

**GOVERNMENT OF ANDHRA PRADESH
HEALTH MEDICAL & FAMILY WELFARE DEPARTMENT**

Memo No.26/COVID-19/2020,Date: 13.4.2020

Sub: HMFWD – COVID-19 –Increased testing of samples using various methods
- Orders – Issued

Ref: Memo No.081/HM&FW/Truenat/2020, HM&FW Dept., Dt: 13.4.2020

COVID INSTANT ORDER - 26

The World Health Organization (WHO) has declared the Corona Virus Disease (COVID19) epidemic affecting all the regions of the World as Pandemic. The Government of Andhra Pradesh has under taken several measures including strengthening of surveillance for prevention, containment and control of COVID-19. Testing in containment clusters in red zone to identify any community transmission is important to contain the spread of disease. It is also important to test persons in the green areas which have no cases registered till date. The motto is to **“Restrict the Red and Protect the Green”**. Hence, it has been decided to increase the various methods of testing to ensure increase of the overall tested samples.

It has been proposed to conduct at least 15,00,000 tests during the next 28 days using various methods namely RT-PCR, TRUE NAT PCR, RDK (Anti body) tests. The risk profile for the targeted population shall be taken into consideration in the containment clusters as well as within the green zones. The targeted population to be screened using each method is as given in Annexure 1 on the basis of risk profiling. The establishment of TruNat testing labs in all districts cited at reference is enclosed as Annexure -2 Protocol for TruNat testing is also given at Annexure -3.

The number of samples to be collected from each district was already communicated and has been discussed in Video Conference held on 12th April 2020 is given in Annexure 4. Similarly, the number of tests conducted per week will keep on increasing in the coming weeks also.

Therefore the District Collectors are requested to identify and depute adequate number of teams (trained Medical Officers in sample collection and Supporting staff) required for sample collection. Collectors are further requested to send the samples to identified VRDL / TRUE NAT Labs as identified for the districts.

**SPECIAL CHIEF SECRETARY TO GOVERNMENT**

To

All the Collector & District Magistrates

Copy to:

The CEO, Dr YSR Aaroyasri Trust for necessary action.

All the Joint Collector & additional district magistrates

All the DM&HOs / DCHSs in the State

Annexure 1

Testing strategy inching towards Exit: General Guidance on whom to test using which method

S. No	Type of Test/method	Targeted area for conducting screening/ tests	Targeted population for screening/ tests
1	VRDL(Confirmatory in nature)- SWAB based	Risk Level 1- High risk population within the Containment cluster	a. Contact Tracing 1.All Primary Contacts of Positive cases shall be completed b. Active house to house Surveillance <ol style="list-style-type: none"> Persons with 60+ age Persons with co-morbid conditions Symptomatic cases requiring immediate hospitalization c. All confirmatory positive samples sent from other methods
2	TRUENAT (SWAB based)- to be confirmed by RT-PCR test if positive	Risk Level 2- Population within the CC with moderate risk/mild symptoms	a. Contact Tracing <ol style="list-style-type: none"> Asymptomatic Contacts between the 5th and 14th day of contact b. Active house to house Surveillance <ol style="list-style-type: none"> Mild Symptomatic cases identified in surveillance Symptomatic /High risk Health care workers Areas in buffer zone outside the containment area - every 10th house shall be done in every village/ward volunteer cluster c. Persons in quarantine centers
3	Modified PCR Sample system – Will be confirmed by RT PCR (SWAB Based)		
4	Clia Tests- (Intravenous Blood)		

5.	RDT Antibody tests- Blood Prick (To be confirmed by RT- PCR)	<p>Low Risk level</p> <p>Screening at Community</p> <p>a) City clusters with more cases VMC,GVMC,GMC,KMC,NMC</p> <p>b) Clusters in High Incidence Districts of Guntur. Krishna, Kurnool, Prakasam and Nellore, Kadapa districts</p>	<p>1. Screening of persons in the Containment Cluster(CC) and buffer areas</p> <p>a. Community transmission areas to be concentrated</p> <p>b. Areas where people have travelled and came back after March 10th 2020 from an outside state/district/Mandal/village</p> <p>2. All persons identified fever survey at community for ILI(fever, sore throat, cough, breathlessness) symptoms shall be tested with RDK</p> <p>3. All other population outside the CC but within the red/orange zone(Mandal /wards) shall be tested through random sampling- every 10th house shall be done in every village/ward volunteer cluster</p> <p>4. In case of Green zone mandals/wards, the testing of every 10th household shall be done in every village/ward volunteer cluster(for Ex: For volunteer having 50 households, 5 houses will be done randomly for which random number generation will be given.</p>
		<p>Whom to be selected in the household selected by sampling?</p> <p>The order in which the selection within the household will be made is for</p> <p>1) An elderly person above 60 years</p> <p>2) If none like 1, person with co-morbidities</p> <p>3) If none like 2, Person who could have travelled outside and came back from a different village/district/state after March 10th March 2020</p> <p>4) If none like 3 above, Children below 10 years in the household</p> <p>5) If none like 4 above, person going to the local market generally or being exposed to public gatherings during lockdown period</p> <p>6) If none like 5 above, anyone in the house randomly</p>	

Annexure - 2

**GOVERNMENT OF ANDHRA PRADESH
HEALTH MEDICAL & FAMILY WELFARE DEPARTMENT**

Memo.No.081/HM&FW/Truenat/2020

Dated: 13.04.2020

Sub: GoAP - HM&FW – COVID – 19 – Establishment of Truenat Testing Labs in all the districts – Notifications of hospitals as COVID – 19 Truenat Testing Labs - Reg.

Ref: 1. ICMR guidelines to conduct the Truenat Beta CoV test for COVID – 19 suspected cases dt: 03.04.2020
2. Revised ICMR guidelines dated 07.04.2020 on Truenat Beta CoV test for the COVID – 19.
2. Revised ICMR guidelines dated 12.04.2020 on Truenat Beta CoV test for the COVID – 19.

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As per the references cited above, the Indian Council for Medical Research has authorised the new testing process “Truenat Beta CoV test” for identifying the COVID – 19 in the suspected cases in addition to the existing method of testing through “RNA based RT – PCR test”. Further, it is stated that the Positive cases with the Truenat testing process should be reconfirmed through the traditional RT – PCR method of testing. In continuation to the above the recently revised guidelines clarified that the norm of BSL -2 or BSL – 3 setups for Truenat Testing Labs has been relaxed provided Bio-Safety precautions were properly ensured.

02. In this regard, the following health facilities are identified and notified as Truenat Testing Labs by redeploying the Truenat machines available in the district under RNTCP program.

S. No.	District	Total Available TrueNat (Dual) machines under RNTCP	Hospital where TrueNat Labs will be established	TrueNat Machines to be deployed
1	Anantapur	12	Govt. Medical College - Anantapur	5
			RDT TB Lab - Bathallapalli	6
			District Hospital - Hindupur	4
			Area Hospital - Kadiri	3
2	Chittoor	17	SVRR GGH - Tirupathi	5
			District Hospital - Chittoor	5
			Veterinary College - Tirupati	3
			District Hospital - Madanapalli	2
			Area Hospital - Palamaneru	2
3	East Godavari	25	Rangaraya Medical College	7
			District Hospital - Rajahmundry	5

			GSL Medical College - Rajanagaram	5
			Area Hospital - Amalapuram	5
			Area Hospital - Rampachodavaram	3
4	Guntur	18	GGH- Guntur	8
			Area Hospital - Narasaraopeta	4
			Area Hospital - Tenali	4
			Area Hospital - Macharla	2
5	Kadapa	15	GMC/ RIMS - Kadapa	7
			District Hospital - Proddutur	5
			Area Hospital - Pulivendula	3
6	Krishna	15	CDST Lab / SMC - Vijayawada	6
			Veterinary College - Gannavaram	2
			District Hospital - Machilipatnam	4
			Area Hospital - Nuzvidu	3
			Area Hospital - Jaggayyapet	8
7	Kurnool	19	GGH - Kurnool	8
			District Hospital - Nandyala	4
			Area Hospital - Nandyala	4
			CHC - Banaganapalli	3
8	Nellore	18	DFIT - Nellore	6
			Narayana Medical College	6
			Area Hospital - Kavali	3
			Area Hospital - Atmakur	3
9	Prakasam	17	GMC/ RIMS - Ongole	7
			Area Hospital - Cheerla	3
			District Hospital - Markapuram	4
			Area Hospital - Podili	3
10	Srikakulam	19	GMC / RIMS - Srikakulam	10
			District Hospital - Tekkali	5
			CHC - Patapatnam	4
11	Visakhapatnam	16	DST lab Govt. Chest Hospital	8
			District Hospital - Anakapalli	4
			Area Hospital - Narsipatnam	4
12	Vizianagaram	13	District Hospital - Vizianagaram	7
			Area Hospital - Parvathipuram	3

			CHC - Saluru	3
13	West Godavari	17	ASRAM Medical College	10
			Area Hospital - Tadepalligudem	4
			Area Hospital - Bhimavaram	3

03. In view of the above, Government has appointed Dr Neerada, Addnl, Director of Health as State TB Control Officer (I/c) and further she is also designated as the State Nodal Officer for Truenat testing for COVID – 19 cases. The contact details of the State Nodal officer are Mobile No: 9849902229, Mail ID: cponhmap@gmail.com

District Collector and Magistrates may ensure:

- PPE & Masks for the health care personnel involved in testing and Biomedical Waste tie-ups for proper disposal of the tested samples.
- To instruct the Superintendents of the hospitals/above centers to ensure the availability of Refrigerator, sufficient electrical fixtures and at least 2 computers in each testing lab.
- Ensure that the samples collected at existing sample collection center or any other newly identified centers must be properly uploaded in the portal and should indicate clearly the name of the Truenat lab center where the sample is going to be tested and should reach the designated Truenat lab.
- Should ensure that, during the data entry process at the sample collection center due caution has to be exercised in marking whether the sample is going to be tested at VRDL lab/Truenat lab.
- Should ensure 2 shifts of lab technicians to work at the Truenat labs and 2 Data Entry Operators/Digital Assistant for proper updation.

District TB Control officers:

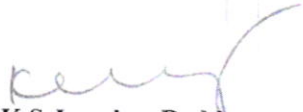
- Being the District Nodal officer of Truenat testing labs, should ensure the availability of testing kits and maintain the proper inventory.
- Each Laboratory should essentially register on ICMR portal and get a User name and Password.
- Contact points for registration at ICMR are
Dr Harpreet Singh – hsingh@bmi.icmr.org.in
Dr Ira Praharaj: praharaj.ira@icmr.gov.in
- In case of “Presumptive positive” cases, please ensure that the left over and the remaining preserved VTM sample mixture corresponding to the “Presumptive - Positive” case should be transported to the nearest VRDL lab for Confirmation testing in the prescribed Sample Referral Format.

Medical Superintendent:

- Biomedical Waste tie-ups for proper disposal of the samples and other utilities used for testing.
- Should provide an autoclave along with biomedical disposal bags.

Lab In-charge:

- Should be preferably Microbiologist/ ENT Surgeon / Dental Surgeon.
- The test reports prepared by the Lab technician should be duly verified and approved by the Lab In-charge.
- If the result is 'negative' upload the patient details in the lab module of MSS COVID App – Link: <https://health.ap.gov.in/MAATHASISU> and if the result is "Presumptive – positive" it has to be entered in the above portal under COVID Section – Select Result (dialogue box) as "Presumptive – Positive".
- The reports should also be entered into IDSP portal and ICMR portal also.


Dr K S Jawahar Reddy,
Special Chief Secretary to Govt. of AP,
Health Medical & Family Welfare, Dept.

To

All the District Collectors
The Director of public Health,
The Commissioner, APVVP,
The State TB Control Officer, AP,
All the District TB Control Officers,

Copy to

The Commissioner Health & Family Welfare & MD NHM,
The Chief Executive Officer, Dr YSRAHCT & State Nodal officer for labs – COVID – 19.

PROTOCOL FOR COVID – 19 TESTING

WITH TRUNAT MACHINES

STEPS INVOLVED:

1. Sample collection process
2. Preparation of the sample
3. RNA extraction
4. Analysing the sample (Chip testing)
5. Reporting

1. Sample Collection Process:

- Patient ID should be correctly labelled on VTM.
- Trained personnel with due precautions following infection control measures has to collect the swab preferably from NASOPHARYNX / OROPHARYNX.
- After collecting the swab, break the swab stick at its notch point and put it in VTM and the left over swab stick has to be disposed-off in 1% hydro chloride solution.
- Properly seal the VTM tube by tightening the cap, label it. Cello tape can be stucked over the label to prevent label smudging out (due to alcohol wipe) during disinfecting the VTM tube.
- After collection / labeling and before passing on to further analysis the outside of the VTM tube (swab container) has to be disinfected by wiping off with a disinfectant (sterilium / hand sanitizer / 70% alcohol etc.)
- VTM tube has to be transported to the nearest TruNat lab by maintaining a temperature of 2°C to 40°C (Thermocol box with ice packs / gel bags) along with the Sample Referral Format (SRF).
- The details of the patient referred has to be entered in the MSS COVID Application from the nearest sample collection hospital Login ID or directly if Login ID's provided for TruNat labs.

2. Preparation of the sample:

- The sample preparation has to be done under standard preventive control measures.
- Transfer 0.5ml of the sample mixture from the VTM into the Lysis buffer tube using 1ml Pasteur pipette.
- Please preserve the remaining sample mixture by sealing properly for future use.
- After 2-5 minutes the entire Lysis mixture buffer has to be transferred into extraction cartridge sample chamber using 3ml Pasteur pipette.

3. RNA Extraction:

- Load the extraction cartridge into the RNA extraction machine and process it for 20 minutes.
- After 20 minutes open up the extraction cartridge cassette and collect the Elute in the Elute chamber.
- The so collected Elute has to be transferred into the micro test tube provided in the β Covid chip packet.

4. Analysing / Chip testing:

- The patient's details have to be entered into the TruNat analyzing machine and press "START TEST".
- Automatically Chip loading bay will come out.
- Place the chip in the Chip loading bay and transfer 6 micro litre of the Elute into the master mix tube (Provided in the β Covid chip packet) and wait for 30 seconds.
- After 30 seconds take 6 micro litre of master mix from the master mix tube and load it in the well of the Chip.
- After 40 – 45 minutes the result will get displayed.
- After completing the test process open the Chip loader bay and discard the Chip in 1% hydro chloride solution.

5. Reporting:

- If the result is 'negative' upload the patient details in the lab module of MSS COVID App – Link: <https://health.ap.gov.in/MAATHASISU>.
- Negative sample's Elute has to be preserved under deep freeze conditions for one week and then only it has to be disposed-off in 1% hypo chloride solution.
- If the result is "Presumptive – positive it has to be entered in the above portal under COVID Section – Select Result (dialogue box) as "Presumptive – Positive".
- The left over and the remaining preserved VTM sample mixture corresponding to the "Presumptive - Positive" case should be transported to the nearest VRDL lab for Confirmation testing in the prescribed Sample Referral Format and until then please don't declare the "Presumptive - Positive" results.

6. Bio-Medical Waste Management:

- All the waste generated should be disposed-off as per the biomedical safety precautions already being following at your lab or hospital.
- Discard all the used consumables (gloves/ cartridge / pre-treatment tube/ transfer pipettes / tips / master mix tube/ etc.) after its use directly into a container with 1% hypo chloride solution.
- The so disinfected material has to be autoclaved using two bio medical disposal bags.
- It is the responsibility of the Superintendent of the respective hospital to provide one autoclave to the TruNat lab.

Amleg
State nodal officer for labs
AP.

Annexure 4

Number of tests per day during week starting 13th Apr 2020

S.No	Type of Test	Number of tests per day during week starting 13 th Apr 2020	Tests per week
1	VRDL(Confirmatory in nature)- SWAB based	1075	7525
2	TRUENAT - to be confirmed by RT-PCR test if positive (SWAB based)	4500	31500
3	Modified PCR Sample system – Will be confirmed by RT PCR (SWAB Based)	2500	17500
4	Clia Tests (Intravenous Blood collection)	Yet to start	Yet to start
5.	RDT Antibody tests- Blood Prick (To be confirmed by RT- PCR)	4500	22500
	TOTAL	12575	79025

Testing Strategy for the next week (13th April - 19th April)

District	13TH April	14th April	15th April	16th April	17th April	18th April	19th April	TOTAL
Anantapur	410	410	410	410	410	410	410	2870
Chittoor	390	390	390	390	390	390	390	2730
East Godavari	750	750	750	750	750	750	750	5250
Guntur	1360	2360	2360	2360	2360	2360	1360	14520
Kadapa	355	355	355	355	355	355	355	2485
Krishna	1200	1950	1950	1950	1950	1950	1200	12150
Kurnool	580	1580	1580	1580	1580	1580	580	9060
Nellore	960	1710	1710	1710	1710	1710	960	10470
Prakasam	440	940	940	940	940	940	440	5580
Srikakulam	380	380	380	380	380	380	380	2660
Visakhapatnam	420	920	920	920	920	920	420	5440
Vizianagaram	260	260	260	260	260	260	260	1820
West Godavari	570	570	570	570	570	570	570	3990
TOTAL	8075	12575	12575	12575	12575	12575	8075	79025

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