Weekly Evidence Report

Health Technology Assessment Philippines

4 to 10 September 2021

Overview

The following report presents summaries of evidence the Department of Health (DOH) - Health Technology Assessment (HTA) Unit reviewed for the period of 4 to 10 September 2021. The HTA Unit reviewed a total of 10 studies for the said period.

Evidence includes 4 studies on Epidemiology; 5 studies on Transmission; 2 studies on Drugs; 2 studies on Vaccines, 0 study on Equipment and Devices; 0 study on Medical and Surgical Procedures; 0 study on Traditional Medicine; and 2 studies on Preventive & Promotive Health.

The following report notes that 4 studies have not been peer-reviewed, each highlighted accordingly.

Sections

Evidence on Epidemiology

Local COVID-19 Tracker: https://www.doh.gov.ph/covid19tracker

Local COVID-19 Case Tracker: https://www.doh.gov.ph/covid-19/case-tracker

Date	Author/s	Title	Journal/ Article Type	Summary
7 September 2021	WHO Global	Coronavirus Disease 2019 (COVID-19) External Situation Report	WHO Global (Situation Report)	• The global incidence of COVID-19 cases has remained stable over the past month with over 4.4 million new cases reported this week (30 August-5 September). • The number of deaths reported globally this week also remained similar to the previous week, with just under 68 000 new deaths reported.Regionally, the largest proportionate decreases in new deaths this week were observed in the South-East Asia (21% decrease).The cumulative number of cases reported globally is now just over 220 million and the cumulative number of deaths is over 4.5 million. • Cases of the Alpha variant have been reported in 194 countries (one new country since last week), territories or areas (hereafter countries), while 141 countries (no new countries) have reported cases of the Beta variant; 92 countries (one new country) have reported cases of the Gamma variant; and 174 countries (four new countries) have reported cases of the Delta variant.
7 September 2021	WHO Western Pacific Region	Coronavirus Disease 2019 (COVID-19) External Situation Report	WHO WPRO (External Situation Report)	• In the Western Pacific Region, 521,172 new cases and 6,570 new deaths have been reported in the past week, leading to a cumulative number of 7,147,520 cases and 96, 981 cumulative deaths. • The Philippines is identified as one of the countries with large-scale community transmission, particularly in the National Capital Region, Region 3, and Region 4A.
10 September 2021	European Centre for Disease Prevention and Control (ECDC)	Weekly COVID-19 Surveillance Report	ECDC Data Set	• At the end of week 35 (week ending Sunday 5 September 2021), the overall epidemiological situation in the European Union and European Economic Area (EU/EEA) was characterised by a high, slowly decreasing overall case notification rate and a low, slowly increasing death rate with case and death notification rates forecast to remain stable over the next two weeks • Among the 15 countries with an adequate sequencing volume in this period, the median (range) of the VOC reported in all samples sequenced was 99.5% (84.7–100.0%) for B.1.617.2 (Delta), 0.0% (0.0–0.5%) for P.1 (Gamma) and 0.0% (0.0–0.3%) for B.1.351 (Beta). This distribution was 0.2% (0.0–1.7%) for B.1.1.7 (Alpha), which has been downgraded from the list of VOCs.

Evidence on Epidemiology (cont.)

Date	Author/s	Title	Journal/ Article Type	Summary
10 September 2021	Scobie, H. et al	Monitoring Incidence of COVID-19 Cases, Hospitalizations, and Deaths, by Vaccination Status — 13 U.S. Jurisdictions, April 4–July 17, 2021	US CDC Morbidity and Mortality Report	Across 13 U.S. jurisdictions, incidence rate ratios for hospitalization (from 13.3 (95% CI = 11.3–15.6) to 10.4 (95% CI = 8.1–13.3) and death (from 16.6 (95% CI = 13.5–20.4) to 11.3 (95% CI = 9.1–13.9)) changed relatively little after the SARS-CoV-2 B.1.617.2 (Delta) variant reached predominance, suggesting high, continued vaccine effectiveness against severe COVID-19. Case IRRs decreased (from 11.1 (95% CI = 7.8–15.8) to 4.6 (95% CI = 2.5–8.5), suggesting reduced vaccine effectiveness for prevention of SARS-CoV-2 infections.

Evidence on Vulnerable Population Epidemiology

Date	Author/s	Title	Journal/ Article Type	Summary
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Evidence on Transmission

Date	Author/s	Title	Journal/ Article Type	Summary
4 September 2021	Public Health England	Transmission of COVID-19 in school settings and interventions to reduce Transmission (update 2)	Public Health England Rapid Review	• Evidence from 39 observational studies (11 preprints, 2 reports) predominantly suggests that transmission within schools can be limited when infection prevention and control (IPC) measures are in place. However, transmission may occur, especially in area of high transmission or when inadequate IPC measures are in place. • Evidence from 17 studies (12 preprints, 1 report), mainly modelling, suggests that implementing a combination of interventions including testing, isolation of cases and cohorting (no mixing outside classrooms and/or reduced class sizes) in addition to other mitigations (physical distancing, face coverings, increased ventilation) might reduce the likelihood and size of outbreaks within schools.
7 September 2021	Rosca E. et al.	Transmission of SARS-CoV-2 associated with aircraft travel: A systematic review	Journal of Travel Medicine/ Systematic Review	The review looked at d 18 studies on in-flight SARS-CoV-2 transmission (130 unique flights) and two studies on wastewater from aircraft. The studies reported on the possibility of SARS-CoV-2 transmission from asymptomatic, pre-symptomatic, and symptomatic individuals (low quality of evidence).

Evidence on Transmission

Date	Author/s	Title	Journal/ Article Type	Summary
7 September 2021	Rosca E. et al.	Transmission of SARS-CoV-2 associated with aircraft travel: A systematic review *(continuation)*	Journal of Travel Medicine/ Systematic Review	Current evidence suggests that SARS-CoV-2 can be transmitted during aircraft travel, but the published data do not permit any conclusive assessment of the likelihood and extent.
8 September 2021	Heinrich J. et al.	SARS-CoV-2 Infections during Travel by Train and Bus: A Systematic Review of Epidemiological Studies	Systematic Review	Five included studies consistently showed a risk of infection when infected persons travelled in the same train, car or bus without mouth-to-nose (MNB) coverage. The risk was not limited to those sitting in close proximity to an infected fellow traveler.However, the three key publications predominantly included the period before the lockdown in China without the strict use of MNB. Thus, the question remains whether the results would be similar under current conditions with MNB and more virulent viral mutations. No single study was found related to infection when using public transportation.
10 Sept 2021	Rebmann T. et al	SARS-CoV-2 Transmission to Masked and Unmasked Close Contacts of University Students with COVID-19 — St. Louis, Missouri, January–May 2021	US CDC Morbidity and Mortality Report	• A total of 9,335 student SARS-CoV-2 tests were performed.Among students with a positive SARS-CoV-2 test result, 378 close contacts were named (mean = 1.4 close contacts per case), 26 (6.9%) of whom reported only masked exposure; 352 (93.1%) reported any unmasked exposure. Close contacts had a median of one exposure incident (range = one–16). Reported exposures occurred between roommates, significant others, or in off-campus social gatherings. • Compared with only masked exposure, close contacts with any unmasked exposure had higher adjusted odds of a positive test result. Each additional exposure was associated with a 40% increase in odds of a positive test.

Evidence on Drugs

Date	Author/s	Title	Journal/ Article Type	Summary
06 September 2021	Ferner, R. et al (University of Oxford)	Monoclonal antibodies directed against SARS-CoV-2: synthetic neutralizing antibodies, the REGN-COV2 antibody cocktail	Evidence Summary	• Prophylactic use of the combination antibody treatment REGEN-COV containing two neutralizing IgG1 recombinant human monoclonal antibodies, casirivimab and imdevimab by subcutaneous injection was investigated in a company-led, randomized placebo-controlled study of <continue to next page>

Evidence on Drugs (cont.)

Date	Author/s	Title	Journal/ Article Type	Summary
06 September 2021	Ferner, R. et al (University of Oxford)	Monoclonal antibodies directed against SARS-CoV-2: synthetic neutralizing antibodies, the REGN-COV2 antibody cocktail *(continuation)*	Evidence Summary	1505 people over the age of 12 years; treated within 96 hours of a diagnosis of SARS-CoV-2 infection in a household contact.Of 753 patients who received REGEN-COV, 11 (1.6%) developed symptomatic covid-19, compared with 59/752 (7.8%) who received placebo. • UK MHRA temporarily approved Ronapreve® "for prophylaxis and treatment of acute COVID-19 infection". US FDA extended the EUA of REGEN-COV® to cover "emergency use as post-exposure prophylaxis in certain adults and pediatric individuals" in addition to the previous approve indication of "for the treatment of mild to moderate COVID-19 in certain adults and pediatric patients"
07 September 2021	Kreuzberger N,et al.	SARS-CoV-2-neutralising monoclonal antibodies for treatment of COVID-19.	Cochrane Systematic Review	In this Cochrane review, the authors searched for randomized trials of SARS-CoV-2-neutralising monoclonal antibodies for the treatment of COVID-19 patients. They did their latest search for articles published since 1 January 2020 on 31 July 2021. They included 6 trials (17,495 patients). Four trials were in non-hospitalized patients with mild or moderate COVID-19 (low certainty evidence) and two trials were in hospitalized patients with severe COVID-19 (very low to moderate certainty evidence). Each study tested a different monoclonal antibody regimen. The authors conclude that the evidence available at the time of their review was insufficient to draw meaningful conclusions about the treatment of COVID-19 patients with SARS- CoV- 2- neutralising monoclonal antibodies.

Evidence on Vaccines

NYT Coronavirus Vaccine Tracker:
https://www.nytimes.com/interactive/2020/science/coronavirus-vaccine-tracker.html

Bloomberg Vaccine Tracker:
https://www.bloomberg.com/graphics/covid-vaccine-tracker-global-distribution/

London School of Hygiene and Tropical Medicine Vaccine Trial Mapper and Tracker:
https://vac-lshtm.shinyapps.io/ncov_vaccine_landscape/

ACIP Files:
https://drive.google.com/drive/u/0/folders/1v-jd66qIIxnUkfzXWKqiD0mkVvqy_VvJ?pli=1

Evidence on Vaccines (cont.)

Date	Author/s	Title	Journal/ Article Type	Summary

10 September 2021	National Health Library and Knowledge Service Evidence (Ireland) (NHLKS)	How long does immunity last after COVID-19 vaccination? Does immunity wane faster in certain sub-populations? How safe and effective are booster doses of COVID-19 vaccine?	NHLKS Evidence Summary	Authors looked at Irish and International guidance and literature on boosters and waning immunity from vaccines and found the following:
				• Data from vaccination campaigns and ongoing studies have not fully answered the question of how long protection from COVID-19 vaccines will last. Data on the impact of new SARS-CoV-2 variants are limited, but are expected soon.
				• Both Britain (Joint Committee on Vaccination and Immunisation) and US Advisory Committee on Immunization Practices recommend a third dose for immunosuppressed and immunocompromised individuals.
				• Studies show that the following individuals need closer monitoring and may require booster vaccination due to attenuated or lowering immune response:
				  ○ Patients receiving dialysis may
				  ○ Individuals aged ³60 years
				  ○ Solid-organ transplant recipients
				• There is significant heterogeneity of humoral immune response to COVID-19 vaccines among immunosuppressed individuals, highlighting an urgent need to optimize COVID-19 prevention in these patients.

10 September 2021	National Health Library and Knowledge Service Evidence (Ireland) (NHLKS)	How safe and effective are COVID-19 vaccines in adolescents, and what is the uptake of COVID-19 vaccines in adolescents?	NHLKS Evidence Summary	• Cases of myocarditis and pericarditis following mRNA vaccination in children and adolescents are rare and typically resolve rapidly. • Based on cross-sectional studies in Canada, Israel and Italy, intention to vaccinate children and adolescents against COVID-19 is high (~80%-90%). Obtaining reliable information about adolescent COVID-19 vaccine safety and efficacy, and having parents or guardians who have been vaccinated are among the factors that increase vaccination intent among both parents and adolescents. Parents inclined not to vaccinate indicate short development time and possible long-term effects as dissuading factors.

Evidence on Equipment & Devices

Date	Author/s	Title	Journal/ Article Type	Summary
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Evidence on Medical and Surgical Procedures

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Evidence on Traditional Medicine

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Evidence on Preventive & Promotive Health

Evidence on Screening

Date	Author/s	Title	Journal/ Article Type	Summary
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Evidence on Personal Measures

Date	Author/s	Title	Journal/ Article Type	Summary
10 September 2021	US CDC	Interim Infection Prevention and Control Recommendations for Healthcare Personnel During the Coronavirus Disease 2019 (COVID-19) Pandemic	Updated Guidance	• This guidance applies to all U.S. settings where healthcare is delivered, including home health. • CDC has updated select healthcare infection prevention and control (IPC) recommendations in response to COVID-19 vaccination. ○ Updated source control recommendations to address limited situations for healthcare facilities in counties with low to moderate community transmission where select fully vaccinated individuals could choose not to wear source control. However, in general, the safest practice is for everyone in a healthcare setting to wear source control. ○ Updated quarantine recommendations for fully vaccinated patients who have had close contact with someone with SARS-CoV-2 infection to more closely align with recommendations for the community. ○ Clarified the recommended intervals for testing asymptomatic HCP with a higher-risk exposure and patients with close contact with someone with SARS-CoV-2 infection.

Evidence on Preventive & Promotive Health

Evidence on Personal Measures (cont.)

Date	Author/s	Title	Journal/ Article Type	Summary
10 September 2021	US CDC	Interim Infection Prevention and Control Recommendations for Healthcare Personnel During the Coronavirus Disease 2019 (COVID-19) Pandemic *(continuation)*	Updated Guidance	○ Added content from previously posted CDC guidance addressing: ■ Recommendations for fully vaccinated HCP, patients, and visitors ■ SARS-CoV-2 testing ■ Duration of Transmission-Based Precautions for patients with SARS-CoV-2 infection ■ Specialized healthcare settings (e.g., dental, dialysis, EMS)

Evidence on Community Measures

Date	Author/s	Title	Journal/ Article Type	Summary
10 September 2021	US CDC	Interim Infection Prevention and Control Recommendations to Prevent SARS-CoV-2 Spread in Nursing Homes	Update on Guidance	• Updated outbreak response guidance to promote use of contact tracing approach. Alternative broad-based approaches to outbreak response at a facility-wide or unit level are also described. • Updated expanded screening testing recommendations for healthcare personnel (HCP). • Updated recommendations for quarantine of fully vaccinated residents. • Updated visitation guidance.