MINIMUM PUBLIC HEALTH STDS IN A COVID WORLD

A/P Jeremy Lim (ephlfyj@nus.edu.sg/ jeremyfylim@gmail.com)

MBBS, MPH, MRCS (Edin), MMed (Surg), FAMS

Co-Director, Global Health Program

Saw Swee Hock School of Public Health

National University of Singapore
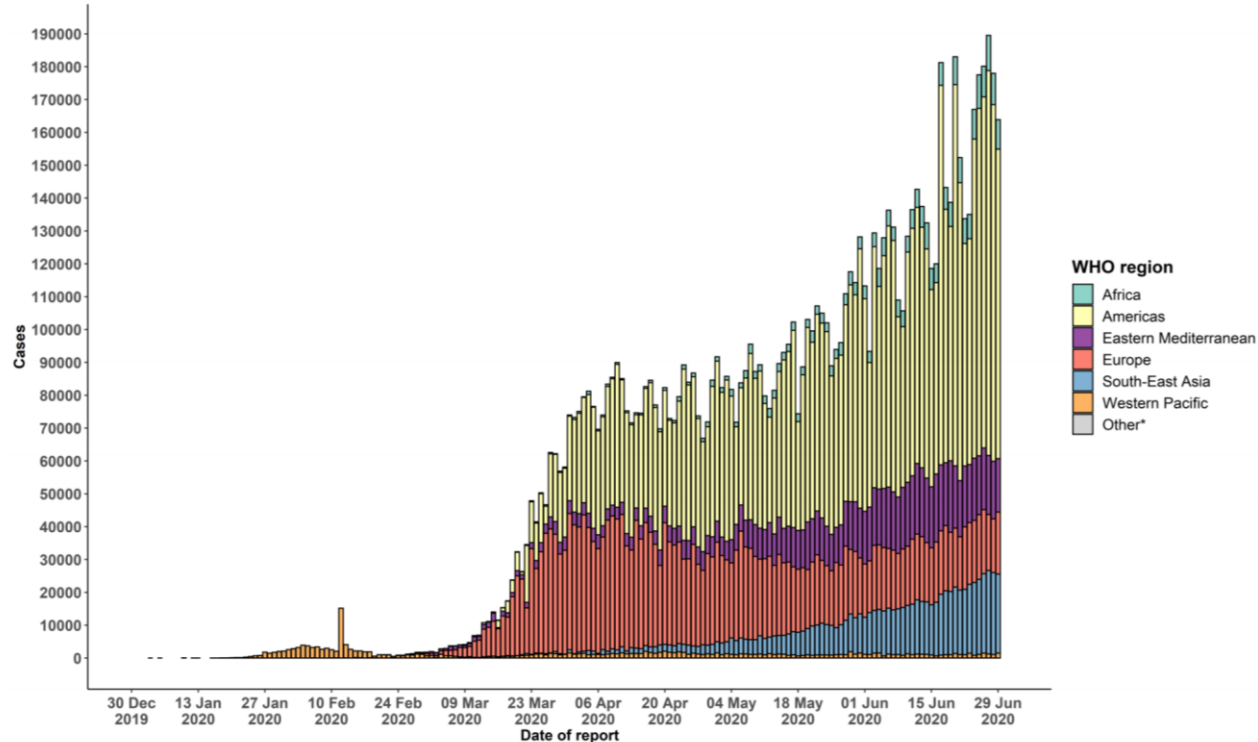
July 1st 2020

OVERVIEW

- COVID-19 Realities
- State of Science- Public Health Interventions
- Policy Objectives of Minimum Public Health Standards in Re-Opening
- 'Next Normal'- Living in a COVID World
- Cross-Border Movement
- Working Together across Borders

COVID-19 Realities- The Worst is not Over

Figure 2. Number of confirmed COVID-19 cases, by date of report and WHO region, 30 December through 30 June**

June 2020

WORLD ECONOMIC OUTLOOK UPDATE

A Crisis Like No Other, An Uncertain Recovery

Global growth is projected at −4.9 percent in 2020, 1.9 percentage points below the April 2020 World Economic Outlook (WEO) forecast. The COVID-19 pandemic has had a more negative impact on activity in the first half of 2020 than anticipated, and the recovery is projected to be more gradual than previously forecast. In 2021 global growth is projected at 5.4 percent. Overall, this would leave 2021 GDP some 6½ percentage points lower than in the pre-COVID-19 projections of January 2020. The adverse impact on low-income households is particularly acute, imperiling the significant progress made in reducing extreme poverty in the world since the 1990s.

As with the April 2020 WEO projections, there is a higher-than-usual degree of uncertainty around this forecast. The baseline projection rests on key assumptions about the fallout from the pandemic. In economies with declining infection rates, the slower recovery path in the updated forecast reflects persistent social distancing into the second half of 2020; greater scarring (damage to supply potential) from the larger-than-anticipated hit to activity during the lockdown in the first and second quarters of 2020; and a hit to productivity as surviving businesses ramp up necessary workplace safety and hygiene practices. For economies struggling to control infection rates, a lengthier lockdown will inflict an additional toll on activity. Moreover, the forecast assumes that financial conditions—which have eased following the release of the April 2020 WEO—will remain broadly at current levels. Alternative outcomes to those in the baseline are clearly possible, and not just because of how the pandemic is evolving. The extent of the recent rebound in financial market sentiment appears disconnected from shifts in underlying economic prospects—as the June 2020 Global Financial Stability Report (GFSR) Update discusses—raising the possibility that financial conditions may tighten more than assumed in the baseline.

https://ourworldindata.org/coronavirus

State of Science- Public Health Interventions

Best way to reduce coronavirus transmission is by wearing a face mask, study finds
By Andrea Kane and Allen Kim, CNN
Updated 2305 GMT (0705 HKT) June 12, 2020

"Wearing of face masks in public corresponds to the most effective means to prevent interhuman transmission"

Why washing hands with soap is critical in battling Covid-19

NIH Director's Blog

To Beat COVID-19, Social Distancing is a Must
Posted on March 19th, 2020 by Dr. Francis Collins

'Social distancing remains one of the best weapons we have to slow the silent spread of this virus and flatten the curve of the COVID-19 pandemic'

COVID-19 Occupational Risk Score

High Risk	Middle Risk	Low Risk
Meat processing/packing	Bus drivers	Economists
Call centres	Restaurants, lounges, coffeeshops	Astronomers
Distribution centres	School teachers	Actuaries
Healthcare*		

https://www.pnas.org/content/early/2020/06/10/2009637117; https://directorsblog.nih.gov/2020/03/19/to-beat-covid-19-social-distancing-is-a-must/; https://www.straitstimes.com/singapore/why-washing-hands-with-soap-is-critical-in-battling-covid-19; https://www.visualcapitalist.com/the-front-line-visualizing-the-occupations-with-the-highest-covid-19-risk/

Policy Objectives in a COVID World

- Test, trace and isolate cases as soon as possible to avoid secondary cases and widespread community transmission

- Prevent hospital and health system resources from being overwhelmed

- Enable economic re-opening cautiously so that livelihoods can be maintained

- Prepare citizens and businesses for the profound changes a COVID world necessitates

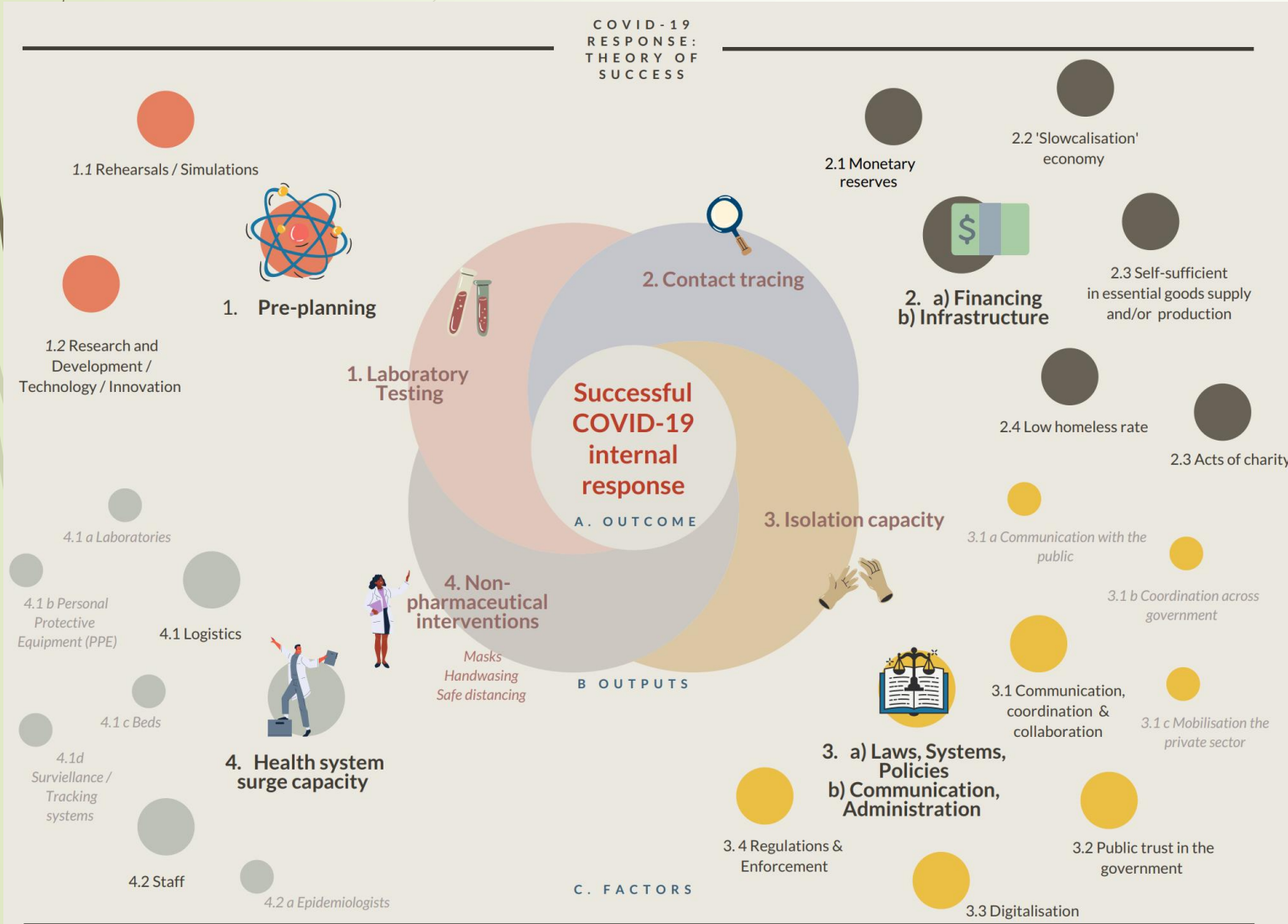# Critical Enablers to Less Dangerous Re-Opening

COVID-19 RESPONSE: THEORY OF SUCCESS

1.1 Rehearsals / Simulations

1. **Pre-planning**

1.2 Research and Development / Technology / Innovation

1. Laboratory Testing

2. Contact tracing

Successful COVID-19 internal response

A. OUTCOME

2.1 Monetary reserves

2.2 'Slowcalisation' economy

2. a) Financing b) Infrastructure

2.3 Self-sufficient in essential goods supply and/or production

2.4 Low homeless rate

2.3 Acts of charity

3. Isolation capacity

4.1 a Laboratories

4.1 b Personal Protective Equipment (PPE)

4.1 Logistics

4. Non-pharmaceutical interventions

Masks
Handwasing
Safe distancing

B OUTPUTS

4.1 c Beds

4.1d Surviellance / Tracking systems

4. **Health system surge capacity**

4.2 Staff

4.2 a Epidemiologists

3. a) Laws, Systems, Policies b) Communication, Administration

3.1 a Communication with the public

3.1 b Coordination across government

3.1 Communication, coordination & collaboration

3.1 c Mobilisation the private sector

3.2 Public trust in the government

3. 4 Regulations & Enforcement
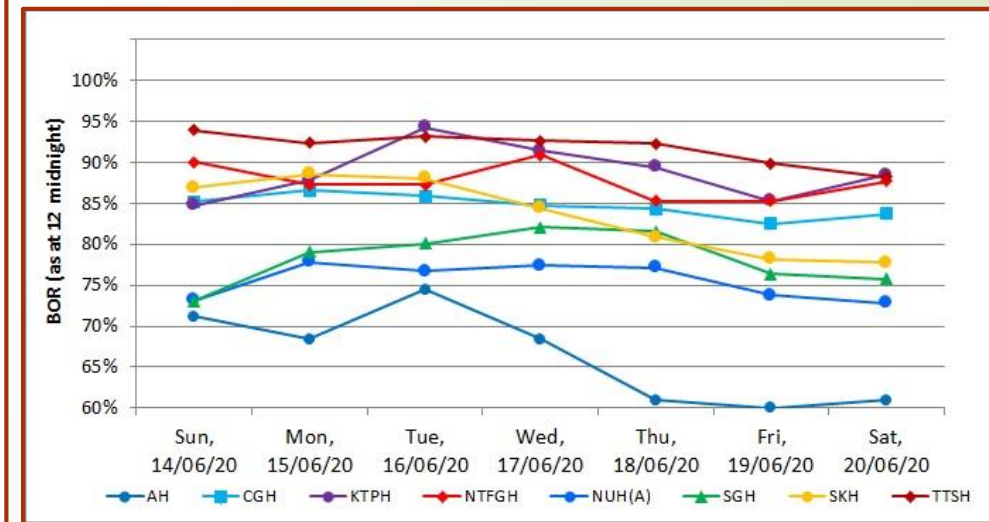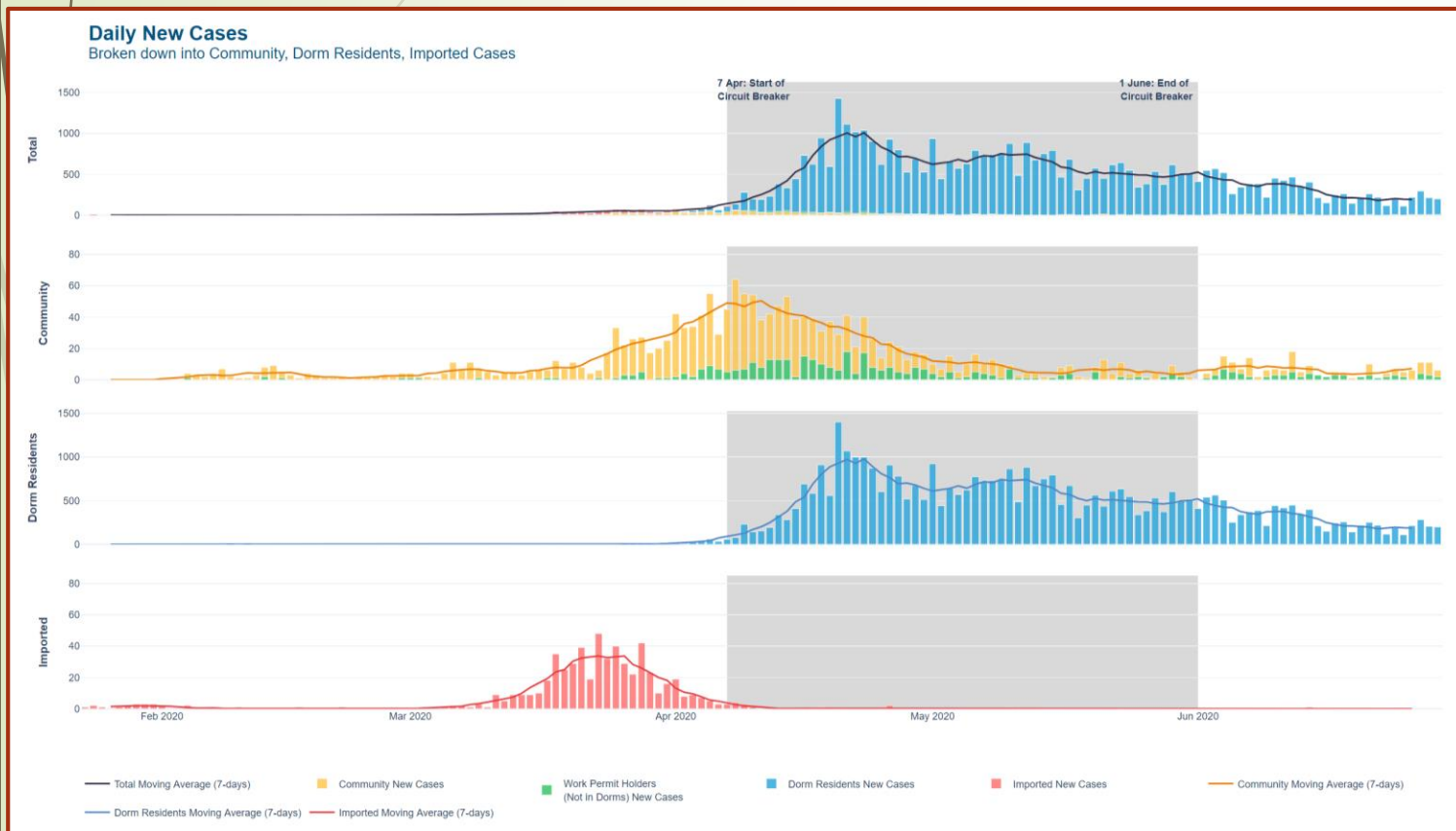
3.3 Digitalisation

C. FACTORS

Health Agencies
- Testing, Tracing, Isolating
- Health System Capacity

Rest of Government
- Supply Chain Effectiveness
- Economic Rescue
- Digital Enablement
- Communications and Trust
- Augment health agencies

Public
- Understanding and Willingness to Sacrifice for the Greater Good
- Digital Enablement

Work in Progress- Australia National University, Harvard Medical School, Hong Kong University, National University of Singapore

How hard and how fast to hit depends on:
- Baseline COVID disease burden and velocity of increases
- Health system utilization and surge capacity
- Management of at-risk populations
- Economic considerations
- Political support

Government Tracking- Both Load and Capacity (Example of Singapore)

https://covidsitrep.moh.gov.sg/

Living in a COVID World- Optimistic Scenario

- Menu of public health interventions implemented and relaxed depending on COVID situation
- Tele-everything: Work From Home; E-commerce; Contactless Interactions; Home Delivery
- Automated Disinfection and other technological enablers
- Less travel; accept uncertainty of cross-border travel
- More greenery and nature… closer to home
- Acceptance of masks, hand washing, safe distancing
- Residents help and support each other including in psychological health
- Privacy and public health strike the right balance
- Vulnerable Communities will get more help

Urban design for post-pandemic world

People will be drawn to self-contained neighbourhoods and nature, architects say

Tan Hui Yee
Indochina Bureau Chief
In Bangkok

A new linear park across the Chao Phraya River will open in Bangkok later this month. Built on an abandoned rail structure, it is perhaps a fitting icon of how urban landscapes can be adapted for life in the Covid-19 era.

The pandemic triggered lockdowns that shuttered economic life but also spurred new thinking about urban design in South-east Asia. Access to sunlight, fresh air and greenery – elements often sacrificed in the race to pack more people and activity into precious real estate – will gain currency, say regional architects interviewed by The Straits Times.

People will gravitate towards self-contained neighbourhoods and seek to reconnect with nature to make up for the isolation brought on by remote working and e-commerce, they say.

Thai landscape architect Kotchakorn Voraakhom, whose firm helped create the new Bangkok skypark, says public spaces will need a rethink as societies adjust to new physical distancing needs.

"It's not just about trying to add more public green space, but also to think about the 'wasted' space that we actually have in the city, and what can be done to it so that we can focus more on public health," she said during a recent preview of the skypark.

Spanning 280m, the new facility connects two parks on the river banks of inner Bangkok. It features sheltered nooks, terraced lookout points over the water, as well as local plants specially selected for their hardy qualities.

Ms Kotchakorn, who created Asia's largest urban rooftop farm in Thailand's Thammasat University, says even existing parks created largely for aesthetic reasons should be adapted for current needs, and perhaps have their choice of plants reviewed to promote biodiversity.

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Ms Ni Nyoman Dessy Anggadewi, an Indonesia-based architect from Singapore firm Goy Architects, expects more interest in self-contained developments that will allow residents to walk or cycle to work, or to run their errands.

"We will still have big malls… but I think there will be growth of smaller-scale working spaces, or small pockets of green space around the city," she said. "The urban fabric may change from these big patterns into smaller 'dots' around the city."

Similarly, Phnom Penh-based Hun Chansan of Re-edge Architecture and Design thinks these self-sustainable neighbourhoods are the way to go.

"On an urban scale, cities need more green parks. On a neighbourhood scale, people need pockets of green spaces," he said. "And on a building scale, people need outdoor spaces that are adjacent to what's indoors, to allow fresh air to flow through buildings."

Adjustments can be made even in densely built-up environments, say architects.

"During the lockdown… we had no choice but to live slowly. We realised that waking up to sunshine and the sound of nature is much better than waking to an alarm in a dark room," said Ms Tran Thi Ngu Ngon of Vietnamese firm Tropical Space.

Future social distancing or quarantine needs, she said, can be met by introducing green walls in buffer zones like backyards.

"We can surround a block or group of buildings with netting of plants, which can be opened or closed," she said. "In some cases, we may have to sacrifice some living area for the green buffer zone."

But the city as a whole will become more beautiful, she added.

Future building designs will likely incorporate more hands-free technology and seating layouts where co-workers do not face one another. But sterile environments could also stir a yearning for connection.

"The drawback of digitalisation is the possibility of increased cabin fever, where people don't feel connected and people feel even more isolated," said Goy Architects' principal architect Goy Zhenru. People might start to lean more towards building materials with natural properties, as it puts them at ease, she said.

"People will start to say no, I want to feel well in the space, that wellness is more important," she said. "If I stay in a sterile box, I can live for a hundred years, but I don't see the point."

ST PHOTO:
TAN HUI YEE

tanhy@sph.com.sg

Bangkok to open new skypark

SCAN TO WATCH

https://str.sg/chaophraya

'People will gravitate towards self-contained neighbourhoods and seek to reconnect with nature to make up for the isolation brought on by remote working and e-commerce'

'Next normal'- risk assessment, early detection of outbreaks, and micro-lockdowns

- Business and municipal disruptions will be a recurring theme
- Businesses will reinvent
- Neighborhoods will transform
- Cities will evolve in tandem
- Local government more and more important

Cross-Border Movements- Decision Factors

BBC NEWS
Coronavirus: EU to allow in visitors from 14 'safe' countries

The EU has named 14 countries whose citizens are deemed "safe" to be let in from 1 July, despite the pandemic - but the US, Brazil and China are excluded.

- EU Travel Advisory (30 June 2020)- Algeria, Australia, Canada, Georgia, Japan, Montenegro, Morocco, New Zealand, Rwanda, Serbia, South Korea, Thailand, Tunisia and Uruguay. China pending reciprocal access

- Factors considered

  - number of new cases over a 14-day period had to be "close to or below the EU average

  - Countries also needed to have a "stable or decreasing trend of new cases over this period."

  - Reliable national data

  - Reciprocity

"I understand that some of us, including Indonesia, have started bilateral talks both with fellow ASEAN countries and with countries outside ASEAN regarding travel corridors. However, it is time for ASEAN, as a community, to think about ASEAN travel corridor arrangements,"- President Joko "Jokowi" Widodo, Indonesia (26 June 2020)

"As a first step, we can explore the possibility of sectoral exemptions for travel restrictions such as medical tourism, or high-value economic visits,"- Prime Minister Muhyiddin Yassin, Malaysia (26 June 2020)

Working Together across Borders

Launch of Singapore-China fast lane for essential travel

Outbound Travel

- Eligibility for travel, invitation by host country company/ organization- Essential Travel

- PCR test negative in home country within 48 hours of travel

- Repeat PCR test in country negative; isolation until then

- Controlled in-country itinerary, subject to digital tracking

Return to Home Country

- Repeat PCR test negative
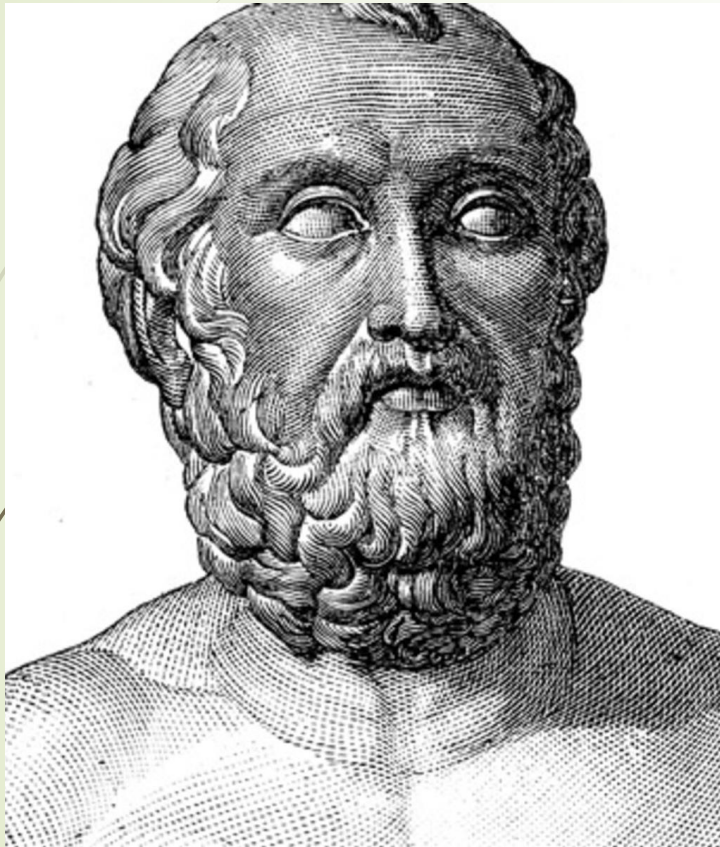
- Stay Home Notice for 14 days

Needs and Opportunities to Work Together

- Mutual recognition of lab testing
- Central registry or at least easy access to COVID test results
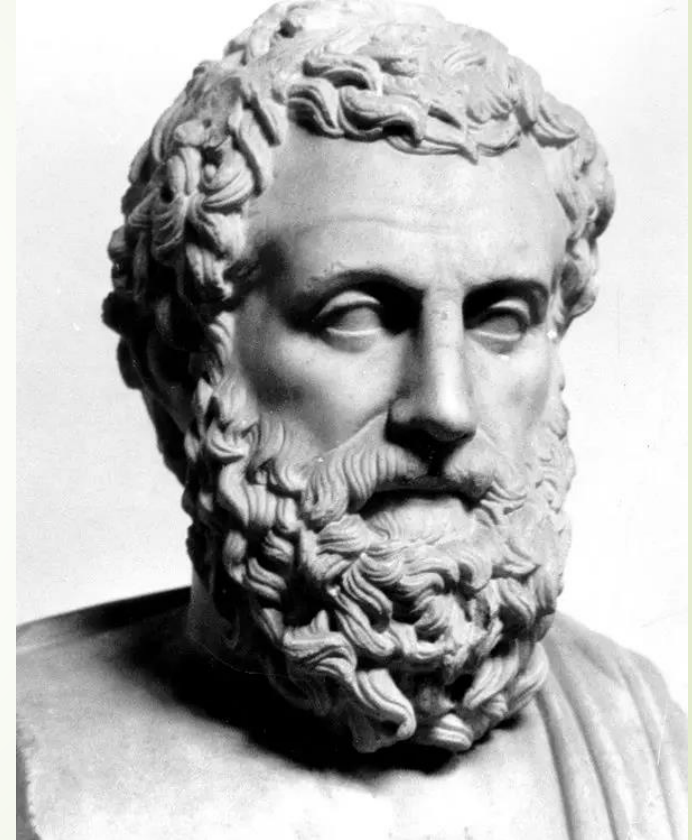- Inter-operable digital trackers

Conclusion

- Minimum Public Health Standards needed
  - Masks/ Nose and mouth covering
  - Hand washing and sanitizing
  - Safe Distancing (gradations depending on risk appetite)
- Use of technology enablers
- Step Ladder Approach to Public Health Standards factoring in resources and support
- Uncertainty continues; need for nimbleness and decisiveness
- Constant renewal of public trust
- Preparing citizens for a COVID world
- Working together across borders

This City is what it is because our citizens are what they are
-Plato

A great city is not to be confounded with a populous one
-Aristotle