



Sameeksha* – Infection Prevention and Control for COVID-19

* *Sameeksha* is a Hindi word, meaning review. This compilation of recent key IPC resources on COVID-19 includes brief summary of relevant publications from scientific journals; guidelines from WHO, Ministry of Health and Family Welfare and others; training and IEC resources; and links between COVID-19 and AMR. The intended target audience for this includes clinical and public health professionals in both public and private sector in India. Kindly note: inclusion of publications and resources in this review/compilation does not imply an endorsement by WHO.

Key highlights of volume 21

- Implication of infectious severe acute respiratory coronavirus-2 in clinical and environmental samples
- WHO infection prevention and control in the context of coronavirus disease (COVID-19): a living guideline
- Understanding (COVID-19) immunity
- Antimicrobial resistance in COVID-19 patients: a systematic review and meta-analysis

Publications from scientific journals

Detection and quantification of infectious severe acute respiratory coronavirus-2 in diverse clinical and environmental samples

- 535 clinical and environmental samples from 75 infected hospitalized and community patients were collected to explore the potential modes of SARS-CoV-2 transmission. Large respiratory droplets and contact – direct and indirect (through fomites) – are important modes of SARS-CoV-2 transmission.

Scientific Reports | Article | 30 March 2022 | [Online link](#)

Occupational challenges of healthcare workers during the COVID-19 pandemic: a qualitative study

- Challenges due to lack of preparedness included delayed IPC guidelines, shortages of PPE combined with staff shortages (especially of nursing staff) and overworked personnel.
- Number of available essential workers caring for Covid-19 patients, especially nursing staff, should be carefully planned and increased to avert chronic work overload, along with training and education in IPC for all HCWs.

Occupational and environmental medicine | Original research | 7 March 2022 | [Online link](#)

Maintaining face mask use before and after achieving different COVID-19 vaccination coverage levels: a modelling study

- Supports maintaining face mask use until and a short time after achieving various final vaccination coverage levels, given that maintaining face mask use can be not just cost-effective, but even cost saving.

The Lancet Public Health | Article | 8 March 2022 | [Online link](#)

Recommendations related to occupational infection prevention and control training to protect healthcare workers from infectious diseases: a scoping review of infection prevention and control guidelines

- The mode of delivery and curriculum of IPC guidelines differed across regions when reviewed for inclusion of key elements related to occupational IPC training, with reference to IPC guidelines of WHO and US-CDC.
- LMIC guidelines did not include recommendations about evaluating IPC training programs.

BMC Health Services Research | Research | 1 March 2022 | [Online link](#)

Availability of the core components of the WHO infection prevention and control strategies in health facilities in Southwestern Uganda: implications for control of COVID-19

- WHO IPC assessment tool was used to assess half the health facilities in four districts of South-Western Uganda.
- Only few facilities in Southwestern Uganda achieved >85% availability of IPC core components.

Infection Prevention in Practice | Article | 10 February 2022 | [Online link](#)

COVID-appropriate facemask use: a study among patients attending outpatient departments of a public health institute in West Bengal

- Good practices regarding COVID-19 appropriate mask-related activities were not seen in nearly 70% of study participants.
- Awareness about correct mask use is important for COVID-appropriate behaviour.

Journal of Education and Health Promotion | Original article | 23 March 2022 | [Online link](#)

Guidelines

Infection prevention and control in the context of coronavirus disease (COVID-19): A living guideline

- Provides latest evidence-based recommendations for IPC in the context of COVID-19 in health care and community settings.
- New information includes updated mask recommendations for children in community settings including updated age specific recommendations, statements for children with disabilities and those at high risk for complications related to COVID-19 infection and updated implementation considerations for mask use in school settings.

WHO | Guideline | 7 March 2022 | [Online link](#)

Operational public health considerations for the prevention and control of infectious diseases in the context of Russia's aggression towards Ukraine

- Focuses on infectious disease vulnerabilities of those fleeing from Ukraine, and the associated requirements for infection prevention and control
- Priority should be given to protection against easily transmitted infectious diseases possibly associated with serious outcomes, such as COVID-19, measles, and poliomyelitis.

ECDC | Technical report | 8 March 2022 | [Online link](#)

WASH and infection prevention and control in health care facilities

- Hand hygiene, respiratory etiquette, ensuring availability of water points, environmental cleanliness, PPE/WASH equipment disinfection and biomedical waste management are key practices for IPC and WASH.

UNICEF | Guidance note | 23 March 2022 | [Online link](#)

Guidance for the prevention and control of COVID-19 in temporary reception centres in the context of the large numbers of people fleeing Ukraine

- Focuses on COVID-19 vulnerabilities and need for IPC in temporary reception centres, which have a higher risk for COVID-19 and other infectious disease outbreaks.
- In addition to physical distancing other IPC measures that can be considered at reception sites include hand hygiene and sanitation, respiratory etiquette, face masks and ventilation.

ECDC | Technical report | 18 March 2022 | [Online link](#)

Interim analysis of COVID-19 vaccine effectiveness against Severe Acute Respiratory Infection due to laboratory-confirmed SARS-CoV-2 among individuals aged 30 years and older, ECDC multi-country study – second update

- Direct effectiveness of overall and product-specific COVID-19 vaccines against SARI due to laboratory-confirmed SARS-CoV-2 were measured in vaccinated/hospitalised patients >30 years.
- Results suggest a high adjusted vaccine effectiveness in preventing SARI associated with laboratory-confirmed SARS-CoV-2 infection for COVID-19 vaccines in EU/EEA countries.

ECDC | Technical report | 14 March 2022 | [Online link](#)

Contact tracing and quarantine in the context of the Omicron SARS-CoV-2 variant: interim guidance

- Health workers with shortened quarantine or who are continuing to work following high-risk exposure must continue to follow all recommended infection IPC precautions, including continuously wearing either a well-fitted medical mask or a respirator at all times, self-monitoring for symptoms and getting tested, if positive.
- National authorities and health facilities must continue to strengthen IPC measures in all settings, including having an IPC programme or at least a dedicated and trained IPC focal point in place.

WHO | Interim guidance | 17 February 2021 | [Online link](#)

Guidelines for COVID-19 vaccination of children between 12-14 years of age

- COVID-19 vaccination program has been expanded to use CorBEvax vaccine in the 12-14 years age group.

MoHFW | Guidelines | 21 March 2022 | [Online link](#)

Training / IEC resources

Understanding immunity

- How body develops immunity when infected with SARS-CoV-2 virus.
- Why is it important to continue to wear masks, ventilate closed spaces, avoid crowds, wash hands and observe all other precautions?

WHO | Science in 5 | 25 February 2022 | [Online link](#)

Engaging the private sector to deliver COVID-19 tools and achieve Health for All

- Defines key concepts and presents a range of tools and proven approaches to enable Ministries of Health to harness private sector capacity to achieve key policy goals, ensuring equitable access to COVID-19 tools while advancing Health for All.
- Target audience includes the Ministry of Health, policymakers, and program managers, WHO staff at regional and country levels, and global health practitioners and researchers supporting COVID-19 efforts.

OpenWHO | Course | 2022 | [Online link](#)

COVID-19: variants

- Few variants such as Delta and Omicron are spreading easily. Protection from the virus and new variants could be ensured by vaccination, keeping safe distance, wearing masks, opening windows, hand/respiratory hygiene.

WHO | Information | 2 March 2022 | [Online link](#)

COVID-19 and Antimicrobial Resistance

Antimicrobial resistance in COVID-19 patients: a systematic review and meta-analysis (November 2019 – June 2021)

- Microbiologically confirmed AMR during the first 18 months of the COVID-19 pandemic was relatively high among patients with bacterial co-infections.
- Most common resistance documented was in CRAB, MRSA, *Klebsiella pneumoniae*, and *Pseudomonas aeruginosa*, although some *C. auris* isolates were also identified.

Antimicrobial Resistance & Infection Control | Research | 7 March 2022 | [Online link](#)

Global consumption of antimicrobials: impact of the WHO Global Action Plan on Antimicrobial Resistance and 2019 coronavirus pandemic (COVID-19)

- Although pre-pandemic global decrease in antimicrobial (AM) consumption suggests a positive impact of the WHO GAP-AMR, however an initial increase in AM consumption was followed by a decrease worldwide during the pandemic.

Journal of Antimicrobial Chemotherapy | Article | 18 February 2022 | [Online link](#)

It is complicated: potential short- and long-term impact of coronavirus disease 2019 (COVID-19) on antimicrobial resistance – an expert review

- High antibiotic consumption in COVID-19 patients and several MDRO outbreaks during the pandemic have been reported in hospital settings, although national AMR surveillance data show ambiguous trends.
- Surveillance data show decreases in antibiotic consumption and in AMR for the year 2020 in the community settings, at least for HICs.

Antimicrobial Stewardship & Healthcare Epidemiology | Article | 18 February 2022 | [Online link](#)

Azithromycin misuse during the COVID-19 pandemic: a cross-sectional study from Jordan

- Drug prescription data was studied in community pharmacies in Jordan, which showed azithromycin misuse by physicians, pharmacists as well as the public.

Infection and Drug Resistance | Original research | 2 March 2022 | [Online link](#)

Interventional research to tackle antimicrobial resistance in low middle income countries in the era of the COVID-19 pandemic: lessons in resilience from an international consortium

- The ASPIRES consortium – Antibiotic use across Surgical Pathways - Investigating, Redesigning and Evaluating Systems – aims to optimise infection management and antibiotic use across the surgical pathway.
- Key principles to deliver the research through the pandemic were mainly the high degree of interdisciplinary engagement with integrated teams, and equitable partnership across sites with capacity building and leadership training, and the pandemic offered opportunities for realigning research priorities.

International Journal of Infectious Diseases | Perspective | 5 February 2022 | [Online link](#)

Antimicrobial use in hospitalised patients with COVID-19: an international multicentre point-prevalence study

- Majority of patients seven tertiary university hospitals in 4 European countries received empirical antibiotics and/or antifungals within 48 hours of admission, although the pattern of antimicrobial use differed across hospitals.
- Widespread use of last-line antibiotics identified in some settings, combined with the heavy burden of hospitalised COVID-19 patients, may lead to an increase in AMR.

Antibiotics | Article | 28 January 2022 | [Online link](#)

Prescription patterns of drugs given to hospitalized COVID-19 patients: a cross-sectional study in Colombia

- 8,596 patients in 170 Columbian cities were studied for prescription patterns in COVID-19 hospitalized patients.
- Most commonly used drugs for the treatment of COVID-19 were systemic corticosteroids (64%), followed by colchicine (13%), azithromycin (9%) and ivermectin (6%).

Antibiotics | Article | 3 March 2022 | [Online link](#)