Exit strategy of COVID-19 epidemic in Sri Lanka

Recommendations of the College of Community Physicians (Public Health Specialists) of Sri Lanka (CCPSL)
Key interventions

These measures slowed down the spread of the virus and already saved thousands of lives.
Asian countries in lockdown

Dates and severity of restricted internal movement by country

- **First case**
- **Localised recommendations**
- **Localised lockdown**
- **National recommendations**
- **National lockdown**

**Note:** China and Thailand confirmed their first cases prior to 15 January 2020

Source: Oxford COVID-19 Government Response Tracker, BBC Research
Exit strategy

- A contingency plan that needs to be executed by the “whole of government with whole of society”, once the stipulated objectives of containing the epidemic has been partly / fully achieved, which could maximize benefit and/or minimize damage.
Objectives of an exit strategy

1. Maintaining the case load well below the country’s health system capacity
2. Returning to near normal public life
3. Economic recovery

- Actions should be based on science with public health at its centre
- A multidimensional policy decision
- Balancing public health benefits against social and economic impacts
Learning from other countries

- **Singapore:** "circuit breaker" approach - loosening and tightening. Functioning economic sectors, supply chain, permits people to go to supermarkets. Case fatality very low. A new wave of cases - an increase of more than 80%, a near total lockdown for one month reintroduced.

- **Hong Kong:** “suppress-and-lift” strategy. Successful control of the epidemic. Case fatality very low. Restaurants open, economy largely functioning. An unexpected ↑ Cases due to imported cases. ‘hammer and dance’

- **Taiwan:** Averted a large-scale outbreak. Most of the country’s service sector, as well as its manufacturing industries, continue to function as usual. Taiwanese returnees from Europe and the US: fivefold ↑ Cases in six weeks. But only few deaths.

- **South Korea:** Worst outbreak outside China - successfully contained. ↑ Cases due to overseas arrivals and isolated clusters. Nearly 100 recovered patients have tested positive: ?'reactivated' virus. Functioning economy and conducted the scheduled general election. Shows that full eradication remains difficult.

- **Iceland:** Large scale testing - 10% of its population, 50% are asymptomatic. (Total population: 364,134). This implies that it may be far more immunity than we realize.
When?

Too early
- Second wave

Too long
- Economic issues
- Public morale
What to consider?

**Population parameters**
- Low socio-economic strata
- Vulnerable populations
- Distribution of Households / families

**Geographical distribution of people**
- Rural / scattered populations
- Urban – high end
- Urban – lower class
- Questionable health behavior

**Geographical distribution of cases**
- High Risk
- Moderate Risk
- Low Risk

**Societal needs**
- Essential services (Food / Transport / Health / Bank etc.)
- Other Essential services
- Schools / Universities/ Other academic institutes

**Economic perspectives**
- Daily wage dependent employees
- Sales outlets / Stores/ Businesses
- Industries and workplace

**Epidemic behaviour**
- No cases / Sporadic
- Second wave
- Community transmission

**Health system**
- COVID-19 focused
- Non COVID-19

**Decision Making**
- Preventive
- Curative
When to relax the lockdown

Criteria to assess whether the time has come to relax the lockdown:

1. **Epidemiological criteria** showing that the spread of the disease has significantly decreased and stabilized for a sustained period of time.

2. **Sufficient health system capacity**

3. **Disease monitoring capacity**, including large-scale testing capacity to detect and monitor the spread of the virus combined with contact tracing and possibilities

EU Guidelines
Pre-requisites

**Escalated strategic RT-PCR testing**

- **Passive surveillance** - Suspected patients fulfilling the case definition of COVID-19
- **Active surveillance** -
  - Targeted high-risk testing among all three tiers of close contacts and quarantined persons
  - Health facility testing of close contacts
- **Sentinel surveillance** - Patients in sentinel centres fulfilling the severe acute respiratory infection (SARI) and influenza like influenza (ILI) criteria
Categorization of risk areas

• Lowest level: Divisional Secretariats
  - Health and non-health coordination
  - Readily available information
  - Ground level staff for implementation
  - Shrinkage of extent of area with risk

• To be decided at national level by an expert panel comprising health and non-health authorities based on input from local level

• May shift the focus to clusters of DS areas / district level
Total number of COVID 19 cases
(Updated 16/4/2020)

COVID 19 cases
- 0
- 0 - 5
- 6 - 10
- >10
Categorization of risk level

Based on several parameters:

- No cases reported within last 28 days
- Extent of the primary / secondary contact load within last 28 days
- Geographical scatter of the households / families
- Judgment on the compliance of the resident population with epidemic control measures

High risk
Moderate risk
Low risk
Generic considerations

(Irrespective of the risk or geography)

1. Key essential services
   • Health / Water / Electricity / Gas / Postal / Petroleum / Telecom / Harbour / Vehicle breakdown services / Road maintenance / Irrigation

2. Essential industries (non-crowding):
   • Farming, fisheries, Food processing construction sites
Vulnerable Groups

• **Mortality Risk**
  - Very high: >65 yrs + pre-existing conditions
  - High: >65 yrs with no pre-existing conditions
  - Low: <65 yrs + pre-existing conditions
  - Nominal: <65 with no pre-existing conditions.

• More focus on protecting **high-risk elderly individuals**, rather than a “one size fits all” economically and socially unsustainable approach. Vulnerable groups should be protected for longer.

• **>65 yrs Population of Sri Lanka:** 950,000 (4.3% of the population)
• Covid19 cases profile Sri Lanka: only **8%** >60 yrs (*up to 29^{th} March*)
Phased Approach

• Withdrawal of curfew / implemented measures / restrictions - in phases in a staggered manner

Phase I
• Stringent restrictions in high risk areas

Phase II
• Moderate restrictions in moderate risk areas

Phase III
• Relaxed restrictions in low risk areas
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Phase I High Risk</th>
<th>Phase II Moderate Risk</th>
<th>Phase III Low Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lockdown status</strong></td>
<td>Curfew 6.00 pm – 6.00am</td>
<td>Curfew 6.00 pm – 6.00am</td>
<td>No Curfew</td>
</tr>
<tr>
<td><strong>Travel</strong></td>
<td>No Inbound or outbound travel</td>
<td>No Inbound or outbound travel</td>
<td>Inbound or outbound travel with restrictions</td>
</tr>
<tr>
<td><strong>People level</strong></td>
<td>One person per house allowed outside</td>
<td>One person per house allowed outside</td>
<td>No restrictions “stay home” promoted</td>
</tr>
<tr>
<td><strong>Vulnerable groups</strong></td>
<td>Remain home</td>
<td>Remain home</td>
<td>Remain home</td>
</tr>
<tr>
<td><strong>Private gatherings</strong></td>
<td>&lt; 5 persons</td>
<td>&lt; 5 persons</td>
<td>&lt; 10 persons</td>
</tr>
<tr>
<td><strong>Weddings and funerals</strong></td>
<td>&lt; 10 persons</td>
<td>&lt; 10 persons</td>
<td>Minimal participants</td>
</tr>
<tr>
<td><strong>Religious congregations</strong></td>
<td>No</td>
<td>No</td>
<td>&lt; 10 persons</td>
</tr>
<tr>
<td>Parameter</td>
<td>Phase I High Risk</td>
<td>Phase II Moderate Risk</td>
<td>Phase III Low Risk</td>
</tr>
<tr>
<td>---------------------------</td>
<td>--------------------------------------------------------</td>
<td>----------------------------------------------------------</td>
<td>---------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Transport</strong></td>
<td>No public transport&lt;br&gt;Private vehicles / Taxi (2 passengers)&lt;br&gt;Three wheelers / Motorcycles (1 passenger)</td>
<td>No public transport&lt;br&gt;Private vehicles / Taxi (2 passengers)&lt;br&gt;Three wheelers / Motorcycles (1 passenger)</td>
<td>Public transport-50% seating&lt;br&gt;Other vehicles same</td>
</tr>
<tr>
<td><strong>Healthcare facilities</strong></td>
<td>All hospital inward services started except routine clinics&lt;br&gt;Field clinics&lt;br&gt;Pharmacies / Medical Centres</td>
<td>All hospital inward services + routine clinics&lt;br&gt;Field clinics&lt;br&gt;Pharmacies / Medical Centres</td>
<td>All services resumed</td>
</tr>
<tr>
<td><em>(With triage systems to care for patients with fever)</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parameter</td>
<td>Phase I High Risk</td>
<td>Phase II Moderate Risk</td>
<td>Phase III Low Risk</td>
</tr>
<tr>
<td>-----------------</td>
<td>-----------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Work</td>
<td>Maintain “work from home” modality - current practice</td>
<td>Government / Private catering for public requirements with 2 sessions Different work hours</td>
<td>All Government / Private offices with 2 or more sessions Different work hours</td>
</tr>
<tr>
<td>Food &amp; Groceries</td>
<td>• Home delivery services • Small groceries / shops • Larger food / grocery outlets (Supermarkets) – restricted entrance (one token per family) • Economic Centers / large scale wholesale food markets opened</td>
<td>Same</td>
<td>Same</td>
</tr>
<tr>
<td>Parameter</td>
<td>Phase I</td>
<td>Phase II</td>
<td>Phase III</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>----------</td>
<td>------------------------------</td>
<td>--------------------------------</td>
</tr>
<tr>
<td>Schools Universities / Other</td>
<td>Remain</td>
<td>Remain closed Examinations</td>
<td>Remain closed Examinations</td>
</tr>
<tr>
<td>academic institutes</td>
<td>closed</td>
<td>may be conducted in IIIry</td>
<td>may be conducted in IIIry level</td>
</tr>
<tr>
<td></td>
<td>Online /</td>
<td>level</td>
<td>level</td>
</tr>
<tr>
<td></td>
<td>distant</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>education</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>modalities</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tuition</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>classes</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>not</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>allowed.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small Businesses</td>
<td>• Small</td>
<td>• Small business - opened</td>
<td>• Small business - opened</td>
</tr>
<tr>
<td></td>
<td>business</td>
<td>• Eating places, restaurants and bakeries opened. No eating allowed in-house. Take away only.</td>
<td>• Eating places, restaurants and bakeries opened. Eating allowed 50% in-house.</td>
</tr>
<tr>
<td></td>
<td>- opened</td>
<td>• Shops selling other merchandise / Non grocery supermarkets, malls, theatres, bars, etc. remain closed.</td>
<td>• Shops selling other merchandise / Non grocery supermarkets, malls - opened</td>
</tr>
<tr>
<td></td>
<td>• Eating</td>
<td>• Theatres, bars, etc. remain closed.</td>
<td>• Theatres, bars, etc. remain closed.</td>
</tr>
<tr>
<td></td>
<td>places,</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>restaurants and bakeries</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Eating</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>allowed</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>50% in-</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>house.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Theatres, bars, etc. remain closed.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- eating</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>allowed</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>50% in-</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>house.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parameter</td>
<td>Phase I High Risk</td>
<td>Phase II Moderate Risk</td>
<td>Phase III Low Risk</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Banks</td>
<td>Should operate mostly via ATM, online or mobile services. No physical client services offered.</td>
<td>Client services started with 2 sessions; Services offered once per week per customer.</td>
<td>Client services started with 2 sessions; Services offered once per week per customer.</td>
</tr>
<tr>
<td>Daily wage dependent employees</td>
<td>Selected workers allowed with specific restrictions</td>
<td>Selected workers allowed with specific restrictions</td>
<td>All workers allowed with specific restrictions</td>
</tr>
<tr>
<td>Export processing zones / larger factories</td>
<td>Remain closed</td>
<td>Remain closed</td>
<td>Resume work with 2 or more sessions 50% or less employees per roster. Different work hours</td>
</tr>
</tbody>
</table>
Other

- **Job categorization** – Identify level of interpersonal contact
- Religious congregations, large events, political meetings or conferences or cultural gatherings shall continue to be prohibited
- **Temperature screening mechanisms** on entrance to public places / institutions
- **Air travel precautions**
  - Rescue missions for Sri Lankans stranded in several countries and imposing mandatory center-based quarantine
  - Inbound / outbound flights: temperature screening / testing / quarantine certificates
- **Reorientation** of different systems including the society
Western Province

• Recognize as economic hub - special analysis needed
• List out business priorities – concurrence from health authorities
• Assessment of the nature of the local industries and enterprises that can be made to function in safe mode.
Special Notes

• Identify **context-specific operationalization** mechanisms
• First implement as a **pilot** in **low risk** areas
• **Central level multi-sector monitoring** mechanism
• Phased approach
• **Scenario-based preparatory approach**
• **Face masks** as a complementary measure / voluntary practice
• **Care for the non-COVID-19 patients**
• Maintain **health system capacity**
• **Supply chain management**
Thank you!!...