# Weekly Evidence Report



Health Technology Assessment Philippines

14-20 November 2020

#### **Overview**

The following report presents summaries of evidence the Department of Health (DOH) - Health Technology Assessment (HTA) Unit reviewed for the period of 14 to 20 November 2020. The HTA Unit reviewed a total of 14 documents for the said period.

Evidence includes 3 studies on Epidemiology; 0 studies on Transmission; 0 studies on Drugs; 2 studies on Vaccines, 2 studies on Equipment and Devices; 0 studies on Medical and Surgical Procedures; 1 study on Traditional Medicine; and 6 studies on Preventive & Promotive Health.

The following report notes that 3 studies have not been peer-reviewed, each highlighted accordingly.



#### **Sections**

Epidemiology			
Transmission			
Drugs			
Vaccines			

Medical & Surgical Procedures

Traditional Medicine

**Equipment & Devices** 

Preventive & Promotive Health

## **Evidence on Epidemiology**

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

Local COVID-19 Case Tracker: <a href="https://www.doh.gov.ph/covid-19/case-tracker">https://www.doh.gov.ph/covid-19/case-tracker</a> Johns Hopkins Global Dashboard: <a href="https://coronavirus.jhu.edu/map.html">https://coronavirus.jhu.edu/map.html</a>

Date	Author/s	Title	Journal/ Article Type	Summary
17 Nov 2020	WHO	Weekly epidemiological update - 17 November 2020	WHO (Situation Report)	<ul> <li>4 million new cases are recorded this week with 81% arising from Europe and USA</li> <li>Mortality rates have grown by 11% rounding out over 1.3 million deaths globally</li> <li>Countries with the highest number of cases this week are: USA, India, Italy, France, and Brazil</li> <li>The Western Pacific Region saw an increase by 5% (33,000) in new cases and 15% (over 400) in deaths.The Philippines, Japan, Malaysia, and French Polynesia reports the highest number of cases.</li> <li>On November 10, Vanatu recorded their first case of a young adult returning from USA</li> </ul>
18 Nov 2020	ASEAN Biodiaspora Visual Center	Risk Assessment for International Dissemination of COVID-19 to the ASEAN Region	ASEAN Biodiaspora Visual Center (Risk Assessment Report)	<ul> <li>Singapore is conducting pilot studies evaluating rapid antigen tests to complement rt-PCR tests to be directed toward larger-scale activities like business events, weddings, etc.</li> <li>Vietnam started a large-scale testing campaign in the city of Da Nang where an outbreak originated. Currently, one third of the city has been tested</li> <li>After getting the green light from an independent safety panel, Johnson &amp; Johnson's vaccine candidate resumes its trials recruiting over 1,000 people a day. US FDA monitoring would be done for 2 months post vaccine initiation on at least half the trial patients</li> <li>Sinovac's vaccine candidate generated a quick immune response albeit with lower levels of antibodies than those who have recovered from the disease</li> </ul>

## **Evidence on Vulnerable Population Epidemiology**

Date	Author/s	Title	Journal/ Article Type	Summary
12 May 2020 Updated 15 Nov 2020	NIPH	COVID-19 and risk factors for hospital admission, severe disease and deatha rapid review, 3rd update	NIPH (Rapid Review)	<ul> <li>The update included editing studies included into only peer-reviewed population-based studies with greater than 5000 laboratory test positive cases</li> <li>In sum, age, comorbidities, and disease severity were noted to be strong predictors for hospital admission</li> <li>2 included studies present increased adjusted HR/OR for overweight and obese.</li> <li>Another 2 included studies, majority of non-whites are at higher risk</li> <li>Onre included study noted increasing risk by number of comorbidity. OR/HR &gt;=3 for those with T1DM, severe renal disease, ongoing chemotherapy, severe immunodeficiency, heart failure, and Down Syndrome</li> </ul>

### **Evidence on Transmission**

Date	Author/s	Title	Journal/ Article Type	Summary

# **Evidence on Drugs**

Date	Author/s	Title	Journal/ Article Type	Summary

## **Evidence on Vaccines**

COVID-NMA Vaccine Tracker: https://covid-nma.com/vaccines/

Date	Author/s	Title	Journal/ Article Type	Summary
17 Nov 2020	Zhang, et.al.	Safety, tolerability, and immunogenicity of an inactivated SARS-CoV-2 vaccine in healthy adults aged 18-59 years: a randomised, double-blind, placebo-controlled, phase ½ clinical trial	Lancet Infectious Diseases  (Randomised, double-blind, placebo-contr olled clinical trial)	<ul> <li>Healthy adults (Aged 18-59 years old) from Suining County of Jiangsu province, China were recruited for this trial</li> <li>3 microgram dose of CoronaVac is the dose suggested for efficacy assessment in future phase 3 trials</li> <li>the correlation coefficient between the neutralising antibody to live SARS-CoV-2 and RBD-specific IgG was 0·85 (95% CI 0·82–0·92) using the antibody titre at 28 days after the second dose of vaccine, 0·80 (0·75–0·86) 14 days after the second dose.</li> <li>The correlation coefficient between the neutralising antibody to live SARS-CoV-2 and the neutralising antibody to pseudovirus was 0·82 (0·76–0·88) using the antibody titer at 14 days after the second dose.</li> <li>The correlation coefficient between the neutralising antibody to pseudovirus and RBD-specific IgG was 0·73 (0·66–0·80) using the antibody titre at 14 days after the second dose.</li> </ul>
16 Nov 2020	NIH	Promising interim results from clinical trial of NIH-Moderna COVID-19 Vaccine	NIH (News Article)	<ul> <li>An independent Data Safety         Monitoring Board noted 94.5%         efficacy rate in the Phase 3 trial         of Moderna</li> <li>95 cases occurred with 5 from         the vaccinated group. Out of the         95, 11 were severe COVID-19         cases</li> </ul>

Date	Author/s	Title	Journal/ Article Type	Summary
18 Nov 2020	Ramasamy, et.al.	Safety and immunogenicity of ChAdOx1 nCoV-19 vaccine administered in a prime-boost regimen in young and old adults (COV002): a single-blind, randomised, controlled, phase 2/3 trial	Lancet (Single blind, randomised, controlled, phase ¾ trial)	<ul> <li>560 healthy adults aged 18 years and older were included in the study</li> <li>As of October 26, 2020, 13 serious adverse events were noted but were not related to the vaccine.</li> <li>The study found that the ChAdOx1 nCoV-19 vaccine was better suited to older individuals and was noted to have immunogenicity similar across age groups</li> </ul>

## **Evidence on Equipment & Devices**

WHO Emergency Global Supplies Catalogue (COVID-19):

https://www.who.int/publications/i/item/emergency-global-supply-chain-system-(covid-19)-catalogue

Date	Author/s	Title	Journal/ Article Type	Summary
13 Nov 2020	WHO	Technical specifications of personal protective equipment for COVID-19	WHO (Interim Guidance Document)	<ul> <li>The document lists the priority COVD-19 medical devices and the minimum requirements to ensure quality, safety, and efficacy of the health technologies.</li> <li>Specifications on regulatory approvals, certifications, and procurement is also included</li> </ul>
No date	WHO	SARS-CoV-2 Antigen Rapid Diagnostic Test Training Package	WHO (Training Materials)	<ul> <li>A structured comprehensive set of training materials and tools to be conducted either through face to face training or blended training.</li> <li>The materials are also noted to be adaptable to national guidelines</li> </ul>

## **Evidence on Medical & Surgical Procedures**

Date	Author/s	Title	Journal/ Article Type	Summary

### **Evidence on Traditional Medicine**

Date	Author/s	Title	Journal/ Article Type	Summary
18 Nov 2020	Le-Trilling, et.al.	Universally available herbal teas based on sage and perilla elicit potent antiviral activity against SARS-CoV-2 in vitro	BioRxiv (Experimental Study)	<ul> <li>Laminaceae plants, perilla and sage were seen to have water-soluble and heat-stable components active versus SARS-CoV-2 replication</li> <li>This was done through a short-term incubation of infected cells with herbal teas</li> </ul>

### **Evidence on Preventive & Promotive Health**

## **Evidence on Screening**

Date	Author/s	Title	Journal/ Article Type	Summary
30 Mar 2020 Updated 13 Nov 2020	HIQA	Rapid Review of Public Health Guidance for Residential Care Facilities in the Context of COVID-19	HIQA (Rapid Review)	<ul> <li>Updates include Northern Ireland tests all asymptomatic staff and home residents every 14 and 20 days respectively</li> <li>England calls for staff who tested positive but asymptomatic and develops symptoms during the isolation period to restart the 10-day isolation period from the first day of symptom occurrence</li> </ul>

### **Evidence on Personal Measures**

Date	Author/s	Title	Journal/ Article Type	Summary
18 Nov 2020	HIQA	Activities or settings associated with a higher risk of SARS-CoV-2 transmission	HIQA (Evidence Summary)	<ul> <li>19 included studies where 12 are primary studies and 7 are evidence syntheses</li> <li>SARS-CoV-2 clusters majorly occurs in household settings noted to have a higher infection probability among susceptible populations with a secondary attack rate of 18.1% (95% CI, 15.7%-20.6%) vs healthcare settings SAR &lt;1%.</li> <li>Indoor environments, crowds, prolonged and intense contact with others are the main factors noted</li> <li>Even with decreased risk of transmission, some outdoor transmission is observed in large events, limited social distancing, dense congregations, and mixing among groups</li> </ul>
23 Mar 2020 Updated 13 Nov 2020	HIQA	Rapid review of public health guidance on protective measures for vulnerable groups	HIQA (Rapid Review)	<ul> <li>Populations generally included are older adults, those with chronic conditions and respiratory conditions, and the immunocompromised</li> <li>The update includes considering adults with Down's Syndrome, on dialysis, or kidney disease to the list of vulnerable groups. Public Health England noted that vulnerable groups are advised to receive medical care at home</li> </ul>

Date	Author/s	Title	Journal/ Article Type	Summary
17 Nov 2020	Purkayastha, et.al.	Direct exposure to SARS-CoV-2 and cigarette smoke increases infection severity and alters the stem cell-derived airway repair response	Cell (Brief Report)	<ul> <li>Direct cigarette smoke exposure increases the number of SARS-CoV-2 infected cells and reduces innate immune responses</li> <li>The pathophysiology of cigarette smoke affecting cells have not yet been studied in depth</li> </ul>

## **Evidence on Community Measures**

Date	Author/s	Title	Journal/ Article Type	Summary
18 Nov 2020	Kreh, et.al.	Ethical and psychosocial considerations for hospital personnel in the COVID-19 crisis: Moral injury and resilience	MedRxiv (Qualitative Study)	<ul> <li>13 experts were interviewed by two teams requested via telephone call</li> <li>Key categories were found in the interviews, namely: fear and frustration, feelings on the rapidly evolving situation with high uncertainty, stressors, and resilience factors</li> </ul>
18 Nov 2020	Schumacher, et.al.	Resuming professional football during the COVID-19 pandemic in a country with high infection rates: A prospective cohort study	MedRxiv (Prospective Cohort Study)	<ul> <li>1,337 football players, staff, and officials were studied over a 9 week football season practicing a tailored infection control program based on preventive measures and regular PCR testing every 3-5 days.</li> <li>85 of the subjects tested positive, 36 of which are players. (Cycle threshold &lt;30) More than 50% of which were asymptomatic and the remaining had only mild symptoms</li> <li>The study concluded by saying outdoor sports involving close contact between athletes show limited risk of transmission</li> </ul>