

# Weekly Evidence Report



Health Technology Assessment Philippines

31 July to 06 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 31 July to 06 August 2021. The HTA Unit reviewed a total of 16 studies for the said period.

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

The following report notes that 3 studies have not been peer-reviewed, each highlighted accordingly.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
03 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>Globally, the number of new cases has been increasing for more than a month, with over 4 million cases reported from 26 July to 1 August 2021. The number of deaths decreased by 8% compared to the previous week.</li> <li>Globally, 182 countries have reported cases of the <b>Alpha</b> variant while 132 countries (one new country) have reported cases of the <b>Beta</b> variant; 81 countries (one new country) have reported cases of the <b>Gamma</b> variant; and 135 countries (three new countries) have reported cases of the <b>Delta</b> variant.</li> <li>In the Western Pacific Region, the reported number of cases and deaths increased by 33% and 48%, respectively. The increase in cases were mainly driven by Japan (121%) and Malaysia (29%) while the increase in deaths were driven by Vietnam (546%) and Malaysia (8%).</li> </ul>
02 August 2021	ASEAN Biodiaspora Virtual Center	<a href="#">COVID-19 Situational Report in the ASEAN Region</a>	ASEAN Biodiaspora Virtual Center	<ul style="list-style-type: none"> <li>As of 31 July 2021, there have been 7,377,527 confirmed cases of COVID-19 reported in the ASEAN region with a total of 150,272 deaths, and a case fatality rate of 2.0%.</li> <li>Malaysia reported 17,150 new COVID-19 cases, the country's fourth highest daily tally to date.</li> </ul>

## Evidence on Vulnerable Population Epidemiology

Date	Author/s	Title	Journal/ Article Type	Summary
03 August 2021	Molteni, E., et al.	<a href="#">Illness duration and symptom profile in symptomatic UK school-aged children tested for SARS-CoV-2</a>	<i>The Lancet</i> / Prospective cohort study	<ul style="list-style-type: none"> <li>Data for 1,734 children aged 5–17 years in the UK who had a positive SARS-CoV-2 test result and calculable illness duration.</li> <li>COVID-19 in UK school-aged children is usually of short duration and low symptom burden.</li> <li>Some children have longer illness duration up to 8 weeks however, most of these children usually recover with time.</li> </ul>

## Evidence on Vulnerable Population Epidemiology

Date	Author/s	Title	Journal/ Article Type	Summary
05 August 2021	Badr, D., et al.	<a href="#">Severe Acute Respiratory Syndrome Coronavirus 2 and Pregnancy Outcomes According to Gestational Age at Time of Infection</a>	<i>Emerging Infectious Diseases</i> / Retrospective cohort study	<ul style="list-style-type: none"> <li>The study population consisted of 10,925 pregnant women with a viable fetus from 10 weeks of gestation and a known pregnancy outcome from February 1 to November 30, 2020..</li> <li>Pregnant women are more susceptible to the adverse effects of SARS-CoV-2 infection on obstetric and neonatal outcomes during the late second and early third trimesters.</li> <li>These findings have implications for public health policy and suggest that vaccination programs should target women either before pregnancy or early in pregnancy to ensure adequate protection when they will be most vulnerable.</li> </ul>

## Evidence on Transmission

Date	Author/s	Title	Journal/ Article Type	Summary
06 August 2021	Brown, C., et al.	<a href="#">Outbreak of SARS-CoV-2 Infections, Including COVID-19 Vaccine Breakthrough Infections, Associated with Large Public Gatherings — Barnstable County, Massachusetts, July 2021</a>	Morbidity and Mortality Weekly Report	<ul style="list-style-type: none"> <li>In July 2019, 469 cases of COVID-19 were identified among residents of a town in Massachusetts. Vaccination coverage in the state is 69% and 74% of cases were among fully vaccinated individuals.</li> <li>The Delta variant was identified as the cause of 89% of cases after genomic sequencing of specimens from 133 patients.</li> <li>Cycle threshold values were similar among specimens from fully vaccinated and non-fully vaccinated patients.</li> <li>No deaths were reported but 4 out of 5 patients who were hospitalized were fully vaccinated.</li> <li>As the Delta variant is highly transmissible, jurisdictions should consider expanding prevention strategies including masking in indoor public settings regardless of vaccination status.</li> </ul>

## Evidence on Drugs

Date	Author/s	Title	Journal/ Article Type	Summary
31 July 2021	Angamo, M., Mohammed, M. & Peterson, G.	<a href="#">Efficacy and safety of remdesivir in hospitalised COVID-19 patients: a systematic review and meta-analysis</a>	<i>Infection/</i> Systematic review and meta-analysis	<ul style="list-style-type: none"> <li>The review included 7 studies published from December 2019 to December 2020, involving a total of 3,686 hospitalised patients with moderate to severe COVID-19.</li> <li>Although treatment with remdesivir was associated with an increase in the clinical recovery rate on day 7 and day 14, reduction in the risk of early mortality on day 14, and a lower likelihood of requiring high-flow supplemental oxygen and invasive mechanical ventilation compared to the placebo or standard care, there was no significant difference in reducing mortality on day 28 for patients with COVID-19.</li> <li>Patients treated with remdesivir reported less serious adverse events than patients treated with placebo or standard of care.</li> </ul>
03 August 2021	Kow, C. & Hassan, S.	<a href="#">The Association Between the Use of Statins and Clinical Outcomes in Patients with COVID-19: A Systematic Review and Meta-analysis</a>	<i>American Journal of Cardiovascular Drugs/</i> Systematic review and meta-analysis	<ul style="list-style-type: none"> <li>A total of 35 studies were identified, 32 of which reported the outcome all-cause mortality (n=115,097) while 15 reported the endpoint severe COVID-19 illness (n=10,081). All studies included were observational studies, reported as cohort or case-control studies or database reviews.</li> <li>The use of statins was associated with a significantly lower risk of all-cause mortality and the composite endpoint of severe illness in patients with COVID-19 compared to non-use of statins.</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)

## Evidence on Vaccines

Date	Author/s	Title	Journal/ Article Type	Summary
02 August 2021	ASEAN Biodiaspora Virtual Center	<a href="#">COVID-19 Situational Report in the ASEAN Region</a>	ASEAN Biodiaspora Virtual Center	<ul style="list-style-type: none"> <li>• Cambodia will begin offering booster shots against COVID-19 to frontline health workers, using the AstraZeneca, Sinopharm, and Sinovac vaccines. Individuals who have already received AstraZeneca shall receive Sinovac as the third dose while those who have already received either Sinopharm or Sinovac will be inoculated with AstraZeneca.</li> <li>• Cambodia has already started vaccinating children aged 12 to 17.</li> <li>• Malaysia's average daily COVID-19 vaccination rate has increased by 136% for July compared to June.</li> </ul>
03 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 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>
01 August 2021	Musser, J., et al.	<a href="#">Delta variants of SARS-CoV-2 cause significantly increased vaccine breakthrough COVID-19 cases in Houston, Texas</a>		<ul style="list-style-type: none"> <li>• Genomes of SARS-CoV-2 from 4,920 patient samples acquired March 15, 2021 through July 24, 2021 in the Houston Methodist hospital system were sequenced.</li> <li>• The Delta variant cause 94% of all COVID-19 cases during the study period.</li> <li>• The variant also caused a significantly higher rate of vaccine breakthrough cases (17.4% compared to 5.8% for all other variants).</li> <li>• Only 8.4% of all COVID-19 cases occurred in fully vaccinated individuals, and relatively few of these patients required hospitalization.</li> </ul>

## Evidence on Medical and Surgical Procedures

Date	Author/s	Title	Journal/ Article Type	Summary
04 August 2021	Perkins, G., et al.	<a href="#">An adaptive randomized controlled trial of non-invasive respiratory strategies in acute respiratory failure patients with COVID-19</a>	Randomized control trial	<ul style="list-style-type: none"> <li>In the Recovery-Respiratory Support, adult patients requiring respiratory support were randomly assigned to receive continuous positive airway pressure (CPAP), high flow nasal oxygenation (HFNO) or conventional oxygen therapy.</li> <li>CPAP, compared with conventional oxygen therapy, reduced the composite outcome of mechanical ventilation or death within 30 days of randomisation in hospitalized adults with acute respiratory failure due to COVID-19.</li> <li>There was no effect observed with the use of HFNO compared to conventional oxygen therapy.</li> </ul>

## Evidence on Equipment & Devices

Date	Author/s	Title	Journal/ Article Type	Summary
05 August 2021	Hamilton, J., et al.	<a href="#">Robotic RNA extraction for SARS-CoV-2 surveillance using saliva samples</a>	<i>PLOS ONE</i> / Research article	<ul style="list-style-type: none"> <li>A robotic nucleic acid extraction method for detecting SARS-CoV-2 RNA in saliva samples with high throughput was developed.</li> <li>A total of 11,971 tests were conducted on supervised self-collected saliva samples.</li> <li>The method enabled concentration of nucleic acids from each saliva sample which allowed for sensitive detection and sample pooling. However, since the quality of saliva sample is highly variable, this affects the extraction and amplification processes in practice.</li> <li>Although saliva provides ease in sample collection, efforts to optimize the assay for saliva samples were unable to match the clinical sensitivity of nasopharyngeal/oropharyngeal swab specimens.</li> </ul>

## Evidence on Traditional Medicine

Date	Author/s	Title	Journal/ Article Type	Summary
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## Evidence on Preventive & Promotive Health

### Evidence on Screening

Date	Author/s	Title	Journal/ Article Type	Summary
31 July 2021	Jakariya, M., et al.	<a href="#">Wastewater based surveillance system to detect SARS-CoV-2 genetic material for countries with on-site sanitation facilities: an experience from Bangladesh</a>	<i>medRxiv</i> / Proof of concept	<ul style="list-style-type: none"> <li>• A total of 238 sewage samples from 14 districts in Bangladesh were collected in two different periods from December 2020 to January 2021. The samples were analysed by RT-PCR for the presence of the genes N and ORF1ab.</li> <li>• The approach of wastewater-based surveillance conducted in Bangladesh was sensitive enough to detect SARS-CoV-2 RNA in the sewer system in places where SARS-COV-2 cases had been documented, such as a SARS-COV-2 isolation center, hospital community drain, city drain, communal pond, river, and mosques.</li> <li>• The lowest Ct values for the ORF1ab and N gene were of wastewater samples collected from isolation centers.</li> </ul>

### Evidence on Personal Measures

Date	Author/s	Title	Journal/ Article Type	Summary
02 August 2021	Sohn, M., et al.	<a href="#">Impact of COVID-19 and Associated Preventive Measures on Cardiometabolic Risk Factors in South Korea</a>	<i>Journal of Obesity &amp; Metabolic Syndrome</i> / Retrospective Cohort Study	<ul style="list-style-type: none"> <li>• A total of 1,485 individuals with a mean age of 61.8 years who visited the hospital at least twice a year for the past 4 years were included in the analysis.</li> <li>• The number of patients whose metabolic syndrome worsened increased significantly by 21% during the COVID-19 pandemic.</li> <li>• Body mass index and systolic blood pressure increased while lipid profiles worsened.</li> <li>• Nationwide strategies to maintain cardiometabolic health are necessary during contagious disease pandemics like COVID-19 to mitigate the adverse health effects of pandemic-preventative strategies.</li> </ul>

## Evidence on Community Measures

Date	Author/s	Title	Journal/ Article Type	Summary
02 August 2021	ASEAN Biodiaspora Virtual Center	<a href="#">COVID-19 Situational Report in the ASEAN Region</a>	ASEAN Biodiaspora Virtual Center	<ul style="list-style-type: none"> <li>● Thailand has extended tighter restriction measures until the end of August to limit the spread of COVID-19.</li> <li>● Indonesia has extended restrictions by another week to control the spread of COVID-19.</li> <li>● The Philippines has recorded 165 local cases of the Delta variant and has assumed that there is already community transmission of the variant in the country to trigger better management of COVID-19 cases. Metro Manila will be under enhanced community quarantine from Aug. 6 to 20, 2021.</li> </ul>
03 August 2021	World Health Organization	<a href="#">Holding gatherings during the COVID-19 pandemic: WHO policy brief</a>	WHO Policy Brief	<ul style="list-style-type: none"> <li>● The WHO recommended the following measures for gatherings, irrespective of COVID-19 vaccination status: physical distancing at all times, covering both mouth and nose when coughing or sneezing, washing of hands or use of alcohol, staying outdoors, and following advice of relevant health authorities on the use of masks.</li> <li>● Gatherings should never be left unmanaged or poorly managed.</li> <li>● The decision-making process related to holding, modifying, postponing or cancelling gatherings of any size in the context of the COVID-19 pandemic should rely on a risk-based approach which entails risk evaluation, risk mitigation, and risk communication.</li> </ul>