GUIDELINES AND RESEARCH UPDATES

World Health Organization India

TECHNICAL DOCUMENTS:

D1. Guidance on operational microplanning for COVID-19 vaccination (WHO, 16 November) **[**LINK**]**

- The publication provides an overview of, and insight into, the key areas that national and subnational authorities may consider focusing on in strengthening health emergency preparedness at the urban level and support the development of policies and capacity building activities at both the national and sub-national level to strengthen health emergency preparedness based on priority risks and existing gaps.

D2. Interim recommendations for use of the Bharat Biotech BBV152 COVAXIN® vaccine against COVID-19 (WHO, 3 November) **[**LINK**]**

- The interim recommendations for use of the BBV152 COVAXIN vaccine has been developed on the basis of advice issued by the Strategic Advisory Group of Experts on Immunization (SAGE) and the evidence summary included in the background document and annexes.

D3. Key planning recommendations for mass gatherings in the context of COVID-19 (WHO, 4 November) **[**LINK**]**

- The purpose of this document is to provide guidance to governments, health authorities and national or international event organizers on taking decisions related to holding mass gatherings in the context of the COVID-19 pandemic, and on decreasing the risks of SARS-CoV-2 transmission and strain on health systems associated with such events, through dedicated precautionary measures.

D4. Injection safety in the context of coronavirus disease (COVID-19) vaccination (WHO, 5 November) **[**LINK**]**

- This policy brief synthesizes WHO guidance and policy on injection safety in the context of the extraordinary increase in global injections resulting from COVID-19 immunization campaigns. It also calls attention to information on specialized syringes for certain COVID-19 vaccines and solutions for possible supply shortages.

D5. Overview of the implementation of COVID-19 vaccination strategies and deployment plans in the EU/EEA (European Centre for Disease Prevention and Control, 11 November) **[**LINK**]**

- This report provides an updated overview of the progress of national COVID-19 vaccination strategies and deployment in European Union/European Economic Area (EU/EEA) countries, including updates on overall vaccine uptake and uptake by target group; vaccination strategies and policies and challenges and good practice with the rollout, including vaccine acceptance.

D6. Public Health Guidance for Potential COVID-19 Exposure Associated with Travel-updated (CDC, 5 November) **[**LINK**]**

- This document offers practical guidance on national and international air travel, associated risks, fully vaccinated travelers, risk for getting and spreading some variants of SARS-CoV-2 etc. The concerned authorities may adapt the recommendations in local context.

D7. COVID-19 Guidance for Operating Early Care and Education/Child Care Programs (CDC, 10 November) **[**LINK**]**

- This document provides updated recommendations on universal indoor masking for those aged 2 and older, fully vaccinated people who have a known exposure to someone with suspected or confirmed COVID-19 and staying home, testing, and masking for individuals with COVID-19 in the last 90 days.

JOURNAL ARTICLES

J1. Saliva is superior over nasopharyngeal swab for detecting SARS-CoV2 in COVID-19 patients (Scientific Reports, 22 November 2021) [LINK]

- The study collected Nasopharyngeal and saliva samples to compare their positivity rate, viral load, and duration of viral shedding. The authors conclude that saliva has higher yield in detecting SARS-CoV2, and COVID-19 patients show higher viral load and prolonged period of viral shedding in saliva and recommend saliva as a better alternative sample to NPS to diagnose COVID-19 patients.

J2. Association of Human Milk Antibody Induction, Persistence, and Neutralizing Capacity With SARS-CoV-2 Infection Vs. mRNA Vaccination (JAMA Pediatrics, 10 November) **[**LINK**]**

- The study compared temporal IgA and IgG response in human milk and microneutralization activity against SARS-CoV-2 between lactating mothers with

infection or vaccination; 90 days after infection or vaccination. The findings demonstrate that while infection was associated with a highly variable IgA-dominant response and vaccination was associated with an IgG-dominant response, both were associated with having human milk that exhibited neutralization activity against live SARS-CoV-2 virus.

J3. Non-pharmaceutical interventions, vaccination, and the SARS-CoV-2 delta variant in England: a mathematical modelling study (The Lancet, 13 November) [LINK]

- The study assessed the roadmap, the impact of the delta (B.1.617.2) variant of SARS-CoV-2, and potential future epidemic trajectories. The results show that the risk of a large wave of COVID-19 resulting from lifting NPIs can be substantially mitigated if the timing of NPI relaxation is carefully balanced against vaccination coverage.

J4. Global prevalence and burden of depressive and anxiety disorders in 204 countries and territories in 2020 due to the COVID-19 pandemic (The Lancet, 6 November) [LINK]

- The study aimed to quantify the impact of the COVID-19 pandemic on the prevalence and burden of major depressive disorder and anxiety disorders globally in 2020. The findings show that daily SARS-CoV-2 infection rates and reductions in human mobility were directly associated with increased prevalence of major depressive disorder; females were affected more than males and younger age groups were more affected than older age groups. The study also estimated an additional 53·2 million cases of major depressive disorder globally (an increase of 27·6%) due to the COVID-19.

J5. Burdens of post-acute sequelae of COVID-19 by severity of acute infection, demographics and health status (Nature, 12 November 2021) [LINK]

- The authors used the healthcare databases of the US Department of Veterans Affairs to build a cohort of 181,384 people with COVID-19 and 4,397,509 non-infected controls and estimated that burden of PASC—defined as the presence of at least one sequela in excess of non-infected controls. They observe that the burden of PASC is substantial; PASC is non-monolithic with sequelae that are differentially expressed in various population groups.

J6. Neutralising antibody titres as predictors of protection against SARS-CoV-2 variants and the impact of boosting: a meta-analysis (Lancet Microbe, 15 November 2021) [LINK]

- In this meta-analysis, authors analysed studies on in-vitro neutralisation and clinical protection to understand the loss of neutralisation to existing SARS-CoV-2 variants of concern. They conclude that In-vitro neutralisation titres remain a correlate of protection from SARS-CoV-2 variants and modelling of the effects of waning

immunity predicts a loss of protection to the variants after vaccination. However, booster vaccination with current vaccines should enable higher neutralisation to SARS-CoV-2 variants than is achieved with primary vaccination, which is predicted to provide robust protection from severe infection outcomes with the current SARS-CoV-2 variants of concern, at least in the medium term.

J7. Meta-analysis of the clinical performance of commercial SARS-CoV-2 nucleic acid and antibody tests up to 22 August 2020 (Eurosurveillance, 11 November) [LINK]

- The study estimated the diagnostic accuracy for nucleic acid and antibody tests, and compare with manufacturer-reported accuracy. The results show that manufacturer-reported clinical performance was significantly higher than independently assessed in 11 of 32 and four of 34 cases, respectively, for sensitivity and specificity. That solicits close look into performance of these tests into the real world and ought not to be relied only on manufacturer's claim on accuracy.