COVID-19 cases in ASEAN: Enhanced surveillance needed

Short Title: COVID-19 in ASEAN

Brief Description of letter

In ASEAN, the number of confirmed COVID19 cases are reported with little information on

the number of screening tests performed or criteria of who are tested. We highlight the need

for enhanced surveillance and reporting of the number of people screened and screening

criteria when testing capacity is limited.

Key Words – COVID-19, ASEAN, Confirmed cases, Screening

David Koh 1,2

david.koh@ubd.edu.bn

Sheena Wong 1

19b3099@ubd.edu.bn

Justin Wong 3

justin.wong@moh.gov.bn

1. PAPRSB Institute of Health Sciences, Universiti Brunei Darussalam, Brunei Darussalam

Jalan Tungku Link, Gadong, BE1410, Brunei Darussalam

Tel: +673 2460922

2. SSH School of Public Health, National University of Singapore, Republic of Singapore

Tahir Foundation Building, Block MD1, 12 Science Drive 2, Singapore 117549

Tel: +65-65164988

3. Ministry of Health, Brunei Darussalam

Commonwealth Drive, Bandar Seri Begawan, Brunei Darussalam, BB3910

Tel: +673-2381640

Correspondence to:

David Koh

PAPRSB Institute of Health Sciences, Universiti Brunei Darussalam

Jalan Tungku Link, Gadong, BE1410, Brunei Darussalam

e-mail: david.koh@ubd.edu.bn

Fax: +673 246 3063 Tel: +673 2460922

Acknowledgements, conflicts of interest, ethics statement and funding information

Acknowledgement

We wish to thank Ms Koh Wan Enn for gathering information from relevant websites.

Conflicts of Interest

None

Ethics Statement

Not applicable

Funding Information

There is no funding for this letter

This letter was not developed with the Field Epidemiology Training Program (FETP) or during any WPSAR scientific writing work.

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The Association of South East Asian Nations (ASEAN) is a 10 member grouping of countries with a total population of over 650 million people. The first cases of COVID-19 were reported in Thailand and Singapore in January and then in other ASEAN countries, with the first death occurring outside China reported in the Philippines.

Table 1 shows the number of confirmed cases of COVID-19 for each ASEAN country as at 5 March 2020, with its population size, number of persons laboratory screened or number of tests done, and the criteria for persons to be tested. The number of confirmed cases of COVID-19 in each country was obtained from the World Health Organization. Information on laboratory testing performed/number of people tested or criteria for screening was gathered from the English language mainstream media for Singapore and Malaysia [1], Indonesia [2,3], Cambodia [4], Myanmar [5]; and from the Ministries of Health of Brunei, Cambodia, Laos and Thailand.

The number of COVID19 cases reported in a country is dependent on its surveillance sensitivity and laboratory testing capacity. The criteria for laboratory testing are also important. Countries usually screen "suspect cases" based on a history of travel to a relevant country, contact with confirmed cases or working in health care managing COVID-19 cases. It

is likely that in some ASEAN countries, cases of COVID-19 may be undetected because of restrictive case definitions of "suspect cases" that allow for laboratory testing or due to limited testing capability. However, as more test kits become available, more people will be tested. Some countries also have additional surveillance by performing laboratory tests for SARSCoV-2 for patients with pneumonia, or screen selected community cases of influenza like illness.

Sharing of accurate data is important and should be expedited for COVID-19. To get a clearer sense of COVID-19 transmission intensity, countries need to move beyond case identification based on restrictive suspect case definitions and even clinical protocols, to triangulate the findings with enhanced surveillance, for example, via pneumonia and Influenza Like Illness/fever clinic screening, or population screening. Before such enhanced surveillance is available, in order to increase transparency, it might be useful to report not only the number of confirmed cases in a country, but also the number of people tested or tests performed, and the criteria for such testing.

References

- Concerns raised over Indonesia's lab tests as country reports zero coronavirus cases.
 27 February 2020. https://www.straitstimes.com/asia/se-asia/indonesia-pressured-to-do-more-to-detect-coronavirus-amid-zero-reported-cases Accessed 6 March 2020.
- Dyna Rochmyaningsih. Indonesia finally reports two coronavirus cases. Scientists worry it has many more. 3 March 2020.
 https://www.sciencemag.org/news/2020/03/indonesia-finally-reports-two-coronavirus-cases-scientists-worry-it-has-many-more Accessed 6 March 2020.
- 3. Gemma Holliani Cahya. Indonesia to test more people for COVID-19. 4 March 2020.
 https://www.thejakartapost.com/news/2020/03/04/indonesia-test-more-people-covid-19-coronavirus.html Accessed 6 March 2020.
- Feliz Solomon and Niharika Mandhana. Tests Hundreds on Cruise for Coronavirus. 17
 February 2020. https://www.wsj.com/articles/cambodia-tests-hundreds-on-cruise-for-coronavirus-11581957867 Accessed 6 March 2020.

5. Aung Phay Kyi Soe. Myanmar remains virus-free, Health ministry assures. 29 February 2020. https://www.mmtimes.com/news/myanmar-remains-virus-free-health-ministry-assures.html Accessed 6 March 2020.

Table 1. Confirmed Cases, Laboratory tests performed and criteria for screening in ASEAN countries (as at 5 March 2020)

	1	1	
Country /	Confirmed	Tests done or	People who are tested
Population	cases	persons tested	
(millions)	(March 5		
	2020)		
Singapore	117	By 25 Feb,	Suspect cases + Additional surveillance for all
5.8		>1,300 tests	pneumonia cases, and samples from Influenza
		[1]	Like Illness surveillance
Malaysia	55	By 25 Feb, ~	# Suspect cases only ?
32		1,000 tests [1]	
Thailand	47	3,680 tests	# Suspect cases only
69		Source: MOH,	
		Thailand	
Vietnam	16	?	# Suspect cases only ?
97			
Philippines	3	,	# Suspect cases only ?
109		O	,
Indonesia	2	331 tests (As	Tested those who show symptoms and have
273		of 3 March,	traveled to affected countries
		2020)	*238 symptomless Indonesians evacuated from
		[2]	Wuhan not tested but quarantined
			*Tested 188 Indonesian crew on World Dream,
			cruise ship quarantined in Hong Kong (in Feb
			2020)
			As of March 4, testing criteria loosened – test
)		symptomatic + relevant travel history, AND
			asymptomatic + contact with confirmed case [3]
Cambodia	1	227 tests	Suspect cases: specifically, those boarding
16.7	_	As of 5 March	Westerdam cruise ship + contact with confirmed
		Source: MOH,	cases [4]
		Cambodia	(Earlier only testing symptomatic passengers on
			the cruise ship Westerdam)
Myanmar	0	As of 29 Feb,	# Suspect cases only
54		43 people	,
]		tested, all	
		negative [5]	
Laos	0	54 tests	# Suspect cases only
_==	1		

7.2		As of 5 March, Source: MOH, Laos	
Brunei 0.43	0	32 tests As of 5 March, Source: MOH, Brunei	Suspect cases# + additional surveillance for those with severe/bilateral pneumonia

[#] Suspect cases: Symptomatic + relevant travel history, or contact with confirmed cases