World Health Organization India

sameeksha

IPC for COVID-19 | Volume 27 | 26 March 2023

# 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 interested in IPC at both public and private sector in India. Kindly note: inclusion of publications/resources in this review/compilation does not imply an endorsement by WHO.

**Key highlights** of volume 27

- Higher mortality due to hospital associated blood stream infections in COVID patients
- Model for standardized analysis of IPC protocols
- IPC guidance for respiratory viral infections in healthcare settings
- Global antibiotic use during the COVID-19 pandemic, and impact of COVID-19 pandemic on AMR

## Scientific publications

### Epidemiology and outcomes of hospital-acquired bloodstream infections in intensive care unit patients: the EUROBACT-2 international cohort study

- Prospective study of 2,600 patients from 333 ICUs in 52 countries found that 78% of hospital-acquired bloodstream infections (HA-BSI) were acquired in ICUs and had a higher mortality among COVID-19 patients.
- HA-BSI caused by Gram-negative, difficult-to-treat resistant pathogens led to delays in adequate therapy.

*Intensive Care Medicine* | Research article | 10 February 2023 | Online link

### Hygieia model: development of a three-dimensional model for the standardized analysis of infection control protocols

- Proposes a three-dimensional model to guide risk assessments of infection control protocols of public events.
- Can be used for IPC risk assessment of events from conferences to concerts focussing on the setting, protection targets of involved groups and precautions.

*Journal of Public Health* | Research article | 20 February 2023 | Online link

### Experiences, challenges, and lessons learned during implementation of a remote monitoring program for home-isolated COVID-19 patients in Chennai, India

- Describes a program combining information technology and health care workers who provided care to 56,046 COVID-19 patients isolated at home, including preventive measures.
- Remote monitoring offers a low cost and effective approach for strained health systems.

*Global Health Science and Practice* | Research article | 28 February 2023 | Online link

## Personality traits influence on perception and hesitancy towards COVID-19 vaccination among tertiary care dental hospital in Delhi: a cross-section study

- Survey of 322 outpatients revealed that 73% were willing to be vaccinated to prevent COVID.
- Willingness to be vaccinated was associated with having predominantly agreeable personalities (trusting, cooperative, motivated), while hesitancy was attributed largely to fear of side effects and lack of information.

*Cureus* | Research article | 21 January 2023 | Online link

## Minimising school disruption under high incidence conditions due to the Omicron variant in France, Switzerland, Italy, in January 2022

- A modelling study that compares school protocols during Omicron BA.1 variant wave in terms of resource peak demands, infection prevention, and reduction of schooldays lost.
- It found that reactive screening is resource intensive and achieves little infection prevention, as compared with proactive weekly screening which considerably reduces the peak of infections and limits school days lost.

*Eurosurveillance* | Research article | 2 February 2023 | Online link

# Guidelines

## Considerations for infection prevention and control practices in relation to respiratory viral infections in healthcare settings

- Provides guidance for prevention of transmission of respiratory viral infections in healthcare settings, with considerations for administrative measures, high-risk medical procedures, occupational health and safety, and environmental measures.

*European Centre for Disease Prevention and Control* | Technical report | 6 February 2023 | Online link

## Gatherings in the context of COVID-19

- Outlines a flexible risk-based approach for reducing transmission of SARS-CoV-2 among mass public gatherings and small private events.
- Highlights the importance of precautionary public health and infection prevention measures, since the risk of transmission is higher when measures are not applied, weakly implemented or not followed.

*WHO* | Policy brief | 19 January 2023 | Online link

# COVID-19 and Antimicrobial Resistance

## Global antibiotic use during the COVID-19 pandemic: analysis of pharmaceutical sales data from 71 countries, 2020–2022

- Estimated the associations between antibiotic use, COVID-19 cases and vaccinations using panel regression models of global data.
- The pandemic's effect on antibiotic use has been relatively modest but vigilance is required to avoid inappropriate prescriptions as COVID-19 becomes endemic.

*eClinical Medicine* | Research article | 5 February 2023 | Online link

## A parallel and silent emerging pandemic: antimicrobial resistance (AMR) amid COVID-19 pandemic

- Reviews secondary infections (bacterial and fungal) among COVID-19 patients and their influence on AMR.
- Highlights the impact of management and mismanagement of COVID-19 crisis on AMR.

*Journal of Infection and Public Health* | Review | 27 February 2023 | Online link

## Antimicrobial stewardship implementation before and during the COVID-19 pandemic in the acute care settings: a systematic review

- Summarizes AMS implementation strategies and toolkits over the last 20 years.
- Highlights the importance of choosing the right AMS strategies and measures, especially during the pandemic.

*BMC Public Health* | Systematic review | 10 February 2023 | Online link

## Evaluation of pre-treated healthcare wastes during COVID-19 pandemic reveals pathogenic microbiota, antibiotics residues, and antibiotic resistance genes against beta-lactams

- Improperly treated healthcare waste can lead to environmental contamination of antibiotic-resistant bacteria.
- Healthcare waste in Malaysia pre-treated with microwave technology still had an array of microorganisms and antibiotic residues showing that microwaving is not useful for removing pathogens and antibiotics in healthcare waste.

*Environmental Research* | Research article | 15 February 2023 | Online link

## Antimicrobial resistance in patients with COVID-19: a systematic review and meta-analysis

- A meta-analysis of 362,976 COVID-19 patients identified a low prevalence of bacterial co-infection but a high prevalence of secondary AMR infections among critically ill patients.
- Suggests global surveillance and research to assess optimal use of antibiotics for COVID-19 patients depending on their clinical profile.

*The Lancet Microbe* | Systematic review | 31 January 2023 | Online link