



GUIDELINES AND RESEARCH UPDATES



TECHNICAL DOCUMENTS:

D1. Estimating global and country-specific excess mortality during the COVID-19 pandemic (WHO, 9 May) [[LINK](#)]

- The document describes the methods that were developed to estimate excess mortality due to COVID-19. To achieve both interpretability and transparency, it describes a relatively simple overdispersed Poisson count framework, within which the various data types can be modeled. National monthly data from the countries is used to build a predictive log-linear regression model with time-varying coefficients for those countries without data. The document describes factors taken in account while doing the modelling on excess mortality.

D2. Infection prevention and control in the context of coronavirus disease (COVID 19): a living guideline (WHO, 25 April) [[LINK](#)]

- This document provides updated interim recommendations on the use of masks by health workers providing care to patients with suspected or confirmed COVID-19. This update is prompted by new evidence around mask use and COVID-19 transmission, as well as the emergence of variants of concern including Omicron. Masks continue to be a critical tool to prevent the spread of COVID-19.

D3. Strengthening pandemic preparedness planning for respiratory pathogens: policy brief (WHO, 27 April) [[LINK](#)]

- This policy brief outlines core elements that countries are encouraged to- a) develop an integrated approach to respiratory pathogen pandemic preparedness planning and b) enhance national and sub-national functional capacities for preparedness. In addition, this policy brief highlights suggested actions for countries as they initiate or update national and sub-national pandemic preparedness planning process.

D4. Health systems resilience toolkit: a WHO global public health good to support building and strengthening of sustainable health systems resilience in countries with various contexts (WHO, 10 May) [[LINK](#)]

- This document is a consolidated, fit-for-purpose technical reference package to support countries in strengthening health systems resilience at national and subnational level from policy and planning, through operational and services delivery, to monitoring and evaluation. The Toolkit may be adapted to varying contexts and will also contribute to the dual agenda of universal health coverage (UHC) and global health security.

D5. Interim recommendations for use of the Cansino Ad5-nCoV-S vaccine (Convidecia®) against COVID-19 (WHO, 19 May) [[LINK](#)]

- This document provides interim recommendations for use of the Cansino Ad5-nCoV-S vaccine; it is based on the advice issued by the Strategic Advisory Group of Experts on Immunization (SAGE). The evidence summary may be referred in the [background document](#) and [annexes](#).

D6. COVID-19 Aviation Health Safety Protocol: Operational guidelines for the management of air passengers and aviation personnel in relation to the COVID-19 pandemic (European Centre for Disease Prevention and Control, 11 May) [[LINK](#)]

- This document provides operational guidelines for the management of air passengers and aviation personnel in relation to the COVID-19 pandemic. It incorporates recent evidence regarding the effectiveness of COVID-19 vaccination as well as the implementation experience of the recommended nonpharmaceutical interventions (NPIs) for air travel, and aims to make recommendations for the transition/ de-escalation process with a harmonised and coordinated approach.

D7. Public health considerations and evidence to support decisions on the implementation of a second mRNA COVID-19 vaccine booster dose (European Centre for Disease Prevention and Control, 28 April) [[LINK](#)]

- This document offers a detailed overview of the available scientific and epidemiological evidence and public health considerations in order to support decisions on the implementation of a second booster dose of COVID-19 vaccine.

JOURNAL ARTICLES

J1. Clinical severity of COVID-19 in patients admitted to hospital during the omicron wave in South Africa: a retrospective observational study (The Lancet, 18 May) [[LINK](#)]

- The study assessed the clinical disease severity of patients admitted to hospital with SARS-CoV-2 infection during the omicron wave and compared the findings with those of the preceding three pandemic waves in South Africa. The findings reveals trend of increasing cases and admissions across South Africa's first three waves shifted in the omicron wave, with a higher and quicker peak but fewer patients admitted to hospital, less clinically severe illness, and a lower case-fatality ratio compared with the preceding three waves. Omicron marked a change in the SARS-CoV-2 epidemic curve, clinical profile, and deaths.

J2. BNT162b2 Protection against the Omicron Variant in Children and Adolescents (The New England Journal of Medicine, 19 May) [[LINK](#)]

- The study assessed vaccine effectiveness against laboratory-confirmed Covid-19 leading to hospitalization and against critical Covid-19. The study found that BNT162b2 vaccination reduced the risk of omicron-associated hospitalization by two thirds among children 5 to 11 years of age. Although two doses provided lower protection against omicron-associated hospitalization than against delta-associated hospitalization among adolescents 12 to 18 years of age, vaccination prevented critical illness caused by either variant.

J3. Protection and Waning of Natural and Hybrid Immunity to SARS-CoV-2 (The New England Journal of Medicine, 25 May) [[LINK](#)]

- The study to compared the rates of infection as a function of time since the last immunity-conferring event in Israel. The findings show that among persons who had been previously infected with SARS-CoV-2 (regardless of whether they had received any dose of vaccine or whether they had received one dose before or after infection), protection against reinfection decreased as the time increased since the last immunity-conferring event; however, this protection was higher than that conferred after the same time had elapsed since receipt of a second dose of vaccine among previously uninfected persons.

J4. Trajectory of long covid symptoms after covid-19 vaccination: community based cohort study (British Medical Journal, 18 May) [[LINK](#)]

- The study analysed associations between covid-19 vaccination and long covid symptoms in adults with SARS-CoV-2 infection before vaccination. It concludes that long covid symptoms was observed to decrease after covid-19 vaccination and evidence suggested sustained improvement after a second dose, at least over the median follow-up of 67 days.

J5. Transmission and Infectious SARS-CoV-2 Shedding Kinetics in Vaccinated and Unvaccinated Individuals (JAMA, 24 May) [[LINK](#)]

- The study compared the secondary attack rate and infectious viral shedding kinetics of SARS-CoV-2 between fully vaccinated individuals (breakthrough infection group) and partially or unvaccinated individuals (non-breakthrough infection group). The study demonstrates that fully vaccinated individuals had a shorter duration of viable viral shedding and a lower secondary attack rate than partially vaccinated or unvaccinated individuals.

J6. Hospitalised patients with breakthrough COVID-19 following vaccination during two distinct waves in Israel, January to August 2021: a multicentre comparative cohort study (Eurosurveillance, 19 May) [[LINK](#)]

- The study characterised hospitalised patients with breakthrough infections during the Delta variant wave and compare them to unvaccinated hospitalised cases during the same period. The comparison of vaccinated patients with breakthrough infections leading to hospitalisation, referred to as severe breakthrough infections, to hospitalised unvaccinated patients during the Delta wave showed a prominent difference. Patients hospitalised with breakthrough infections were 20 years older than unvaccinated patients and had a higher prevalence of immunosuppression.

J7. The impact of COVID-19 on essential health service provision for endemic infectious diseases in the South-East Asia region: A systematic review (The Lancet-Regional Health-South East Asia, 24 May) [[LINK](#)]

- This study is a systematic literature review of quantitative evidence to estimate the impact of COVID-19 on the provision of essential prevention, detection, treatment, and management services for five high-burden infectious diseases across the SEAR. The findings identified evidence of significant disruption to the prevention, diagnoses, treatment, and management of TB, HIV, and dengue fever due to the COVID-19 pandemic across multiple SEAR country settings. This has the potential to set back hard-fought gains in infectious disease control across the region.