# Weekly Evidence Report



Health Technology Assessment Philippines

12 - 18 November 2022

#### **Overview**

The following report presents summaries of evidence the Department of Health (DOH) - Health Technology Assessment (HTA) Division reviewed for the period of 12 - 18 November 2022 on current public health emergency concerns, COVID-19 and monkeypox. The HTA Division reviewed a total of 15 studies for COVID-19 and 7 studies for monkeypox.

For COVID-19, evidence includes 5 studies on Epidemiology; 5 studies on Vaccines; 3 studies on Drugs; 0 studies on Transmission; 2 studies on Equipment and Devices; 0 studies on Medical and Surgical Procedures; 1 study on Traditional Medicine; 0 studies on Preventive & Promotive Health; and 0 studies on Other Health Technologies.

For monkeypox, evidence includes 2 studies on Epidemiology; 2 studies on Vaccines; 2 studies on Drugs; 1 study on Transmission; 0 studies on Equipment and Devices; 0 studies on Medical and Surgical Procedures; 0 studies on Traditional Medicine; 0 studies on Preventive & Promotive Health; and 0 studies on Other Health Technologies.



#### **Sections**

Epidemiology
Vaccines
Drugs
Transmission
Equipment & Devices
Medical & Surgical Procedures
Traditional Medicine

Other Health Technologies

Preventive & Promotive Health

# COVID-19

#### **Evidence on Epidemiology**

#### **Local COVID-19 Case Tracker:**

https://doh.gov.ph/2019-nCoV?gclid=CjwKCAjwjtOTBhAvEiwASG4bCOmLzFMQljh8DX VVSGA-HmO0Pt5 Cscyk ID7xZv4zqlXG5vm9PM2xoC27QQAvD BwE

Date	Author/s	Title	Journal/ Article Type	Summary
16 Nov 2022	WHO Global	Weekly epidemiological update on COVID-19 - 16 November 2022	WHO Global Situation Report	<ul> <li>Globally, the number of new weekly cases increased by 2% during the week of 7 to 13 November 2022, as compared to the previous week, with over 2.3 million new cases reported.</li> <li>The number of new weekly deaths decreased by 30%, as compared to the previous week, with about 7400 fatalities reported. As of 13 November 2022, 632 million confirmed cases and 6.5 million deaths have been reported globally.</li> </ul>
12 November 2022	Fattahi. et al.	In-hospital mortality of COVID-19 in Iranian children and youth: A multi-centre retrospective cohort study	Journal of Global Health Multicenter Study/ Multi-centre retrospective cohort study	<ul> <li>The median age of the admitted patients was 4.0 years, 33.6% were under 12 months old, and 53.0% were female. Fever, cough, nausea/vomiting, dyspnoea, and myalgia were the most common symptoms presented by 50.5%, 47.6%, 24.2%, and 23.0% of the patients, respectively. Overall, They observed 16 cases of death and the in-hospital fatality rate was 2.5%. They also found comorbidity as an independent risk factor of death (odds ratio (OR) = 3.8, 95% confidence interval (CI) = 1.2-12.1, P-value = 0.022). Finally, they observed an increased risk of death in patients with dyspnoea (OR = 11.0, 95% CI = 2.8-43.7).</li> <li>In-hospital mortality was relatively high in</li> </ul>

paediatric patients who were hospitalized due to COVID-19 in Iran. The risk of hospitalization, ICU admission, and death was higher among children with younger ages, underlying causes, and dyspnoea.

# COVID-19

#### **Evidence on Epidemiology**

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 $\frac{https://doh.gov.ph/2019-nCoV?gclid=CjwKCAjwjtOTBhAvEiwASG4bCOmLzFMQljh8DX\ VVSGA-HmO0Pt5\ Cscyk}{ID7xZv4zqlXG5vm9PM2xoC27QQAvD\ BwE}$ 

Date	Author/s	Title	Journal/ Article Type	Summary
16 November 2022	Afraie, et al.	COVID-19 and Parkinson's disease: a systematic review and meta-analysis	Acta Neurologica Belgica/ Systematic review and meta-analysis	<ul> <li>The prevalence of tremor and sleep problems were higher than those of other symptoms in the studied population. According to the results, there was no significant difference in the risk of COVID-19 infection between Parkinson's patients and healthy people. In other words, the risk of COVID-19 infection was equal in both groups (RR = 1.00 (CI 95% 0.77-1.30%; P = 0.15)).</li> <li>The results showed mortality and hospitalization rates of the elderly with Parkinson's disease were not significantly different from those of the general population during the COVID-19 pandemic. Also, the symptoms of Parkinson's disease and mental disorders increased during the COVID-19 pandemic. So, designing and developing more specific studies, like cohort studies, with large sample size is required for assessing these associations.</li> </ul>
18 November 2022	Czeisler et al.	Perception of Local COVID-19 Transmission and Use of Preventive Behaviors Among Adults with Recent SARS-CoV-2 Infection — Illinois and Michigan, June 1–July 31, 2022	CDC MMWR/ Epidemiological Report	<ul> <li>One half of adults surveyed during June–July 2022 who had recently received a positive SARS-CoV-2 test result in metropolitan Detroit, Michigan and DuPage County, Illinois perceived local COVID-19 transmission when surveyed to be low or moderate, despite documented sustained high transmission. Higher perceived local COVID-19 transmission was associated with more use of preventive behaviors, overall and in response to high local COVID-19 transmission.</li> <li>Continued monitoring of public perceptions of local COVID-19 levels, and further understanding their impact on use of preventive behaviors, can guide pandemic-related communication strategies and policy-making.</li> </ul>
18 November 2022	Santiban ez, et al.	Sociodemographic Variation in Early Uptake of COVID-19 Vaccine and Parental Intent	CDC MMWR/ Epidemiological Report	• Four percent of children aged 6 months–4 years had received ≥1 doses of COVID-19 vaccine based on interviews conducted during July 2022; 59% were unvaccinated, but the parent was open to vaccinating their child; and

Children Aged 6

Note. Studies that have not honths where highlighted in red.

United States, July
1–29, 2022

**Toward** 

and Attitudes

Vaccination of

years had received ≥1 doses of COVID-19 vaccine based on interviews conducted during July 2022; 59% were unvaccinated, but the parent was open to vaccinating their child; and 37% were unvaccinated and the parent was reluctant to vaccinate. Among parents open to vaccination, 25% reported receiving a provider recommendation, and 57% were confident of the vaccine's safety; confidence of vaccine safety varied by race or ethnicity and household income.

# COVID-19

#### **Evidence on Epidemiology**

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https://doh.gov.ph/2019-nCoV?gclid=CjwKCAjwjtOTBhAvEiwASG4bCOmLzFMQljh8DX VVSGA-HmO0Pt5 Cscyk ID7xZv4zqlXG5vm9PM2xoC27QQAvD BwE

Date	Author/s	Title	Journal/ Article Type	Summary
18 November 2022	Santiban ez, et al.	Sociodemographic Variation in Early Uptake of COVID-19 Vaccine and Parental Intent and Attitudes Toward Vaccination of Children Aged 6 Months-4 Years — United States, July 1–29, 2022	CDC MMWR/ Epidemiological Report	<ul> <li>Four percent of children aged 6 months–4 years had received ≥1 doses of COVID-19 vaccine based on interviews conducted during July 2022; 59% were unvaccinated, but the parent was open to vaccinating their child; and 37% were unvaccinated and the parent was reluctant to vaccinate. Among parents open to vaccination, 25% reported receiving a provider recommendation, and 57% were confident of the vaccine's safety; confidence of vaccine safety varied by race or ethnicity and household income.</li> <li>Health care provider recommendations and assurances of COVID-19 vaccine safety by trusted persons could increase vaccination coverage among young children.</li> </ul>

#### **Evidence on Vaccines**

Bloomberg Vaccine Tracker: <a href="https://www.bloomberg.com/graphics/covid-vaccine-tracker-global-distribution/">https://www.bloomberg.com/graphics/covid-vaccine-tracker-global-distribution/</a> WHO COVID-19 Vaccine Tracker:

https://www.who.int/publications/m/item/draft-landscape-of-covid-19-candidate-vaccines

**WHO SAGE Vaccine Recommendations:** 

https://www.who.int/groups/strategic-advisory-group-of-experts-on-immunization

Local COVID-19 Vaccine Updates: https://doh.gov.ph/vaccines

Date	Author/s	Title	Journal/ Article Type	Summary
14 November 2022	Cook, et al.	Third primary SARS-CoV-2 mRNA vaccines enhance antibody responses in most patients with haematological malignancies	Nature Communications / Observational study	<ul> <li>Presented data on 381 patients with haematological malignancies. By comparison with healthy controls, they reporte suboptimal responses following two primary vaccines, with significantly enhanced responses following the third primary dose. These responses however are heterogeneous and determined by haematological malignancy sub-type and therapy.</li> <li>The study identifies a group of patients with continued suboptimal vaccine responses who may benefit from additional doses, prophylactic extended half-life neutralising monoclonal therapies (nMAB) or prompt nMAB treatment in the event of SARS-CoV-2 infection.</li> </ul>

#### **Evidence on Vaccines**

Bloomberg Vaccine Tracker: <a href="https://www.bloomberg.com/graphics/covid-vaccine-tracker-global-distribution/">https://www.bloomberg.com/graphics/covid-vaccine-tracker-global-distribution/</a> WHO COVID-19 Vaccine Tracker:

https://www.who.int/publications/m/item/draft-landscape-of-covid-19-candidate-vaccines

**WHO SAGE Vaccine Recommendations:** 

https://www.who.int/groups/strategic-advisory-group-of-experts-on-immunization

Local COVID-19 Vaccine Updates: https://doh.gov.ph/vaccines

Date	Author/s	Title	Journal/ Article Type	Summary
15 November 2022	Guedalia, et al.	Effectiveness of a third BNT162b2 mRNA COVID-19 vaccination during pregnancy: a national observational study in Israel	Nature Communications / Observational study	<ul> <li>Study includes 82,659 and 33,303 pregnant women from the Delta and Omicron waves, respectively. Compared with the second dose, the third dose effectively prevents overall hospitalizations with SARS-CoV-2 infections, with estimated effectiveness of 92% (95% CI 83–96%) during Delta, and enhances protection against significant disease during Omicron, with effectiveness of 92% (95% CI 26–99%), and 48% (95% CI 37–57%) effectiveness against hospitalization overall.</li> <li>A third dose of the BNT162b2 mRNA COVID-19 vaccine during pregnancy, given at least 5 months after the second vaccine dose, enhances protection against adverse COVID-19-related outcomes.</li> </ul>
17 November 2022	Chemaite IIV. et al.	Covid-19 Vaccine Protection among Children and Adolescents in Qatar	The New England Journal of Medicine/ Multi-centre retrospective cohort study	<ul> <li>Among children, the overall effectiveness of the 10-µg primary vaccine series against infection with the omicron variant was 25.7% (95% confidence interval [CI], 10.0 to 38.6). Effectiveness was highest (49.6%; 95% CI, 28.5 to 64.5) right after receipt of the second dose but waned rapidly thereafter and was negligible after 3 months. Effectiveness was 46.3% (95% CI, 21.5 to 63.3) among children 5 to 7 years of age and 16.6% (95% CI, -4.2 to 33.2) among those 8 to 11 years of age.</li> <li>Among adolescents, the overall effectiveness of the 30-µg primary vaccine series against infection with the omicron variant was 30.6% (95% CI, 26.9 to 34.1), but many adolescents had been vaccinated months earlier. Effectiveness waned over time since receipt of the second dose. Effectiveness was 35.6% (95% CI, 31.2 to 39.6) among adolescents 12 to 14 years of age and 20.9% (95% CI, 13.8 to 27.4) among those 15 to 17 years of age. In the pre-omicron study, the overall effectiveness</li> </ul>

of the 30-µg primary vaccine series against SARS-CoV-2 infection among adolescents was 87.6% (95% CI, 84.0 to 90.4) and waned relatively slowly after receipt of the

second dose.

#### **Evidence on Vaccines (cont.)**

Date	Author/s	Title	Journal/ Article Type	Summary
17 November 2022	Simwanza, et al.	COVID-19 Vaccine Effectiveness during a Prison Outbreak when Omicron was the Dominant Circulating Variant-Zambia, December 2021	The American Journal of Tropical Medicine and Hygiene/ Case control study	<ul> <li>During a COVID-19 outbreak in a prison in Zambia from December 14 to 19, 2021, a case-control study was done to measure vaccine effectiveness (VE) against infection and symptomatic infection, when the Omicron variant was the dominant circulating variant.</li> <li>In total, 385 (50.2%) of the 767 incarcerated persons present during the outbreak were reached for interview, and 382 (49.8%) consented to being enrolled in the study. All were males, with a median age of 28 years (interquartile range: 21–36 years) (Table 1). Overall, 84 (22.0%) had at least one comorbidity, with HIV being most common (N = 40, 10.5%). Only 16 (4.1%) reported having had COVID-19 previously.</li> </ul>
18 November 2022	Xu. et al.	Effectiveness of inactivated COVID-19 vaccines against mild disease, pneumonia, and severe disease among persons infected with SARS-CoV-2 Omicron variant: Real-world study in Jilin Province, China	Emerging Microbes and Infection/ Real world study	<ul> <li>A total of 2968 cases with SARS-CoV-2 infections (asymptomatic: 1029, mild disease: 1858, pneumonia: 108, severe disease: 21) were enrolled in the study. Multivariable regression indicated that the risk for pneumonia or severe disease was greater in those who were older or had underlying diseases, but was less in those who received COVID-19 vaccines.</li> <li>Relative to no vaccination, VE against the composite of pneumonia and severe disease was significant for those who received 2 doses (60.1%, 95%CI: 40.0%, 73.5%) or 3 doses (68.1%, 95%CI: 44.6%, 81.7%), and VE was similar in the subgroups of males and females.</li> </ul>

However, VE against the composite of all three classes of symptomatic diseases was not significant overall, nor after stratification by sex. There was no statistical difference in

the VE of vaccines from different

manufacturers.

# **Evidence on Drugs**

Date	Author/s	Title	Journal/ Article Type	Summary
18 November 2022	Hu, et al.	Ivermectin role in the prevention of COVID-19: A systematic review and meta-analysis	The Journal of Clinical Pharmacology/ Systematic review and meta-analysis	<ul> <li>Seven databases of health-related studies were searched for eligible trials without language restrictions. Randomized controlled trials (RCT) and cohort studies investigating ivermectin for coronavirus disease-2019 (COVID-19) prevention were included. Data were pooled using a random-effects model, and subgroups were analyzed by study type and the pre- or post-exposure population.</li> <li>Four RCTs and four cohort studies with a moderate to high risk of bias were included in the analysis.</li> <li>The prophylactic use of ivermectin significantly decreased the overall incidence of COVID-19 (odds ratio [OR], 0.26; 95% confidence interval [CI], 0.16-0.44).</li> <li>Nevertheless, the positive result was not supported by the RCT. Ivermectin was associated with a lower risk of COVID-19 (OR, 0.22; 95% CI, 0.12-0.40) in the pre-exposure population, whereas no protective effect was observed in the post-exposure population (OR, 0.39; 95% CI, 0.09-1.67).</li> <li>In summary, prophylactic ivermectin did not prevent COVID-19 in the post-exposure population. Although the protective effect of ivermectin was shown in the overall and pre-exposure populations, the results were unreliable owing to poor-quality evidence.</li> </ul>
16 November 2022	Rahman, et al.	Efficacy of colchicine in patients with moderate COVID-19: A double-blinded, randomized, placebo-control led trial	PLOS ONE/ Double-blinded, randomized, placebo-controll ed trial	<ul> <li>Despite a 56% reduction in the need for mechanical ventilation and death with colchicine treatment on day 14, the reduction was not statistically significant. On day 28, colchicine significantly reduced clinical deterioration measured as the need for mechanical ventilation and all-cause mortality.</li> <li>Colchicine was not found to have a significant beneficial effect on reducing mortality and the need for mechanical ventilation. However, a delayed beneficial effect was observed. Therefore, further studies should be conducted to evaluate the late benefits of colchicine.</li> </ul>

received sotrovimab were at lower risk of severe outcomes of covid-19 than those

treated with molnupiravir.

#### **Evidence on Drugs (cont.)**

Date	Author/s	Title	Journal/ Article Type	Summary
16 November 2022	Zheng, et al.	Comparative effectiveness of sotrovimab and molnupiravir for prevention of severe covid-19 outcomes in patients in the community: observational cohort study with the OpenSAFELY platform	BMJ/ Observational cohort study	<ul> <li>Within 28 days of the start of treatment, 87 (1.4%) patients were admitted to hospital or died of infection from SARS-CoV-2 (32 treated with sotrovimab and 55 with molnupiravir). Cox proportional hazards models stratified by area showed that after adjusting for demographic information, high risk cohort categories, vaccination status, calendar time, body mass index, and other comorbidities, treatment with sotrovimab was associated with a substantially lower risk than treatment with molnupiravir (hazard ratio 0.54, 95% confidence interval 0.33 to 0.88, P=0.01).</li> <li>In routine care of adult patients in England with covid-19 in the community, at high risk of severe outcomes from covid-19, those who</li> </ul>
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#### **Evidence on Equipment and Devices**

Date	Author/s	Title	Journal/ Article Type	Summary
17 November 2022	Fox, et al.	Antibody tests for identification of current and past infection with SARS-CoV-2	Cochrane Database of Systematic Reviews/ Systematic Review	Some antibody tests could be a useful diagnostic tool for those in whom molecular-or antigen-based tests have failed to detect the SARS-CoV-2 virus, including in those with ongoing symptoms of acute infection (from week three onwards) or those presenting with post-acute sequelae of COVID-19. However, antibody tests have an increasing likelihood of detecting an immune response to infection as time since onset of infection progresses and have demonstrated adequate performance for detection of prior infection for sero-epidemiological purposes. The applicability of results for detection of vaccination-induced antibodies is uncertain.

# **Evidence on Equipment and Devices (cont.)**

Date	Author/s	Title	Journal/ Article Type	Summary
15 November 2022	Ohshimo, et al.	Trends in survival during the pandemic in patients with critical COVID-19 receiving mechanical ventilation with or without ECMO: analysis of the Japanese national registry data	Critical Care/ Prospective observational cohort study	<ul> <li>A total of 9418 patients were ventilated, of whom 1214 (13%) received ECMO. The overall survival rate for ventilated patients was 79%, 65% for those receiving ECMO. There have been five outbreaks in Japan to date. The survival rate of ventilated patients increased from 76% in the first outbreak to 84% in the fifth outbreak (p &lt; 0.001).</li> <li>The survival rate of ECMO patients remained unchanged at 60–68% from the first to fifth outbreaks (p = 0.084). Age of ≥ 59 (hazard ratio [HR] 2.17; 95% confidence interval [CI] 1.76–2.68), ventilator days of ≥ 3 before starting ECMO (HR 1.91; 95% CI 1.57–2.32), and institutional ECMO experiences of ≥ 11 (HR 0.70; 95% CI 0.58–0.85) were independent prognostic factors for ECMO.</li> </ul>

#### **Evidence on Traditional Medicine**

Date	Author/s	Title	Journal/ Article Type	Summary
	Jin, et al.	Contribution of Chinese herbal medicine in the treatment of coronavirus disease 2019 (COVID-19): A systematic review and meta-analysis of randomized controlled trials	Phytotherapy Research/ Systematic review and meta-analysis of randomized controlled trials	<ul> <li>Twenty-six studies were included in this meta-analysis. The included cases were all patients diagnosed with COVID-19 according to the "New Coronary Virus Pneumonia Diagnosis and Treatment Program," with a total of 2,407 cases. Patients were treated with CHM, including 36 prescriptions, and 105 flavors of CHM were included. The results of the meta-analysis showed that the CHM group improved in lung CT, clinical cure rate, clinical symptom score and time to negative for viral nucleic acid.</li> <li>However, this study still has many limitations due to the limited number of included studies. Therefore, high-quality RCT studies are needed to provide more reliable evidence for CHM treatment of COVID-19. In conclusion, CHM may significantly improve the clinical manifestations and laboratory indicators of patients with COVID-19. In addition, no serious adverse reactions were found after CHM treatment. Therefore, CHM may be used as a potential candidate for COVID-19.</li> </ul>

Evidence on Medical and Surgical Procedure
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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
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#### **Evidence on Personal Measures**

Date	Author/s	Title	Journal/ Article Type	Summary
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## **Evidence on Community Measures**

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

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# **Evidence on Other Health Technologies**

Date	Author/s	Title	Journal/ Article Type	Summary
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# **MONKEYPOX**

#### **Evidence on Epidemiology**

**Monkeypox Case Tracker:** 

WHO: <a href="https://extranet.who.int/publicemergency/#">https://extranet.who.int/publicemergency/#</a>

**US CDC:** <a href="https://www.cdc.gov/poxvirus/monkeypox/response/2022/index.html">https://www.cdc.gov/poxvirus/monkeypox/response/2022/index.html</a>

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Date	Author/s	Title	Journal/ Article Type	Summary
18 November 2022	WHO	2022 Monkeypox Outbreak: Global Trends	WHO/Global Epidemiological Report	<ul> <li>As of November 17 2022, a total of 80,221 laboratory confirmed cases and 1,519 probable cases, including 52 deaths, have been reported to WHO.</li> <li>WHO assesses the global risk as Moderate. Regionally, WHO assesses the risk in the Region of the Americas as High and as Moderate in the African Region, Eastern Mediterranean Region, European Region and the South-East Asia Region. The risk in the Western Pacific Region is assessed as Low.</li> <li>In the past 7 days, 18 countries reported an increase in the weekly number of cases, with the highest increase reported in Brazil. 65 countries have reported no new cases in the past 21 days.</li> </ul>
18 November 2022	CDC	Technical Report 4 Supplementary Analysis: Multi-National Monkeypox Outbreak, United States, 2022	CDC Technical Report	<ul> <li>The overall incidence of new cases of monkeypox in the United States is declining.</li> <li>The declining incidence of new cases is likely due to a combination of many factors, including vaccination, behavior change, and possibly increases in infection-acquired immunity among a segment of affected sexual networks.</li> <li>Vaccination remains an important tool as the outbreak evolves and vaccination coverage, especially of second doses, increases. As of November 12, 2022, 692,298 first doses and 396,410 second doses of JYNNEOS vaccines have been administered (Monkeypox Vaccine Administration in the U.S.). An analysis posted on September 28, 2022, estimated a 14-fold higher monkeypox incidence in unvaccinated individuals compared to those who received one dose of JYNNEOS vaccine at least 14 days earlier (Vaccine Considerations).</li> </ul>

#### **Evidence on Vaccines**

Date	Author/s	Title	Journal/ Article Type	Summary
16 November 2002	WHO	Background document for the SAGE October 2022 session on monkeypox vaccines	SAGE Background Document	<ul> <li>This background document has been prepared by the SAGE working group on smallpox and monkeypox vaccines to inform the discussions of SAGE at its 3-7 October 2022 meeting.</li> </ul>
16 November 2022	WHO	Vaccines and immunization for monkeypox: Interim guidance, 16 November 2022	WHO Interim Guidance	<ul> <li>Mass vaccination is not required nor recommended for monkeypox at this time;</li> <li>Primary preventive (pre-exposure) vaccination (PPV) is recommended for individuals at high-risk of exposure.</li> </ul>

vaccination (PPV) is recommended for individuals at high-risk of exposure. Persons at highest risk of exposure in the current multi-country outbreak are gay, bisexual or other men who have sex with men (MSM) with multiple sexual partners. Others at risk may include individuals with multiple casual sexual partners; sex workers; health

workers at risk of repeated exposure, laboratory personnel working with orthopoxviruses; clinical laboratory and health care personnel performing diagnostic testing for monkeypox; and

- outbreak response team members;
   The level of risk of exposure may vary between the groups and could be used in countries for prioritization in case of limited vaccine supply;
- Post-exposure preventive vaccination (PEPV) is recommended for contacts of cases ideally within four days of first exposure (and up to 14 days in the absence of symptoms);
- Vaccination programmes must be backed by thorough surveillance and contact-tracing, and accompanied by a strong information campaign, robust pharmacovigilance, ideally in the context of collaborative vaccine effectiveness studies with standardized protocols and data collection tools;
- Decisions on use of smallpox or monkeypox vaccines should be based on a full assessment of risks and benefits on a case-by-case basis.

# **Evidence on Drugs**

Date	Author/s	Title	Journal/ Article Type	Summary
13 November 2002	Rabaan et al.	Monkeypox Outbreak 2022: What We Know So Far and Its Potential Drug Targets and Management Strategies	Journal of Medical Virology- Review	<ul> <li>There is no treatment that has been specifically approved for monkeypox virus infection, infected patients may benefit from using certain antiviral medications that are typically prescribed for the treatment of smallpox.</li> <li>The drugs are tecovirimat, brincidofovir, and cidofovir, all of which are currently in short supply due to the spread of the monkeypox virus.</li> <li>Resistance is also a concern, as widespread replication of the monkeypox virus can lead to mutations that produce monkeypox viruses that are resistant to the currently available treatments.</li> </ul>
14 November 2002	DeLaurentis et al.	New Perspectives on Antimicrobial Agents: Tecovirimat for Treatment of Human Monkeypox Virus	American Society for Microbiology (ASM Journals - Review	<ul> <li>Tecovirimat is an antiviral drug initially developed against variola virus (VARV) to treat smallpox infection. Due to its mechanism of action, it has activity against the family of orthopoxviruses, including vaccinia and the human monkeypox virus (HMPXV).</li> <li>Tecovirimat has been prescribed via an expanded access for an investigational new drug protocol during the 2022 outbreak.</li> </ul>

# **Evidence on Transmission**

Date	Author/s	Title	Journal/ Article Type	Summary
15 November 2022	Yan et al.	Monkeypox and the perinatal period: what does maternal-fetal medicine need to know?	World Journal of Pediatrics - Review	<ul> <li>Very few studies have been reported on pregnant women and newborns. In the case of monkeypox infection, the virus can cause serious adverse pregnancy events in women, which can lead to fetal or neonatal death.</li> <li>Two case reports reported a total of nine pregnant women, six of whom had fetal deaths. In the autopsy of a stillbirth, researchers found that the placenta was infected with monkeypox virus, but the mechanism of infection remains unclear.</li> <li>It is not known whether monkeypox virus is present in breast milk, and pasteurized breast milk can be given to newborns when breastfeeding is considered.</li> </ul>

# **Evidence on Equipment and Devices**

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

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

## **Evidence on Traditional Medicine**

Date	Author/s	Title	Journal/ Article Type	Summary
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## **Evidence on Other Health Technologies**

Date	Author/s	Title	Journal/ Article Type	Summary
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