\_
8. Gram Panchayat/Municipality: \_\_\_\_\_
9. District: \_\_\_\_\_
10. Pin Code: \_\_\_\_\_
11. Email ID: (if available) \_\_\_\_\_

### B. SAMPLE DETAILS

12. Specimen Type: a) TS/NPS/NS b) BAL/ETA c) Blood in EDTA d) Acute sera e) Convalescent sera f) Other \_\_\_\_\_
13. Collection Date: \_\_\_\_\_

### C. PATIENT CATEGORY (SELECT ONLY ONE)

14. Category: Other
  - a. Pregnant women
  - b. OPD attendees or IPD patients
  - c. Healthcare workers

### D. HISTORY OF EXPOSURE

15. Did you travel to foreign country in last 14 days: Yes / No
16. If yes, place(s) of travel: \_\_\_\_\_,
17. Have you been in contact with lab confirmed COVID-19 patient: Yes / No
18. If yes, name of confirmed patient: \_\_\_\_\_
19. Were you Quarantined? Yes / No
20. If yes, where were you quarantined: Home / Facility
21. Are you a healthcare worker working in hospital involved in managing patients: Yes / No

### E. CLINICAL SIGNS AND SYMPTOMS

22. Respiratory infection: Severe Acute Respiratory Illness (SARI): Yes / No
23. Influenza Like Illness (ILI): Yes / No
24. Symptoms (in the last 14 days):
  - a. Cough: Yes / No
  - b. Diarrhea: Yes / No
  - c. Vomiting: Yes / No
  - d. Fever at evaluation: Yes / No
  - e. Abdominal pain: Yes / No
  - f. Breathlessness: Yes / No
  - g. Nausea: Yes / No
  - h. Hemoptysis: Yes / No
  - i. Body ache: Yes / No

- j. Sore throat: Yes / No
- k. Chest pain: Yes / No
- l. Nasal discharge: Yes / No
- m. Sputum: Yes / No
- n. Loss of smell and/or taste sensations: Yes / No

25. Pre-existing medical conditions:

- a. Chronic lung disease: Yes / No
- b. Malignancy: Yes / No
- c. Heart disease: Yes / No
- d. Chronic liver disease: Yes / No
- e. Chronic renal disease: Yes / No
- f. Diabetes: Yes / No
- g. Hypertension: Yes / No
- h. Immunocompromised condition: Yes / No
  - If yes, specify what condition:
- i. Other underlying conditions:
  - Specify:

## F. TEST REFERRAL DETAILS

|  |  |
|--|--|
| Hospitalized: Yes / No<br>Hospitalization Date: (dd/mm/yy) | Hospital State:.....<br>Hospital District: .....<br>Hospital Name: ..... |
|--|--|

Name of Doctor: .....

Doctor Mobile No.: ..... Doctor Email ID: .....

## G. TEST RESULTS

| Date of sample receipt(dd/mm/yy) | Sample accepted: Yes / No | Date of Testing (dd/mm/yy) | Test result (Positive / Negative) | Repeat Sample required (Yes / No) | Sign of Authority (Lab in charge) |
|----------------------------------|---------------------------|----------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
|                                  |                           |                            |                                   |                                   |                                   |

### NOTE:

#### How to give Patient ID number: 6-digit numeric code

Box 1: Round No of surveillance: for this round, insert “1”

Boxes 2 and 3: Numericcode for districts, as below:

|                       |                       |                       |                    |
|-----------------------|-----------------------|-----------------------|--------------------|
| 01: Alipurduar        | 02: Bankura           | 03: Paschim Bardhaman | 04: PurbaBardhaman |
| 05: Birbhum           | 06: Cooch Behar       | 07: Darjeeling        | 08: Uttar Dinajpur |
| 09: Dakshin Dinajpur  | 10: Hooghly           | 11: Howrah            | 12: Jalpaiguri     |
| 13: Jhargram          | 14: Kolkata           | 15: Kalimpong         | 16: Malda          |
| 17: Paschim Medinipur | 18: Purba Medinipur   | 19: Murshidabad       | 20: Nadia          |
| 21: North 24 Parganas | 22: South 24 Parganas | 23Purulia             |                    |

Boxes 4 to 6: Numeric Code for patient enrolled. If there are multiple centers in a district:

First center will enroll from 001 to 300

Second center will enroll from 301 to 600

Third center will enroll from 601 onwards