

# Weekly Evidence Report



Health Technology Assessment Philippines

07 to 13 August 2021

## Overview

The following report presents summaries of evidence the Department of Health (DOH) - Health Technology Assessment (HTA) Unit reviewed for the period of 07 to 13 August 2021. The HTA Unit reviewed a total of 15 studies for the said period.

Evidence includes 3 studies on Epidemiology; 1 study on Transmission; 2 studies on Drugs; 4 studies on Vaccines, 2 study on Equipment and Devices; 0 study on Medical and Surgical Procedures; 0 studies on Traditional Medicine; and 3 studies on Preventive & Promotive Health.

The following report notes that 1 study have not been peer-reviewed, each highlighted accordingly.



## Sections

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Epidemiology

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Transmission

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Drugs

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Vaccines

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Equipment & Devices

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Medical & Surgical Procedures

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Traditional Medicine

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Preventive & Promotive Health

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## 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
10 August 2021	WHO Global	<a href="#">Coronavirus Disease 2019 (COVID-19) Weekly Epidemiological Update</a>	WHO Global (Situation Report)	<ul style="list-style-type: none"> <li>On 5 August, the cumulative number of COVID-19 cases globally surpassed 200 million, just 6 months after reaching 100 million cases.</li> <li>This week over 4.2 million new cases and 65 000+ new deaths were reported, a slight increase as compared to the previous week.</li> <li>38 out of 228 Member States and territories (17%) reported &gt;50% increase in new cases vs. the previous week and 34 (15%) reported &gt;50% increase in new deaths.</li> <li>Globally, <b>Alpha</b> variant cases have been reported in 185 countries (three new countries), while 136 countries (four new countries) have reported cases of the <b>Beta</b> variant; 81 countries (no new country) have reported <b>Gamma</b> variant cases; and 142 countries (seven new countries) have reported cases of the <b>Delta</b> variant.</li> </ul>
			WHO Global (Situation Report) – <i>Regional Updates</i>	<ul style="list-style-type: none"> <li>As of the week ending 8 August 2021, South-East Asia reported 1.0 death per 100 000 population (6% decrease from the previous week) and 799,000 new cases (5% decrease from the previous week).</li> <li>Meanwhile, the Western Pacific Region reported over 375 000 new cases and over 4600 new deaths, which are of 19% and a 46% increases, respectively. The increasing trend has been observed for nearly 2 months in Japan, Malaysia, and Philippines.</li> </ul>
12 August 2021	European Centre for Disease Prevention and Control (ECDC)	<a href="#">Weekly COVID-19 Surveillance Report</a>	ECDC Data Set	<ul style="list-style-type: none"> <li>As of the week ending 8 August 2021, the epidemiological situation in the EU/EEA overall was categorised as of moderate concern. Two countries were categorised as high concern, 13 of moderate concern, 11 of low concern and four as very low concern.</li> <li>Among the 15 countries with an adequate sequencing volume in this period, the median (range) of the VOC reported in all samples sequenced was 94.4% (81.6–98.8%) for <b>Delta</b>, 2.0% (0.4–11.2%) for <b>Alpha</b>, 0.1% (0.0–1.1%) for <b>Gamma</b>, and 0.0% (0.0–1.3%) for <b>Beta</b>.</li> </ul>

## Evidence on Vulnerable Population Epidemiology

Date	Author/s	Title	Journal/ Article Type	Summary
11 August 2021	Kazemi, S.N, et al.	<a href="#">COVID-19 and cause of pregnancy loss during the pandemic: A systematic review</a>	<i>PLOS One</i> / Systematic review	<ul style="list-style-type: none"> <li>Based on 11 eligible articles included, first-trimester abortion was found in 5 studies, and second-trimester abortion in 7 studies.</li> <li>Reports related to abortion in pregnant females with COVID-19 show that most miscarriages due to COVID-19 in the first trimester were due to placental insufficiency.</li> </ul>

## Evidence on Transmission

Date	Author/s	Title	Journal/ Article Type	Summary
10 August 2021	Duer, R., et al.	<a href="#">Dominance of alpha and iota variants in SARS-CoV-2 vaccine breakthrough infections in New York City</a>	<i>The Journal of Clinical Investigation</i> /	<ul style="list-style-type: none"> <li>A total of 126, 367 fully vaccinated individuals were included as of April 30, 2021, 98% were vaccinated with mRNA vaccines (Pfizer/BioNTech = 103,166 and Moderna=20,345) and the rest with Janssen COVID-19 vaccine (n=2,856).</li> <li>101 vaccine breakthrough cases were recorded but only 76 cases passed quality control and yielded full SARS-CoV-2 genome that allowed the determination of lineage and mutations.</li> <li>Out of the 76 breakthrough cases, 26 were Alpha variant, 31 were Iota variant, 1 was P.1 or Gamma variant, 18 belonging to other variants. No Beta and Delta variants were recorded in the study.</li> </ul>

## Evidence on Drugs

Date	Author/s	Title	Journal/ Article Type	Summary
11 August 2021	Oksuz, E, et al.	<a href="#">Cost-Effectiveness Analysis of Remdesivir Treatment in COVID-19 patients Requiring Low-Flow Oxygen Therapy: Payer Perspective in Turkey</a>	<i>Advances in Therapy</i> / Cos-effectiveness evaluation	<ul style="list-style-type: none"> <li>Analyses were performed using data from 78 hospitalized COVID-19 patients with SpO<sub>2</sub> &lt; 94% who received low-flow oxygen therapy (LFOT) in tertiary hospitals.</li> <li>In the remdesivir arm, the length of hospital stay (LOS) was 3 days shorter and there was a lower rate of intubation as compared to the standard of care (SOC).</li> <li>Remdesivir treatment was determined to be cost-saving with an incremental QALY estimated at 0.174.</li> </ul>

## Evidence on Drugs (cont.)

Date	Author/s	Title	Journal/ Article Type	Summary
11 August 2021	Abbass, S., et al.	<a href="#">Efficacy and safety of Sofosbuvir plus Daclatasvir or Ravidasvir in patients with COVID-19, A Randomized Controlled Trial</a>	<i>Journal of Medical Virology</i> / Randomized Controlled Trial	<ul style="list-style-type: none"> <li>• A Phase III multi-center RCT, that enrolled 120 patients with moderate to severe COVID-19. There were 40 patients allocated per treatment arm: 1) standard of care (SOC), 2) Sofosbuvir plus Ravidasvir (SOF+RVD), and 3) Sofosbuvir plus Daclatasvir (SOF+DCV).</li> <li>• Compared to SOC alone, SOF+DCV had a significantly lower sum of counted symptoms, no evidence of deterioration, significantly improved oxygen saturation (starting day 4), and lower incidence of mortality.</li> <li>• On the other hand, adding SOF+RDV to SOC did not show significant improvements in endpoints.</li> </ul>

## 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/](https://vac-lshtm.shinyapps.io/ncov_vaccine_landscape/)

## ACIP Files:

[https://drive.google.com/drive/u/0/folders/1v-jd66qllxnUkfzXWKqiD0mkVvqy\\_VvJ?pli=1](https://drive.google.com/drive/u/0/folders/1v-jd66qllxnUkfzXWKqiD0mkVvqy_VvJ?pli=1)

Date	Author/s	Title	Journal/ Article Type	Summary
11 August 2021	WHO Western Pacific Region	<a href="#">COVID-19: External Situation Report #65</a>	Situational Report	<ul style="list-style-type: none"> <li>• All countries and areas of the WHO Western Pacific Region have now secured sufficient doses of COVID-19 vaccines to protect all of their healthcare workers – approximately 26 million people.</li> </ul>
13 August 2021	WHO	<a href="#">COVID-19 Vaccine Tracker and Landscape</a>	Database	<ul style="list-style-type: none"> <li>• Currently, there are 110 vaccines in clinical development and 184 vaccines in pre-clinical development.</li> <li>• Among candidate vaccines in clinical development, 15% are single-dose vaccines, 65% have two doses, and 1% have three doses.</li> <li>• There are 3 vaccines in clinical development that are for oral administration.</li> </ul>

## Evidence on Vaccines (cont.)

Date	Author/s	Title	Journal/ Article Type	Summary
10 August 2021	Dionne, A., Sperotto, F., and Chamberlain, S.	<a href="#">Association of Myocarditis with BNT162b2 Messenger RNA COVID-19 Vaccine in a Case Series of Children</a>	<i>JAMA Cardiology</i> / Case Series	<ul style="list-style-type: none"> <li>15 children that were hospitalized with myocarditis after receipt of BNT162b2 mRNA COVID-19 vaccine were observed.</li> <li>Boys were most affected after dose 2. There was no mortality and all but 1 had normal echocardiogram after discharge.</li> <li>COVID-19 vaccine-associated myocarditis may have a benign short-term course in children; however, the long-term risks remain unknown.</li> </ul>
10 August 2021	Nhuyen Van Vinh Chau, et al.	<a href="#">Transmission of SARS-CoV-2 Delta Variant Among Vaccinated Healthcare Workers, Vietnam [pre-print]</a>	SSRN / Clinical study	<ul style="list-style-type: none"> <li>62 healthcare workers who tested positive for SARS-CoV-2 after Oxford/AstraZeneca COVID-19 vaccination (n=60 received 2 doses; n=2 received one dose) participated in the study.</li> <li>23 samples obtained for complete-genome sequencing all belonged to the Delta variant.</li> <li>Breakthrough Delta variant infections are associated with high viral loads, prolong PCR positivity, and low levels of vaccine-induced neutralizing antibodies explaining the transmission between the vaccinated healthcare workers. Preventive measures remains critical.</li> </ul>

## Evidence on Medical and Surgical Procedures

Date	Author/s	Title	Journal/ Article Type	Summary
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## Evidence on Traditional Medicine

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## Evidence on Equipment & Devices

Date	Author/s	Title	Journal/ Article Type	Summary
12 August 2021	Brummer, L.E., et al.	<a href="#">Accuracy of novel antigen rapid diagnostic for SARS-CoV-2: A living systematic Review</a>	<i>PLOS ONE</i> / Systematic Review	<ul style="list-style-type: none"> <li>• A systematic review of publications evaluating the accuracy of antigen-rapid diagnostic tests (Ag-RDTs) up until 30 April 2021. A total of 133 analytical and clinical studies were included.</li> <li>• Across all meta-analyzed samples, the pooled Ag-RDT sensitivity and specificity were 71.2% (95% CI 68.2% to 74.0%) and 98.9% (95% CI 98.6% to 99.1%), respectively.</li> <li>• Testing in the first week from symptom onset resulted in substantially higher sensitivity (83.8%, 95% CI 76.3% to 89.2%) compared to testing after 1 week (61.5%, 95% CI 52.2% to 70.0%). The best Ag-RDT sensitivity was found with anterior nasal sampling (75.5%, 95% CI 70.4% to 79.9%).</li> </ul>
13 August 2021	Congrave-Wilson, Z., et al.	<a href="#">Change in Saliva RT-PCR Sensitivity Over the Course of SARS-CoV-2 infection</a>	<i>JAMA</i> / Research Letter	<ul style="list-style-type: none"> <li>• 889 paired nasopharyngeal swab (NPS) - saliva samples were collected from 404 participants, of which SARS-CoV-2 was detected in 524 NPS (58.9%) and 318 saliva (35.7%) specimens.</li> <li>• Saliva was sensitive for detecting SARS-CoV-2 in symptomatic individuals during initial weeks of infection, but sensitivity in asymptomatic carriers was less than 60% at all time points.</li> </ul>

## Evidence on Preventive & Promotive Health

### Evidence on Screening

Date	Author/s	Title	Journal/ Article Type	Summary
10 August 2021	Karthikeyan, S., et al.	<a href="#">Rapid, Large-Scale Wastewater Surveillance and Automated Reporting System Enable Early Detection of Nearly 85% of COVID-19 Cases on a University Campus</a>	<i>American Society for Microbiology / Observational Study</i>	<ul style="list-style-type: none"> <li>68 automated wastewater samplers were deployed to monitor 239 campus buildings associated with residences of 7,614 individuals.</li> <li>SARS-CoV-2 signatures in wastewater were elucidated via real-time quantitative PCR (RT-qPCR) screening for the three SARS-CoV-2-specific genes namely, N1, N2, and the E gene</li> <li>From 23 Nov to 31 Dec 2020, a total of 1,574 wastewater samples were collected. Of the collected samples, a total of 692 were positive, 878 were negative, and 34 were inconclusive. There were 59 cases diagnosed, of which 84.5% (n = 50) were preceded by positive wastewater samples, indicating that the wastewater program was highly sensitive in detecting cases.</li> </ul>

### Evidence on Personal Measures

Date	Author/s	Title	Journal/ Article Type	Summary
07 August 2021	Probst, L.F., et al.	<a href="#">Mask decontamination methods (model N95) for respiratory protection: a rapid review</a>	<i>Systematic Reviews Journal / Rapid Review</i>	<ul style="list-style-type: none"> <li>A systematic search for primary studies that evaluated methods for the decontamination of N95 masks for reuse and whose outcome was the effectiveness, safety, maintenance of protection, or filtering characteristics of the evaluated decontamination method. Last date of search was up to September 2020. A total of 48 lab-base studies were selected out of 563 articles retrieved.</li> <li>Five methods that showed promising results are as follows: hydrogen peroxide vapor, ultraviolet irradiation, dry heat, wet heat/pasteurization, and microwave ovens.</li> </ul>

## Evidence on Community Measures

Date	Author/s	Title	Journal/ Article Type	Summary
13 August 2021	Public Health England	<a href="#">Stay at home: guidance for households with possible or confirmed coronavirus (COVID-19) infection</a>	Guidance and support	<ul style="list-style-type: none"><li>• Starting 16 August, fully vaccinated and individuals aged under 18 years and 6 months will not be required to self-isolate if a contact of a COVID-19 confirmed case but should still consider getting tested and follow safety precautions.</li><li>• Close contacts aged under 18 years 6 months who usually attend an education or childcare setting should continue to attend the setting as normal. They do not need to wear a face covering within the setting, but it is recommended that these are worn when travelling on public or dedicated transport.</li></ul>