



COVID-19 Outbreak Control and Prevention State Cell

Health & Family Welfare Department

Government of Kerala

ADVISORY ON AUGMENTING TESTING AND SMAPL COLLECTION MANAGEMENT - IMPLEMENTATION FRAMEWORK FOR THE DISTRICTS

NO: 31/F2/2020/H&FWD- 2nd July 2020

State of Kerala has a testing policy driven by rigorous epidemiological analysis. It is based on infection importation and transmission-based approach. The testing strategy focusses on risk stratification, at the same time it has inbuilt system for sentinel surveillance among general public. The comprehensive testing strategy of the state is backed up by the strong public health approach. As the epidemic figures shows importation of new cases and identifying a few cases from sentinel surveillance, the state has decided to increase testing. It is also essential to strengthen the system further so as to ensure that every eligible person gets an opportunity to get tested timely without a bearing on out of pocket expenditure on laboratory investigations with minimal inconveniences.

In order to augment testing for COVID in Kerala, following advisory is issued.

1. NODAL OFFICER FOR SAMPLE MANAGEMENT:

- a) **A nodal officer shall be designated in all districts with the following roles and responsibilities. The DSO shall do appropriate arrangements.**
- b) Establish a sample collection and transportation system in the district from periphery to laboratory using a hub and spoke model, as described below.
- c) Establish adequate sample collection facilities (WISK model) and Mobile Sample collection units.
- d) Ensure all eligible individuals recommended in the advisories issued by the Department of Health and Family Welfare, Govt. of Kerala are tested.
- e) Ensure the adequacy of samples collected and transported from eligible categories in the field to designated hub and laboratories.
- f) Ensure completeness and correctness in data entry at field level.
- g) Ensure the timeliness of actions in the field.
- h) Impart training to the sample collection teams and concerned parties



- i) Ensure adequate number of trained staff at WISKs and Mobile Sample collection teams
- j) Coordinate sero surveillance, sentinel surveillance and sample collection for epidemiological studies in coordination with District Surveillance Officer (COVID).
- k) Maintain detailed test related data, analyse and put action.
- l) Communicate efficiently across all levels of management

2. DISTRICT SAMPLE HUB

Is a laboratory in the district with highest level of laboratory services. Eg: District Public Health Lab, District Hospital Lab, General hospital Lab. The District sample hub to be decided appropriately by the DSO, DMO and Lab in charge based on the available space, infrastructure and capability of providing support to the units in the field.

Role of District Sample Hub:

- a) Act as the nodal testing lab for the samples received
- b) In cases where the requested test is not available in the hub the sample should be redirected to the nearest laboratory where the testing facility is available.
- c) Communication of results back to the treating physician.

3. STRUCTURE FOR SAMPLE COLLECTION AND TRANSPORTATION IS AS FOLLOWS

3.1 Sample Way

“Road route which connect all taluks of the district in such a way that it reaches the District Hub in minimum time”

3.2 Mobile Sample Collection & Transportation Team

- Mobile collection and transportation team follows the sample way. There should be a minimum of 2 mobile teams in a district. As per the need the DSO and DMO may decide to add on the Mobile Sample Collection teams.



- Responsibilities-
 - a) sample collection from field of allotted Taluks (sentinel surveillance)
 - b) collection of sample boxes from Taluk collection centre to District hub/ designated laboratory
- Staff pattern
 - o 1 driver, 1 trained health care staff, 1 data entry operator, 1 support staff
- Duty timings 10 am to 2pm (1 shift), 3pm- 7pm (2nd shift)
- Material requirement- Modified VTM, Mobile with app installed, SRF, Packing materials, gloves, sanitiser, bleach solution to sanitise exposed gloves of WISK. Facility for cold chain maintenance

3.3 Fixed Collection Centres

- Unit of sample collection will be Block
- In every block, establish at least 1 WISK at one of the health facilities based on the travel convenience for citizen.
- Nodal officer-Administrative head of the attached institution.
- Samples from all eligible persons from the block will be collected here.
- Samples from WISK will be transported to nearest Taluk Collection Centre after co-ordinating with timings of mobile collection team reaching Taluk Collection Centre.
- Block collection centres located in Sample way of Mobile sample collection team can directly give samples to Mobile team. Department wise sorting of samples shall happen in the WISK eg- Biochemistry/ Pathology etc

3.4 WISK- Block Level

- ACTIVE TIME 8 am- 12 noon, 1 pm- 5 pm (2 shifts)
- Staff pattern-
 - 1 Trained health care staff for sample collection (decision maker on pooled / individual test/ type of test) & Department to which the sample should be sent. The same shall be labelled over the box
 - 1 Data entry operator – Online Platform & SRF
 - 1 Support staff



- Material requirements- Routine VTM, Modified VTM, Mobile with app installed, SRF, Packing materials, gloves, sanitiser, bleach solution to sanitise exposed gloves of WISK
- Facility for cold chain maintenance

3.5 Taluk Level

- In every Taluk, Taluk sample collection centre will be established in Government Hospital which is located close to the "sample way." Need not be Taluk/ District hospital always.
- It will be a storage site (eg: Microbiology lab/ RPHL) for samples coming from all blocks, from where it will be collected by **mobile SAMPLE COLLECTION TEAM**.
- Receival and despatch of samples will be supervised and recorded by the Lab-in-charge of attached institution.
- For every 2-3 Taluks, a **mobile SAMPLE COLLECTION TEAM** will be deputed in such a way that it can cover the assigned taluks and reach the **District Sample Hub** before 2 pm (1st shift) and 7 pm(2nd shift).

4. TRANSPORTATION OF PEOPLE UNDER QUARANTINE.

People under quarantine who need to be tested shall be brought to the nearest WISK following 'sanitised corridor' for sample collection. For ensuring 'sanitised corridor', double chambered taxi / double chambered auto rickshaws shall be encouraged after proper training, ensuring adequate PPE and vehicle disinfection system after each transport.

Wherever possible by going in a Mobile Sample Collection unit, collect the sample.

5. GENERAL INSTRUCTIONS

- Develop a sample collection Action plan for the District with tentative route maps of mobile teams
- Priority samples (post mortem samples/ samples of patients awaiting emergency medical or surgical interventions/ sample of Prisoner's) can be sent for TRUENAT/ CBNAAT testing at the nearest laboratory where the facility is available without delay.



- Additional precautions including crowd management need to be taken in all sample collection and transportation way so as to ensure that no cross-infection happens.
- Districts can customise the plan. Effort shall be put in to establish sustainable system. Through the system established, other samples (histopathology, microbiology, biochemistry specimens including testing for New born metabolic screening program, testing for other communicable diseases including TB, AMR surveillance) shall also be collected in the future.

Fig 1. Thematic map showing sample collection and transportation systems

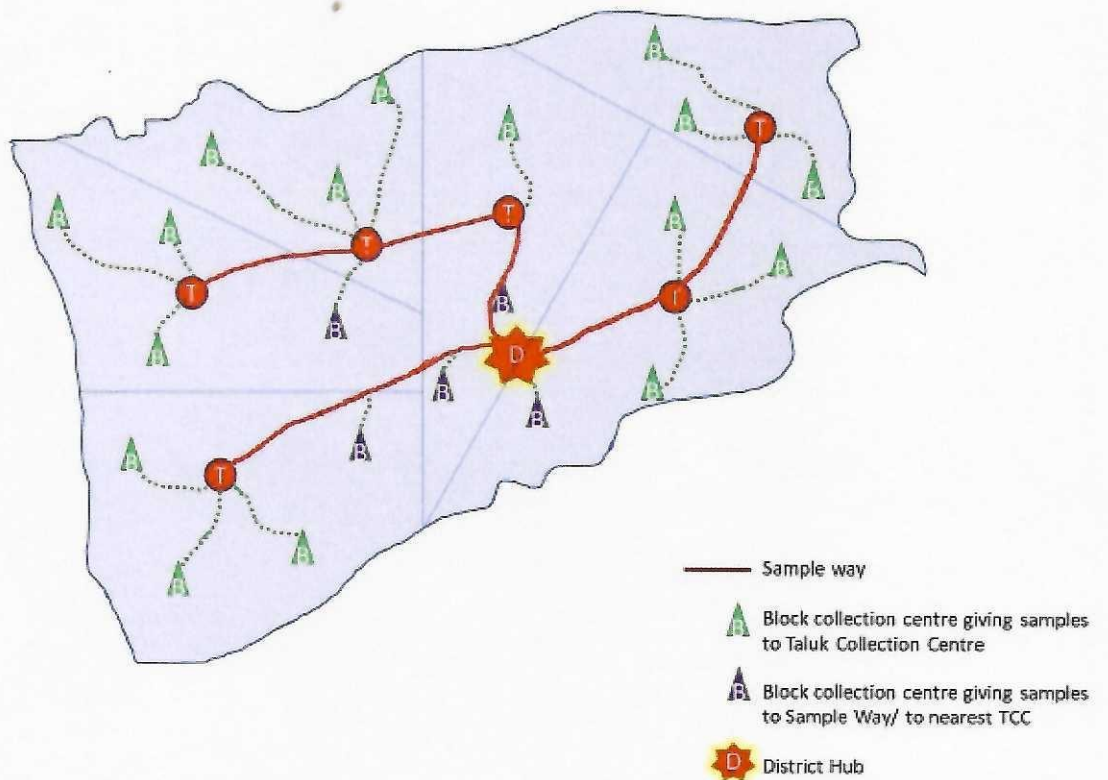




Fig 2. Sample Collection and Transportation system at district

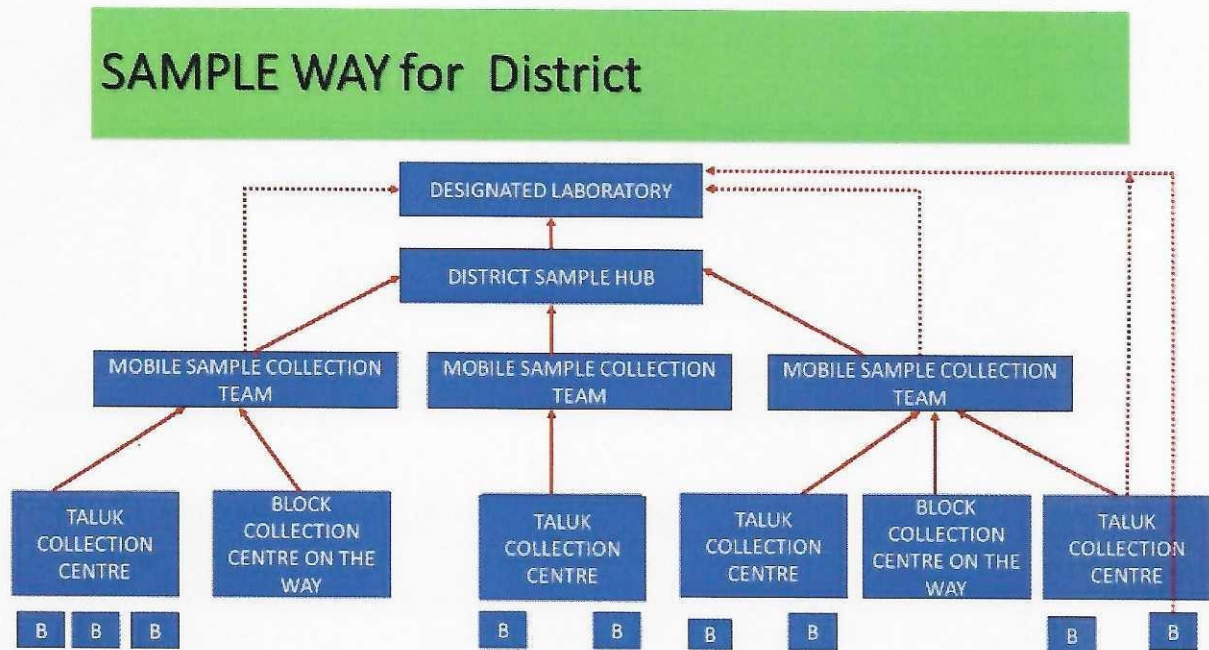
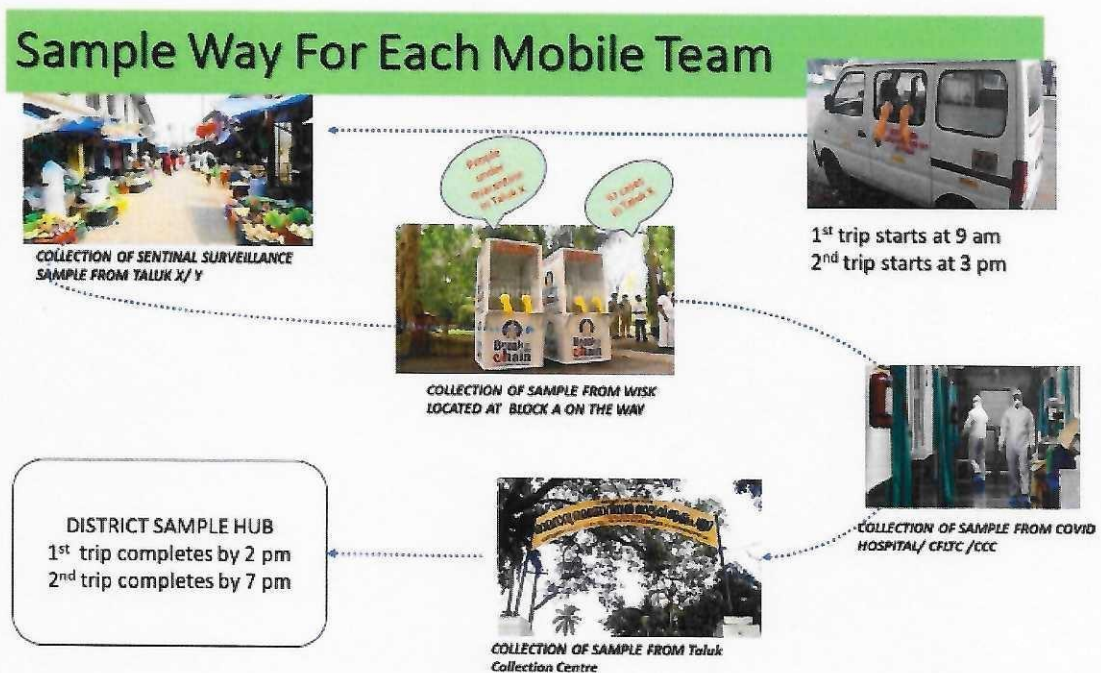


Fig 3: Sample way for Mobile Unit





6. DISTRICT LEVEL MONITORING OF SAMPLE MANAGEMENT:

A weekly monitoring and appraisal should be done as per the following table below and submitted by the nodal officer to the DSO/DMO.

Sl.no	Indicator	Value/Comment
1.	Sample collection Action plan and route map for the week (Sunday to Saturday)	
2.	Total no of Fixed site Sample collection teams	
3.	Total no of Mobile sample collection teams	
4.	Total no of new/refresher training given for the sample collection teams in the week	
5.	No of Routine samples(RT-PCR) collected in the week	
6.	No of Sentinel Surveillance(antigen /RT-PCR) samples collected in the week	
7.	No of Airport samples per week (if applicable)	
8.	No. of samples collected for Antibody test	
9.	Remarks on Logistics & transportation:	


Principal Secretary