

ASEAN BIODIASPORA VIRTUAL CENTER

Weekly Situation Report in the ASEAN Region

COVID-19 and Mpox

August 17, 2023 | WSR 2023-07









GLOBAL PARTNERS







Korea Disease Control and Prevention Agency





Editorial

CONSULTANTS ASEAN SECRETARIAT Assistant Director and Head of Health Division Human Development Directorate Ferdinal Fernando, MD

Programme Coordinator for Mitigation for Biological Threats (MBT) Phase 2 Michael Glen, MSSc

EDITORIAL TEAM Editor-in-Chief Abdurrahman, MPH

Managing Editor Gian Rei Mangcucang, MIH, EMT-B, RN

Associate Editor Aldilas Achmad Nursetyo, MSc, MD

Section Editor Nur Ismi Hamid

Technical Support Team Socorro Lupisan, MSc, MD Pebbles Grayle Tamayo John Rey Pablo

PUBLISHER ASEAN Biodiaspora Virtual Center

EDITORIAL ADDRESS ASEAN Biodiaspora Virtual Center, 2/F Ministry of Health, Jl. H.R. Rasuna Said, Blok X5, Kav. 4-9, Jakarta Selatan, Jakarta, Indonesia

E-mail: support@biodiaspora.org Weekly Issue





Table of Contents

COVID-19	1
Highlights and Situation Overview	2
<u>Global Updates</u>	2
<u>Regional Updates</u>	3
Research Updates	2
ASEAN Travel Advisories	6
COVID-19 Cases and Deaths Table	7
COVID-19 Cases in ASEAN Region Table	7
Epidemic Curve Among ASEAN Countries	8
ASEAN Weekly New Cases and Deaths	9
Vaccination Status in ASEAN	10
Мрох	11
Map of Mpox Cases Globally	12
Mpox Daily Trend Globally	13
Highlights and Situation Overview	14
Mpox Cases in ASEAN Region Table	14
Mpox Cases in Asia-Pacific Region Table	14
Top 5 Countries with Most Mpox Cases Globally	14
Mpox Cases per Region	15
<u>Global Updates</u>	15
Regional Updates	15
References	16







COVID-19: Highlights and Situation Overview

Global Updates

- Worldwide, over 693 million cases and over 6 million deaths have been attributed to COVID-19.
- Europe: In its latest weekly update, the European Centre for Disease Prevention and Control (ECDC) has noted a significant shift in the COVID-19 landscape across European countries (ECDC, 2023). While several weeks have witnessed stable or declining case notification rates, the ECDC now reports an increase in these rates. However, the ECDC emphasizes the need for cautious interpretation of these trends, citing a reduction in the number of countries reporting data and potential delays stemming from the summer holiday period. An analysis of the current data indicates a rise in transmission, albeit from low levels, in approximately half of the reporting countries. Furthermore, an upward trend is observed in the number of COVID-19 cases among individuals aged 65 and older, with this demographic showing an increase in half of the countries reporting agerelated data. Notably, certain countries have experienced a surge in clinic visits linked to respiratory symptoms, coupled with elevated test positivity rates. Among the subset of countries providing hospital and intensive care unit (ICU) admission data—comprising 11 in total—only two have reported an upward trajectory in one of these indicators. Moreover, among the 15 countries sharing death rate statistics, four have signaled an escalation in mortality rates within at least one specific age group. [Full report]
- **Republic of Korea.** The daily average COVID-19 infection count reached 49-18, down 2.7 percent from the previous week (KBS World, 2023). However, critically ill patients' daily averages rose by 35 to 220, and fatalities climbed by 38 to 136. The Korea Disease Control and Prevention Agency reported a six-week increase in infections, but the spread appears to have stopped. The agency attributed the trend to public voluntary mask wearing and plans for annual surges, similar to seasonal flu. [Full article]
- United States: COVID-19 hospitalizations and deaths are increasing, with the US experiencing a 12.5% increase in hospital admissions in July, compared to 6,000 in June (Morse, 2023). The World Health Organization reports global numbers are also climbing. The number of COVID-19 hospitalizations has risen for the fifth consecutive week, but still represents only 2.73 of every 100,000 admissions. Emergency department visits increased 21.4%, and test positivity rose 1.6%, with higher levels in Texas and surrounding states. [Full article]

The latest data from the Centers for Disease Control and Prevention (CDC) reveals that various measures of virus activity have experienced minor upticks (CDC, 2023). While starting from a low base, hospitalizations due to COVID-19 have increased by 14.3% in comparison to the previous week. Although this marks the fifth consecutive week of escalation, COVID-19 admissions still constitute a relatively small portion of overall hospitalizations. The CDC's COVID-19 hospitalization map showed that only few of counties have reported medium rates of COVID-19 admissions, with none designated as high-risk areas. The CDC's recommended actions for individuals and communities are closely linked to the levels of COVID-19 hospitalizations, which currently remain low for 99% of the nation. Conversely, deaths attributed to COVID-19 have seen a 10% increase over the prior week, yet these COVID-related fatalities constitute only 1.1% of total national deaths. Early indicators of heightened virus activity, such as emergency department (ED) visits, have also observed a rise of 21.4% compared to the preceding week. However, evaluations for COVID-19 represent only 1.2% of all ED visits. [Full report]

• Argentina has confirmed the detection of the new Eris subvariant of the Covid-19 virus, which has been found in Cordoba and Buenos Aires (MercoPress, 2023). The EG.5 subvariant, also known as Eris, is a sublineage of the rapidly spreading Omicron variant,



which has already been found in the United States, Mexico, Ecuador, and Colombia. The symptoms of the EG.5 subvariant include a sore throat, runny nose, nasal congestion, sneezing, coughing, headache, and hoarse voice. Breathing difficulty and fever are less frequent. The EG.5 subvariant was first identified in China in February 2023 and has been detected in 52 countries. Eris, a variant of concern, is feared to cause an increase in the incidence of cases and become dominant in some countries or even globally. [Full article]

• Israel: COVID-19 incidence in Israel has increased, with most infections in nursing homes and geriatric centers (NEWSru.co.il, 2023). Kan-11 journalist Cathy Dor reports that older people are more likely to be tested for the virus, and 20-40% of infections are due to the Eris strain. The new strain is not considered more aggressive or dangerous than Omicron. A vaccine will be available in September-October, and vaccination is recommended for the elderly and those in the "risk group." [Full article]

Regional Updates

- **Singapore** has seen a drop in COVID-19 community cases, with about 18% infected with the EG.5 Omicron subvariant (CNA, 2023). The first local case was detected on May 5. The World Health Organization (WHO) does not suggest the subvariant has contributed to any significant increase in cases, disease severity, or deaths compared to other circulating strains. The number of COVID-19 cases hospitalized or in intensive care has remained stable, and the MOH will continue to monitor the local situation closely. The EG.5 Omicron subvariant, a descendant of XBB.1.9.2, was first detected overseas in February and has since been reported in at least 51 countries. [Full article]
- Vietnam: The Ministry of Health has sent a dispatch to centrally-run cities and provinces to request active response to COVID-19, as the number of new infected cases surged by 80% last month (VNA, 2023). The World Health Organization identified the new EG.5 sub-variant of Omicron as a "significant concern." Despite an 80% increase in new infections, COVID-19-related deaths fell by 57%, totaling 2,500 cases. Cities and provinces are urged to follow government and Prime Minister's guidelines on pandemic prevention and control. [Full article]

Research Updates (Published and peer-reviewed studies)

The study Prevalence of Symptoms ≤12 Months After Acute Illness, by COVID-19 Testing • Status Among Adults — United States, December 2020-March 2023 led by researchers from the University of California at San Francisco (UCSF) and the Centers for Disease Control and Prevention (CDC) conducted a survey study and found that long-COVID symptoms may overlap with those from other infections (Montoy et al., 2023). A total of 1,296 participants completed all surveys through 1 year, including 1,017 with positive COVID-19 tests and 279 who tested negative. A much greater proportion of COVID-19 patients had been hospitalized than those who tested negative (5.6% vs 0.4%). Symptoms of an acute infection included fatigue, runny nose, headache, sore throat, shortness of breath, chest pain, diarrhea, forgetfulness, and difficulty thinking or concentrating. From enrollment to 3 months, the prevalence of any symptom fell from 98.4% to 48.2% for test-positive participants and from 88.2% to 36.6% for those who tested negative. Symptom prevalence continued to decline through 1 year, affecting 18.3% and 16.1% of test-positive and test-negative participants at 1 year, a nonsignificant difference. Symptom prevalence at baseline and persistence through 1 year varied by symptom category. At baseline, a higher percentage of COVID-positive participants reported symptoms in each category, except for extreme fatigue, than those who tested negative. The prevalence during the study period ranged from 0.3% for gastrointestinal symptoms to 5.9% for HEENT symptoms among COVID-positive participants and 1.1% for cardiovascular or pulmonary symptoms to 6.8% for extreme



fatigue among those who tested negative. The only statistically significant difference at 1 year between the two groups was with extreme fatigue (3.5% positive vs 6.8% negative). According to authors, awareness that symptoms might persist for up to 12 months, and that many symptoms might emerge or reemerge in the year after COVID-like illness, can assist health care providers in understanding the clinical signs and symptoms associated with post-COVID-like conditions. [Full text]

- This retrospective cohort study, Performance comparison between heterologous and homologous COVID19 vaccine schedules on Omicron variant incidence: A real-world retrospective cohort study in Southern Italy, investigated the vaccine schedule performance of heterologous vaccination compared to homologous vaccination in preventing Omicron SARS-CoV2 infection in the adult population (Baglivo et al., 2023). This study utilized data from the Infections Regional Information System and the Apulia Regional Vaccine Registry to identify individuals who received a booster dose of one of 14 different COVID19 vaccination schedules between September 2021 and August 2022 in the province of Lecce, Southern Italy. A total of 469,069 subjects were included in the study. The standardized incidence of SARS-CoV2 infection varied greatly among different vaccine schedules, with the highest and lowest being AZ-AZ-BNT (34.7%) and MOD-MOD-BNT (18.9 %), respectively, and some heterologous schedules performing better than homologous ones. The risk of SARS-CoV2 infection was significantly lower in individuals who received specific heterologous vaccination schedules compared to homologous vaccination schedules, the best performing being MOD-MOD BNT with a common odd ratio of 0.661 (IC. 95 % [0.620-0.704]). This study provides evidence that heterologous vaccination schedules may be more effective in preventing Omicron SARS-CoV2 infection compared to homologous vaccination schedules, highlighting how the vaccine product, rather than the platform, is involved in the different protection provided by heterologous vaccination. [Full text]
- The impact of the COVID-19 pandemic on tuberculosis control in high-burden countries has not been adequately assessed. This nationwide longitudinal analysis, Impact of the COVID-19 pandemic on tuberculosis control in Indonesia: a nationwide longitudinal analysis of programme data, aimed to estimate the impact of the COVID-19 pandemic on the national tuberculosis programme in Indonesia, in association with indicators of human development and health-system capacity across all 514 districts in 34 provinces (Surendra et al., 2023). Tuberculosis case notification, treatment coverage, and mortality rates in Indonesia before (2016–19) and during (2020–21) the COVID-19 pandemic were compared. During the COVID-19 pandemic, the tuberculosis case notification rate declined by 26% (case notification rate ratio 0.74, 95% CI 0.72–0.77) and treatment coverage declined by 11% (treatment coverage ratio 0.89, 95% CI 0.88-0.90), but there was no significant increase in all-cause mortality (all-cause mortality rate ratio 0.97, 95% CI 0.91-1.04) compared with the pre-pandemic period. In the second year of the pandemic, a partial recovery of the case notification rate from Q1 to Q4 of 2021, a persistent decrease in treatment coverage, and a decrease in the all cause mortality rate from Q2 of 2020 to Q4 of 2021 were observed. The multivariable analysis showed that the reduction in the tuberculosis case notification rate was associated with a higher COVID-19 incidence rate (adjusted odds ratio 3.1, 95% CI 1.1-8.6, for the highest compared with the lowest group) and fewer GeneXpert machines for tuberculosis diagnosis (3.1, 1.0-9.4, for the lowest compared with the highest group) per 100000 population. The reduction in tuberculosis treatment coverage was associated with higher COVID-19 incidence (adjusted odds ratio 11.7, 95% CI 1.5–93.4, for the highest compared with the lowest group), fewer primary health centres (10.6, 4.1-28.0, for the lowest compared with the middle-high group), and a very low number of doctors (0.3, 0.1-0.9, for the low-middle compared with the lowest group) per 100000 population. The COVID-19 pandemic adversely and unevenly affected the national tuberculosis programme across Indonesia, with the greatest impacts observed in districts with the lowest health-system capacity. [Full text]





ASEAN Travel Advisories (new update/s)

as of 17 August 2023

ASEAN Country	Published	Foreign travelers allowed	COVID-19 vaccination requirement	Required COVID- 19 testing for fully vaccinated	Required COVID-19 testing for NOT fully vaccinated	Quarantine upon arrival	Health insurance requirement	Arrival health declaration/ registration/ documents
Brunei Darussalam	December 1, 2022	Yes	No	No	No	No	No	No
Cambodia	October 6, 2022	Yes	No	No	No	No	No	No
Indonesia	June 10, 2023	Yes	No	No	No	No	No	No
Laos	December 29, 2022	Yes	No	No	No	No	No	No
Malaysia	August 2, 2022	Yes	No	No	No	No	No	No
Myanmar	July 3, 2023	Yes	No	Passengers are subject to medical screening and could be subject to a test upon arrival.	No	No	Printed COVID-19 medical insurance.	Passengers must present a Health Declaration Form upon arrival.
Philippines	July 25, 2023	Yes	No	No	No	No	No	No
Singapore	February 13, 2023	Yes	No	No	No	No	No	No
Thailand	March 1, 2023	Yes	No	No	No	No	No	No
Vietnam	May 16, 2022	Yes	No	No	No	No	No	No

Reference: <u>IATA Travel Centre</u>

Cases and Deaths as of 17 August 2023

- As of 17 August 2023 (5PM, GMT+7), worldwide, there were **693,646,452** confirmed cases, including **6,679,309** deaths. Globally, Case Fatality Rate (CFR) was **1.0%**.
- 36,334,527 total confirmed cases of COVID-19 have been reported in the ASEAN Region.
- The Case Fatality Rate in the **ASEAN** Region was **1.01%**.

COVID-19 cases in ASEAN region

REGION	COUNTRY	FIRST CONFIRMED CASES	LATEST REPORT ON CONFIRMED	TOTAL CONFIRMED CASES	CONFIRMED CASES IN 2023	NEW CASES	TOTAL DEATHS	NEW DEATHS	CUMULATIVE CASES/ 100,000	CUMULATIVE VACCINATED	CUMULATIVE FULLY VACCINATED	CUMULATIVE BOOSTED	FULLY VACCINATE D PER 100
	Brunei Darussalam	10-Mar-20	04-Aug-23	310,019	48,579	-	225	-	65,967	451,032	446,630	340,379	95.0
	Cambodia	27-Jan-20	04-Aug-23	138,940	502	-	3,056	-	793	15,301,258	14,674,372	10,716,594	83.8
	Indonesia	02-Mar-20	15-Aug-23	6,813,175	101,392	80	161,916	-	2,518	203,873,924	174,949,489	69,268,638	64.7
ASEAN REGION	Lao PDR	24-Mar-20	16-Aug-23	218,787	1,181	-	758	-	2,888	6,324,678	5,691,962	2,451,034	75.1
	Malaysia	25-Jan-20	15-Aug-23	5,121,858	102,458	582	37,165	5	15,654	28,134,784	27,550,446	16,336,861	84.2
	Myanmar	23-Mar-20	15-Aug-23	641,134	7,559	34	19,495	1	1,137	40,354,937	35,196,377	13,903,599	62.4
	Philippines	30-Jan-20	09-Aug-23	4,174,101	116,472	-	66,643	-	3,824	82,684,774	79,164,840	24,178,325	72.5
	Singapore	23-Jan-20	06-Aug-23	2,538,425	351,751	3,485	1,872	-	43,466	5,286,131	5,249,889	4,767,986	89.9
-	Thailand	13-Jan-20	14-Aug-23	4,755,761	36,853	318	34,444	7	6,795	57,658,679	54,173,539	27,369,493	77.4
	Vietnam	23-Jan-20	16-Aug-23	11,622,327	98,960	235	43,206	-	11,357	90,270,583	85,958,364	57,958,886	84.0
		ASE		36,334,527	865,787	4,734	368,780	13	154,399	530,340,780	483,055,908	227,291,795	78.9

REGION	TOTAL CONFIRMED CASES	NEW CASES	TOTAL DEATHS	NEW DEATHS
ASIA	198,270,619	66	1,209,796	-
AFRICA	12,836,465	-	29,989	3
AMERICAS	196,431,134	6,234	3,001,446	15
EUROPE	249,773,707	186	2,069,298	3
TOTAL	657,311,925	6,486	6,310,529	21

**Data References: <u>Singapore Government</u>, <u>Worldometer</u>, and the <u>WHO</u>

COVID-19 Epidemic Curve Among ASEAN Countries

From January 1 to August 17, 2023

*Weeks based on ABVC reporting schedule for COVID-19



ASEAN Weekly COVID-19 New Cases and Deaths

From January 1, 2023 to August 17, 2023



ASEAN COVID-19 Vaccination Status

as of 17 August 2023



1. World Health Organization, Coronavirus (COVID-19) Dashboard, accessed August 17, 2023 https://covid19.who.int/

- 2. Department of Health Philippines, National COVID-19 vaccination dashboard accessed August 17, 2023, https://doh.gov.ph/covid19-vaccination-dashboard
- 3. Ministry of Health Indonesia, "Vaccine Dashboard, August 17, 2023, <u>https://vaksin.kemkes.go.id/#/vaccines</u>
- 4. Ministry of Health Malaysia, COVID-19 vaccination, accessed August 17, 2023, https://data.moh.gov.my/covid-vaccination
- 5. Ministry of Public Health Thailand, COVID-19 Vaccination Infographic, accessed August 17, 2023, https://dashboard-vaccine.moph.go.th/
- 6. Singapore Government Open Data, accessed August 17, 2023, https://data.gov.sg/dataset/covid-19-stats

MPOX



Mpox Cases Reported Globally

as of August 14, 2023



Edouard Mathieu et al., "Mpox (Monkeypox)," Our World in Data, accessed August 17, 2023, https://ourworldindata.org/monkeypox.

Mpox Daily Trend Globally

January 1 – August 14, 2023





Mpox: Highlights and Situation Overview

- As of 17 August 2023 (1PM, GMT+7), there were **5,276** confirmed cases worldwide in 2023, including **79** deaths. Globally, the Case Fatality Rate (CFR) was **1.50%**.
- 186 confirmed cases in the ASEAN region in 2023, with a CFR of 0.54%.
- **5,090 confirmed cases** of Mpox have been reported in other **5 regions** in 2023 (other than the ASEAN region):

Country	Total Cases	New Cases	Deaths	Case Fatality Rate (CFR)
Philippines	1	-	-	0.00%
Singapore	7	-	-	0.00%
Thailand	177	98	1	0.56%
Vietnam	1	-	-	0.00%
ASEAN Total	186	98	1	0.54%

Mpox cases in the ASEAN region

Mpox cases in the Asia-Pacific region

Country/Territory	Total Cases	New Cases	Deaths	Case Fatality Rate (CFR)
Australia	3	2	-	0.00%
India	2	-	-	0.00%
Japan	186	-	-	0.00%
Nepal	1	-	-	0.00%
New Zealand	1	-	-	0.00%
People's Republic of China*	632	15	-	0.00%
The Republic of China*	254	-	-	0.00%
The Republic of Korea*	130	-	-	0.00%
Sri Lanka	2	-	-	0.00%
Asia Pacific Total	1,210	17	-	0.00%

*People's Republic of China - China, Hong Kong (SAR), and Macao (SAR); Republic of China - Taiwan, Republic of Korea - South Korea

Top 5 countries with the most mpox cases globally

Country	Total Cases	New Cases	Deaths	Case Fatality Rate (CFR)
United States of America	843	-	26	3.08%
People's Republic of China	632	11	0	0.00%
Democratic Republic of Congo	555	-	2	0.36%
Brazil	456	-	2	0.44%
Mexico	408	-	26	6.37%



Mpox cases per region

REGION	TOTAL CONFIRMED CASES SINCE JANUARY 1, 2023	NEW CASES SINCE THE PREVIOUS REPORT	TOTAL DEATHS	CASE FATALITY RATE
AFRICA	689	-	5	0.73%
AMERICAS	2,896	-	71	2.45%
ASEAN	186	70	1	0.54%
ASIA PACIFIC	1,210	4	-	0.00%
EUROPE	285	11	2	0.70%
MIDDLE EAST	10	-	-	0.00%
TOTAL	5,276	85	79	1. 50 %

Edouard Mathieu et al., "Mpox (Monkeypox)," Our World in Data, accessed August 17, 2023, https://ourworldindata.org/monkeypox.

Global Updates

• **Republic of China:** The Taiwan Centers for Disease Control (CDC) has issued a travel notice for China and Thailand due to increased cases of monkeypox (Tseng & Lee, 2023). The countries will join 38 others on the Level 1 watch list, which includes South Korea, Australia, the United States, and Japan. Mpox cases have worsened in Asia-Pacific countries, with China reporting 491 cases in July and Thailand having 119. The CDC confirmed 14 cases between August 8-13 in Taiwan, bringing the total to 280 since the disease was designated a Category 2 communicable disease in June. [Full article]

Regional Updates

 Thailand's Department of Disease Control (DDC) reported the first fatal mishap related to Monkeypox in Thailand, involving a 34-year-old man with HIV and syphilis (Connor, 2023). The man was infected with the virus, which was renamed mpox to avoid racism and stigmatization. The escalating monkeypox situation poses a significant threat to Thailand's public health, with 189 cases as of August 8. The most vulnerable demographic are men seeking unprotected sexual encounters with strangers, with 43% also battling HIV. The Monkeypox outbreak has claimed 152 lives worldwide. Thailand has procured a batch of Tecovirimat, an antiviral medication reserved specifically for Monkeypox, to mitigate the crisis. [Full article]



References

- Baglivo, F., Magrì, M., De Angelis, L., Aprile, V., Minelli, M., Stifini, R., Lopalco, P., Rizzo, C., & Fedele, A. (2023). Performance comparison between heterologous and homologous covid19 vaccine schedules on Omicron variant incidence: A real-world retrospective cohort study in Southern Italy. Vaccine. https://doi.org/10.1016/j.vaccine.2023.07.055
- CNA. (2023, August 8). 18% of recent COVID-19 community cases in Singapore infected by eg.5 Omicron subvariant. Channel News Asia. https://www.channelnewsasia.com/singapore/covid-19-community-cases-singaporeinfected-eg5-omicron-subvariant-3685896
- Centers for Disease Control and Prevention. COVID Data Tracker. Atlanta, GA: U.S. Department of Health and Human Services, CDC; 2023, August 17. https://covid.cdc.gov/covid-datatracker
- Connor, M. (2023, August 15). Thailand's first Monkeypox-related death highlights rising infectious disease threat. Thaiger. https://thethaiger.com/news/national/update-thailands-first-monkeypox-case-goes-missing
- ECDC. (2023, August 11). Country overview report: week 31 2023. European Centres for Disease Prevention and Control. https://covid19-country-overviews.ecdc.europa.eu/index.html
- KBS World. (2023, August 14). KDCA preparing for covid-19 level downgrade as new cases ease. KBS World. https://world.kbs.co.kr/service/news_view.htm?lang=e&Seq_Code=179798
- MercoPress. (2023, August 15). New covid-19 subvariant detected in Argentina. MercoPress. https://en.mercopress.com/2023/08/15/new-covid-19-subvariant-detected-in-argentina
- Montoy, J. C., Ford, J., Yu, H., Gottlieb, M., Morse, D., Santangelo, M., O'Laughlin, K. N., Schaeffer, K., Logan, P., Rising, K., Hill, M. J., Wisk, L. E., Salah, W., Idris, A. H., Huebinger, R. M., Spatz, E. S., Rodriguez, R. M., Klabbers, R. E., Gatling, K., ... Plumb, I. D. (2023). Prevalence of symptoms ≤12 months after acute illness, by COVID-19 testing status among adults — United States, December 2020–March 2023. MMWR. Morbidity and Mortality Weekly Report, 72(32), 859– 865. https://doi.org/10.15585/mmwr.mm7232a2
- Morse, S. (2023, August 14). CDC reports uptick in COVID-19 hospitalizations and deaths. Healthcare Finance News. https://www.healthcarefinancenews.com/news/cdc-reportsuptick-covid-19-hospitalizations-and-deaths
- NEWSru.co.il. (2023, August 15). In Israel, an increase in the incidence of COVID-19. NEWSru.co.il. https://www.newsru.co.il/health/15aug2023/covid_19_0014.html
- Surendra, H., Elyazar, I. R., Puspaningrum, E., Darmawan, D., Pakasi, T. T., Lukitosari, E., Sulistyo, S., Deviernur, S. M., Fuady, A., Thwaites, G., van Crevel, R., Shankar, A. H., Baird, J. K., & Hamers, R. L. (2023). Impact of the COVID-19 pandemic on Tuberculosis Control in Indonesia: A Nationwide Longitudinal Analysis of programme data. *The Lancet Global Health*, 11(9). https://doi.org/10.1016/s2214-109x(23)00312-1
- Tseng, Y., & Lee, H.-Y. (2023, August 15). Taiwan adds China, Thailand to travel alert list amid growing MPOX cases - focus Taiwan. Focus Taiwan - CNA English News. https://focustaiwan.tw/society/202308150027
- VNA. (2023, August 14). Active response to COVID-19 urged as new sub-variant emerges globally. VietnamPlus. https://en.vietnamplus.vn/active-response-to-covid19-urged-as-newsubvariant-emerges-globally/266227.vnp

