District Action Plan
Thiruvananthapuram

District Disaster Management Authority, Thiruvananthapuram
# COVID 19 Pandemic: Action Plan for Thiruvananthapuram District

(#fightcovidtvm)

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Executive Summary

Background:

The critical status as state capital along with unique features like densely populated city limits, long coastal belt and sharing of border with neighboring state of Tamil Nadu has made Thiruvananthapuram district more vulnerable to a pandemic like COVID-19. Increasing trend of cases, established community transmission with large clusters in coastal belt, new clusters developing in many rural areas, outbreaks in institutions and work places and hospital based outbreaks indicates that Thiruvananthapuram district has reached the phase of epidemic where there can be a rapid rise of cases. At this rate of increase, a projection based on SEIR modeling, based on pattern till Aug 20, 2020, projections can be made that a peak may be possible by the next three weeks. But our interventions can change the course of the epidemic as it happened in the initial part of the epidemic. Onam, the colourful festival is something Thiruvananthapuram looks forward to; but this year, the crowding and social mobility related to shopping, commercial activities, family as well as social gatherings can make the peak sharper and higher if appropriate interventions are not made. At this juncture the District administration of Thiruvananthapuram under the guidance of Dr Rajan N. Khobragade IAS Principal Secretary, Health and Family Welfare Department is rolling out a comprehensive action plan with targeted interventions for preventing further spread of infection and flattening the epidemic curve.

Aim of action plan:

To effectively manage the COVID-19 pandemic in Thiruvananthapuram district by people’s participation and to flatten the epidemic curve so that the health system is not overwhelmed, patients receive appropriate care and mortality can be prevented; ensuring that social and economic activities can move forward at the same time.

Objectives:

1. Prevent spread of COVID-19 and limit daily active cases within the surge capacity of the district.
2. Prevent Community transmission in unaffected areas.
3. Reduce morbidity and mortality due to COVID-19.

Strategies:

1. Zone specific Interventions
2. Community Participation in COVID control through restructuring of ward level Jagratha Samitis and Residents associations, coordinated by LSG members with technical support from Health, Police, revenue and Social justice Department. Forming a ward level COVID control team and building a pool of Community Volunteers with Political leaders, Government officials, Professionals, teachers, health workers, Policemen, Kudumbasree members, Anganwadi workers, ASHA, members of social and political organisations and other willing citizens.
• Thrice weekly Telephonic monitoring by Volunteers in their beneficiary households for early identification of symptoms and risk status, ensuring reverse quarantine for vulnerable and providing medical and social assistance.

• Awareness generation for self-assessment and reporting of symptoms

• IEC activities at ward level

• Planning and implementing interventions at ward level to maintain Social distancing and to avoid gatherings at Market places, shops, religious , social and family functions.

• Monitoring of high-risk persons and those with symptoms using Finger Pulse Oximeter. Procuring and maintaining stock of Finger pulse oximeters for use and reuse by those in need.

3. Information Education Communication (IEC) Campaign

• COVID Protocol pledge
• # Fightcovidtvmp campaign through Social media
• ‘CoVEED ONAM’: Onam special IEC campaign
• IEC through Youth Organisations
• IEC through through Mass Media
• IEC through Ward level Samitis
• IEC through Shops and establishments
• IEC through Government and Private Institutions
• Targeted IEC for protection of Vulnerable, Antenatal and Self assessment of symptoms

4. Effective enforcement of COVID Protocol

5. Medical Management

• Increasing Surveillance and testing
• CFLTC and Home-based management for Category A Patients
• Level 2 CFLTCs and Govt Hospitals for Category B patients.
• Medium level private hospitals to be roped in from all zones for management of Category B patients
• Selected Private hospitals made part of the Government facility for direct referral of category B patients by Government doctors.
• Medical college and Major Private hospitals for Category C patients
• Real time Bed -ICU management for smooth referrals between different level of hospitals in both public and Private sector through District Programme Management and support unit (DPMSU)
• Call center for co ordinating admission and transportation of patients as well as answering queries.
• Teleconsultation services

6. Mortality Prevention

• Targeted IEC for protection of Vulnerable
Reverse quarantine measures implemented through Ward level COVID Control team.

Targeted IEC for self-assessment of symptoms

Monitoring of high risk and symptomatic persons with Finger Pulse Oximeters procured and stocked by ward level COVID Control team

Health desks with finger pulse oximeters in public places.

Efficient Medical Management

**Stakeholders:** This action plan will be owned by the people and implemented by Local Self Government through community participation. All Government departments will give technical support to all activities. Private institutions, Shops and establishments, Residents associations, Kudumbasree units, Other Self Help Groups, Youth, Social, religious and political Organisations, other NGOs and other Community Volunteers are the main stakeholders of this Campaign.

**Conclusion:**

The Thiruvanathapuram action plan has been prepared after deliberations with all stakeholders in the district and it captures the essential elements to flatten the covid curve. The consultative process has brought the people to the centre of attention and other aspects which will work around the people to contain the spread of covid. The efficient implementation of this plan will assist the district to work on the strengths that has been built so far and realise the objectives set forth.
Chapter 1: Background and Objectives

The first case of COVID 19 in Thiruvananthapuram district was reported on 11th March, 2020. In the early phase of the epidemic, cases detected were mostly imported and the district could successfully control local transmission by proactive interventions like strong IEC campaign, heightened entry screening at airports, registering of all persons returning from affected countries and ensuring home quarantine for them with the involvement of its strong network of Primary health centres and support of LSGs. There was ramping up of surveillance and control activities and Surge capacity building during the lock down phase.

By the first week of July the district has entered the inevitable second phase with detection of clusters in city limits and coastal belt. The district with a population nearing 34 lakhs and a high density at 1509/ sq.km has one third of its population residing in city limits. Added to this the status of being the capital of the state, sharing border with neighbouring state of Tamilnadu and having a long coastal belt with its unique features stretching for 78 kms in its entire western border makes it more vulnerable to a pandemic than any other district of Kerala.

1.1 Burden and trend

As on August 22, 2020, the district of Thiruvananthapuram has reported 11830 confirmed COVID 19 cases and 49 deaths. It tops the list of districts in daily reporting of cases, contributing 22% of total cases reported in the state till date. Testing strategy adopted by the district from July 4 with the availability of antigen testing kits has resulted in detection of cases and clusters from various high-risk pockets taking the graphs of reported cases upwards. All suspect deaths are tested systematically and hence number of reported deaths of the district is higher when compared with other districts. This points towards the robust surveillance system in place for detection and reporting of all cases and deaths. Trend analysis of cases and deaths as well as comparison with other regions is presented in Table 1 and Figures 1-6

| Table 1: COVID 19 status on 22.08.2020: Thiruvananthapuram Vs Kerala |
|-----------------|-----------------|-----------------|
| Indicator       | Thiruvananthapuram | Kerala         |
| Total confirmed cases | 11830         | 54812          |
| New Cases       | 429            | 1983           |
| Deaths          | 49             | 203            |
| Case fatality rate | 0.41%         | 0.37%          |
| Recovery rate   | 57.8% (6830)   | 65.05% (35243) |
| Active cases    | 4992           | 18673          |
| Quarantine      | 24127          | 176930         |
Fig 1: Trend of new cases and deaths

Fig 2: Trend of cumulative cases, active and recovered
Fig 3: Case Fatality Rate: Comparison with other Districts

Fig 4: Deaths Per Million Population: comparison with other Districts
Fig 5: Comparison of declared Cases Per Million population with other Districts

![Case Per Million Population Comparison](image)

Fig 6: Comparison of Doubling time with Other Districts

![Doubling Time Comparison](image)
1.2. Spatial distribution of cases:

Cases are being reported from almost all areas of the district. Large clusters of cases are distributed in the entire coastal belt of district with cases ranging from 100 to more than 1000. In urban Thiruvananthapuram and bordering panchayaths of coastal belt, clusters of size 10-100 are seen. But in rural Thiruvananthapuram cases are mostly reported singly or in clusters of size less than 10. Even in Thiruvananthapuram corporation area only 29 wards out of the total 100 have more than 10 cases at a given time which shows that the containment activities at coastal cluster has paid well. Other large clusters are seen in panchayaths bordering Tamil Nadu. Fig 7 shows spatial distribution of cases in Thiruvananthapuram district.

1.3. Local transmission

Up till now 95% of total cases reported in Thiruvananthapuram was through contact and only 5% cases are imported. Right from the initial days of epidemic, proportion of local transmission cases was higher than other districts in Kerala. Comparison is shown in figures 8 and 9. It is partly due to the testing strategy where testing at community level was given importance along with testing of travelers. In addition, the first instance of community transmission in Kerala was reported in coastal belt of Thiruvananthapuram. Currently district has 29 clusters of which 14 are large clusters with more than 100 cases. The coastal belt has most of the large clusters. Central jail is an institutional cluster with 485 cases. Most of the times the source of infection for the small rural clusters were people travelling to high burdened parts of district for work. Formation of new clusters in unaffected areas was triggered mostly by family functions like funerals and spread in work places. Hospitals and police stations reported clustering of cases. The pattern of transmission observed in both these places is that an infected person transmits the infection to fellow workers. During their interaction with public, precautions are usually taken but while interacting with fellow staff relaxation in caution results in spread of infection. This happens especially when having food together when none will be using a mask. Clusters have been reported among migrant workers at construction site, factories and shops.
**Fig 7:** Spatial distribution of COVID 19 cases

**Fig 8:** Comparison of Imported Vs Local transmission cases
1.4. Testing

On an average more than 4000 tests are done daily in the district with 39 (18 Govt and 21 private) antigen testing centers and 5 labs (2 govt and 3 private) doing RT PCR. Antigen testing was started in the district from July 4. Increased number of test with antigen kits facilitated early detection of cases and identification of new clusters. The clusters in coastal belt was thus picked up and more testing in that area resulted in reporting of large number of confirmed cases. More than 60% of the cases thus picked up were asymptomatic and only about 15% of patients showed symptoms which need hospitalization. It was just because of the proactive testing strategy adopted that we could pick up asymptomatic and mild cases which could have gone unnoticed and would have spread disease to many more. Rapid testing among vulnerable helped in giving early management thus reducing complications and death. The subsequent containment measures implemented in the coastal belt helped us successfully curb the spill over into other parts of the district. Testing strategy adopted is as per state guidelines. Focus is given to trace out all contacts in case of a new cluster and in existing large clusters priority is given to testing vulnerable. Testing among ILI/ respiratory symptomatic is now increased. Table 2 and 3 shows testing statistics.
Table 2: Test Positivity for last 14 Days (as on 22.08.2020)

<table>
<thead>
<tr>
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<th>Last 14 days</th>
<th></th>
<th>Last 7 days</th>
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<tr>
<td></td>
<td>Tests</td>
<td>Positives</td>
<td>Percentage</td>
<td>Tests</td>
</tr>
<tr>
<td>Antigen</td>
<td>34819</td>
<td>3785</td>
<td>10.87%</td>
<td>18396</td>
</tr>
<tr>
<td>RT PCR</td>
<td>9106</td>
<td>1567</td>
<td>17.20%</td>
<td>4434</td>
</tr>
<tr>
<td><strong>Total Tests</strong></td>
<td><strong>43925</strong></td>
<td><strong>5352</strong></td>
<td><strong>12.18%</strong></td>
<td><strong>22830</strong></td>
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Table 3: Week wise trend of Test Positivity

<table>
<thead>
<tr>
<th>Week</th>
<th>Number of tests</th>
<th>Positives</th>
<th>Positivity</th>
</tr>
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<tbody>
<tr>
<td>July 3rd week</td>
<td>15920</td>
<td>1546</td>
<td>9.71%</td>
</tr>
<tr>
<td>July 4th week</td>
<td>14854</td>
<td>2028</td>
<td>13.65%</td>
</tr>
<tr>
<td>Aug 1st week</td>
<td>19913</td>
<td>2277</td>
<td>11.43%</td>
</tr>
<tr>
<td>Aug 2nd week</td>
<td>20225</td>
<td>2472</td>
<td>12.22%</td>
</tr>
<tr>
<td>August 3rd week</td>
<td>22830</td>
<td>2895</td>
<td>12.68%</td>
</tr>
</tbody>
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The average test positivity rate for last 7 days is 12.68% (2895 positives/ 22830 tests). Excluding cluster at central prison, TPR is 10% (1972/19597). The test positivity rate for total tests done till date is 9.52% (13451 positives/141365 tests). Positivity rate with RT PCR is high (17.2%) because as per guidelines, RT PCR is done mostly among symptomatic. This category includes patients with ILI or SARI too. This high positivity rate indicates increasing prevalence of COVID 19 among respiratory symptomatic.

Comparison of test positivity rate (TPR)

Test positivity rate (9.5%) for Thiruvananthapuram district is higher than the state average of 3.8%. Target is to keep it below 5%. Comparison is shown in figures 10 to 13. While interpreting the positivity rates it should be kept in mind that the rates are not representative of infection level in general population as majority of testing is being carried out in high risk groups as part of our testing strategy to trace out contacts and vulnerable.

There are specific reasons for the district to have high TPR despite the higher number of tests done in comparison with other districts. Most of the testing was done in the coastal belt where majority clusters had a positivity rate around 20%. Even in non coastal areas
testing was done strategically among contacts and high risk groups which resulted in a greater yield pulling the TPR to the right extreme. Area specific TPR rate is shown in Table 4. Definitely, this high TPR points towards need for increasing testing keeping pace with the rapid rise of cases.

**Fig 10: Tests Per Million Vs Case Per Million**

![Tests Per Million Vs Case Per Million](image)

**Fig 11: Comparison of Tests Per Million**
Fig 12: Comparison of weekly Positivity
Fig 13: Comparison of Cumulative TPR

Fig 14: Comparison of Doubling time
1.5. Treatment of COVID cases

District has put in place manpower and infrastructure required to win this war with minimum loss of lives. Three hospitals are converted into COVID Hospitals with General Hospital completely catering to COVID19 patients only. As of now 26 CFLTCs are up and running which house the Category A patients and are always under the supervision of a doctor. Basic health care is made available in all CFLTCs. Ambulance facility have been ensured in each CFLTC to refer the patient promptly if condition worsens.
Four CFLTCs are upgraded into Level 2, two in Govt sector and two private sector. General Hospital will be catering only to patients with Category B symptoms. Medical college will treat the category C patients only. Thiruvananthapuram district was the first district to earmark dedicated hospitals for COVID positive antenatal cases. Category A Antenatal patients in first two trimesters are admitted in ESI Hospital, Peroorkada and Ayurveda Maternity Hospital, Poojappura is now converted into a facility for 3rd trimester category A antenatal only and round the clock services of Gynecologists has been ensured. All category B and C COVID antenatal cases and other complicated cases are catered by SAT hospital. Services of private hospitals have been roped in to support Government hospitals in management of Category B and C patients. For management of Category B patients 1000 beds will be ready by August 31. Four private hospitals have been taken up as an extension of Government facility to which Government doctors can directly refer patients. Medical College hospital is fully equipped to handle category C Patients for real time Bed-ICU management DPMSU is established.

Activities at a glance:
Testing facility
1.6. District Specific Projections by KSDMA- Thiruvananthapuram

*(Based on data available on 20th August 2020, start of epidemic is assumed to be on 4th May 2020 with a single active case and 10 in incubation period)*

Method used is Projecting the active cases, as it could be considered something similar to the ‘I’ compartment of a SEIR model and trying to fit a SEIR model curve on the top of the cases reported in GoK dashboard. It is to be noted that the prediction is not of the real active case load, but the active case load that would be captured by the system and reported in GoK dashboard.

**Figure: 1 Active cases in Trivandrum District**

It has got 4 phases till now

1. Lag phase till first week of July

2. First log phase from first week of July to last week of July (May be largely contributed by community clusters of coastal area)

3. Flattened curve from last week of July to 10th August

4. Second log phase from 10th August onwards (May be because the cases from other parts of district also)

Till third week of July the curve behaved like a SEIR model curve with Ro of 2.3.
In that case, the peak would have been occurred by last week of August with 12750 active cases at a single time and 1400 cases reported on a single day like that shown in figure 3.

However the district was able to flatten the initial curve, but now there is a surge again. The second log phase is similar to an epidemic curve (SEIR) with $\text{Ro}=1.97$. 
In that case, the epidemic will peak on 3rd September in terms number of new cases (N=921) and on 10th September in terms of total active cases (N=8299).

*Projections are based on pattern till Aug 20, 2020. Curve can fluctuate based on interventions.

(Projections prepared by Dr Anish T S, Associate professor in Community Medicine, GMCT)
Increasing trend of cases, established community transmission with large clusters in coastal belt, new clusters developing in many rural areas, outbreaks in institutions and work places and hospital based outbreaks indicates that Thiruvananthapuram district has reached the phase of epidemic where there can be a rapid rise of cases with peaking occurring probably within next three weeks. Added to this, upcoming Onam festival this month end with its increased shopping and commercial activities and family as well as social gatherings can make the peak sharper and higher if appropriate interventions are not made.

In this juncture district administration with the support of State Health Department and NHM, State Mission is rolling out a comprehensive action plan having targeted interventions for preventing further spread of infection and flattening the epidemic curve. The aim is to keep the daily active cases within the Surge hospital capacity of our district. So that everyone gets proper treatment and thus prevent mortality.

1.7. Aims and Objectives

Aim of action plan

To effectively manage the COVID 19 pandemic in Thiruvananthapuram district by people’s participation and to flatten the epidemic curve so that the health system is not overwhelmed, patients receive appropriate care and mortality can be prevented; ensuring that social and economic activities can move forward at the same time.

Objectives:

1. Prevent spread of COVID 19 and limit daily active cases within the surge capacity of the district.

2. Prevent Community transmission in unaffected areas.

3. Reduce morbidity and mortality due to COVID 19.
Chapter 2: Zone Specific Strategies

Thiruvananthapuram district may be divided into five zones (Figure 7) for ease of implementation of COVID control interventions.

1. Coastal Zone
2. Corporation Zone
3. Rural Zone
4. Zone with Interstate border (South Thiruvananthapuram)
5. Tribal Zone

Figure 7: Zones for Implementation of Action Plan
2.1 General strategies applicable to all Zones

2.1.1 Strategies for Prevention of spread and flattening the curve

All preventive interventions should be implemented with complete community participation. A people led campaign designed and implemented by people themselves will be conceptualized based on the feedback obtained during the webinar. This would involve the people, appeal to them and there will be greater level of adherence to the advisories and directions of the District administration.

2.1.1.1 Information Education Communication (IEC) Campaign

- Information, Education and Communication will be the backbone of preventive strategy as behavioural change is a potent weapon which will help us flatten the curve. Proper use of face masks, sanitisers and maintaining social distance are the three key behaviour traits which will be reinforced through this campaign. Targeted communication concentrating on effective methods of COVID prevention by providing awareness pertaining to the DOs and DONTs, responsible citizen actions, How to stop superspreader events from occurring, dynamics of transmission etc will be undertaken.
- COVID Protocol Pledge: Public will be asked to take up a pledge that they will abide COVID protocol. A google form will be shared through Facebook and other social media handles of District Collector. An E-Certificate of Commitment will be automatically issued and sent via email to the ones taking Pledge. The email will also ask them to post the certificate in their own social media handle with the hash tag #fightcovidtvm
- #Fightcovidtvm: Hash tag campaign will be rolled out for active participation and for individual appeal so that the tag line will be a common thread connecting people of all age groups across the district. This will be a social media campaign to highlight good practices showing adherence to COVID protocol. People are requested to post their selfie photo following Covid protocol in a public place - a store/market etc under the hash tag #fightcovidtvm. This will be promoted mainly through Youth.
- CoVEED ONAM: Special campaign for Onam.
- Innovative Campaigns will also be designed (eg: How to live with COVID) which will rejuvenate the thinking in people about their responsibilities and they become more responsible in the fight against covid.
- A pledge for fight against covid will be undertaken by one and all where in celebrities will also be roped in for better reach and appeal This will also be made online for better people participation.
- All line departments will be directed to execute the COVID related activities in their respective offices.
- Targeted IEC for protection of Vulnerable, Antenatal and self assessment of symptoms

2.1.1.2 Enforcement of Social Distancing
• Community engagement is the strength of Kerala’s approach in tackling every crisis and here also Self adherence to COVID protocol should be promoted.
• Gatherings will be avoided by targeted interventions at market places and restricting all family and social functions with the help of Ward level COVID Control teams.
• Market places, shops and public transport systems should have mechanisms in place to ensure social distancing.
• Special protocols will be in place for maintaining social distancing in shops and public places in view of Onam celebrations.
• Police enforcing restrictions should target their activities focusing on probable super spreaders and super spreading events and places.

2.1.1.3 Community participation through Ward level Jagratha Samitis

• Ward level Jagratha Samitis will be strengthened and streamlined so that all COVID control activities in a ward can be coordinated better.
• Area specific strategies will be adopted for restructuring and delivering services through Jagratha Samitis. Eg: for urban areas Residents association will be roped in for effective implementation, Kudumbasree units can take the lead in some places. In typical rural wards all categories of community volunteers will join hands.
• COVID Control activities will be implemented at community level with wards as implementation unit. Respective LSG will be responsible for implementation with ward members co-ordinating all activities at ward level.

Daily telephonic symptom monitoring by Ward level COVID control team (Model piloted jointly by NanniyodeGrama panchayath, CHC Palode and Police Station, Palode)

• COVID control team will be formed in all wards under the leadership of ward member with volunteers including Residents association members, Kudumbasree members. Anganwadi workers, ASHA, teachers, Government officers etc. Police, Health and social Justice department will give technical support for implementation
• All the houses in the ward will be listed and 10 houses will be allocated to each volunteer. For a ward with around 500 houses, 50 volunteers are needed.
• Volunteer will be a person who is motivated, educated, having a telephone and is acceptable to the families allocated. If the contact number of the household is that of a female, a female volunteer will be assigned and vice versa.
• Monitoring will be done through telephonic conversation. In the initial call baseline assessment of medical and social needs of family including listing of vulnerables will be done. Calls will be made on alternate days so that volunteer need to call only 5 houses a day. Purpose of telephonic call is to ask for any symptoms or needs.
• The purpose of this community based monitoring mechanism is early identification of symptoms and ensuring reverse quarantine for vulnerables. In addition psychological support and social assistance can be routed for deserving members
• Doctors posted in the respective PHC/CHC will be given charge of specific wards. Volunteers can contact JPHN/JHI or doctor in case of reporting of symptoms for follow up action.

2.1.2 Strategies for Prevention of Mortality/morbidity
• Reverse quarantine for elderly, vulnerable persons and those with comorbidity will be strengthened.
• The Grand care programme will be effectively implemented in all wards of the district.
• Hospital preparedness both public and privateshall be ensured for medical management of cases along with an affective ambulance network.
• The patient management will be streamlined so that efficient patient care can be provided at the CFLTCs and Covid hospitals.
• Early identification of cases and their management by increased testing especially among vulnerable.
• Finger Pulse Oximeters: Health desks and home-based monitoring by ward level COVID Control team
  Health Desks: Establishing health desks with pulse oximetry facility in Public places like markets, shopping complex, bus stops etc. An open place should be chosen for setting up the desk It should be manned by a trained non-medical volunteer. Training will be given by MO/JPHN/JHI of the area. This facility can be used by high risk individuals for checking their Oxygen saturation. Persons with symptoms of increasing cough, breathlessness and increased fatiguability should get their oxygen saturation checked availing this facility. Those with a reading less than 95% will be referred to the nearest treatment facility for COVID 19 testing and management.
  Home based monitoring: Monitoring of high-risk persons or those with symptoms can be done by the ward level monitoring team/resident associations using finger Pulse oximeters. The JPHN/JHI of the area will give an initial training to volunteers regarding use of pulse oximeters. If oxygen saturation is found to be less than 95% the person should be referred to nearest facility for COVID testing and management. It can be procured and stocked by Ward level COVID Control team for appropriate use and reuse. This can also be used for Category A patients on Home care. For them the cut off value of Oxygen saturation is less than 94% for referral.
• Identifying and follow up with the elderly, those who are co-morbid and with NCD ailments by ensuring regular supply of medicines to them by door delivery
• Self-assessment by the people will be emphasized upon so that everyone is aware of the symptoms of COVID 19

2.2. Zone specific strategies

1. Coastal Zone
The coastal belt in Thiruvananthapuram district stretches through its entire west border for 78 kms. We already have large clusters with community transmission in almost the entire stretch. Test positivity rate in this area reaches 20%. Many of the initial clusters has started showing a marginal decline whereas as many other clusters are in its peak. At this phase of epidemic in the region focus is on death prevention and early isolation of vulnerable population and those with co morbidities.

**Strategies:**

- Increased testing and early isolation and treatment of cases continues to be priority
- Testing and treatment facilities including CFLTC will be arranged to the extent possible within the area
- Testing should specifically focus on Vulnerable groups so as to identify them early and give proper management to prevent mortality.
- Reverse quarantine of Vulnerable persons at home will be ensured and those without the adequate facilities will be moved to the CFLTCs or CH based on need.
- Ward level Jagratha committee will identify volunteers who can be entrusted with beneficiary homes with vulnerables for telephonic monitoring. They will assess both medical and social needs and give appropriate assistance to deserving households.
- Health volunteers shall do house to house ILI symptom survey and referral to nearby testing facility.
- Health desks with Pulse oximetry facility can be established at Junctions, churches, mosques and market places with non medical volunteers.
- Screening of all elderly(>65yrs) shall be undertaken at homes or at nearby temporary clinics–
- Community volunteers will be mobilized to assist the district administration.
- IEC campaigns will be led by local political leaders as well as religious leaders co ordinated by LSGD members.
- Facilitating livelihood activities including fishing ensuring social distancing and other COVID protocols.

2. Corporation zone
Trivandrum corporation area is beset with several bottlenecks that pose a great challenge to control of COVID 19 infection. The upcoming Onam festival shall serve to aggravate the situation if not handled properly.

The lifting of lockdown has alleviated the fear in minds of people and induced a false sense of security that may prompt them to move out of homes for reasons not necessarily essential. Vulnerable persons who should be strictly under reverse quarantine shall be easily susceptible in the circumstances and enforcement of RQ is a true challenge in this festive season.

The challenges specific for city area are:

- Health workforce disproportionate to the population at hand.
- As Trivandrum is the capital, majority of the strategically important institutions and head offices are located in the city.
- People flock from other districts and states for several official and career related purposes.
- High population density and highly mobile population.
- A construction hub. Workforce and raw material for the same comes from other districts and states.
- Coastal and border areas with heavy case load.
- Market areas are more alive than in rural settings
- Hospitals that cater to needs of people even from outside the state.
- Operational relief camps and unpredictable rains.
- Possible increase in social interaction of people with families and others in homes and marketplaces.
- Overt presence of correctional institutions/ destitute homes/ prisons and enterprises in the city limits.

Strategies:

- Local health volunteers will be mobilized for screening and health education.
- Ward level COVID control teams to be constituted with help of Residents association, health volunteers and Police
- COVID control team to establish telephonic monitoring of beneficiary households for medical and social needs especially for vulnerable persons
- Marketplaces, busy areas will be screened on priority
• Regular screening of people with high social exposure.

• Routine sustained IEC.

• Enforcement of Break the chain rules and social distancing.

• LSGD representatives - should ensure that not more than 10 immediate family members gather for any function (funeral, house warming, marriage etc.). Preferably gatherings should be denounced.

• All supermarkets, Government offices and institutions in the corporation area should strictly abide by the social distancing norms and break the chain rules.

• Identify temporary health clinics in busy areas to screen people with mild COVID like symptoms so that the rush to COVID hospitals may be reduced.

• All ARI/ILI or COVID like symptomatic patients attending OPD/casualty even in non COVID settings should be subject to strict triaging and testing.

• Special monitoring activities to be planned as cases are rising in urban areas. Screening will be done for identifying symptomatic and high risk persons as well as for ensuring adherence to COVID Protocol.

Action Plan for Monitoring activities (Symptom and high risk screening and COVID Protocol adherence)

<table>
<thead>
<tr>
<th>Area</th>
<th>Frequency of screening once in a</th>
<th>Activities</th>
<th>Responsible agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential areas</td>
<td>Week</td>
<td>ILI/Vulnerable screen</td>
<td>UPHC/RA/LSGD with the help of Volunteers of COVID control team</td>
</tr>
<tr>
<td>Wet markets Fish/meat/flower</td>
<td>Twice weekly</td>
<td>SMS/IEC</td>
<td>Police/LSGD</td>
</tr>
<tr>
<td>Dry markets</td>
<td>Week</td>
<td>SMS/IEC</td>
<td>Police/LSGD</td>
</tr>
<tr>
<td>Hospitals[pvt] &amp; clinics</td>
<td>Daily</td>
<td>SMS/ILI</td>
<td>Management</td>
</tr>
<tr>
<td>MCHKIMS &amp; other major hospital areas</td>
<td>Twice weekly</td>
<td>SMS/ILI</td>
<td>RA/LSGD/UPHC</td>
</tr>
<tr>
<td>Construction sites</td>
<td>Fortnight</td>
<td>SMS/IEC</td>
<td>Corporation HO</td>
</tr>
<tr>
<td>Prisons</td>
<td>Fortnight</td>
<td>SMS/IEC</td>
<td>Police</td>
</tr>
<tr>
<td>Category</td>
<td>Frequency</td>
<td>Communication</td>
<td>Responsible Officer</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>-----------</td>
<td>---------------</td>
<td>---------------------------------------</td>
</tr>
<tr>
<td>Corporation sanitation workers</td>
<td>Fortnight</td>
<td>SMS</td>
<td>HO/LSGD</td>
</tr>
<tr>
<td>Food delivery agents</td>
<td>Fortnight</td>
<td>SMS</td>
<td>Supply Officer</td>
</tr>
<tr>
<td>KSEB/LIC/KWA/KMSCL</td>
<td>Month</td>
<td>SMS</td>
<td>Inst Head</td>
</tr>
<tr>
<td>Pangode/SAC/VSSC/CRPF/Police HQ</td>
<td>Month</td>
<td>SMS</td>
<td>Org Head</td>
</tr>
<tr>
<td>Technopark and Infosys</td>
<td>Month</td>
<td>SMS</td>
<td>Management</td>
</tr>
<tr>
<td>Airport/railway/Bus stations</td>
<td>Fort night</td>
<td>SMS/IEC</td>
<td>APHO/Stat master/UPHC</td>
</tr>
<tr>
<td>Secretariat/Leg Assembly/Collectorate/Public office/Treasury/AGs Office</td>
<td>Month</td>
<td>SMS</td>
<td>LSGD/Police/corp health officer/UPHC</td>
</tr>
<tr>
<td>Panchayat offices[grama and block]</td>
<td>Month</td>
<td>SMS/IEC</td>
<td>PHC/LSGD</td>
</tr>
<tr>
<td>Municipalities/Corporation</td>
<td>Month</td>
<td>SMS</td>
<td>Corp HO</td>
</tr>
<tr>
<td>DHS/DMO</td>
<td>Month</td>
<td>SMS</td>
<td>DSO</td>
</tr>
<tr>
<td>Banks</td>
<td>Fortnight</td>
<td>SMS/IEC</td>
<td>Bank manager/Police/PHC</td>
</tr>
<tr>
<td>Supermarkets/Malls</td>
<td>Week</td>
<td>SMS/IEC</td>
<td>Police/LSGD/PHC</td>
</tr>
<tr>
<td>Barber shops/beauty parlour/Gyms</td>
<td>Week</td>
<td>SMS/IEC</td>
<td>Police/LSGD/PHC</td>
</tr>
</tbody>
</table>

3. **Rural zone**

This includes all panchayaths of Thiruvananthapuram district which are not included in the other four zones. Focus should be given to identify new cases early so that cluster formation can be aborted at the earliest. Containment activities in existing clusters to be strengthened. There is a complacency regarding practice of preventive measures among rural population due to comparatively less number of cases. Awareness has to be generated regarding the explosive phase of epidemic and need for stepping up caution. The strength of rural panchayaths is a strong community network of volunteers belonging to different organisations and the reach of LSG to the grass root levels.

**Strategies:**

1. Ward level Jagratha samitis to be strengthened
2. COVID control team should be formed and telephonic monitoring by volunteers established.

3. Increased testing to identify new cases among high risk groups

4. Extensive contact tracing and isolation at PHC level.

5. ILI surveillance


7. Reverse quarantine to be followed.

8. Routine surveillance has to be strengthened.

9. Avoid all gatherings especially family functions.

10. Social distancing and masks to be enforced by targeted interventions.

4. **Border Zone (Thiruvananthapuram south):**

Bordering panchayats include Vellarada, Kunnathukaal, Parassala, Karode, Kulathoor, Poovar and Pozhiyoor.

Parassala continues to be a hotspot for multiple reasons such as:

- Shop vendors residing or having shops in the neighbouring districts of Tamil Nadu travel constantly as part of their occupation and are mostly asymptomatic carriers transmitting infection to the interiors of the district.
- Patients from Tamil Nadu flock into Parassala to avail the quality services provided by TaluK hospital Parassala.
- Porous border with several by routes without police checking to enter the district.
- The presence of National Highway and Inchivila check post serves as a transit point for heavy motor vehicles carrying goods, fish and other commodities across borders.

**Strategies:**

- All strategies planned for rural areas to be implemented in this zone. In addition following strategies need special attention.
- Strong IEC campaign to be planned by LSG with help of Volunteers and local leaders. Social distancing and Break the chain to be strictly enforced in public places.
- Merchants and small scale vendors from Tamil Nadu coming for wholesale marketing of vegetables and other commodities should travel with minimum crew and follow strictly the COVID protocol. There stay and movement within the district has to be strictly regulated and monitored.
- Routine ILI symptom surveillance at PHC/health facility level [includes screening]
• Self assessment for symptoms and testing should be encouraged. Private Laboratories and clinics can be roped in for increasing antigen testing.

• Services of medium level private hospitals can be roped in for management of Category B patients

• Sentinel surveillance

• Strengthen field teams and build teams of local health volunteers

• Tele consultation to be actively promoted.

5. **Tribal Zone**

• The tribal areas include Kuttichal, Peringamala and eastern portion of Vithura.

• The Kaanikaar tribe inhabit most of the tribal areas from Amboori to Vithura.

• The population in the area belong to the vulnerable category and hence need sustainable medical attention. The immunity status of Tribals vary from that of normal population. They have better immunity to certain diseases but are prone to certain illnesses too. It has to be studied by comparing COVID 19 prevalence in Tribal areas in other districts and states too.

• Currently testing rate among tribal population will be further augmented. It will be increased to the rate of once per week. The testing facility for the same will be identified in adjoining PHCs.

  a. Amboori- PHC Amboori
  b. Peringamala- PHC Peringamala
  c. Kuttichal- PHC Kuttichal
  d. Malayadi- PHC Malayadi

• For the Tribal population living in deep areas of the forest, Tribal community halls in the vicinity may be identified for the same by the Panchayaths.

• CFLTCs should be established at their vicinity to avoid issues regarding transport, food habits & it shall reduce resistance too

• The local health facility MO will be the charge nodal person and convenor with LSGD president as mentor along with health standing committee chair as the chairman for the management of testing and treatment facilities.

• COVID control teams can be formed with the help of local leaders and Volunteers.

• Tribal/Hamlet ASHA will be in charge of home based monitoring and contact tracing

• LSGD should be in charge for food & logistic arrangement as per protocol so as to avoid local grievances & apprehension
• Nearby Taluk hospital will be identified for management of Category B patients and beds will be earmarked for the same. Its better to earmark 50 beds in nearby taluk hospital for managing cat B...

• In addition empower nearby CFLTC for managing Category B patients

• Ambulance travel not possible in hilly terrain hence vehicles like Mahindra Thar or other Jeeps with adequate separation between will be needed for patient transport. At least 2 vehicles should be arranged in an area to avoid transportation delays. The separation for the vehicle may be carried out in accordance with LSGD.

• Since disease mortality can increase, both due to the vulnerable nature of the population and difficult terrain hence the entry to the forest area at checkpoints need to be strictly monitored. If needed screening also has to be carried out to prevent disease spread in the vulnerable areas.

• Intersectoral co ordination should be implemented including various stake holders like
  a. Tribal ITDP (Integrated Tribal Development Project) under Nedumanagadu area.
  b. Police.
  c. LSGD and
  d. Health department.
Chapter 3: Stakeholders in COVID control campaign and proposed activities

Thiruvananthapuram action plan will be owned by People and implemented by respective Local Self Government through community participation and intersectoral co-ordination. All Government departments will give technical support to all activities. Private institutions, Shops and establishments, Residents associations, Kudumbasree units, Other Self Help Groups, Youth, Social, religious and political Organisations, other NGOs and other Community Volunteers are the main stakeholders of this Campaign.

Local Self Government (LSG):

LSG will coordinate all the activities of fight COVID 19 undertaken by various stakeholders in their respective areas.

General Public, Residents association, Community Volunteers:

The preventive interventions planned as a part of this campaign are owned by and implemented through active Community participation. Most of the activities will be implemented through Ward level JagrathaSamithis. As part of the campaign Ward level COVID Control team will be reconstituted or strengthened under the leadership of LSG member.

IEC activities in respective areas can be streamlined through the campaign team.

In addition, a daily COVID monitoring programmewill be implemented with wards as implementation unit by respective Local self-governments with support from Police, Revenue Health and Social justice department. Activities can be streamlined through Kudumbasree units/ Residents association/ NGOs of each ward depending on the local characteristics.Ward member of LSGD will co ordinate the activities

Respective ward members with the help of Police/Health/ADS/ Residents association will constitute a COVID monitoring unit comprising of members of Residents association /Kudumbasree members/ Anganwadi workers/ Volunteers of the ward. Activities of the unit will be coordinated via telephonic conversations or social media platforms as per convenience. Beneficiary households will be divided between the Volunteers.

Each Volunteer will make an initial assessment of their beneficiary households. Details can be collected through telephonic conversation. Visiting beneficiary houses is not mandatory.

Activities during initial assessment:Collection of baseline data to identify vulnerable persons and to assess medical and non-medical needs and Provide contact number of the Volunteer/ Call centre number to be contacted in case of any assistance or emergency.

Volunteers should make phone calls thrice weekly to their beneficiary houses for early identification of symptoms and providing assistance if any needed.
Social distancing can be ensured through monitoring by ward level team. Family and Social functions should be regulated by Community Volunteers. Marketplaces and shops in the locality can also be monitored by the team to bring in sustainable practical solutions for maintaining social distancing.

Special precautions during Onam celebrations can be maintained with the help of ward level COVID control team.

**Health Department:**

In coordination with LSG, Health dept will give leadership for surveillance and facilitate testing and treatment. Technical support for all IEC activities in their area.

**Police:**

Enforcement of restrictions and social distancing especially at shops and commercial establishment

Supporting activities of Ward level monitoring team

**Old age homes, special care homes and reverse quarantine centres:**

Establishing of Reverse quarantine centres may be done in limited numbers only and admission should be restricted strictly to Vulnerable persons who have none to take care of them. Strict preventive measures should be implemented in centres thus established as well as in homes meant for vulnerable persons especially old age homes. LSG of each area should prepare a list of such care homes and the RQ monitoring team of each area should implement and monitor preventive activities

Preventive measures to be implemented strictly in care homes are:

**AT INSTITUTIONAL LEVEL**

1. Rooms should have proper ventilation and lighting

2. Ensure adequate supply and use of Soap and clean water, alcohol based sanitisers, adequate masks for all the residents and staff, medicines for the inmates (for at least a month), separate laundry and utensils for the residents

3. Restrict entry of visitors except for unavoidable reasons.

4. Movement of staff in and out of the institution should be restricted by making arrangements for their stay within the institution to minimise risk of infection.

5. Alternatives such as video calls or telephonic conversations with family members should be made available.

6. Only one person should be granted access to the institution for the supply of daily needs. The person should use proper protective measures (masks, use of sanitisers) when at
the institution. Ensure that he/she does not interact with any of the residents of the institution.

7. Delivery of the goods should be restricted to a single entrance which should be disinfected after the delivery

8. In places of crowding in institution (e.g. TV room, newspaper rooms, dining rooms) ensure physical distancing of at least 1m among the residents.

9. Ensure hygienic practices in food preparation

10. Post posters, flyers around the facility for educating residents and employees regarding COVID 19 and its prevention, hand hygiene, social distancing, proper use of masks etc.

11. Ensure proper waste disposal methods (e.g. bin with lids for disposing masks after use)

12. Hospital grade cleaning and disinfecting agents are recommended for frequently touched surfaces (electric switches, door handles, bed rails, railings, telephones)

13. The institution should establish link with local PHC, an ambulance service and nearest COVID 19 testing centres for emergencies.

FOR INSTITUTION STAFF

1. Provide infection prevention control training to all staff.

2. Ensure proper usage of masks and hand hygiene within the institution by all staff.

3. Frequent hand washing with soap and water especially before and after nursing the elderly residents.

4. Avoid frequent travel outside the institution and if necessary, avoid public transport and interaction with others.

5. Attenders and those handling soiled linens, laundry etc. should take proper personal protective measures (masks, gloves, face shield, boots etc.)

6. Any staff with ARI/ILI symptoms should inform it and stay at home.

7. Staff should be sensitised regarding older resident’s mental health and well-being.

8. Staff should not be overburdened and their mental well-being should also be ensured.

FOR THE INMATES

1. Information sessions for residents on COVID 19, its transmission and prevention through modes of telecommunication.

2. Identifying the high-risk inmates in the institution (e.g. elderly with cardiovascular disease, cancer, other comorbidities)

3. The high-risk inmates should be separated from others and provided with separate rooms with proper ventilation and attached bathroom (if feasible)
4. A dedicated healthy care taker should be made available for any bed ridden inmate to cater to their needs.

5. Inmates should have a healthy and a balanced diet.

6. Serve resident’s individual meals in their personal rooms.

7. Engage the inmates in light physical activities to be done in their rooms.

8. Affectionate personal communication should be done with the inmates for emotional and psychological support.

9. Daily monitoring of temperature and oxygen saturation of the inmates can be done and any drastic change should be notified immediately to health authorities.

10. Check for onset of ARI/ILI symptoms among any resident. In case if any resident becomes symptomatic isolate him/her immediately in a separate room with mask and inform the health authorities for necessary actions.

11. COVID 19 testing of inmates can be organised with the help of RQ monitoring team wherever needed.

12. Call centre number of Social Justice department can be used for availing services.

**Shops and Commercial establishments:**

All Shopping Malls and Shopping Centers have to take the following actions in accordance with the Covid19 protocol

1. Maintain social distancing of at least one meter between employees and customers.

2. Provide adequate hand sanitizer at shop entrances and counters and ensure all employees and customers use sanitizers properly.

3. Employees and transacting customers sitting on payment counters should clean their hands with a sanitizer after each payment.

4. Maintain hygiene in Washrooms, Keep sufficient tissue papers and soap solutions.

5. Posters containing messages such as washing hands, using hand rubs, handkerchiefs when coughing and sneezing, etc. should be displayed at every establishment.

6. Posters showing the steps of hand washing should be displayed in the washing area.

7. Promote online money transactions.

8. The Shop/Company owners must ensure daily that their employees are asymptomatic.

9. The company owners should grant leave to their employees if she/he is suffering from symptoms.
10. Employees with any type of contact history (COVID 19) must exercise home quarantine and should inform to both nearest health Care institutions and district control room. Also the institution should be closed as per the directions from health authorities.

11. Ensuring social distancing

12. Maintenance of register of customers and visitors

13. Quarantine of high risk staff

14. Testing and isolation of symptomatics

15. Information Education Communication through posters as well as awareness generation among staff

**Drivers of Autorickshaws and Taxis:**

Ensure compartmentalisation of vehicles into double chamber

Wear mask properly while interacting with passengers and ensure hand hygiene before and after exchanging currency notes.

Keep conversation to minimum with passengers.

During leisure hours and while interacting with co drivers, use mask properly and maintain social distancing

Avoid having food and drinks together.

**Work places:**

In addition to maintaining social distancing with clients, precautions to be continued while interacting with co workers.

Avoid having food and drinks together. If needed maintain distance and don’t talk in between.

Wherever possible work from home can be allowed and can function with 2/3 rd strength

**Hospitals:**

Ensure adequate PPE stock in all health care institutions and use of recommended PPE by each HCW.

Proper triaging.

Reducing OP patient rush

By token system

Tele consultation from PHC level for mild illnesses that require only follow up care.

Reducing number of patients /doctor.

Restrict the number of bystanders for IP patients to one.

Restrict the entry of visitors to hospital premises itself especially in waiting area.
Routine and frequent screening of all health staff.

Ensure no health staff spend time together after duty hours, eg; for sharing food and same space.

Engage LSGD in providing NCD drugs, simple pain relief gels etc; at household level after checking BP and GRBS, it will reduce patient load in hospitals to a great extent.

IEC and mike announcements discouraging unnecessary hospital visits.

As soon as a Covid suspect is identified in Non Covid hospitals, he/ she should be isolated without delay.

**Religious places and leaders:**

Religious leaders can effectively use their influence on people for generating awareness and ensuring practice of COVID 19 preventive measures.

Ensuring social distancing in religious places.

**IEC BCC activities:**

Most important strategy for controlling this epidemic is generating awareness among people. The spread of disease in an area is determined by behavioural factors of the people. Change in behaviour of people is the one weapon which will help us keep the epidemic curve flattened. If number of infections in a locality is low, naturally the vulnerable persons of that area will be protected. The crucial point in success of any IEC activity is disseminating right messages which are effective. Targeted IEC activities are needed with focus on preventive measures which works.

Special strategies for IEC planned under this Action plan are

- **COVID control pledge**
- **# Fightcovidtvm campaign**
- **CoVEED ONAM Campaign**
- IEC through Youth Organisations
- IEC through through Mass Media
- IEC through Ward level Samitis
- IEC through Shops and establishments
- IEC through Government and Private Institutions
- **Thrust areas in IEC will be SMS, Self assessment of Symptoms, Protection of Vulnerable and Antenatal.**
For IEC different platforms can be used like print and audio visual media and social media platforms. IEC campaigns can be planned at different settings like school, workplaces and community. Mass media wing of District Medical Office, Information and Public relations department and IT department should jointly plan and implement IEC activities.

Rather than focusing on general messages, communication can be made more effective by delivering crucial points like exact mode and dynamics of spread, high risk events and low risk events, need and method of reverse quarantine, symptoms, red flag signs, services available etc.
Chapter 4: Streamlining activities of other departments in relation to COVID control Campaign

- Good Infection Control practices in public offices – Display IECs, Counters for sanitizers and Handwashing, avoid crowding, Maintain Social distancing
- Measures to reduce crowding like switching to app/e office based activities
- Promote Volunteering of staff in health fields
- Reduce the number of staff to be present every day to minimum
- Plan and promote activities that can be undertaken at each departmental level to fight covid. Innovative solutions implementable at departmental level may be accepted from public suggestions
- Co-Ordination with Health, Police, LSGDs must be ensured in all departments whenever necessary.
- Participation in Ward level monitoring committees may be supervised and encouraged
- Symptomatic staff must be isolated at home
- Any possible stigma to a diagnosed patient must be avoided. IEC activities may be launched for this.
- Augmenting health dept with necessary resources should be encouraged whenever possible

LSGD

- Formation and running of ward level monitoring committees actively. All stakeholders’ participation in such WMC must be ensured for smooth functioning
- Social and financial needs of Covid patients in hone isolation/persons in quarantine must be dealt with compassionately
- Measures to avoid stigma to Covid patients should be taken
- Setting up and running of CFLTCs must be streamlined
- Community level volunteers may be mobilized utilizing youth organisations
- Complaints among CFLTC inmates should be taken care of promptly
- All support to the local PHC and its work force must be ensured
- Staff whenever necessary and possible may be posted
- Good Infection control practices must be propagated inside and outside office.
- Innovative IEC campaigns may be launched
- Wherever possible think about online solutions to keep people inside home

**Police**

- Safety of the officers must be ensured. Infection control practices must be promoted.
  Personal Protective equipment supply must be assured
- Compassionate behavior to public must be ensured.
- Effective implementation of Containment zone/Lockdown restrictions
- Awareness creation among public is of utmost importance.
- Online services wherever possible may be promoted.

**Electricity**

- Maintenance of social distancing and other safety measures must be promoted in staff who come in touch with general public
- Online Bill payment may be encouraged
- Uninterrupted power supply has to be ensured in hospitals and CFLTCs

**General Education**

- Training to teachers must be given promptly so that they could be posted wherever their skills can be of use
- Online classes must be conducted for school kids. Ways to make it more interactive may be thought about.
- School children and parents must be educated about the safety measures against Covid19 through these classes.
- Scientific knowledge about the disease must be imparted to the kids

**Agriculture**

- Markets and fair price must be ensured for farmers locally itself.
- Measures to make sure that govt benefits reach the desired targets must be taken
Transport

- Interstate goods movement should be streamlined and must be monitored for any covid symptoms.
- KSRTC and Private buses should be made to follow covid protocols
- Taxis and autorikshaws should be plying with driver cabin separation
- Transport of patients to CFLTCs and Covid hospitals if needed may be done with private ambulances arranged by transport dept

Fisheries

- Awareness creation through extensive IEC campaigns in coastal villages
- Ensure covid protocols among fishermen and in fish markets
- Financial help whenever possible must be done without delay

Civil Supplies and Food

- Hoarding and black marketing of goods must be dealt with.
- Basic essentials must be reaching the target groups
- All covid protocols must be maintained in PDS shops and establishments
- Quality and quantity in Government Kits must be ensured
- Covid protocols must be ensured in restaurants, Delivery services and take away shops

IT - Telecom

- Connectivity and bandwidth must be adequate for people working from home and those who are on quarantine
- Connectivity Must be ensured in CFLTCs and hospitals

SC- ST development

- Constant monitoring must be done for early detection of symptoms in Tribal population as they will be more vulnerable
- Adequate supply of goods must be ensured
- Any possible exploitation must be taken care of
- Transport arrangements for the sick may be put in place for tribal areas
• Good Infection Control practices in public offices – Display IECs, Counters for sanitizers and Handwashing, Avoid crowding, Maintain Social distancing

• Measures to reduce crowding like switching to app/e office based activities

• Promote Volunteering of staff in health fields

• Reduce the number of staff to be present every day to minimum

• Plan and promote activities that can be undertaken at each departmental level to fight covid. Innovative solutions implementable at departmental level may be accepted from public suggestions

• Co-Ordination with Health, Police, LSGDs must be ensured in all departments whenever necessary.

• Participation in Ward level monitoring committees may be supervised and encouraged

• Symptomatic staff must be isolated at home

• Any possible stigma to a diagnosed patient must be avoided. IEC activities may be launched for this.

• Augmenting health dept with necessary resources should be encouraged whenever possible
Chapter 5: Medical management of COVID19

With increase in active cases, Improvement of Hospital preparedness, ensuring medical and equipment supplies and establishment of second level CFLTCs is needed. Roping in services of private hospitals and redeployment of skilled HCWs to critical stations need to be done. Based on epidemic situation, graded activities and services can be planned. Procurement of Pulse oximeters by all LSGs and maintain a stock of finger pulse oximeters by ward level COVID control team is an important strategy. Along with it help desks with pulse oximeter facility can be established at public places.

Strategies:

- Increasing Surveillance and testing
- CFLTC and Home based management for Category A Patients
- Level 2 CFLTCs and Govt Hospitals for Category B patients.
- Medium level private hospitals to be roped in from all zones for management of Category B patients
- Selected Private hospitals made part of the Government facility for direct referral of category B by Government doctors.
- Medical college and Major Private hospitals for Category C patients
- Real time Bed -ICU management for smooth referrals between different level of hospitals in both public and Private sector through District Programme Management and support unit (DPMSU)
- Call centre for co ordinating admission and transportation of patientas well as for answering queries.
- Teleconsultation services
- Targeted IEC for protection of Vulnerable
- Reverse quarantine measures implemented through Ward level COVID Control team.
- Targeted IEC for self assessment of symptoms
- Stock of Finger Pulse Oximeters with ward level team
- Health desks with finger pulse oximeters in public places

High risk areas

- The strategies for this area need to focus on preventing mortality.
• For preventing spread from identified high risk zones strict containment measures should be implemented all facilities including treatment facilities should be provided within the boundary.

• Testing strategy should be giving preference to vulnerable persons viz elderly, persons with comorbidities. This testing criteria is scientific as in high risk zones, more than one out of five persons (>20%) is testing positive. Hence absolute restriction of mobility to be implemented so that asymptomatic patients, even though not tested and identified will not be spreading the infection

• CFLTCs to be categorized into two levels based on facilities. Level 1 CFLTCs will manage patients with mild symptoms and Level 2 CFLTCs will manage those with moderate symptoms.

• Severe cases need to be admitted in secondary and tertiary level hospitals.

• Rope in private hospitals for management of COVID 19 cases.

• Doctors and nurses posted in less critical stations can be redeployed to critical stations.

Intermediate Risk areas

There should be fluidity in criteria for testing and admission as well as arrangements in line with evolving situation.

• In identified clusters, testing of primary contacts should be carried out and once the positivity rate exceeds 20%, the testing strategy has to be changed.

• Further testing should be carried out among vulnerable population and symptomatic people.

• The admission of patients should be carried out after proper clinical categorization into CFLTCs and COVID Hospitals.

• Asymptomatic patients can be managed at home itself.

• New CFLTCs has to be identified and established in two levels based on facilities.

• Redeployment of doctors and nurses to critical stations.

• Rope in private hospitals for management of COVID19 positive cases.

• Field level surveillance to be strengthened.

• Routine supervisory visits conducted randomly in areas with weak surveillance to monitor activities and to boost IEC.

• Every Taluk convenor should convene a meeting with medical officers under his taluk and identify potential areas for cluster formation like crowded areas, marketplaces, crowded residential areas and devise individualised strategy for prevention of spread.
• More focus on screening high risk groups like auto drivers, lottery sellers, thattu tea shops, food delivery agents like Zomato, Medical shops, street vendors to name a few.

• All ILI to be tested and reported.

**Low risk areas**

These are areas where clusters are not identified. Routine activities to be continued this area with heightened surveillance.

• Focused sentinel surveillance with Antigen testing
• COVID Jagratha portal monitoring
• Preventive screening
• Conventional contact tracing
• ILI monitoring
• Daily IDSP reporting of ILI/SARI from private practitioners, clinics and hospitals
• Daily review meeting with monitoring of epidemiologic scenario at all levels from panchayath to district.
• Rumour reporting
Chapter 6: Report of Workshop and Webinars conducted for development of Thiruvananthapuram Action plan conducted on 22/08/20

INTRODUCTION:

As part of development of Thiruvananthapuram Action Plan, the District Administration and Health Department conducted a half day online workshop involving various stakeholders on different subthemes on 22nd August 2020. Following which series of Webinars were conducted on 23rd August 2020 with representatives of Residents association, Media Persons and Youth. The purpose of the workshop and webinars were to identify stakeholders and formulate strategies for the Action plan.

Workshop on District Action plan for Control of COVID 19 in Thiruvananthapuram

Date: 22/08/2020

Agenda

<table>
<thead>
<tr>
<th>Sessions</th>
<th>Topic/themes/subthemes</th>
<th>Coordinator</th>
<th>Moderator</th>
<th>Panel members</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.00 am to 10.30 am</td>
<td>Overview of COVID scenario in district - Spread of epidemic, case scenario, expectations from various stakeholders</td>
<td>Mr Anish, RA, SHSRC</td>
<td>District Collector</td>
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<tr>
<td>Session 1 – Plenary session</td>
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<td>3 pm to 5 pm</td>
<td>People’s participation in COVID management</td>
<td>Mr Anish, RA, SHSRC</td>
<td>Hon Minister for Co-Operation, Tourism and Devaswom, Mr. Kadakampally Suren</td>
<td>H’ble MPs, MLAs, Mayor, Zilla panchayat president, Zilla panchayat Vice president, Deputy mayor</td>
</tr>
</tbody>
</table>
| Subtheme II | Zone Specific Interventions | Mr. Harikishore IAS | Mr. U V Jose. IAS  
| | Topic – Spread of epidemic, current situation, what has worked well, what has not worked, innovations, consideration (Migrants, Elderly), hurdles etc |  
| | Mr Vipin, PRO, DPM, TVM | Dr. M G Rajamanickam IAS  
| | | Mr. Balakiran IAS  
| | | Mr. Venkateshpathy IAS  
| | | Mr. Biju Prabhakar IAS  
| | | Dr Srividya IAS, Dr Divyalyer IAs  
| | | Current incident commanders, Tahsildars, ASHA Workers, Kudumbasreeworkers (Focus on Migrants and elderly) |  
| Subtheme III | Managing COVID at shops and establishments | Mr. Biju K IAS | Representatives of Major business and trade association, banks , IT sector, Akshaya coordinator  
| | Topic – innovative strategies, do’ & don’ts, what needs to be improved etc | Mr Sreejith, Training team |  
| | MrRajeeesh, SHSRC | Dr. Bijoy (Asst Director DHS)  
| | | Mr. Ani Krishna AS (SHA)  
| | | Dr.Sreejith R (IMA)  
| | | Dr.Binoy (KPHA)  
| | | Dr. Roy Mathew (CHAI)  
| | | Fr Cletus (Private Medical college association.) |  
| Subtheme IV | Medical management of COVID | Dr. Ramesh.R Project Director KSACS |  
| | Topic – role of private sector in Covid 19 containment, innovative strategies in surveillance, COVID package, PPP, CFLTC management , HR |  |  
| | MrRajeeesh, SHSRC | Dr. Bijoy (Asst Director DHS)  
| | | Mr. Ani Krishna AS (SHA)  
| | | Dr.Sreejith R (IMA)  
| | | Dr.Binoy (KPHA)  
| | | Dr. Roy Mathew (CHAI)  
| | | Fr Cletus (Private Medical college association.) |
Subtheme V

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<tr>
<th>Time</th>
<th>Session</th>
<th>Participants</th>
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<tr>
<td>10:30 to 12 noon</td>
<td><strong>Law, Enforcement and Covid 19 Containment</strong>&lt;br&gt;Topic: successful strategies, challenges, innovative strategies, way forward, role of law enforcement agencies</td>
<td>Mr Arun, SHSRC&lt;br&gt;Dr. A. Kausigan IAS&lt;br&gt;Commissioner of Disaster Management</td>
</tr>
<tr>
<td>12 noon to 12:30 pm</td>
<td><strong>Summing up session</strong></td>
<td>Mr Anish, RA, SHSRC</td>
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Subtheme 1: PEOPLE’S PARTICIPATION IN COVID MANAGEMENT

**Participants:** Hon Minister, Kadakampally Surendran, MLAs, MPs, District collector

**Introduction**

Even though containment has been lifted, we should address this festival season with extreme caution. The most important stake holders for the same mission is the respected representatives.

**Background**

Thiruvananthapuram was the first district in Kerala to announce community spread. Today, 50 days hence, steps taken by the district administration has been effective in preventing emergence of new large clusters in the city. This was the result of intersectoral coordination from various departments and LSGD representatives of the district. Next week, being a festival
season demands continuous and magnified efforts of our anti-COVID work force, especially the LSGD representatives. The reduction of cases in the earlier cluster areas indicates we are in track. But to prevent an unhealthy rise in the number of cases, making a clear cut plan and strategies taking into the experience we have before hand is the need of the hour. For formulation of the Thiruvananthapuram Action plan to fight COVID, one of the crucial inputs needed are from People’s representatives.

Suggestions and discussion points:

Hon’ble Minister. Shri Kadakampally Surendran

☐ In many places especially in rural areas LSG and officials with the help of volunteers are effectively managing COVID control activities. Initial clusters in the coastal belt is showing a declining trend in cases.

☐ There is an increased risk of spread of disease during Onam and hence needs increased vigilance.

☐ MLAs and MPs should make sure that all the activities for prevention and containment are done from the Ward level upward. Our ward level RRT groups should be rejuvenated. We should take the effort to enlist the support of maximum volunteers- a possible group being young persons who were previously infected and now cured. It should be made sure all CFLTCs have essential amenities, it would be good if people’s representatives visit these centres personally, taking all needed precautionary measures, to make sure that all facilities are available.

Shri V. Sasi, Hon. Deputy Speaker

☐ Activities at ward level are not done as before now. All local issues can be handled effectively at ward level beyond Politics with the help of Ward level samitis.

☐ Ward level samitis with a clear action plan will be the most effective strategy in this fight. It is as important as our SMS campaign. Officials from Police and revenue should be included in these committees. Community oriented action approach through Ward level samitis is the need of the hour.

☐ Clarity regarding management of dead bodies is essential

☐ Efforts should be made to share the expenses for working of IQCs, CFLTCs by various panchayaths whose people are making use of the facilities, rather than the whole burden falling on the Panchayath where the CFLTC is located.

Dr. Shashi Tharoor, MP
What we need is not a law and order approach, but rather a method by which the citizens themselves are made aware of the need to be cautious, and to take measures to protect themselves and their families.

Community engagement was a great strength of Kerala's approach and a hallmark of its earlier success... Today, dealing with the revived infection through a law and order approach is proving counterproductive. Sending armed commandos to seal off coastal villages was a bad idea. Inform people, support people and they will voluntarily cooperate.

Facilities in the frontline treatment centres seem to lacking esp when it comes to quality and variety of food, and clean toilet facilities. We cannot quarantine people without giving them adequate facilities.

Shri. Sivakumar, MLA

Increased vigilance is needed during coming days as Onam is approaching.

We need to understand why there is such a large number of cases in Trivandrum.

People are likely to get out more, especially for Onam shopping. The important markets in the constituency such as Palayam, Chala and Manacadu markets need special attention as a large number of people from various parts of Trivandrum are likely to visit. Effort should be made to ensure that COVID protocol is followed in these markets without inconveniencing customers.

Need to focus on preventing death by ensuring Ventilator support and ICU care.

Guidelines should be in place for ward level COVID control activities.

Need to address complaints regarding some CFLTCs

Shri. C. Divakaran, MLA

This is the second meeting convened by Hon’ble Minister. In the last meeting, complete sealing of coastal area, Coordinated efforts for containment of infection were the major decisions.

Only a peoples’ movement can bring back our lost achievements

We need to enlist the support of Resident’s associations, Arts and cultural clubs, Literary figures, Youth clubs. Special meetings of these groups is needed to seek their opinions and support. Government agencies should co ordinate joint activities

LSGs have financial constraints which need to be taken care of.

Community kitchen was a model activity.
□ Though some relaxation is needed in the time of Onam, our prevention strategies should not be lax in any way.

□ Nedumangad constituency is working in a good way. The lack of funds to run CFLTCs is a major issue

□ Special attention should be given to the different jails in the district, and also to other places of community living such as hospitals

□ Chengalchuela Colony is a model which needs to be appreciated, the youth in the colony itself have made sure that minimal movement in and out of the colony is permitted, but all the needs of the residents are met timely.

□ In spite of political differences, leaders should make sure that no statement to frighten the public is made

□ Review meetings should be held at all levels- MLAs should take the initiative to call meetings of all panchayaths in the constituency.

□ In the coming Onam week, Revenue, Police and Health departments should jointly do a squad work to ensure that Covid protocol is maintained at all times and places

Shri. C.K. Hareendran, MLA

□ There are a large number of cases in Parassala constituency since many places share border with Tamil Nadu. The mixing of people from across the border can not be prevented.

□ Volunteers need to be better equipped and trained to meet all the needs.

□ There is a shortage of Health personnel, so that more CFLTCs cannot be started. Four CFLTCs are presently working, though there are gaps.

□ Some panchayaths are asking for relaxations in containment in the context of absence of new cases.

Shri. M. Vincent, MLA

□ The constituency had a large number of positive cases, but now there has been a reduction in the number of new cases.

□ Parts in the constituency have been containment zones for the last one and a half months. People are facing a lot of livelihood issues due to this. Containment status has to be reassessed every two weeks.

□ A lot of difficulties regarding release of Dead bodies is being faced.

□ The maximum amount that can be levied by Private hospitals for catering to Category A positive patients need to be fixed by the Government.
The local police are under pressure by higher authorities, leading to stringency of containment measures, causing a lot of problems to the people.

All panchayaths should start CFLTCs
Regular testing should be done in Orphanages and Old age homes
Major business of handloom workers in Balaramapuram is during Onam season. Some relaxation in containment should be given and they should be allowed to work.

Shri. K. Ansalan, MLA

Cases are on the rise in Neyyattinkara constituency. Death is also increasing. Nine CFLTCs are ready to function, but all could not be opened due to lack of Human resources.
Great difficulties are faced in the handling of Dead bodies.
Lack of fear among the public is a major issue
After Onam, stringent precautions should be in place again
Handloom market should not be affected
Such review meeting should be held at least once in 15 days.

Shri I.B. Satheesh, MLA

Activation of ward level committees
Micro containment should be done instead of making a whole ward containment area.
Loading, unloading workers and people crossing the border for trade purposes can be sources of infection. Measures should be taken to disinfect the vehicles crossing the borders and test the people who cross the border

Shri K S. Sabarinadhan, MLA

Testing needs to be increased in hilly areas. More testing kits should be procured.
Once testing is done, messages spread through Watsapp regarding the positive cases, even before official confirmation leading to unnecessary panic among the people. Channel for official dissemination of information should be clearcut.
Needed equipment should be supplied to Fire and rescue services, as early as possible.
Fire and rescue services should be given sufficient support to ensure disinfection activities.

Shri B Sathyan, MLA
- Ward level committees to be strengthened.
- Ensure basic amenities in CFLTC
- Review meetings to be held regularly.
- Special precautions for Onam shopping to be in place.

Shri V Joy, MLA

- Constituency level review meetings should be held regularly
- It is difficult to ensure basic amenities in CFLTCs
- The MLA should be informed regarding the containment zone status of any area in the constituency
- If any case is positive, MLA should be made aware through Health staff

Shri V.K Prasanth, MLA

- When colonies are made containment zones, MLA should be informed early so that needs of the people are met early and measures such as supply of food kits can be ensured
- Four CFLTCs are functioning presently. There are complaints regarding the food supplied.

Shri V K. Madhu, District. Panchayath President.

- All local bodies are working well to ensure preventive activities. But ward level RRTs have lost some energy
- Management of dead bodies is a major issue. Though a decision was made that all crematoriums in the district can be used, it has not been implemented.
- All local bodies need to be taken into confidence especially in the scenario of Onam celebrations.
- Crowds and celebrations are expected in the coming week, and must be proactively managed.

**Summing up/Reply by Minister. Shri KadakampallySurendran**

- Meeting of MLAs can be done once in 15-20 days.
- Three instalments of Plan fund has been given to all Panchayaths. Since fighting COVID is the major agenda now, all other development activities can be stalled for the time being. Any lack of fund may be informed.
MLAs are free to convene/attend any meeting in their constituency including participating ward level RRT meetings.

MLAs will be informed regarding new developments, with the help of PR division.

Containment at Microlevel needs to be done

Precautions during Onam season is essential. Every panchayath should make their own customised action plan.

Involving residents associations can be done in RRT meetings itself

There is a mechanism to get the results of dead bodies within a day itself.

Handloom industry can work with precautions

SUMMARY

**Major issues raised by Peoples Representatives**

- Need for relaxations with precautions in Onam season
- Scientific determination of containment zones- microcontainment, with timely information to MLA
- Need for rejuvenation of Ward level Jagratha Samiti and RRTs
- Difficulties in dead body management
- Difficulties faced by local body for the functioning of CFLTCs
- Need to hold at least biweekly review meetings

**Major decisions**

- Review meeting of MLAs to be held once in every 15-20 days
- MLAs to hold review meetings in their constituencies and take active steps to ensure rejuvenation of Ward level Jagratha samitis RRTs
- Onam week- crowds to be managed and markets to be held with precautions in place

**Strategies evolved**

- There is a need for strengthening LSGD representation for COVID control activities at all levels( Ward, Panchayath, Municipality and corporation).
- The most instrumental unit in COVID control activities remains the Ward level Jagratha Samitis.
In the initial phase of covid pandemic, the role of Ward level committees and community volunteers was crucial in effectively containing the disease spread. But, as we have entered the third phase of pandemic, a laxity has been observed in the same and has to be rejuvenated.

Healthy persons who have recovered from COVID may be identified for volunteer activities at the field level.

A situational analysis has to be carried out at Ward, Panchayath, Municipality and corporation levels to identify the existing gaps and formulate strategies for the same.

In busy market areas a people friendly approach should be adopted with strict adherence to COVID 19 protocol.

Though the testing system is sound, it has to further increased to identify the disease prevalence among vulnerable groups.

Death prevention strategies to be adopted by ensuring ventilator support and increasing ICU beds.

Micro containment zones to be identified based on criteria without delay.

IEC activities in the containment zones should be strengthened.

Continuous supply of goods to these areas also should be ensured so that the people need not move out of their homes.

Action plans for separate LSGDs should be made as per the gaps identified in existing strategy and the plan should evolve dynamically based on the newly evolving situations.

District vigilant squad: Revenue/ health/ police departments. Daily reports should be submitted and activities should be planned accordingly.

Media: should transmit positive news, eg; experiences of recovered patients, the reduced death rate when compared to other states, increased testing rates etc.

Subtheme 2: ZONE SPECIFIC INTERVENTIONS

Background:

High levels of positivity in coastal belt propelled the need for critical coastal containment identification and allied activities.

Incident commanders were identified for the same to ensure smooth disease control and addressal of social and other local problems.

Inter sectoral co ordination with LSGD, volunteers, Police and religious leaders (church) has helped in achieving effective reduction in the scale of disease spread.
Effective containment has ensured reduced spillover of cases into the city limits and also helped in reduce the cases in several coastal zones.

Effective surveillance continues in areas with continued high test positivity.

**Challenges identified in the coastal zone:**

- High population density in coastal pockets.
- Reluctance of people to come forward for testing due to multiple reasons like associated stigma, lack of acceptance towards CFLTCs.
- Overcrowding, presence of vulnerable population in crowded households.
- Cultural behaviours like sitting together in evenings for playing cards, singing aloud, religious gatherings.
- No proper coastal boundary, several byroads hence proper patrolling along with police and volunteers is needed.

**Strategies:**

1. **Strengthen IEC Activities**

   - Stigma was identified as a troubling issue for those who recover from illness, when they go back to the society and to resume their jobs. Sensitization of community and neighboring communities for stigma prevention.
   - Need for continuous dissemination of information at various levels of society.[VC, Jeep travels]
   - Local self-government, police and religious leaders should constantly involve in discussion regarding planning and implementation of activities.
   - Information regarding prevention of disease, home care of quarantined individuals, care of vulnerable people is needed.[Local demand based IEC, based on local issues and fears.]
   - Information dissemination helps in changing attitude of people and to bring behavioural change.[Funding, personnel, vehicle expenses through intersectoral coordination]
   - Assurance and reassurance is much needed by the public to gain constant faith in health system.
   - IEC for fish vending, Onam related behaviours to be adopted, living with Covid.
   - Residents associations can actively engage in IEC activities.

2. **Community Participation**

   - Link workers and volunteers have to be recruited from the community itself and they should be assigned charge of 10-15 houses.
- Involvement of Residence associations in city limits.
- Volunteers can help in ILI screening. These workers should follow up those households daily through telephonic calls and if any person turns symptomatic, concerned ASHA and field staff should be informed.
- This helps to activate RRT and alert contact tracing and disinfection activities.
- Involvement of Kudumbasree in information dissemination, vulnerable screening, food and related needs in CFLTC’s. This can help to ensure the quality of food being served there.
- Improved social networking through volunteer groups, whatsapp groups to identify and address issues at local community level effectively.
- Supplies of essential goods should be according to local demands and there should not be any time restriction on supply of goods to prevent overcrowding.

3. Enforcement with the help of police

- Police visibility has been identified as an important factor in reducing the movement of people unnecessarily and following strict protocols in malls, markets etc.
- This is very important in the festival season of Onam, where get together among family members and shopping take place.
- Travel restrictions like number of persons travelling in a vehicle, visiting shopping malls and recreation areas etc has to be brought.
- Ensuring social distancing and other break the chain measures.
- Public announcement and strengthen IEC activities.

4. Psychological support and stigma reduction

- Quarantined individuals need psychological support.
- Stigma and discrimination towards cases and contacts and those coming from cluster area needs to be addressed.
- Same rule for all should be applied to prevent discrimination in availing services.

5. Health system strengthening

- Increasing testing and syndromic surveillance.
- Decentralise contact tracing
- Increasing the number of mobile testing teams- one team for 4 or 5 panchayaths.
- Non-covid care-Ensure NCD drugs and facilities for uninterrupted palliative care.
Decentralising ambulance services, taking help from NHM

Timely testing of post mortem samples, sorting issues in sample collection, transportation and funeral practices.

The bottom line of all our efforts is to prevent death.

Strengthen the activities of 24*7 call center.

CFLTCs quality monitoring and assuring that needs [quality food, toilet and health needs] of people are met.

6. Decentralisation

Local self-governments should mobilise funds for IEC activities, disinfection of public places and transportation.

Identifying and implementation of customized strategies for local community.

Consider space as a process rather than space as a physical entity. Implementing strategies which fit to that community and cultural practices should be advised rather than a protocol driven one.

Due to quarantine and containment activities, livelihood can be compromised. Hence essential and emergency supplies should be ensured without fail.

‘Living with Covid’ - Ensure normal livelihood, most affected are those with daily wages and those with a seasonal income, hence livelihood means to be retained with adherence to Covid protocol.

Disinfection to be decentralized to institution levels instead of relying heavily on fire force.

Institution heads should be responsible for Covid control activities in their institution.

Death prevention should be focused on.

Subtheme3: MANAGING COVID AT SHOPS AND COMMERCIAL ESTABLISHMENTS

Challenges identified & possible solutions:

BANKS:

Even though following relaxation of lockdown, banks have started disbursing social security and loan schemes, in compliance to the proposed guidelines, certain problems have been encountered.

• Huge crowd coming at the same time with a great rush during 10am-12pm.
• People waiting outside the banks are not controllable by the bank staff alone.

• Since only 50% staff are allowed to work in a day, management of customers inside the bank hall (eg. no of people approaching a single window counter) is difficult.

• Confusion regarding functioning of banks in containment zones.

Solutions:

• Management of crowds with the help of police.

• Better staff redistribution to manage the crowd within the banks.

AKSHAYA CENTRES:

Recently Akshaya centres are being faced with crowd management issues due to the various social security and pension schemes as well as online applications for students. There had been instances where the police imposed fines to regulate the crowd outside the centres which had negatively impacted the functioning of Akshaya centres.

Solutions:

• Positive management of crowds inside & outside the Akshaya centres.

CONSTRUCTION INDUSTRY:

Since the lockdown was in place no construction activities were taking place and hence employees who were dependant on this for a livelihood were not able to handle. They were anxious as to when they could join back for work.

Solutions:

• All activities can be resumed following strict implementation of SMS (Sanitation, Masks & Social distancing)

• Avoid gathering in market places.

• Ensure a distance of 1 ½-2 metres between customers within the shops.

• IEC to follow strict etiquette of personal hygiene at public places

• Certainty of punishment should be the key, and not the severity of punishment.

• Strict enforcement of all rules and regulations.

• Identify individuals like institutional heads, shop owners, residents associations responsible for monitoring the infection control activities in the shops of their areas.

• Encourage shop owners to buy their own handpumps for disinfection and daily disinfection of shops and institutions.

• Different time slots for elderly to shop.
Deploying volunteers for home delivery of daily essentials, medicines and other consumables for the elderly.

Tailor made preventive activities for different types of shops, establishments and even make shift shops in open spaces (applicable to all areas – urban, rural, coastal, tribal and hilly as well as slums).

Strict and lucid guidelines for management of entry and exit points at markets, shops and other commercial establishments.

Placement and maintenance of surveillance cameras at the critical points in market places.

IEC in the form of loudspeaker/mic announcements, video clips, hoardings, banners and posters played/displayed at busy places (including shopping malls, markets, bus stations, banks and all establishments) in the district.

Spraying of sanitisers on articles in supermarkets and other shops (wholesale and retail)

Token system for entry into shops, banks etc

All staff in all the shops, markets, banks, Akshaya Centres and other commercial establishments to follow all rules of personal hygiene and etiquette.

Restaurants to follow strict guidelines with regard to safety of food, staff and customers.

**Conclusion**

Lockdown is not a sustainable solution for the containment of spread of COVID 19. It is essential to remind the general public that there will not be a return to the old normality in the foreseeable future. In the long run all of us will have to learn to live with the virus. Our collective aim and effort should be directed to prevent the untoward consequences of withdrawal of lockdown, with regard to the spread of the infection. For this durable behavioural change is vital.

**Subtheme 4: MEDICAL MANAGEMENT OF COVID**

(Topic: Role of private sector in COVID 19 containment, innovative strategies in surveillance, COVID package, PPP, CFLTC management, HR convergence with private sector exclusive private COVID Hospitals, ICU and ventilator capacity, KASP)

1. **Discussion points from KPHA (Kerala Private Hospitals Association)**

   - Expressed the willingness to provide HR for the COVID management pool
   - Raised a concern regarding absence of provision for costly drugs (included in guidelines as on 15th August 2020) in the KASP package which the hospital cannot afford. So, it was requested that separate provision be considered for management for these specific cases that require these management.
• Raised an issue regarding mixing up of COVID and NON COVID cases in the small and moderate hospitals

• Mentioned the stigma among NON COVID patients and their unwillingness to attend hospitals catering COVID cases.

• Few private hospitals are willing for TRUNAT test which requires NABL accreditation.

2. Discussion Points from IMA

• Ensured support from private sector in curbing the COVID 19 outbreak.

• Ensured to convince the private doctors to join the COVID management team

• Increasing the availability of Antigen test kits through KMSCL.

• Supply to medium private hospitals (no bulk order is placed)

• Training to all the private practioners regarding COVID 19 management and stepping up the training for ICU and ventilator management.

• To identify the private hospitals across the 5 zones. Many private hospitals are located at border zone. The need of the hour is to identify the hospitals in rural and coastal regions for managing Category B patients.

• To identify hospitals (including small and medium hospitals) to be kept as standby to be brought in action when necessary.

• With the scaling up testing, there is high chance that about 5% of tests to be positive. In such a scenario the existing CFLTC capacities and the Human resources will be deficient to cater to required management. To avoid such a shortage, guideline should be revised as to begin home based management for asymptomatic and patients with mild symptoms so as to reroute the existing human resources for management of Category B and C patients.

• Put forward a recommendation of pooling up of resources in wake of increasing number cases among health care workers. Doctors from medium and small hospitals may convinced to join the pooling system.

• Human resources can also be increased through NHM.

• The issue regarding mixing up of COVID and NON COVID cases can be dealt by following stringent infection control practises or by identifying separate blocks for exclusively managing COVID cases.

3. Way forward

• To identify hospital zone wise especially in rural and coastal regions
• There should be clarity regarding the category of patients that will be managed in these identified hospitals

• After identifying these hospitals, a district team should be constituted for the assessment based on the available checklist

• Enhancing real time capacity building and proper utilization of data portal

• Mechanism for pooling of Human resource

• Ensuring uninterrupted supply of PPE kits and other logistics

• Uplifting the telemedicine facility, E- sanjeevani. Doctors who are not involved in COVID care directly can support and promote telemedicine.

• Setting up of call centres for real time monitoring of the availability of the hospital facilities.

• Demarcation between government and private sector to be minimised and mechanisms to be in place so that private hospitals can attend to the referred cases from government hospitals.

Subtheme 5: LAW, ENFORCEMENT AND COVID -19 CONTAINMENT

• Ensure a balance of control and liberty on enforcement of law.

• Synergistic approach from all sectors and communities is required especially in IEC section.

• IEC not to be focused on the private sector alone and to be taken as a responsibility of the Govt officials also, including Courts, Bank, LSGD dept, Revenue, Collectorate such that they lead by example so that police can focus more on the public.

• Ensure full compliance of rules and regulations by introducing fine for violators by establishing clear guidelines.

• Strict enforcement of containment should be ensured

• Frame strategies of participatory approach through people driven campaigns to contain the situation.

• Community participation and awareness meetings for school students, resident associations, Panchayat presidents.

• Testing to be introduced by installing mobile testing units in district court campus.

• Time structuring should proceed as of now without extending the time for shops and other establishments.
• SHO level video conferencing with resident and flat association in organizing and allotting particular time for set of households for the visits outside.

• Regulation on number of people per vehicle need to be implemented.

• Prisoners not to be summoned to court unless urgent and if needed remanded over video conferencing itself.

• Proper police bandobast scheme to be implemented.

• Police bikes to be deployed for patrolling and ensuring strict implementation of social distancing, wearing mask, using sanitiser etc.

• Volunteers to be deputed for monitoring activities in busy market places.

• Announcement systems by all police vehicles on awareness.

• Banners and bill boards for awareness, to be established at entry and exit of cities.

• Micro containment zones in each ward to contain COVID.

• Police personnel to be continue engagement in contact tracing, pasting primary contact stickers and ensuring home quarantine.

• Special scheme to be implemented in sea erosion areas like Vizhinjam.

ONAM SPECIFIC ARRANGEMENTS

• Ward level committee and market level committee need to formulate new guidelines pertaining to Onam celebrations.

• Limit the number of family members for shopping following the reverse quarantine guidelines and the same should be strengthened.

• Floor space should be calculated and boards displaying number of customers that can enter should be displayed.

• Not to allow mike sanctions, processions etc at police station levels during Onam days.


Date: 23/08/2020
The meeting began at 11:00 am and the District Collector presented the data and figures of the district with respect to the total number of active patients, hospital infrastructure, testing, Containment zone activities and surveillance. The meeting was then open for discussion.

Media:

Since Onam is approaching, people will have to do plenty of shopping for preparatory purposes. Will the daily functioning time of the shops from 7 am to 7 pm be enough? It might be risky because most of the people may go for shopping in the evening and lead to crowding. Would it not be wise to extend the functioning time of shops till at least 9 pm in the night in order to reduce the rush associated with shopping?

District Collector:

In a DDMA meeting involving the SP and CP, it was remarked that there is currently no evidence that stretching out of functioning hours of shops, will lessen the crowd or there by reduce the risk of disease transmission. People need not necessarily go out for shopping during the day time. As per human tendency they may choose to wait till evening to finish their work/house hold chores and then go out for shopping. If the shops remain open till 9 pm or later, they may still choose to shop late. Hence there is no guarantee that the risk of transmission of the disease may be reduced by stretching out the functioning time of shops.

Media:

The number of people present at a time in a shop or establishment can actually be decided based on the size of the shop. Allegedly, police seems to be very strict and particular regarding a single number of customers in all shops (eg: 5 customers at a time).

District Collector:

There was a discussion in a previous meeting that the number of customers allowed to be present inside a shop can be decided proportionately based on the size of the shop. Each shop can take a decision in this regard and the implementation is the shop owners decision. It should be understood that the police cannot go to all shops or buildings to assess the number of customers that can be permitted at a time based on the floor area or size of the establishment. Individual shop managements can decide on that.

Media:

How is the districts Hospital infrastructure preparedness?

District Collector:

Currently, our infrastructure is not strained, as we have enough beds, ICUs and Ventilators spread across 3 major COVID hospitals and 9 private hospitals. Cat A patients are admitted at CFLTCs. Currently hospitals are accommodating patients starting from Cat B. Most of our patients (roughly 85%) are asymptomatic or mildly symptomatic and they are in the CFLTCs, where the bed strength is above 3000. As of now, around 75% of the CFLTCs beds are occupied. The real challenge is when everyone falls sick simultaneously, in which case the hospital infrastructure might be overwhelmed. Now the focus is to protect the vulnerable
population from contracting the infection and thereby prevent or delay the strain on hospital infrastructure. We have simultaneously worked on increasing our capacity of beds for category B patients to 1000 and above.

Media:

What is the opinion of the district administration with regard to the COVID control?

District Collector:

It should become a peoples campaign. People should understand that it is their responsibility to support the administration, Health department and enforcement to control disease spread. Responsible use of masks, social distancing, sanitization of hands and proper hygiene and etiquette should be public responsibility.

Media:

How long can a mask be used? Will the use of masks and gloves by the shop staff be effective in protecting them?

District Collector:

Since the shop staff remains in contact for a long time with customers from various places in the district, they are placed at a greater risk of infection due to COVID 19 when compared to individual customers. It is always better for the sales persons, staff at counters and cashiers to wear face shields along with masks.

Media:

It has been observed that the disease transmission in coastal areas has come down, still why do they continue to be in containment?

District Collector:

We are gradually relaxing the restrictions placed in the containment zones and shifting to micro-containment strategies. Every area has different strategies for COVID control. The major responsibility of the enforcement department is to ensure strict adherence to prevention protocols. Now with the arrival of Onam, we have relaxed much of the restrictions. Protocol violations during the next one week might get reflected in the form of increased number of patients in the first week of September.

Media:

What are the advancements in home quarantine of patients?

District Collector:

Currently COVID positive health care workers are advised to remain in home isolation as they are capable of self monitoring. Asymptomatic or mildly symptomatic patients are currently isolated in CFLTCs. Even though the number of CFLTCs can be increased, there is always an issue with regard to the human resource deployed for CFLTCs. We are slowly implementing
home isolation for category A patients, making use of Telemedicine facility. We are in the process of preparing an Action plan for the District.

Media:

Thiruvananthapuram should not have been first. Why did Thiruvananthapuram lead?

District Collector:

Being the capital city, we are always vulnerable as we have a lot of challenges to face.

- Greater mobility of people
- Dense population

- Thiruvananthapuram shares its border with Tamil Nadu, which is one among the states that had community spread. Many people from Tamil Nadu have crossed the district border for multiple reasons including treatment, for which no restrictions could be placed. There are region specific barriers, especially in the coastal region. It is not any person’s fault.

- We had been relying on RTPCR for testing till July 4 after which we received antigen kits for testing. Had we received the antigen testing kits well before in June, we would have been able to identify the cases in the now declared clusters, way earlier.

Nonetheless, we are experiencing a gradual surge only. The coastal areas will soon show decline in cases. It has been 7 weeks now, it is a matter of maybe a week more, we shall be able to witness a decline in the number of cases.

Webinar 2: MEETING WITH MEMBERS OF RESIDENTIAL ASSOCIATION

Date: 23/8/2020, Moderator: Dr Indu P S, Professor and Head, Dept of Community Medicine, Govt Medical College, TVM.

In wake of alarming rise of COVID 19 cases in the district and impending saturation of infrastructure and resources for COVID 19 care, there arises a crucial need to incorporate every sector in the society for constraining the disease. Residential association can act as an extended arm of the district authorities in executing the COVID control measures. They can play a pivotal role in bringing a behavioural change of the society. The webinar conducted with residents association members came out with a plan of action

Plan of action

1. Creating COVID Control team in Residential association.

The medical and social needs of vulnerable persons as well as other members of household including monitoring of symptoms can be done by telephonic monitoring by volunteers of the team. With the existing guidelines to promote reverse quarantine and the future proceedings to initiate home based management for the asymptomatic and people with mild symptoms of
COVID 19, the role of this team will be crucial in identification and for follow-up of these people in their area. This wing can be created based on the number of members in the area. Team must include healthy volunteers (who can be provided with volunteer card), a doctor or any health care worker (who is the part of the particular association), public leader.

**Activities:**

- Identify vulnerable persons amongst the members and their monitoring
- Thrice weekly telephonic monitoring
- Initial assessment of their medical and non-medical needs
- Monitoring of symptoms or risk status of household members.
- Make provision for fulfilling these needs
- Promote and motivate the vulnerable for reverse quarantine
- Conduct weekly telephonic conversation for enquiring their needs
- A WhatsApp group can be created with the members of the team where they can discuss the issues in their association as
  - Occurrence of symptoms in any person (without revealing the identity)
  - Social needs of the people
  - Any issues that need to be addressed
  - New innovative ideas that can be implemented in the association

2. **Awareness strategies for health promotion**

IEC activities should be targeted not just for prevention of the COVID 19 disease but must include elements for health promotion also.

**Strategies:**

- Regular interactive sessions by health care workers on topics like
  - Healthy and balanced diet
  - Importance of exercise
  - Preventing NCDs
  - COVID 19 preventive measures
  - Interventions to reduce COVID 19 morbidity
• Using social media platform for circulating IEC materials with proper content across the members of residential association (e.g. creating WhatsApp group with members of the association)

3. **Home based management of COVID 19 positive patients**

With authorities planning for home-based management of asymptomatic and people with mild symptoms without any comorbidities, residential association will have a major role in supervision of these patients. Such patients will be obliged for self-monitoring with home isolation which may include SPO2 and temperature monitoring.

**Role of the association**

- Association can purchase finger pulse oximeter which can used for SPO2 monitoring and reused after proper disinfection with sanitizer
- Technical details, functioning and the normal values of SPO2 can be explained through an online training session. Proper training in SPO2 monitoring can help in rapid detection in worsening of the disease, thus allowing prompt referral.
- Support in reducing the social stigma pertaining to COVID 19 disease and thus help in lowering the discrimination against those tested COVID 19 positives and their family members.
- Provide psychological support with the help of the public health wing through telephonic conversations

4. **Social enforcement**

Residential association having market place in their close vicinity, can take a lead to from a social enforcement team to ensure the preventive measure in the shops and market places (like physical distancing, use of masks)

**Activities:**

- Identify the commonly visited shops around the area and categorise them as open or closed (e.g. air-conditioned shops)
- Measures to avoid crowding in shops
  - Create time gaps: advising people to avoid shopping at a common time
  - Encouraging people to keep physical distancing while shopping
  - Demand for markings on the floors of the shops for maintaining the physical distancing
• Encouraging people to shop from well ventilated shops. Avoid closed and congested market places
• Appealing the shopkeepers to use masks correctly during interactions with customers.
• Instructing strict usage of sanitisers when at shop and immediate wash with soap and water after returning home.
• Avoid crowding at street sellers, physical distancing must be considered a self-responsibility by the customers.

5. Social gatherings
• Marriages and funeral are becoming now becoming source for clusters of COVID 19. Government has restricted number of people allowed to participate in funeral and marriages.
• People (except close family members) must avoid attending marriage functions. Arrangements such live telecast of the ceremonies through social platforms can be encouraged
• Permissions for opening of auditoriums and halls have not been sanctioned
• People must restrict visiting homes of deceased or funeral gatherings.
• This year’s Onam celebration must be restricted to their own home. Association celebrations must be avoided. Innovative ideas can be brought in for celebrations on internet platform.

6. Testing strategies
• Guideline based testing is done free of cost in Government institutions.
• Walk in testing facility is available in private institutions and the cost is prefixed as based on government guidelines
• Testing of deceased is not mandatory is every situation. Tests will be done if from containment zones or the person has history of any exposure.
• Sentinel surveillance are being conducted to discover any undetected community transmission.
## Chapter 7: Action Plan Matrix

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Activity</th>
<th>Responsible Agencies</th>
<th>Monitoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community participation through Ward level samitis</td>
<td>Strengthening ward level committees. Formation of COVID CONTROL TEAMS with Volunteers in each ward</td>
<td>LSG to issue orders Ward member will convene the committee meetings. Govt officials from Police, health, Revenue, social justice Dept will give technical support. Residents association members, Kudumbasree members, Anganwadi workers, ASHA and Community Volunteers</td>
<td>Committees should be constituted and meetings should be convened by before August 31st. DDP to submit report to DDMA Thrice weekly reporting by Volunteers through Wats App group maintaining privacy. Fortnightly review by ward level Committee. Monthly review meeting and reporting by LSG</td>
</tr>
<tr>
<td>Telephonic monitoring of symptoms</td>
<td>Volunteers</td>
<td>IEC control team</td>
<td>Public will be asked to take up a pledge that they will abide Covid protocol. A google form will be shared through Facebook and other social media handles of District Collector An E-Certificate of Commitment will be automatically issued and Public information Department and Mass media will submit weekly reports regarding progress of Campaign</td>
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<tr>
<td>CoVEED ONAM</td>
<td># Fightcovidtvvm</td>
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<tr>
<td>Appreciating Best COVID19 Protocol implementation models during this Onam season</td>
<td>People are requested to post their selfie photo following Covid protocol in a public place - a store/market etc under the hash tag #fightcovidtvvm</td>
<td></td>
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</tr>
<tr>
<td>Posters, Kiosks, markings etc for mask, sanitisers and social distancing</td>
<td>Public information Department and Mass media will submit weekly reports regarding progress of Campaign</td>
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<tr>
<td>Shops and commercial establishments will implement</td>
<td>Monitoring by Police</td>
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<tr>
<td>Enforcement by Police</td>
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<tr>
<td>Community level IEC campaign</td>
<td>Monthly review meeting and reporting by LSG</td>
<td></td>
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<tr>
<td>Ward level COVID Control team LSG</td>
<td></td>
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<tr>
<td>IEC at public and private institutions</td>
<td>Monitoring by Institution heads.</td>
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<tr>
<td>Institution heads, Employees association</td>
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<tr>
<td>Enforcement of laws for control of epidemic especially Social distancing.</td>
<td>Daily reporting by police</td>
<td></td>
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<tr>
<td>Mask</td>
<td></td>
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<tr>
<td>Social distancing at shops</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Restricting family, religious and social gatherings</td>
<td></td>
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<tr>
<td>Shop timings</td>
<td></td>
<td></td>
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<tr>
<td>Other restrictions and regulations</td>
<td>Fortnightly review meeting by Ward level committee</td>
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<tr>
<td>Police</td>
<td></td>
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<tr>
<td>Community level COVID Control teams</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Task</td>
<td>Responsibility and Methodology</td>
<td>Due Date</td>
<td></td>
</tr>
<tr>
<td>------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>---------------------------------</td>
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</tr>
<tr>
<td>Reverse quarantine.</td>
<td>Listing of Vulnerables and their households with the help of Anganwadi workers, ASHA, JPHN and JHI</td>
<td>Report to PHC and CDPO within August 31.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Initial assessment of Medical and Social needs and instructions regarding Reverse quarantine through telephonic conversation</td>
<td>Report to PHC and CDPO within August 31.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Weekly thrice telephonic monitoring by Volunteers</td>
<td>Thrice weekly reporting by Volunteers through Wats App group maintaining privacy. Fortnightly review by ward level Committee. Monthly review meeting and reporting by LSG.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Assistance to Vulnerable persons in need</td>
<td>Ward level COVID Control team. Fortnightly review by ward level committee. Monthly review meeting and reporting by LSG.</td>
<td></td>
</tr>
<tr>
<td>Monitoring with Finger Pulse Oximetry among high risk persons and persons with</td>
<td>For home based monitoring of oxygen saturation, procurement of Finger Pulse</td>
<td>LSG will support Procurement and stocking by Ward level committee Technical support by local PHC. Fortnightly review by ward level committee.</td>
<td></td>
</tr>
<tr>
<td>Problem</td>
<td>Action</td>
<td>Responsible</td>
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<tr>
<td>Symptoms of increasing cough, breathlessness and fatigue. (Those with oxygen saturation less than 95% should be referred to nearest health facility for testing and management)</td>
<td>oximeters (10 to 20 numbers)</td>
<td>Training of Volunteers by JPHN/JHI</td>
<td></td>
</tr>
<tr>
<td>Supply and collecting back oximeters after use</td>
<td></td>
<td>Monitoring by JPHN/JHI</td>
<td></td>
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<tr>
<td>Health desks in open public places with Finger Pulse Oximeter</td>
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</tr>
<tr>
<td>Hospital Preparedness</td>
<td>Setting up of Level 2 CFLTC in every zone</td>
<td>Health Department with the help of LSG</td>
<td></td>
</tr>
<tr>
<td>Roping in medium level Private Hospitals for category B patients</td>
<td>Health Department with the help of LSG and IMA</td>
<td></td>
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</tr>
<tr>
<td>Capacity building in General Hospital and Medical college</td>
<td>Health Department</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roping in Private hospitals</td>
<td>Health Department with help of LSG and IMA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Real time Bed- ICU Management for smooth referral between Govt and private hospitals by DPMSU</td>
<td>DDMA through Health Department</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Call centre for coordinating admission and transportation as well as answering queries</td>
<td>DDMA through Health Department</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospital Preparedness</td>
<td>Monitoring by JPHN/JHI</td>
<td></td>
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</tr>
<tr>
<td>Weekly review by District collector and Health Department</td>
<td></td>
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<td></td>
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</tbody>
</table>

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### Action Plan for Monitoring activities (Symptom and high risk screening and COVID Protocol adherence) in selected areas

<table>
<thead>
<tr>
<th>Area</th>
<th>Frequency of screening once in a</th>
<th>Activities</th>
<th>Responsible agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential areas</td>
<td>Week</td>
<td>ILI/Vulnerable screen</td>
<td>PHC/RA/LSGD with the help of Volunteers of COVID control team</td>
</tr>
<tr>
<td>Wet markets Fish/meat/flower</td>
<td>Twice weekly</td>
<td>SMS/IEC</td>
<td>Police/LSGD</td>
</tr>
<tr>
<td>Dry markets</td>
<td>Week</td>
<td>SMS/IEC</td>
<td>Police/LSGD</td>
</tr>
<tr>
<td>Hospitals[pvt] &amp; clinics</td>
<td>Daily</td>
<td>SMS/ILI</td>
<td>Management</td>
</tr>
<tr>
<td>Major hospitals in the area</td>
<td>Twice weekly</td>
<td>SMS/ILI</td>
<td>RA/LSGD/PHC</td>
</tr>
<tr>
<td>Construction sites</td>
<td>Fortnight</td>
<td>SMS/IEC</td>
<td>LSGD</td>
</tr>
<tr>
<td>Prisons</td>
<td>Fortnight</td>
<td>SMS/IEC</td>
<td>Police</td>
</tr>
<tr>
<td>Food delivery agents</td>
<td>Fortnight</td>
<td>SMS</td>
<td>Supply Officer</td>
</tr>
<tr>
<td>Government and Private institutions</td>
<td>Fortnight</td>
<td>SMS</td>
<td>Institutional Head</td>
</tr>
<tr>
<td>Shops and Establishments</td>
<td>Fortnight</td>
<td>SMS</td>
<td>Management</td>
</tr>
<tr>
<td>Airport/railway/Bus stations</td>
<td>Fortnight</td>
<td>SMS/IEC</td>
<td>APHO/Stat master/UPHC</td>
</tr>
<tr>
<td>Banks</td>
<td>Fortnight</td>
<td>SMS/IEC</td>
<td>Bank manager/Police/PHC</td>
</tr>
<tr>
<td>Supermarkets/Malls</td>
<td>Week</td>
<td>SMS/IEC</td>
<td>Police/LSGD/PHC</td>
</tr>
<tr>
<td>Barber shops/beauty parlour/Gyms</td>
<td>Week</td>
<td>SMS/IEC</td>
<td>Police/LSGD/PHC</td>
</tr>
</tbody>
</table>
8. Conclusion

The Thiruvananthapuram action plan has been prepared after deliberations with all stakeholders in the district and it captures the essential elements to flatten the COVID curve. The consultative process has brought the people to the centre of attention and other aspects which will work around the people to contain the spread of COVID. The efficient implementation of this plan will assist the district to work on the strengths that has been built so far and realise the objectives set forth. The fight against COVID has been a long drawn one but the district of Thiruvananthapuram has resolved in unison to face the challenges posed by COVID and emerge victorious.

Together WE CAN and WE WILL!
Annexures

Annexure1: Abbreviations

APHO: Airport Health officer
AWW: Anganwadi worker
CDPO: Child Development Project Officer
CFLTC: COVID First Line Treatment Centre
CFR: Case Fatality Rate
CH: COVID Hospital
DPMSU: District Programme Management and support unit
HO: Health Officer
IEC: Information Education Communication
JHI: Junior Health Inspector
JPHN: Junior Public Health Nurse
LSG: Local self Government
MO: Medical Officer
PHC: Primary Health Centre
RA: Residents association
SMS: Soap Mask Sanitiser
TPR: Test Positivity Rate
TVM: Thiruvananthapuram
UPHC: Urban Primary Health Centre
Annexure 2: Document Preparation team

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