Risk Assessment for International Dissemination of COVID-19 to the ASEAN Region

As of March 9, 2020 (2:00 PM GMT+8)

COVID-19

As the COVID-19 outbreak continues to evolve, comparisons have been drawn to influenza. WHO has provided a Q&A regarding the similarities and differences between the two diseases.

Q. How are COVID-19 and influenza viruses similar?

- COVID-19 and influenza viruses have a similar disease presentation. Both cause respiratory disease, which presents as a wide range of illness from asymptomatic or mild through to severe disease and death.
- Both viruses are transmitted by contact, droplets and fomites. As a result, the same public health measures, such as hand hygiene and good respiratory etiquette (coughing into your elbow or into a tissue and immediately disposing of the tissue), are important actions all can take to prevent infection.

Q. How are COVID-19 and influenza viruses different?

Category	COVID-19	Influenza Virus
Speed of Transmission a. Incubation Period[1] b. Serial Interval[2]	2-14 days 5-6 days	1-4 days 3 days
Reproductive Number[3]	Between 2-2.5	>2.5
At risk of developing severe illness	Current data suggests that older age and underlying conditions increase the risk for severe infection	Those most at risk for severe influenza infection are children, pregnant women, elderly, those with underlying chronic medical conditions and those who are immunosuppressed
Mortality	Mortality for COVID-19 appears higher than for influenza, especially seasonal influenza. While the true mortality of COVID-19 will take some time to fully understand, the data we have so far indicate that the crude mortality ratio (the number of reported deaths divided by the reported cases) is between 3-4%, the infection mortality rate (the number of reported deaths divided by the number of infections) will be lower.	For seasonal influenza, mortality is usually below 0.1%. However, mortality is to a large extent determined by access to and quality of health care.

[1] the time from infection to appearance of symptoms
[2] the time between successive cases
[3] the number of secondary infections generated from one infected individual; however, estimates for both COVID-19 and influenza viruses are very context and time-specific, making direct comparisons more difficult

COVID-19: Highlights and Situation Overview

- WHO has issued a consolidated package of existing preparedness and response guidance for countries to enable them to slow and stop COVID-19 transmission and save lives. WHO is urging all countries to prepare for the potential arrival of COVID-19 by readying emergency response systems; increasing capacity to detect and care for patients; ensuring hospitals have the space, supplies and necessary personnel; and developing life-saving medical interventions.

- **New country with COVID-19 case/s**
  - o **BANGLADESH (3 cases)**
    - ▪ On March 8, the first COVID-19 has been confirmed in Bangladesh. The 3 affected individuals are aged between 20 and 35 years-old and two of them recently returned from different cities in Italy, and the third case is a close contact of one of the first two cases. Further details on these cases are limited.
  - o **BULGARIA (4 cases)**
    - ▪ On March 8, first four cases of COVID-19 were reported in Bulgaria. wo of the affected individuals are from the northern city of Pleven: a 27 year-old man with no known history of travel or contact with a previously confirmed patient, and a 61-year-old man who had contact with the younger individual. The two other individuals are from the central city of Gabrovoa; a 75 year-old woman with no known history of travel or contact with a previously confirmed patient, and a health care worker in the hospital where the woman is being treated. The report indicates that none of these cases have travelled recently or had contact with someone that had travelled recently to a country with COVID-19 outbreak.
  - o **MALDIVES (2 cases)**
    - ▪ On March 8, first cases of COVID-19 were reported in the Maldives. the affected individuals are two employees at the Kuredu Island Resort. They were in contact with an Italian tourist who was recently on the island and tested positive after returning to Italy. Local authorities have begun contact tracing and emergency response protocols. As of March 8th, the Maldives are restricting entry to passengers who have originated from, transiting through, or spent any time in Italy in the preceding 14 days.
  - o **PARAGUAY (1 case)**
    - ▪ On March 7, first case of COVID-19 was reported in Paraguay. A Ministry of Health report indicates that the affected individual is a 32-year-old male who returned to Paraguay from Ecuador on March 3.

- o **MALTA (1 case)**
  - ▪ On March 7, the first case of COVID-19 was reported in Malta. The affected individual is a 12 year-old-female who arrived from Trentino in Northern Italy on March 3 and is now being treated at Mater Dei Hospital
- o **MOLDOVA (1case)**
  - ▪ On March 7, the first case of COVID-19 was reported in Moldova. The affected individual is a 48-year-old woman with underlying medical conditions who returned to Moldova from Italy on March 7. The woman had severe symptoms during transit to Moldova and was taken from the airport to an unspecified medical institution. Further details on this case are limited. The report indicates that local authorities have suggested all passengers on this flight to self-isolate at home, and have started contact tracing and emergency response protocols.
- o **TOGO (1 case)**
  - ▪ On March 6, first case of COVID-19 was reported in Togo. the affected individual is a 42-year-old female in the capital Lome, who visited Benin, Germany, France, and Turkey in late February and early March. The media report indicates that local authorities have isolated the affected individual and began contact tracing.
- o **SERBIA (1 case)**
  - ▪ On March 6, first case of COVID-19 was reported in Serbia. The affected individual returned to Subotica city from Budapest, Hungary. The report indicates the individual is a 43-year-old man, stable, and has been placed in isolation at a local hospital in Subotica.

- o **CAMEROON (2 cases)**
  - ▪ On March 6, first case of COVID-19 was reported in Cameroon. The affected individual returned to the capital Yaounde from France on February 24. The report indicates that the individual is a 58-year-old man and is isolated at a local hospital in Yaunde. As of March 7, 1 additional case was reported in Cameroon, bringing the total number to 2 cases.
- o **COLOMBIA (1 case)**
  - ▪ On March 6, first case of COVID-19 was reported in Colombia. The affected individual is a 19 year-old-female who arrived from Milan, Italy on February 26 and is currently isolated at home. Further details about the case are limited.
- o **SLOVAKIA (3 cases)**
  - ▪ On March 6, first case of COVID-19 was reported in Slovakia. the 52-year-old man does not have recent travel history, but that his son has a recent travel history to Northern Italy. As of

March 7, 2 additional cases were reported in Slovakia, bringing the total number to 3 cases.

- **MARTINIQUE (2 cases)**
  - On March 6, first case of COVID-19 was reported in Martinique. The affected individuals arrived from Italy. Further details about the cases are limited. Both individuals have been isolated and treated are being treated in Martinique University Hospital.
- **FRENCH GUINA (5 cases)**
  - On March 6, first case of COVID-19 was reported in French Guina. The affected individuals are five people who participated in the religious rally in Mulhouse, France between February 17 and 24. They are currently being treated in Saint-Laurent-du-Maroni.
- **COSTA RICA (5 cases)**
  - On March 6, first case of COVID-19 was reported in Costa Rica. The affected individual is a 49 year-old-female who arrived from New York on March 1 and is currently isolated with her husband in a hotel in San Jose, the country's capital. As of March 8, 4 additional cases were reported in Costa Rica, bringing the total number to 5 cases. The origin of the third case is unclear and may or may not be linked to a previously identified case. Health authorities report that there is currently no community-based transmission.

- **Increasing Cluster Cases in South Korea**
  - As of March 8, **272** new cases of COVID-19 were reported in South Korea bringing the total number to **7,313** in the country
  - 50 deaths were reported (case fatality ratio of 0.68% based on reported deaths and reported case counts)
- **Increasing Cluster Cases in Italy**
  - As of March 8, **1492** additional cases of COVID-19 were reported in Italy, bringing the total number to **7,376** in the country.
  - 366 deaths were reported (case fatality ratio of 4.96% based on reported deaths and reported case counts)

- **Increasing cases in Iran**
  - As of March 8, **1819,** new cases of COVID-19 were reported in Iran, bringing the total number to **6,566** in the country.
  - 194 deaths were reported (case fatality ratio of 2.95% based on reported deaths and reported case counts)

- **Travel Restrictions**
  - **Thailand's Health Ministry** on Sunday (March 8) included Singapore in a recommendation on countries and territories to avoid due to COVID-19. In addition, Health Ministry spokesman

recommended against travel by Thai citizens to Japan, France and Germany.

o In **Vietnam**, travelers arriving from Italy or Iran who left those countries less than 14 days ago will be denied entry or will be placed in a government quarantine area. The Immigration Departments in Hanoi and Ho Chi Minh City have temporarily stopped issuing visas of all categories to Korean, Italian and Iranian nationals. Visa exemptions for citizens of South Korea and Italy have also been temporarily suspended until further notice.

o Starting March 8, **Indonesia's Foreign Affairs Ministry** has banned travelers from Iran, Italy and South Korea from entering Indonesia as the three countries continue to struggle to contain a widespread COVID-19 outbreak.

o The **Philippines'Department of Foreign Affairs (DFA)** re-echoes its advisory informing the Filipino public that the Deputy Director General of Kuwait International Airport (KWI) has temporarily suspended all incoming flights to KWI from the Philippines, Bangladesh, Egypt, India, Lebanon, Sri Lanka, and Syria, as a measure to prevent the spread of the coronavirus disease 2019 (COVID-19). The travel ban was put into effect for a period of one week starting 06 March 2020.

o The **Qatari government** on Monday, March 9, imposed temporary travel restrictions banning the entry of travelers from the Philippines, Bangladesh, China, Egypt, India, Iran, Iraq, South Korea, Lebanon, Nepal, Pakistan, Sri Lanka, Syria, and Thailand amid growing fears over the continued increase of COVID-19 cases. According to the Qatari government, travel restrictions will cover all individuals entering from these countries, including those with residence or work permits, temporary visas, and visas upon arrival.

Cases and Deaths as of 9 March 2020

- As of March 9 (2PM, GMT+8), worldwide, there were **109,602** confirmed cases, including **4,327** deaths.
- In **China**, there were **81,033** confirmed cases with **3,614** deaths, including deaths in Hong Kong (2) and Taiwan (1). Confirmed cases in China include confirmed cases in Hong Kong (110), Macau (10), and Taiwan (45).

- **28,569 confirmed cases** of COVID-19 have been reported in **101 countries** (other than China, Hong Kong, Taiwan and Macau):

REGION	COUNTRY	FIRST CONFIRMED CASE(S)	LATEST CONFIRMED CASE(S)	CONFIRMED CASES/(DEATHS)
ASIA PACIFIC	Thailand	13 Jan 2020	07 Mar 2020	50 (1)
	Vietnam	23 Jan 2020	08 Mar 2020	30
	Singapore	23 Jan 2020	08 Mar 2020	150
	Malaysia	25 Jan 2020	08 Mar 2020	99
	Cambodia	27 Jan 2020	08 Mar 2020	2
	Philippines	30 Jan 2020	07 Mar 2020	20 (1)
	Indonesia	02 Mar 2020	08 Mar 2020	6
	Japan	16 Jan 2020	08 Mar 2020 1157	451 (13) 706 from quarantined ship
	South Korea	20 Jan 2020	08 Mar 2020	7,313 (50)
	Nepal	24 Jan 2020	24 Jan 2020	1
	Australia	25 Jan 2020	08 Mar 2020	80 (3)
	Sri Lanka	27 Jan 2020	27 Jan 2020	1
	India	30 Jan 2020	08 Mar 2020	36
	Afghanistan	24 Feb 2020	07 Mar 2020	4
	Pakistan	26 Feb 2020	06 Mar 2020	6
	New Zealand	28 Feb 2020	07 Mar 2020	5
	Bhutan	05 Mar 2020	05 Mar 2020	1
	Maldives	07 Mar 2020	07 Mar 2020	2
	Bangladesh	08 Mar 2020	08 Mar 2020	3
AMERICAS	USA	21 Jan 2020	07 Mar 2020	470 (19)
	Canada	25 Jan 2020	08 Mar 2020	59
	Brazil	26 Feb 2020	08 Mar 2020	19
	Mexico	28 Feb 2020	08 Mar 2020	7[3]
	Saint Martin	01 Mar 2020	01 Mar 2020	2
	Ecuador	01 Mar 2020	07 Mar 2020	14
	Dominican Republic	01 Mar 2020	01 Mar 2020	2
	Chile	03 Mar 2020	08 Mar 2020	7
	Argentina	03 Mar 2020	06 Mar 2020	9 (1)
	Peru	05 Mar 2020	08 Mar 2020	6
	Costa Rica	06 Mar 2020	08 Mar 2020	5
	Colombia	06 Mar 2020	06 Mar 2020	1
	French Guiana	06 Mar 2020	06 Mar 2020	5

	Paraguay	07 Mar 2020	07 Mar 2020	1
EUROPE	**France**	24 Jan 2020	08 Mar 2020	1,126 (19)
	Germany	27 Jan 2020	08 Mar 2020	902
	Finland	29 Jan 2020	08 Mar 2020	23
	Italy	30 Jan 2020	08Mar 2020	7,376 (366)
	Russian Federation	31 Jan 2020	08 Mar 2020	15
	Spain	31 Jan 2020	06 Mar 2020	617 (17)
	Sweden	31 Jan 2020	08 Mar 2020	203
	United Kingdom of Great Britain	31 Jan 2020	08 Mar 2020	273
	Belgium	05 Feb 2020	08 Mar 2020	200
	Switzerland	25 Feb 2020	07 Mar 2020	337 (2)
	Austria	25 Feb 2020	08 Mar 2020	104
	Croatia	25 Feb 2020	07 Mar 2020	12
	Norway	26 Feb 2020	08 Mar 2020	159
	Romania	26 Feb 2020	08 Mar 2020	14
	Estonia	26 Feb 2020	06 Mar 2020	12
	Georgia	26 Feb 2020	08 Mar 2020	13
	North Macedonia	26 Feb 2020	07 Mar 2020	3
	Greece	26 Feb 2020	07 Mar 2020	66
	Denmark	27 Feb 2020	08 Mar 2020	27
	San Marino	27 Feb 2020	07 Mar 2020	36 (1)
	Lithuania	27 Feb 2020	27 Feb2020	1
	Netherlands	27 Feb 2020	08 Mar 2020	265 (3)
	Azerbaijan	27 Feb 2020	07 Mar 2020	9
	Belarus	28 Feb 2020	04 Mar 2020	6
	Iceland	28 Feb 2020	08 Mar 2020	50
	Ireland	28 Feb 2020	08 Mar 2020	19
	Monaco	29 Feb 2020	29 Feb 2020	1
	Czech Republic	01 Mar 2020	08 Mar 2020	26
	Luxembourg	01 Mar 2020	08 Mar 2020	4
	Armenia	01 Mar 2020	01 Mar 2020	1
	Latvia	02 Mar 2020	08 Mar 2020	2
	Portugal	02 Mar 2020	08 Mar 2020	28
	Andorra	02 Mar 2020	02 Mar 2020	1
	Liechtenstein	03 Mar 2020	03 Mar 2020	1
	Ukraine	03 Mar 2020	03 Mar 2020	1
	Slovenia	04 Mar 2020	08 Mar 2020	16
	Hungary	04 Mar 2020	07 Mar 2020	5
	Poland	04 Mar 2020	08 Mar 2020	8
	Faroe Islands	04 Mar 2020	08 Mar 2020	2

	Bosnia and Herzegovina	05 Mar 2020	07 Mar 2020	3
	Gibraltar	05 Mar 2020	05 Mar 2020	1
	Slovakia	06 Mar 2020	07 Mar 2020	3
	Martinique	06 Mar 2020	06 Mar 2020	2
	Serbia	06 Mar 2020	06 Mar 2020	1
	Malta	07 Mar 2020	08 Mar 2020	3
	Moldova	07 Mar 2020	07 Mar 2020	1
	Bulgaria	08 Mar 2020	08 Mar 2020	4
MIDDLE EAST	**UAE**	29 Jan 2020	07 Mar 2020	45
	Iran	19 Feb 2020	08 Mar 2020	6,566 (194)
	Israel	21 Feb 2020	08 Mar 2020	25
	Lebanon	21 Feb 2020	05 Mar 2020	28
	Kuwait	24 Feb 2020	08 Mar 2020	62
	Oman	24 Feb 2020	06 Mar 2020	16
	Bahrain	24 Feb 2020	08 Mar 2020	85
	Iraq	24 Feb 2020	08 Mar 2020	54 (4)
	Qatar	29 Feb 2020	07 Mar 2020	12
	Tunisia	02 Mar 2020	02 Mar 2020	1
	Saudi Arabia	02 Mar 2020	08 Mar 2020	11
	Jordan	02 Mar 2020	02 Mar 2020	1
	Palestine	05 Mar 2020	08 Mar 2020	19
AFRICA	**Egypt**	14 Feb 2020	07 Mar 2020	48
	Algeria	25 Feb 2020	07 Mar 2020	19
	Nigeria	28 Feb 2020	28 Feb 2020	1
	Morocco	02 Mar 2020	05 Mar 2020	2
	Senegal	02 Mar 2020	05 Mar 2020	4
	South Africa	05 Mar 2020	08 Mar 2020	3
	Cameroon	06 Mar 2020	07 Mar 2020	2
	Togo	06 Mar 2020	06 Mar 2020	1
				28,569 (713)

Map of COVID-19 Affected Countries: Global
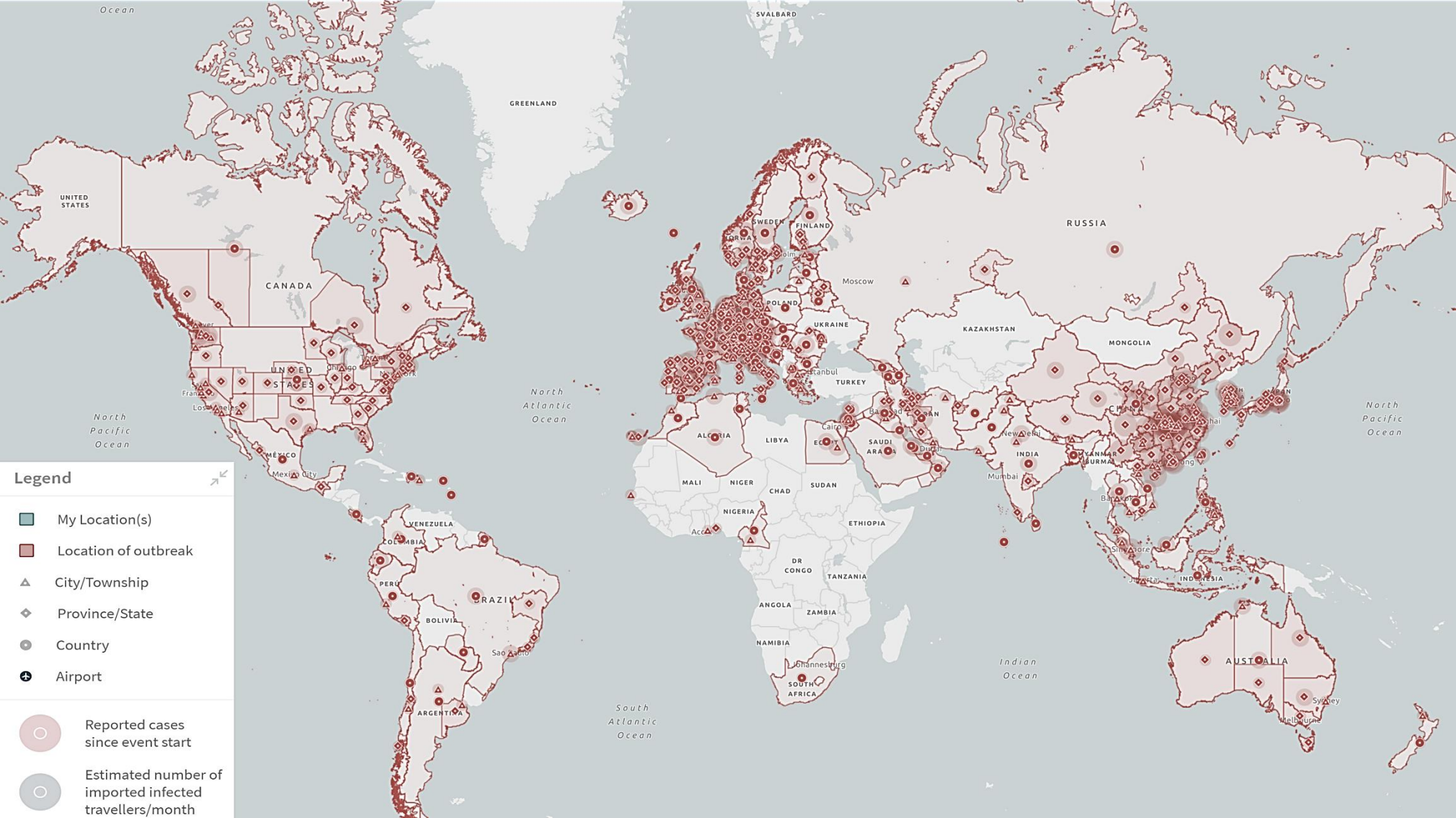
Figure 1. *Global map of countries with COVID-19 confirmed cases as of March 9, 2020 (2 PM GMT+8)*

Map of COVID-19 Affected Countries: ASEAN Region

THAILAND
50 cases, 1 death

VIETNAM
30 cases, 0 death

CAMBODIA
2 cases, 0 death

PHILIPPINES
20 cases, 1 death

MALAYSIA
99 cases, 0 death

SINGAPORE
150 cases, 0 death

INDONESIA
6 cases, 0 death
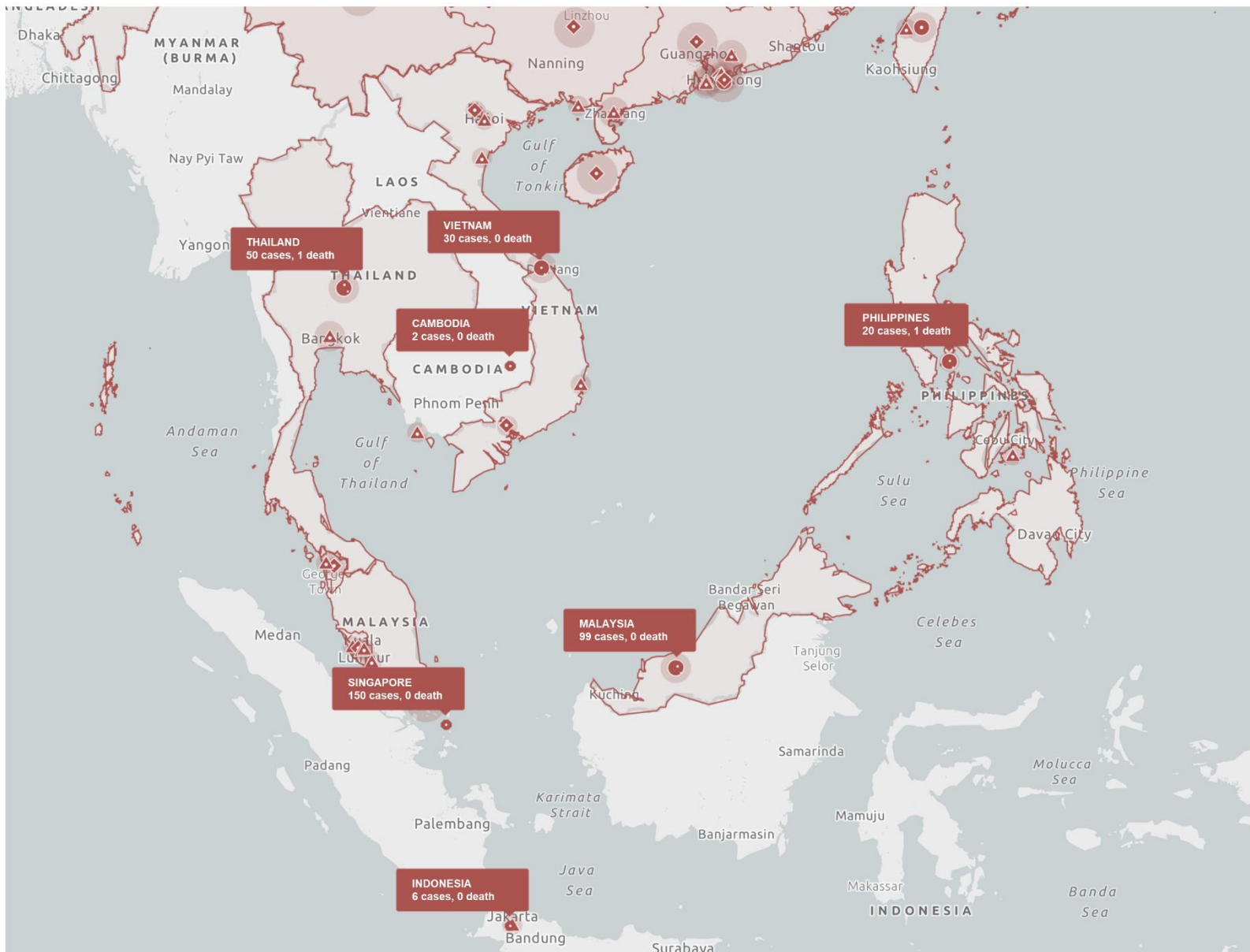
Figure 2. ASEAN Region with COVID-19 confirmed cases as of March 9, 2020 (2 PM GMT+8)

COVID-19: Timeline (continuation*)

- First confirmed cases in Togo (1), Serbia (1), Cameroon (1), Colombia (1), Slovakia (1), Martinique (2), and Costa Rica (1)
- Additional cases in Singapore (5), Malaysia (33), Philippines (2), Japan (50), South Korea (827), Australia (7), India (1), Pakistan (1), USA (105), Brazil (4), Ecuador (3), Argentina (1), France (73), Germany (290), Finland (3), Italy (778), Russia (7), Spain (128), UK (73), Belgium (59), Switzerland (119), Austria (18), Norway (19), Estonia (10), Georgia (5), Greece (14), Denmark (9), Netherlands (46), Azerbaijan (3), Iceland (8), Ireland (7), Czech Republic (10), Luxembourg (1), Portugal (1), Slovenia (5), Hungary (2), Iran (1,234), Israel (2), Lebanon (1), Oman (1), Bahrain (3), Iraq (5), Saudi Arabia (4), Palestinian Territory (3), and Egypt (12)
- Deaths reported in Japan (12), USA (3), France (4), Italy (49), Spain (3), UK (1), Netherlands (1st death), Iran (17), Iraq (1)

- **First confirmed case/s in Togo, Serbia, Cameroon, Colombia, Slovakia, Martinique, and Costa Rica**
- **Increasing cases reported outside China**
- **Deaths reported outside China**

6 MARCH 2020

- **First confirmed case/s in Malta, Moldova, and Paraguay**
- **Increasing cases reported outside China**
- **Deaths reported outside China**

7 MARCH 2020

- First confirmed case in Malta (1), Moldova (1), and Paraguay (1)
- Additional cases in Thailand (3), Vietnam (4), Singapore (21), Malaysia (10), Philippines (1), Indonesia (2) Japan (44), South Korea (448), Australia (1), India (2), Afghanistan (3), New Zealand (1), USA (94), Canada (5), Brazil (5), Ecuador (1), Dominican Republic (1), Chile (2), Argentina (7), France (346), Germany (156), Italy (1,247), Spain (113), Sweden (97), UK (43), Switzerland (54), Austria (19), Croatia (2), Norway (30), Romania (5), North Macedonia (2), Greece (1), Denmark (1), San Marino (2), Netherlands (60), Azerbaijan (3), Iceland (2), Ireland (12), Czech Republic (1), Luxembourg (1), Portugal (6), Slovenia (6), Hungary (1), Poland (5), Bosnia and Herzegovina (1), UAE (17), Israel (4), Lebanon (6), Kuwait (3), Bahrain (11), Iraq (6), Qatar (4), Saudi Arabia (2), Palestinian Territory (9), Egypt (33), Algeria (2), South Africa (1), Cameroon (1), Slovakia (2)
- Deaths reported in Japan (12), USA (3), Argentina (1st death), France (12), Italy (36), Spain (5), and Iraq (1)

*refer to previous reports for previous timeline

COVID-19: Timeline (continuation*)

- First confirmed cases in Bangladesh (3), Bulgaria (4), and Maldives (2)
- Additional cases in Vietnam (10), Singapore (12), Malaysia (6), Cambodia (1), Philippines (4), Indonesia (2) Japan (26), South Korea (272), Australia (14), India (6), USA (109), Canada (3), Brazil (6), Mexico (1), Chile (2), France (177), Germany (107), Finland (8), Italy (1,492), Russia (2), Spain (116), Sweden (42), UK (67), Belgium (109), Switzerland (69), Austria (30), Norway (23), Romania (3), Georgia (4), Greece (20), Denmark (3), San Marino (13), Netherlands (77), Iceland (5), Ireland (1), Czech Republic (7), Luxembourg (1), Latvia (1), Portugal (13), Slovenia (4), Poland (3), Iran (1,819), Israel (4), Lebanon (6), Kuwait (1), Bahrain (19), Iraq (8), Saudi Arabia (4), Palestinian Territory (3), South Africa (1), Peru (5), Malta (2), Faroe Island (1), Costa Rica (4)
- Deaths reported in Japan (1), South Korea (2), Australia (1), USA (2), France (3), Italy (133), Spain (7), Switzerland (1), Netherlands (2), and Iran (49)

- **First confirmed case/s in Bangladesh, Bulgaria, and Maldives**
- **Increasing cases reported outside China**
- **Deaths reported outside China**

8 MARCH 2020

- **Global Update**
  - **Cases: 109,602**
  - **Deaths: 4,327**

9 MARCH 2020

- As of March 9 (2PM, GMT+8), worldwide, there were **109,602** confirmed cases, including **4,327** deaths.

*refer to previous reports for previous timeline

Risk of COVID-19 spread via Air Travel

BIODIASPORA AIR TRAVEL DATA FROM HIGHLY INFECTED COUNTRIES TO ASEAN MEMBER STATES (AMS)

Table 1. ASEAN Countries receiving direct passengers from **Italy** in March 2020

Origin Country	Destination Country	Flights	Seats*
Italy	Thailand	43	13,803
	Singapore	46	11,408
	Vietnam	2	718
	Myanmar	2	718

actual number of passengers may vary due to in-country's travel ban or restrictions

Table 2. ASEAN Countries receiving direct passengers from **South Korea** in March 2020

Origin Country	Destination Country	Flights	Seats*
South Korea	Viet Nam	2,352	512,903
	Philippines	1,460	304,107
	Thailand	938	257,099
	Malaysia	467	121,033
	Singapore	247	81,367
	Indonesia	156	45,451
	Laos	128	22,733
	Cambodia	90	19,276
	Myanmar	49	8,990
	Brunei Darussalam	18	2,700

actual number of passengers may vary due to in-country's travel ban or restrictions

Table 3. ASEAN Countries receiving direct passengers from **Iran** in March 2020

Origin Country	Destination Country	Flights	Seats*
Iran	Thailand	33	8,052
	Malaysia	28	7,091

actual number of passengers may vary due to in-country's travel ban or restrictions

Table 4. ASEAN Countries receiving direct passengers from **Japan** in March 2020

Origin Country	Destination Country	Flights	Seats*
Japan	Thailand	1,089	333,115
	Singapore	796	217,327
	Philippines	855	188,485
	Viet Nam	687	164,452
	Malaysia	320	98,179
	Indonesia	234	66,096
	Cambodia	39	9,406
	Myanmar	31	7,316
	Brunei Darussalam	18	2,700

*actual number of passengers may vary due to in-country's travel ban or restrictions