



ADVISORY ON RECOGNITION AND CONTAINMENT MEASURES FOR SECOND WAVE OF COVID-19 IN KARNATAKA

Technical Advisory Committee (TAC) for COVID-19



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**DEPARTMENT OF HEALTH AND FAMILY WELFARE- GOVERNMENT OF KARNATAKA
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**This report is based on the deliberations of 53rd meeting of
Technical Advisory Committee (TAC)
held on 24th November 2020**

Executive Summary

This report of State Technical Advisory Committee (TAC) for COVID-19 provides a brief narrative of measures needed to foresee and contain second wave of COVID-19 pandemic in the state. A summary of the report is given below:

1. An early recognition of second wave of COVID-19 in the state can be done by closely monitoring 7-day average growth rate and reproduction number (R_0) at district and state levels
2. The second wave of COVID-19 is expected during January-February, 2021
3. An epidemic intelligence team shall be supporting the state war room for early recognition of second wave and alerting the Additional Chief Secretary-HFW & Commissioner-HFWS
4. Minimum of 1.25 lakh tests per day should continue till the end of February 2021, of which 1 lakh shall be RT-PCR (1:5 pooled in lab as per state protocol)
5. Fortnightly testing of all teachers, pupils, and staff in educational institutions, Anganwadi staff, and others by RT-PCR (by 1:5 pooling of samples in lab)
6. To keep ready by 1st week of January, the clinical facilities at an October 2020 level in terms of beds, ICUs, ICU- ventilators, etc. both in Govt & Private hospitals including ambulance services or this could be ramped up at a short notice of 2-3 days maximum.
7. Explore CCCs to be run on PPP model with reputed NGOs for better facilities, services, and care
8. After carefully assessing the COVID-19 situation in the last week of December, graded opening of schools from January may be considered, i.e. classes 12 & 10 to commence initially from January and classes 11 and 9 to follow later on
9. Restriction of mass gatherings like fairs and festivals, religious congregations, cultural events, etc. Strictly restrict super spreader events during December & January (winter months) – like permitting events only in open areas like Marriages, etc. – Up to 100; political and public events – up to 200; death ceremonies – 50; funerals -20.
10. To ban New Year public celebrations from Dec. 26 to Jan. 1 and impose night curfew (8 pm to 5 am) during this period.
11. To expedite preparedness for COVID-19 vaccine introduction both in public and private sectors
12. To rope in popular cine and sports personalities to promote messages of mask wearing and use of sanitizer, hand washing, etc.
13. Further unlocks like swimming pools, sports, etc. to be delayed till February 2021
14. Identify and implement best practices of COVID-19 containment from other states

1. Preamble:

Human behaviour is known to be responsible for spiking of Covid-19 cases. The decision to introduce, adapt or lift public health and social measures (PHSM) should be based primarily on a situational assessment of the intensity of transmission and the capacity of the health system to respond, but must also be considered in the light of the effects these measures may have on the general welfare of society and individuals ¹

To minimize the severity of the second wave, we can take specific measures such as emphasizing cluster detection, testing, tracking and contact tracing; adoption of individual precautionary measures such as hand hygiene, wearing mask and staying home; avoiding “3Cs”; resuming activities with safety measures in place; and protecting the vulnerable. Periodical monitoring of the efficacy of public health and social measures helps to make critical decisions based on the intensity of transmission, health system capacity and upcoming instances that affect the transmission. The PHSM can be adjusted according to the situational analysis.

2. Situation analysis

The scenario of COVID-19 in the state is summarized as follows –

The first case of COVID-19 (imported from USA) was reported on 8th March 2020 in Bangalore and in the last 9 months a total of 8.74 lakh cases and 11,678 deaths have occurred. In the months of July to September there was a sudden surge in the cases that was largely attributed to large scale migration of people consequent to lifting the lockdown. The daily incidence of cases was more than 10,000 cases during September which has now come down to around 1,500 cases. In February 2020, there were 2 labs which have been expanded to 164 labs in November. Presently, on an average, over 1 lakh tests are done every day of which more than 75% is RT-PCR and the rest by RAT. The test positivity rate was around 14% in August and has now drastically come down to 1.6% that is largely due to various containment measures.

The state has duly complied with the unlock guidelines of GOI and the colleges are now opened from 17th November and the schools are planned to be opened at a later date. The state has 36 Dedicated COVID hospitals(DCH), 174 Dedicated COVID health centres(DCHC), and 628 private hospitals for COVID-19 care. There are 22,602 beds, 11,452 central oxygenated beds, 1902 ICU with ventilators both in government and private for COVID-19 patients. The state has established a war room at state level and at BBMP that provide necessary technological support to management of COVID. Various expert committees have been constituted at state and district levels to address clinical and public health issues. The state has been very supportive in extending free treatment and diagnosis for COVID-19 to all. The state has roped in private sector, corporate sector, philanthropists, NGOs, and others for participation in the containment of COVID-19.

There has been a second wave of COVID-19 in USA, Europe, Australia, and other countries. Recently, there has been a surge in cases in Delhi, Haryana, Gujarat, Madhya Pradesh, West Bengal, Kerala, and other states that has been a cause for concern in other states. In this context, as Karnataka has significantly controlled COVID-19 and there is a steep decline in the number of cases it is now considered important for the state to prepare for a possible second wave of COVID-19. Consequently, TAC considered it important to provide an advisory to the government for effective management of second wave of COVID-19 in the state.

In the above context, TAC deliberated on this subject and on the following lines:

- Epidemiological criteria
- Laboratories/testing
- Hospital/clinical facilities including CCCs, home isolation/home care, etc.
- Public health response
- Participation of private, corporate, NGOs, charity institutions, etc.
- COVID-19 vaccine
- IEC
- Other considerations

3. Epidemiological criteria

3.1. What is second wave?

The second wave of a virus typically refers to a resurgence of a viral infection, in an area where the transmission decreased to below the outbreak potential but now is continually increasing over a certain period. Besides, it is occurrence of cases in similar proportions or more than the first wave. There needs to be a period, (ordinarily longest incubation period) of low transmissibility between the first and second wave.

3.2. How to recognize early and imminent second wave?

- So, for easy calculation, 7 days Average Growth Rate shall be used as an indicator.
- Occurrence of cases clearly in excess of normal expectancy i.e. Test Positivity Rate doubled in a week subject to no changes in testing pattern + hospitalizations doubled in the corresponding seven consecutive days

Prerequisite conditions

- First wave should have been contained, i.e. R_0 below 1.5
- Low rate of infection has been sustained for at least 1 month
- It is increasing steadily over last 2-3 weeks
- Second wave is termed when the cases are increasing steadily after crossing the basic reproduction rate $R_0 > 1.5$

TAC is willing to provide initial guidance and technical support in this regard .

3.3. When is it anticipated?

- Usually three to four months after the first spike/wave i.e. January- February 2021. This is due to winter, unlock in progress, weak enforcements, population movements, etc.
- An epidemic intelligence team shall be supporting the state war room for early recognition of second wave and alerting the Additional Chief Secretary-HFW & Commissioner-HFWS

4. Laboratories/testing

- Minimum of 1.25 lakh testing per day should continue till end of February 2021- of which 1 lakh shall be RT-PCR (1:5 pooled in lab as per state protocol)
- Continue with aggressive contact testing (1 case to 20 contacts); Compulsory testing of all SARI and ILI cases
- Fortnightly testing of all teachers, pupils, and staff in educational institutions, Anganwadi staff, and others by RT-PCR (by 1:5 pooling of samples in lab.)
- To expedite procurement of newer testing kits that are economical and easier to perform

5. Hospital/ clinical facilities including CCCs, home Isolation/home care ambulance, etc.

Designate nodal officer/s at the district level and down the line

- **Hospital**
 - To keep ready by January 1st week (or could be ramped up at a short notice of 2-3 days maximum) the clinical facilities as on October 2020 level in terms of beds, ICUs, ICU ventilators , etc. both in Govt & Private hospitals including ambulance services
 - Reinforce IPC strategies through training and monitoring to limit transmission in health care settings
- **COVID Care Centre (CCC)**
 - To run on PPP model with reputed NGOs for better facilities, services, and care
 - There shall be an inbuilt plan for quick ramp up of CCC beds to meet the surge demand. There shall be one readied CCC at every district/ taluka level
- **Home isolation**
 - Better triaging and timely shifting to hospitals
 - To run on PPP model with reputed NGOs

6. Public health response

The TAC makes these recommendations for the state to largely reduce the disease burden and prevent mortality.

- Enforce mask wearing – More marshals/police to fine mask violators in busy areas like markets, bus stops, commercial areas, in buses, at traffic junctions, etc. Consider

introducing tough actions like simple imprisonment of a few hours for mask violators as done in Madhya Pradesh

- After carefully assessing the COVID-19 situation in the last week of December, graded opening of schools from January may be considered, i.e. classes 12 & 10 to commence initially from January and classes 11 and 9 to follow later on

Note – The month of December shall be used for revising curriculum, planning examinations and preparing class rooms for COVID-19 compliance; providing hot water, procuring masks, disinfectants, sanitizers, etc., hostels – rooms, bath & toilets ; food mess, etc.

In the meantime, the effect of opening of colleges from Nov. 17 will be known, for planning further in this regard.

- Restriction of mass gatherings like fairs and festivals, religious congregations, cultural events, etc.
- Strictly restrict super spreader events during December & January (winter months) – like holding events only in open areas like Marriages, etc. – up to 100; political and public events – up to 200 ; death ceremonies – 50 ; funerals -20.
- To ban New Year public celebrations from Dec. 26 to Jan. 1 like in resorts, hotels, on roads(MG road, Brigade road in Bengaluru, etc. and impose night curfew (8 pm to 5 am) during this period.

Surveillance:

- Strengthen contact tracing, community based active surveillance, ILI & SARI Surveillance, Surveillance in prisons, long-term care facilities, educational institutions, offices, etc.
- Re-orientation of surveillance staff to contact tracing
- Conduct cluster investigations in high risk settings like urban slum, marriages, closed spaces, etc.

7. Participation of private, corporate, NGOs, charity institutions, etc.

- A meeting of reputed NGOs and Philanthropists shall be convened soon to explore the ways and means for their further participation in the Covid -19 control
- Should be engaged in mission mode to support the government efforts

8. COVID-19 vaccine

- To address euphoria of the people and suitably educate the masses

- To expedite preparedness for COVID-19 vaccine introduction both in public and private sectors

9. IEC

- Popular private TV channels shall be used with sponsorships to organize expert opinion shows, panel discussions, etc.
- To rope in popular cine and sports personalities to promote mask wearing and use of sanitizer, hand washing, etc.
- Use of social media for IEC messages both in Kannada and English
- The laxity in the public regarding COVID-19 appropriate behaviour needs to be focused through celebrities and short, interesting video messages.
- Engage the public through fact-based information regarding COVID-19 scenario in the state and ensure people participation

10. Other considerations

- Further unlocks like swimming pools, sports, etc. to be delayed till February 2021
- Identify and implement best practices of COVID-19 containment from other states
- If and when the second wave comes, we should have all departments of government involved as was done previously and approach to help the health systems in surveillance, contact tracing, patient's admission, earmarking of beds in private hospitals, mask and physical distance enforcement, etc.

Reference:

1. WHO- Considerations for implementing and adjusting public health and social measures in the context of COVID-19, Interim guidance, 4 November 2020.