Communiqué - 4

Proposed Exit strategy for Colombo Municipality Area: recommendations of the College of Community Physicians of Sri Lanka (CCPSL)

- Fourth Communiqué from the College of Community Physicians of Sri Lanka

The College of Community Physicians of Sri Lanka

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1. Colombo City Profile

Colombo City is the economic hub of the country. It is the most populous city in Sri Lanka, with 650,000 – 750,000 people living within the city limits. This is also added with a 500,000 daily floating population. People of Colombo City are from a multi-religious, multi-ethnic and multi-cultural background, representing a mix of several ethnic groups, mainly Sinhalese, Sri Lankan Tamils and Sri Lankan Moor.

The City covers an area of 37 km² divided into six Districts (Figure 1).

Districts are further divided into 47 Colombo Municipal Council (CMC) Wards for its administrative purpose.

1. District 1 Colombo North
2. District 2A Colombo Central
3. District 2B Colombo Central
4. District 3 Borella
5. District 4 Colombo East
6. District 5 Colombo West

Figure 1: Administrative districts in Colombo Municipality area

Table 1 shows the population characteristics of the CMC Wards within each District in the Colombo Municipality area.

Table 1: Population characteristics of the Colombo Municipal Council Wards

District	Ward No	Ward	Categorization	Population (2012)
D1	1	Mattakkuliya	Low income	65832
D1	2	Modara	Low income	27757
D1	3	Mahawatta	Low income	31779
D1	4	Aluthmawatha	Low income	23625
D1	5	Lunupokuna	Low income	12423
D1	6	Bloemendhal	Low income	13802
D1	7	Kotahena East	Low income	8385
D1	8	Kotahena West	Low income	12409
Sub Total				196012
D2A	9	Kochchikade North	Low income	10339
D2A	10	Ginthupitiya	Low income	10110
D2A	11	Masangasweediya	Low income	12516
D2A	12	New Bazaar	Low income	13436
D2A	13	Grandpass North	Low income	15725
D2A	14	Grandpass South	Low income	31271
D2A	16	Aluthkade East	Low income	10053
D2A	17	Aluthkade West	Low income	8517
D2A	18	Keselwatta	Low income	8221
D2A	19	Kochchikade South	Low income	8746
D2A	20	Fort	No	8186
D2A	28	Maligawatta East	Low income	12524
Sub Total				149644
D2B	15	Maligawatta West	Low income	10968
D2B	21	Kompannaweediya	Low income	10795
D2B	22	Wekanda	Low income	8839
D2B	23	Hunupitiya	Low income	10500
D2B	24	Suduwella	Low income	6915
D2B	25	Panchikawatta	Low income	8467
D2B	26	Maradana	Low income	4591
D2B	27	Maligakanda	Low income	8526
D2B	37	Kollupitiya	No	6711
Sub Total				76312
D3	29	Dematagoda	Low income	2602
D3	30	Wanathamulla	Low income	20355
D3	31	Kuppiyawatta East	Low income	10577
D3	32	Kuppiyawatta West	Low income	7954
D3	33	Borella North	Low income	31326
D3	35	Borella South	No	9127
D3	36	Cinnamon Gardens	No	9914
Sub Total				91855
D4	34	Narahenpita	Low income	27692
D4	40	Thimbirigasyaya	No	22675
D4	41	Kirula	No	20237
D4	44	Kirulapona	Low income	17846
D4	45	Pamankada East	No	12389
Sub Total				100839
D5	46	Pamankada West	No	12451
D5	38	Bambalapitiya	No	9564
D5	39	Milagiriya	No	9389
D5	42	Havelock Town	No	9455
D5	43	Wellawatta North	No	24967
D5	47	Wellawatta South	No	20826
Sub Total				86652
Total Population				701314

2. Objectives of an exit strategy for the Municipality area

The latest coronavirus disease 2019 (COVID-19) data as per 24th April 2020 indicate that 91 out of 334 confirmed cases are from the Municipality area. Considering the uniqueness of Colombo as the commercial capital of Sri Lanka and the urgency in establishing normalcy, an exit strategy unique to Colombo Municipality area is indispensable. However, at the same time, the fact that Colombo Municipality area is the worst-hit geographical area due to COVID-19 epidemic should be taken into consideration.

The key objectives are:

1. Maintaining a low case load
2. Returning to near normal public life
3. Economic recovery

3. Parameters to be considered for decision making

When formulating a geographical area-specific exit modality, it is paramount to study different scenarios, as outlined in Figure 2.

Figure 2: Parameters to be considered in an exit modality

Geographical distribution of people

An exploration into the recent COVID-9 cases reported from Colombo Municipality area provides an insight into the differentials in the case distribution and the population characteristics.

Nagalagam Street and Gunasenghepura, from which cases were reported previously, are currently “cleared” of cases. The case no. 21 was reported from Bandaranayake Mawatha on 16 April 2020. This is a typical “watta” found within a CMC ward and is located in a 16–18 perch geographical area with 230 people living in 62 houses. A sudden death of a 37-year old male has been reported from the same locality on 27 March 2020. RT-PCR testing performed on selected people in Bandaranayake Mawatha resulted in 81 cases and the adjacent 146 Watta has found 64 cases. In Princegate, all the samples tested were negative.

The above information gives an idea of the behavioural pattern of people in specific locations within a CMC Ward, such as in “watta” and the impact on the spread of the disease. Therefore, in addition to the caseload, it is essential to study the scatter of the households (families) and properties of people within Colombo Municipality area limits.

Properties within the city:

- ◆ Residential Properties - 106,068
- ◆ Commercial Properties - 35,604
- ◆ Government Properties - 10,158
- ◆ Exempted Properties - 3,671
- ◆ Total Number of Properties - 155,501

High density low-income clusters ('watta')

The average population density of Colombo Municipality area is 172 people per hectare (Department of Census and Statistics, 2001). However, high-risk pockets for COVID-19, similar to Bandaranayake Mawatha located within some CMC Wards, show higher densities such as 974 people per hectare. The highest population density is in Colombo North, which is predominantly a low-income residential area.

Half of the population of Colombo Municipality area has been living for many years in low income settlements, such as 'watta'. The 2001 Survey carried out by the Colombo MC and SEVANATHA has identified a total of 77,612 families living in 1,614 low-income settlements in the city. A unique character of these settlements was that they are relatively smaller in size. Further, 74% of them have fewer than 50 housing units while the larger settlements with more than 500 units account for about 0.7% of the total low-income settlements in Colombo.

Household size

In such high-density low-income clusters, nearly 60% of families have 5 to 7 members, while 8% of the households have more than 10 members per unit. Twenty per cent of housing units have more than 2 families. Often, when children marry, they too settle down in their parents' house. Some families have rented out part of their house to earn an additional income.

Less-density high risk clusters

In addition to the typical high-density low-income settlements, there are clusters smaller in size confined to a few streets in some CMC Wards. Also, there are populations in urban new settlements””- Flats, mostly in Modara, Maligawatta, Dematagoda, Bluemendhal, Wanathamulla, Ingurukade and Slave Island area. The socio-cultural contexts and health behavior of these communities may also be different from other areas in the city.

Economic implications of the low income populations

The city needs services of the people living in low income settlements for the proper functioning of various sectors of the urban economy. About 45% of the income-earning household members engage in unskilled employment activities (waged labourers, CMC garbage collectors, road cleaners, helpers, etc.) About 9% of families do not have any source of regular income. As such, lack of a regular source of income is a problem for about 54% of urban poor families.

4. Pre-requisites for an exit strategy for Colombo

Considering the unique population characteristics and distribution of people in Colombo Municipality area, a careful analysis is needed prior to lifting the

lockdown of a particular area. The World Health Organization (WHO) has laid down 6 criteria to be considered before deploying an exit strategy. The status of these criteria in relation to Colombo Municipality area is given below (Table 2).

Table 2: Status of WHO criteria in relation to Colombo Municipality area

Criteria	Status
1. Disease transmission is under control;	Stage 3 b
2. Health systems are able to "detect, test, isolate and treat every case and trace every contact";	Yes
3. Hot spot risks are minimized in vulnerable places;	Yes
4. Schools, workplaces and other essential places have established preventive measures;	Guidelines formulated Schools not started
5. The risk of importing new cases "can be managed";	Yes
6. Communities are fully educated, engaged and empowered to live under a new normal.	Not sure

a. Disease transmission is under control.

The Colombo district, including Colombo Municipality area, has witnessed an increase in the confirmed cases during the past week. However, it is apparent that the stage of the epidemic is shifting from the level of family clusters to village clusters.

b. Health systems are able to "detect, test, isolate and treat every case and trace every contact".

The Colombo Municipality area has the highest population density and has the highest movements of the people. A well-coordinated mechanism is essential in tracing not only cases and contacts, but also to capture possible community transmission

It is **mandatory** that escalated RT-PCR testing of the following categories should continue, especially in high-density clusters and less-density high-risk clusters in each CMC ward prior to implementation of lockdown strategies.

1. Primary and secondary close contacts
2. Random community sampling of adjacent CMC wards
3. Random community sampling of low risk CMC wards

Specifically, active case detection in CMC wards with lower socio-economic families should be continuously carried out. In addition, they should be targeted for testing at every given opportunity, such as when they report to work related to services (e.g.

CMC labourers) and commercial/ business premises (e.g. manual labourers) within CMC sector. Currently, there is active surveillance conducted by the CMC health authorities to detect infected persons in these high risk areas for COVID-19.

c. Hot spot risks are minimized in vulnerable places.

With the emergence of recent Bandaranayaka Mawatha cluster, measures are being implemented jointly by CMC, Ministry of Health, Police and Armed Forces in collaboration with political leadership and Governor of the Western Province.

d. Schools, workplaces and other essential places have established preventive measures.

Comprehensive guidelines have been already formulated covering the relevant situations. However, there has to be an effective and practical mechanism to monitor the implementation of the guidelines.

e. The risk of importing new cases can be managed.

It is equally important to contain the outbreak in Colombo Municipality area and also not transmit the spread from Colombo to other districts. Considering a total number of nearly 500,000 people daily

entering Colombo, inbound and outbound movement of the population has to be limited.

f. Communities are fully educated, engaged and empowered to live under a new normal.

The CCPSL believes that this aspect needs to be much improved. The Bandaranayaka Mawatha cluster is a classic example of the actual behaviour the Watta population. This should be an eye opener for revisiting health education strategies already in place. Novel smart phone based or social media modalities will not be applicable to the index communities. We emphasize that it should be a mix of traditional modes (Loudspeaker messages / posters etc) redesigned with modern technologies.

5. Level of implementation of exit strategy

The CCPSL suggests that CMC Ward administrative level of Colombo Municipality area should be considered as the lowest area to implement the exit strategies. A CMC ward usually coincides with the public health inspector (PHI) area, so that it is more feasible for better coordination of the control activities by both health and non-health agencies.

Categorization of the CMC wards as **High Risk, Moderate Risk** and **Low Risk** should be worked out based on the following parameters;

- a. Number of cases reported within the last 28 days
- b. Extent of the primary / secondary contact load within last 28 days
- c. Geographical scatter of the households / families within a CMC Ward (*Presence of “Watta” communities or other less density high-risk clusters*)
- d. Judgment on the compliance of the resident population with epidemic control measures

In addition to the above, following aspects should also be considered;

1. Pregnant women / Persons with chronic illnesses
2. Age > 65 years population
3. Skilled / unskilled work force in each CMC ward
4. Location of essential services / industries within a CMC ward

With further understanding of the behaviour of the epidemic/people in each ward or district, relevant authorities may shift the focus to clusters of adjacent CMC wards. 'Moderate risk' areas will be the CMC wards adjacent to 'high risk' wards. They should be carefully selected by a panel of authorities representing health and non-health sectors.

It should be re-iterated that categorization of each Ward and pockets within each Ward should be managed at national level by a panel comprising health and non-health experts.

6. Implementation of the exit strategy

Within each of the areas according to their identified risk profile, the withdrawal of curfew / implemented measures / restrictions needs to be carried out in phases in a staggered manner, while ensuring the continuity of interventions carried out so far to contain the epidemic.;

- A. Stringent restrictions in high risk areas
- B. Moderate restrictions in moderate risk areas
- C. Relaxed restrictions in low risk areas

The optimal operationalizing of the strategy will also need rigorous inputs of real-time epidemiological geo-spatial data originating from ward level. Further, the exit strategy should be time-bound and requires

change depending on the emerging local epidemic data and will be revised by a team of multi disciplinary experts when appropriate.

Generic considerations (irrespective of the risk or geography)

Following services should continue irrespective of the risk level or the geographical area;

1. Key essential services

Health/ Transport/ Water/ Electricity/ Gas/ Postal/ Petroleum/ Telecommunication/ Harbour/ Vehicle breakdown services /Road maintenance / Irrigation

2. Essential industries (non-crowding): farming, fisheries, construction sites

3. Selected marketplaces/ industries will be opened (Figure 3)

4. Control of daily floating population – This should be addressed by a specific mechanism with restrictions enforced on the presence of minimal staff working at essential services/ government and private offices.

Market places should be re-orientated to follow the Myanmar model markets with social distancing (Figure 3) especially for Manning Market and Fisheries market (Figure 4).

Figure 3: Myanmar model markets with social distancing

Figure 4: Distribution of major markets in Colombo Municipality area

The above markets (Figure 3) should be appropriately modified and customers should be educated on basic health precautionary measures.

Preparing the mindset

This is essential prior to implementation of exit strategies. For successful implementation, an effective communication campaign with a mixture of traditional and innovative modalities are needed to prepare the mindset of the general public for the graded exit plan which is essential in gaining

compliance for it and avoiding any pent-up actions that will explode and be difficult to manage in terms of COVID-19.

Notifying the residents in Colombo Municipality area in the risk categorizations and restriction/relaxation of strategies is essential. This is also essential prior to implementation of exit strategies. Through mass media and by MOH offices (via loudspeakers), residents in all types of wards, clear messages should be announced to people.

6. An outline of the Exit Strategy

STRINGENT - These will be applicable to “High risk” CMC wards within the CMC Districts.

Parameter	Restrictions / Relaxations
Lockdown status	<p>24 hour curfew will be enforced.</p> <p>If the ward includes mainly highly dense lower socio-economic families, they will be <u>shifted to quarantined centers</u> based on the judgment on their health behavior.</p> <p>Other families will remain in their houses under strict supervision of Police and Armed Forces.</p>
Travel	<p>Inbound or outbound travel will not be allowed, unless for a specific humane reason.</p> <p><i>Other vehicular movement allowed without stoppage, if a main road is crossing the ward or if a ward is along a main road.</i></p>
People level	<ol style="list-style-type: none"> 1. Personal level measures including hand-washing, respiratory etiquette and social distancing should be practised. 2. No private gatherings for any purpose, no religious congregations and all places of worship shall remain closed.
Transport	No public or private transport allowed.
Offices	All offices government / private remain closed
Food & Groceries	Home delivery services to continue and to be more strengthened.
Schools / Other academic institutes	All remain closed.
Small Businesses	All remain closed.
Banks	<p>Should operate mostly via ATM, online or mobile services.</p> <p>No physical client services offered.</p>
Factories / Industries	Carefully selected industries will be allowed to function with 50% workforce*

* **NB:** Many of the workers of the area factories and industries are from the respective wards.

MODERATE RESTRICTIONS - These will be applicable to wards adjacent to “High risk” areas.

Parameter	Restrictions / Relaxations
Lockdown status	<p>Modified 24 hour curfew will be enforced.</p> <p>Families will remain in their houses under strict supervision of Police and Armed Forces.</p>
Travel	In bound or outbound travel—not allowed unless there is a specific humane reason
People level	<ol style="list-style-type: none"> 1. Personal level measures including hand-washing, respiratory etiquette, and social distancing should be practised. 2. Only one person per house will be allowed outside the house premises at a time for a specific purpose. A token system should be introduced.

	<p>3. Pregnant women should remain at home but allowed to attend routine clinics.</p> <p>4. Other vulnerable groups (persons above 65 years / patients with chronic illnesses) are NOT permitted to move outside the house unless for medical reasons. They should obtain special passes if needed or may use the clinic record as a pass.</p> <p>5. No private gathering for any purpose <u>more than five</u> persons, no religious congregations and all places of worship shall remain closed.</p> <p>Attendance at weddings and funerals should be restricted to 10 persons.</p>
Transport	No public or private transport allowed.
Offices	All offices government / private remain closed
Healthcare facilities	All pharmacies / General Practice / Medical Centers are allowed to open and should follow guidelines issued by Ministry of Health & College of GPs.
Food & Groceries	Home delivery services to continue and to be more strengthened.
Schools / Other academic institutes	All remain closed.
Banks	<p>Should operate mostly online or mobile services.</p> <p>Client services should be started with 2 sessions;</p> <p>7.00 am – 12.00 N 12.30 N – 5.30 pm</p> <p>Services offered once per week per customer.</p> <p>Different work hours may be introduced to reduce overcrowding in public transport.</p>
Daily wage dependent employees	Daily paid labourers are allowed with specific restrictions posed to employers on social distancing and basic hygienic measures
Factories / Industries	Carefully selected industries will be allowed to function with 50% workforce

MORE RELAXED RESTRICTION - These will be applicable to “Low risk” areas.

Parameter	Restrictions / Relaxations
Lockdown status	The curfew will be lifted daytime. Supervision by police and Armed Forces will continue.
Travel	No restrictions on inbound or outbound travel.
People level	<p>1. Personal level measures including hand-washing, respiratory etiquette, and social distancing should be practised.</p> <p>2. No restrictions on moving outside the house premises, but “stay home” promoted.</p> <p>3. Pregnant women should remain at home but allowed to attend routine clinics.</p> <p>4. Other vulnerable groups (persons above 65 years / patients with chronic illnesses) are permitted to move outside the house for a specific purpose for a limited time period.</p> <p>5. No private gathering for any purpose <u>more than 10</u> persons.</p> <p>6. Religious congregations and all places of worship will be opened for only 10 people at a time.</p> <p>7. Weddings and funerals should be conducted with minimal participants, complying with hygienic practices and maintaining social distancing.</p>

Transport	<ol style="list-style-type: none"> 1. Public transport (CTB / Private / Train) allowed for travel with 50% seating capacity within the area. 2. Private vehicles / Taxi are allowed with only 2 passengers. 3. Three wheelers / Motorcycles / Bicycles can carry <u>only one passenger</u>.
Healthcare facilities	All healthcare services (government and private) should be resumed with triage systems to care for patients with fever.
Offices	<p>All workplaces (Government / Private) in the geographical area to resume work with 2 sessions 50% employees per session (one group per week of every other day).</p> <p>7.00 am – 12.00 N 12.30 N – 5.30 pm</p> <p>Different work hours may be introduced to reduce overcrowding in public transport</p>
Food & Groceries	<ol style="list-style-type: none"> 1. Home delivery services to continue and to be more strengthened. 2. Small groceries / shops – Allowed to open with minimal crowding. 3. Larger food / grocery outlets (Supermarkets) –restricted entrance with one token card per family for a designated outlet / Token valid once per week for 1 hour 4. The catchment area and the catering population should be considered. 5. Economic Centers and other large scale wholesale food markets are kept open in compliance with safety health measures.
Schools / Other academic institutes	All remain closed.
Small Businesses	<ol style="list-style-type: none"> 1. Non-grocery supermarkets, malls, Hardware and shops selling other merchandise like jewelry, textiles and electronics will be opened. 2. Eating places, restaurants, tea shops, bakery will be opened. Eating allowed in-house for 50% seating at a time. 3. Restaurants are allowed to open with minimal crowding. 4. Theatres, bars, etc. with closed air-conditioning will remain closed.
Banks	<p>Should operate mostly online or mobile services.</p> <p>Client services should be started with 2 sessions:</p> <p>7.00 am – 12.00 N 12.30 N – 5.30 pm</p> <p>Services offered once per week per customer.</p> <p>Different work hours may be introduced to reduce overcrowding in public transport.</p>
Daily wage dependent employees	<ol style="list-style-type: none"> 1. Daily paid labourers are allowed with specific restrictions posed to employers on social distancing and basic hygienic measures. 2. Lottery sellers & other street vendors –allowed with social distancing and basic hygienic measures.
Industries / larger factories	<p>All factories in the geographical area to resume work with 2 or more sessions 50% or less employees per roster.</p> <p>Different work hours may be introduced to reduce overcrowding in public transport.</p>
Other	Religious congregations, large events, political meetings or conferences or cultural gatherings shall continue to be prohibited

In a broader perspective, Western Province is the economic hub of the country. With a high number of cases reported, WP is still considered as a high risk area. Even with the proposed strategy above for the Colombo Municipality area, it will take longer time to bring back the normalcy and the economic

repercussions would be many. As such, a micro planned strategy with inputs from all the relevant non-health stakeholders is indispensable.

College of Community Physicians of Sri Lanka

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