

# **GMOA COVID-19 Exit Strategy Sri Lanka**

# EXTENSION TO EXIT STRATEGY TO MITIGATE SITUATIONAL LEVEL 4 - AUGUST 2021



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09.08.2021

**Government Medical Officers' Association** 

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## Introduction

The COVID-19 pandemic which saw its inception in Sri Lanka in March 2020 has progressed throughout the course of this time with several peaks and troughs. During this period the Government Medical Officers' Association (GMOA) issued several strategies and concepts on the management of the pandemic (Exit Strategy: April,2020; October,2020 and May,2021)<sup>1,2,3,4</sup>. Most of these strategies have served as a fruitful basis to the mechanisms carried out by the health sector.

At present Sri Lanka is at WHO Situational Level 4; which requires a new and stronger mechanism for management.

Based on the "Hammer and Dance" Theory during periods such as this where there is a rising case load, large scale and effective steps or "hammering" must be done.

As such at the present with the rising case number several steps have already been put in place by the government sector. Increment of vaccination, implementation of home care and testing for COVID-19 are some of the steps that are currently in place.

Integrated Home Care is operationalized island-wide from Monday 9<sup>th</sup> of August and will contribute to the optimal use of hospital facilities.

These mechanisms though contributory to the current management is insufficient to reduce the currently exponential rise in number of cases and it is evident that the government must take more firm decisions to combat this wave. Thus, it is imperative that a new and beneficial strategy be introduced, so that flattening of the curve can be brought about and the case load can be reduced.

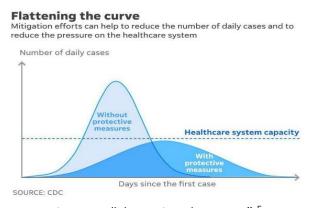


Figure 1: "Flattening the curve" 5

<sup>&</sup>lt;sup>1</sup> 'GMOA COVID-19, Exit Strategy Sri Lanka', GMOA, Sri Lanka, 2020

<sup>&</sup>lt;sup>2</sup> 'GMOA COVID-19, Exit Strategy Sri Lanka Reinforcement October 2020', GMOA, Sri Lanka, 2020

<sup>&</sup>lt;sup>3</sup> 'GMOA COVID-19, Exit Strategy Sri Lanka Recommendations for the COVID-19 vaccination program in Sri Lanka', GMOA, Sri Lanka, 2021

<sup>&</sup>lt;sup>4</sup> 'GMOA COVID-19, Exit Strategy Sri Lanka Reinforcement May 2021 Home care strategy', GMOA, Sri Lanka, 2021

<sup>&</sup>lt;sup>5</sup> 'how to protect yourself and others", <u>www.cdc.gov</u>, CDC, 2021 <u>https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/prevention.html</u>

# **Brief out line of strategy**

Whilst implementation of Home Care and island-wide vaccination strategies are significant steps to combat the current situation, a longer period of time will be taken for these steps to bring about reduction in case load. Home Care will bring about saving of resources for those in crucial need. When considering vaccination once 70% coverage is achieved, this will bring about a reduction in community transmission. Whilst it is essential that hospital capacity and resources be increased, it is evident the government does not have the capabilities to achieve this.

Therefore, in order to mitigate the current rising trend and to bring about a reduction in future caseload the following 4 actions must be adhered to:

- 1. Strict travel restrictions and stepwise exit
- 2. Vaccination of 70% of population
- 3. Implementation of 3<sup>rd</sup> dose of vaccine
- 4. Improving testing capacity

#### SARS – CoV 2 Delta Variant

- Highly contagious, nearly twice as contagious as previous variants
- Infected patients are more likely to be hospitalized than patients infected with Alpha or the original strain
- R value 5 to 8
- High CT value in both unvaccinated and fully vaccinated people.
- But fully vaccinated people are likely to be infectious for less time than unvaccinated people.

# 1. Strict Travel Restrictions and Stepwise Exit

#### 1.1 Justification

At present based on the WHO criteria Sri Lanka is at Situational Level 4. Additionally, the Delta variant has now entered the community and it is a variant with R value of 5 to  $8^{\rm 6}$ . Considering these factors, it is evident that vaccination must be expedited.

However, this process is time consuming and development of immunity following the first dose takes at least a period of 2 months after the first dose and subsequently 3 to 4 weeks from the  $2^{nd}$  dose<sup>7</sup>. Therefore, implementing a period of strict travel restrictions (targeting 80 % - 90% movement restriction) during this period where immunity is being developed in a large proportion of the population is financially prudent.

Therefore, immediate steps must be identified to reduce both the case load and the death rate.

### 1.2 Exit strategy

Exit strategy for COVID 19 and reinforcements to the Exit Strategy from COVID-19 were published by the GMOA in March 2020, October 2020 and in May 2021.

At present too a timely strategy must be identified to impose travel restriction, targeting 80 % - 90% movement restriction and then subsequently exit the imposed restrictions.

The imposition of strict travel restrictions and its exit should ideally be based on the vaccination availability and schedule.

Therefore, if adequate vaccines are made available with immediate effect a 2-weeks strict travel restrictions and stepwise exit over 2 months period must be implemented so that 70% of the population is vaccinated and will be adequate coverage to reduce community transmission.

<sup>&</sup>lt;sup>6</sup> "The Delta variant is 40% more infectious than the original COVID-19 strain", <u>www.aarp.org</u>, AARP, 2021<a href="https://states.aarp.org/west-virginia/the-delta-variant-is-40-more-infectious-than-the-original-covid-19-strain">https://states.aarp.org/west-virginia/the-delta-variant-is-40-more-infectious-than-the-original-covid-19-strain</a>

<sup>&</sup>lt;sup>7</sup> Reference for vaccination immunity

# 2. Vaccination of 70% of the Population

### 2.1 Synopsis of vaccination situation

At present Sri Lanka has received 19.5 million doses and as of 9th August 2021 14.5 million vaccine doses have been administered to all Sri Lankans with approximately 5 million doses remaining. Of this 3.25 million people (14.5% of population) have received both doses and approximately 11.2 million (50% of the population) have received one dose<sup>8</sup> .(Astra Zeneca, Sinopharm, Pfizer, Sputnik and Moderna)<sup>8</sup> .

There is a need of another 11 million doses in order to achieve vaccination of 70% of the population of those over 18 years of age.

Additionally, we must also ensure coverage of children between the ages of 12 and 18 years.



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#### මාධාෘ නිවේදනය ~ PRESS RELEASE

2021. 08. 09 දින පස්වරු 8.30 වන විට කොච්ඩ-19 පුතිශක්තිකරණ වැඩ සටහනේ පුගතිය Progress of COVID-19 Immunization as of 8.30 pm on 09. 08. 2021

මානුවේ මානුවේ Dose 59426 406924 453403 5489	Covishield දෙවන මානුංච Second Dose 64589 282721 30997 7578 69446	සයිනොගාමී පළමු මානුංච First Dose 2,865* 756041 1019139 6186895	ව Sinopharm දෙවන මානුව Second Dose 2,435* 708791 1045027	ජපුටනික් - V පළමු මානුාව First Dose 26,821 87,974 44286	Sputnik - V දෙවන මානුංච Second Dose	Pi පළමු මාතුාව First Dose	ලේචන මානුවේ Second Dose	Mod පළමු මාතුාව First Dose	lerna දෙවන මානුාව Second Dose
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30499	50893	97966	11058	- 4	_	1308	<u>~</u>	5625	
31323	26067	79182	6878	-	13	41156	76	-	
38665	17547	46113	2545		-	3830	126	5465	
29654	9570	63461	69736	-	-	2962	58	19115	
23135	1021	69041	153678	-	-	711	75	995	
25576	3620	153958	307267	-	-	169	215		
	865,364	8,948,551	2,369,042	159081	14,516	251643	748	748936	
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<sup>\*</sup> යංවධර්න කටයුතු සඳහා ශී ලංකාවට පැමිණ සිටින වින ජාතිකයින්ට හයිනොෆාම එන්නත පළමු මානුාව 2,865 ක්ද, දෙවන මානුාව 2,435 ක්ද ලබා දී ඇත.

පුධාන වසංගත රෝග විදාහඥ Chief Epidemiologist

Figure 2: "Press Release \_ Epidemiology Unit – 09.08.2021" 9

<sup>\* 2,865</sup> doses of the Sinopharm vaccine as the first dose and 2,435 doses as the second dose was administered to Chinese nationals in Sri Lanka engaged in developmental activities.

<sup>&</sup>lt;sup>8</sup> Data from GMOA COVID coordinating center

<sup>&</sup>lt;sup>9</sup> Epidemiology Unit <a href="https://www.epid.gov.lk/web/images/pdf/corona\_vaccination/covid\_vaccination\_2021-08\_09.pdf">https://www.epid.gov.lk/web/images/pdf/corona\_vaccination/covid\_vaccination\_2021-08\_09.pdf</a>

No	Date	Astra Zeneca	Sputnik I	Sputnic II	Sinopharm	Pfizer	Moderna	Total
		No of Doses	No of Doses	No of Doses	No of Doses	No of Doses	No of Doses	
1	28-Jan-21	500,000	-					
2	25-Feb-21	500,000	-					
3	7-Mar-21	264,000	-					
4	31-Mar-21		-		600,000			
5	5-May-21		15,000					
6	25-May-21				500,000			
7	27-May-21		50,000					
8	6-Jun-21				1,000,000			
9	9-Jun-21				1,000,000			
10	11-Jun-21		50,000	15,000				
11	2-Jun-21				1,000,000			
12	4-Jun-21				1,000,000			
13	5-Jul-21					26,910		
14	11-Jul-21		50,000					
15	12-Jul-21					26,910		
16	13-Jul-21				2,000,000			
17	19-Jul-21					62,010	1,500,100	
18	22-Jul-21				2,000,000			
19	26-Jul-21					90,090		
20	27-Jul-21				1,600,000			
21	31-Jul-21	728,460						
22	2-Aug-21					105,300		
23	6-Aug-21				2,160,000			
24	7-Aug-21	728,460						
25	8-Aug-21				1,860,000			
26	9-Aug-21					100000		
Sub Total		2,720,920	165,000	15,000	14,720,000	411,220	1,500,100	19,532,240

Figure 3: COVID-19 vaccine arrival summary as of 09th, august 2021
Source: GMOA COVID Coordinating Center, 2021

#### 2.2 Strategy for vaccination

In May 2021 the GMOA published "Recommendations for the COVID-19 vaccination program in Sri Lanka."

Based on this GMOA strategy if vaccination of high risk category took place according to priority order 90% of all present deaths could have been prevented.

Due to vaccination a significant number of deaths has been prevented even at present, however as we have failed to vaccinate the above 60 population and high-risk working population with both doses as per our recommendations a rising trend in deaths and particularly in the high-risk categories has been noted.

If as stated the first 10 million doses of vaccines had been utilized to vaccinate 20% of the population belonging to the above 60 age category and below 60 age group with NCD and High-risk working Population (nearly 5 million Population) more deaths could have been prevented from the said groups.

#### 2.3 Timeline

The current need of vaccines is 11 million in total. If 11 million doses are made immediately available a minimum of 40 to a maximum of 50 days would be required to vaccinate the population based on the current rate of administration of vaccines and the capacity of vaccination.

Therefore, if vaccination is achieved it will take another 3 to 4 weeks to develop immunity following full vaccination.

Thus, based on such estimations if 11 million vaccine doses are made available with immediate effect to it will take a minimum of 65 days to 75 days to develop effective Immunity of 70% of the population.

# 3. <u>Implementation of 3<sup>rd</sup> Dose of Vaccine</u>

#### 3.1 Need for booster dose of vaccination

When a virus is actively circulated within a population and infecting a large number of individuals the likelihood of the virus mutating increases<sup>10</sup>

The higher the opportunity that a virus has to spread the more it replicates and a new variant can result from the mutation that may take place. Therefore, at present Sri Lanka has a high risk of getting a new virulent local variant, as the spread of disease increases and due to inefficient vaccination methodology.

In order to mitigate the spread and with the idea of looking towards the future the concept of a third dose of vaccine being administered has been accepted globally. Several nations have now commenced and are planning to commence a booster dose of the vaccination for COVID-19 with accepted vaccine types, countries such as Great Britain, France, Russia, Israel, Germany and Indonesia are amongst these nations<sup>11</sup>

By administering a booster dose, it will halt or minimize spread of disease and prevent further mutation thereby preventing a mutant variant.

#### 3.2 Plan of action for booster dose

As there is no definitive expiration for COVID-19 it is imperative that a way forward is set in place especially in terms of vaccination.

Therefore, it is essential to identify and plan for a booster vaccination with a technically accepted vaccine type.

- As such a minimum of 15 million doses of vaccines are required to administer a 3<sup>rd</sup> dose
- If a booster is to be administered a plan of action must be set in place identifying a time line, the initial categories to be administered and a methodology
- Administering of the vaccine for the 12-18 age group must also be actively explored at this juncture.

<u>vaccines?gclid=CjwKCAjw3riIBhAwEiwAzD3TiZRJ1SLjeoJnJ7v6sHNeQMa7iwIzLv7VeBHxrtdU4nXmPg-GwUoFmxoCEbEQAvD\_BwE</u>

<sup>&</sup>lt;sup>10</sup> "The effects of virus variants on COVID-19 vaccines" <u>www.who.org</u>, WHO, 2021 <u>https://www.who.int/news-room/feature-stories/detail/the-effects-of-virus-variants-on-covid-19</u>

<sup>&</sup>lt;sup>11</sup> From Israel to Britain, which countries are planning to give COVID-19 vaccine booster shots, <a href="https://www.firstpost.com">www.firstpost.com</a>, First-post, 2021, <a href="https://www.firstpost.com/health/from-israel-to-britain-which-countries-are-planning-to-give-covid-19-vaccine-booster-shots-9859111.html">https://www.firstpost.com/health/from-israel-to-britain-which-countries-are-planning-to-give-covid-19-vaccine-booster-shots-9859111.html</a>

# 4. Testing Capacity

RT-PCR and Rapid antigen test are the practiced methods for testing at present. As Sri Lanka has now reached community level transmission testing too must be carried out accordingly.

The current testing capacity is highly inefficient for effective surveillance where community level transmission is present.

Testing methods thereby must be developed based on global practices and testing must be made more freely available.

In order to achieve this, we must:

- Study and identify testing methods practiced globally
- Increase availability of tests
- Plan testing in the community based on case density and hot spots
- Systematically "test, track and treat" all individuals