



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 17

- Surveillance for face mask compliance in Chennai
- WHO framework and toolkit for IPC in outbreak preparedness, readiness and response at the national level
- MoHFW national guidelines for safe dental practice during COVID-19 pandemic
- The world's largest vaccination drive
- Global survey on the impact of the COVID-19 pandemic on surveillance, prevention and control of AMR

Publications from scientific journals

Surveillance for face mask compliance, Chennai, Tamil Nadu, October-December 2020

- Mask compliance was low in outdoor public places with no remarkable change over time as only one-third of residents, across the different age groups and gender, correctly wore masks in public places, with lower compliance in slum areas.
- Recommends scaling up mask compliance surveillance to all major cities in India and emphasised periodic surveys, enforcement in public places, and mass media campaigns to promote appropriate mask use.

PLoS ONE | Research article | 24 September 2021 | [Online link](#)

The effect of hand hygiene promotion programs during epidemics and pandemics of respiratory droplet-transmissible infections on health outcomes: a rapid systematic review

- Reviews the effectiveness of community-based hand hygiene promotion programs on infection transmission, health and behavioural outcomes, in the context of respiratory droplet-transmissible diseases such as influenza or COVID-19.
- Hand hygiene interventions in between epidemics of influenza led to lesser influenza positive cases in schools.
- Beneficial effects of promoting hand hygiene on health outcomes are clearly seen when implemented as a preventive measure regardless of whether cases have been identified or not.

BMC Public Health | Research | 27 September 2021 | [Online link](#)

Nosocomial outbreak caused by the SARS-CoV-2 Delta variant in a highly vaccinated population, Israel, July 2021

- Records an outbreak due to SARS-CoV-2 Delta variant from a single patient source in Israel that spread rapidly among twice vaccinated individuals wearing masks.
- The high transmissibility of SARS-CoV-2 Delta variant in the outbreak implies waning immunity and the need for a third vaccine dose along with appropriate use of masks, especially in high-risk settings.

Euro Surveill | Rapid Communication | 30 September 2021 | [Online link](#)

Face masks for COVID pass their largest test yet

- A clinical trial in Bangladesh concluded that face masks protect against COVID-19, backing up findings of hundreds of previous observational and laboratory studies.
- Authors demonstrated a scalable and effective method to promote mask adoption and reduce symptomatic SARS-CoV-2 infections as the study linked surgical masks with an 11% drop in risk, compared with a 5% drop for cloth.

Nature | News | 9 September 2021 | [Online link](#)

Cotton and surgical face masks in community settings: bacterial contamination and face mask hygiene

- Bacterial load on cotton and surgical face masks were evaluated after wearing them for 4 hours and the effects of different cleaning methods. Surgical or medical face masks may be better than cloth masks especially over longer periods of mask wearing and need to be disposed safely after use.

Frontiers in Medicine | Original Research | 3 September 2021 | [Online link](#)

From outbreak of COVID-19 to launching of vaccination drive: invigorating single-use plastics, mitigation strategies, and way forward

- Highlights environmental consequences due to excessive use of disposable plastics for COVID-19 and recommends adopting adequate segregation, sterilization, sanitization activities, technological intervention and process optimization measures.

ESPR | Review Article | 3 September 2021 | [Online link](#)

A cross-sectional analysis to evaluate knowledge, attitude and practices among pregnant women during COVID-19 pandemic

- Majority of the pregnant women had satisfactory knowledge, positive attitude and were following practices in right manner regarding various aspects of COVID-19 highlighting Government of India's effort in dissemination of required information.

J Obstet Gynecol India | Original Article | 4 September 2021 | [Online link](#)

What you need to know about hand hygiene and dermatitis during the coronavirus pandemic

- Understanding of frontline healthcare workers on glove use, hand hygiene, and emollient use after handwashing during the COVID-19 pandemic is important to avoid hand-based dermatitis

JABFM | Brief Report | 17 September 2021 | [Online link](#)

Nosocomial or not? A combined epidemiological and genomic investigation to understand hospital-acquired COVID-19 infection on an elderly care ward

- Investigates an outbreak of COVID-19 in an elderly care ward using epidemiological and genomic methods, aimed to understand SARS-CoV-2 transmission in the hospital.
- Demonstrates the utility of genome sequencing coupled with epidemiological investigation to understand the epidemiology of COVID-19 nosocomial outbreaks.

Infection Prevention in Practice | Outbreak Report | 28 August 2021 | [Online link](#)

WHO and other guidelines

Framework and toolkit for infection prevention and control in outbreak preparedness, readiness and response at the national level

- Enumerates key actions for each emergency management phase and is designed to support countries with development of activities or actions to prepare and respond to outbreaks.
 - **Phase 1 - preparedness** (2 years to 6 months in advance of any defined threat) – develop a foundation for IPC; identify key personnel and partners
 - **Phase 2 - readiness** (up to 6 months in advance of a defined threat) – adapt existing tools for IPC in outbreaks; prepare key personnel and partners
 - **Phase 3 - response** (emergency actions in response to a threat) – activate existing tools for IPC based on outbreak context and monitor for surge of cases in response to a defined public health threat.

WHO | Publication | 17 September 2021 | [Online link](#)

Annex to Infection prevention and control during health care when coronavirus disease (COVID-19) is suspected or confirmed

- Updates earlier guidance after the review of new scientific evidence on transmission of SARS-CoV-2 variants of concern (VOC).
- Contains updated recommendations on the use of masks and respirators for health workers providing care to suspected or confirmed COVID-19.

WHO | Interim guidance | 1 October 2021 | [Online link](#)

COVID-19 disease in children and adolescents

- Outlines the risk of children and adolescents becoming infected by SARS-CoV-2 comparable to the risk of adults, and the probability of transmission of SARS-CoV-2 infection by children and adolescents comparable to that of adults.

WHO | Scientific brief | 29 September 2021 | [Online link](#)

Therapeutics and COVID-19: living guideline

- Sixth updated version of the WHO guideline contains nine recommendations.
- Two new conditional recommendations are included for using a combination of neutralizing monoclonal antibodies (casirivimab and imdevimab) for non-severe COVID-19 patients at the highest risk of severe disease and severe and critically ill seronegative COVID-19 patients.

WHO | Living guideline | 24 September 2021 | [Online link](#)

Guidance for COVID-19 prevention in K-12 schools

- Recommends universal indoor masking and 3 feet distance between students, in addition to screening testing, ventilation, handwashing and respiratory etiquette, staying home when sick, contact tracing in combination with quarantine and isolation, and cleaning and disinfection.

CDC | Updated guidance | 5 August 2021 | [Online link](#)

COVID-19 vaccination for pregnant people to prevent serious illness, deaths, and adverse pregnancy outcomes from COVID-19

- Strongly recommends COVID-19 vaccination in pregnant women or those trying to become pregnant to prevent serious disease, death or adverse outcomes of pregnancy.

CDC | Health advisory | 29 September 2021 | [Online link](#)

MoHFW guidelines

National guidelines for safe dental practice during Covid-19 pandemic

- Provides IPC guidelines for safe dental practices to be followed in dental clinics located in government and private sector including dental colleges, including safe management of waste.

MoHFW | Guidelines | 29 September 2021 | [Online link](#)

Guidelines on operationalization of maternal health services during Covid-19 pandemic

- Summarizes management of pregnant women in view of the COVID-19 pandemic including use of telemedicine for providing ante-natal care.
- Lists the responsibilities of the hospital infection control committee to ensure safety of pregnant women in healthcare settings.

MoHFW | Guidelines | September 2021 | [Online link](#)

Training / IEC resources

The world's largest vaccination drive

- Describes the roll out of largest vaccination drive in the world as a key component of the national response strategy for COVID-19.
- Planning was based on scientific evidence, global best practices and WHO guidelines.

MoHFW | Information Booklet | 14 September 2021 | [Online link](#)

WHO EMRO/UNSSC leadership programme on epidemic and pandemic preparedness and response

- Designed for heads of WHO offices and senior ministry of health officials and focuses on leadership in times of crisis, preparedness, adopting a systems approach, strategic thinking, emotional resilience and multisectoral partnership building.

OpenWHO | MOOC | September 2021 | [Online link](#)

COVID-19 vaccine quick reference guide for healthcare professionals

- Key information for healthcare professionals on the proper storage, preparation, and administration of the currently authorized COVID-19 vaccines in the United States.

CDC | Poster | 30 September 2021 | [Online link](#)

ECDC – the disease detectives

- Explains field epidemiology and trainings in epidemiology and public health to prevent, prepare for, and respond to outbreaks.

ECDC | Podcast | 7 September 2021 | [Online link](#)

COVID-19 and Antimicrobial Resistance

Impact of the COVID-19 pandemic on the surveillance, prevention and control of antimicrobial resistance: a global survey

- First survey amongst countries enrolled in Global AMR Surveillance System (GLASS) to explore the global impact of COVID-19 on AMR. Many countries (particularly LMICs) reported increased total antibiotic prescribing, compromising antimicrobial stewardship and IPC improvements that could favour the prevention of both AMR and COVID-19, such as improved hand hygiene, PPE use, the stable availability of environmental cleaning workers and increased availability of IPC focal points.

JAC | Article | 2 September 2021 | [Online link](#)

Public health literacy, knowledge, and awareness regarding antibiotic use and antimicrobial resistance during the COVID-19 pandemic: a cross-sectional study

- KAP study using the WHO multi-country public awareness survey (2015). found that awareness of antibiotic resistance had increased.
- Findings emphasize the need for continued AMR awareness campaigns to improve health literacy.

Antibiotics | Article | 13 September 2021 | [Online link](#)

Informing antimicrobial management in the context of COVID-19: understanding the longitudinal dynamics of C-reactive protein and procalcitonin

- Serial CRP concentrations can be used to monitor COVID-19 patients to improve their outcomes.

BMC Infectious Diseases | Research Article | 8 September 2021 | [Online link](#)

Trends in outpatient antibiotic prescriptions in the United States during the COVID-19 pandemic in 2020

- Prescription fills of commonly prescribed outpatient antibiotics in the United States through the end of 2020 was measured in this cross-sectional study. Results showed reduced monthly prescriptions for antibiotics used to manage respiratory tract infections but not for antibiotics used against urinary tract and skin infections.

JAMA Network Open | Research Letter | 22 September 2021 | [Online link](#)

Procalcitonin for individualizing antibiotic treatment: an update with a focus on COVID-19

- PCT can be used in patients with respiratory infections and sepsis to initiate antimicrobial therapy in low-risk settings and discontinuing antimicrobials in certain high-risk settings.

CRCLS | Review Article | 13 September 2021 | [Online link](#)