



## 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 20

- Lessons learned from public concerns associated with face mask-wearing during the COVID-19 pandemic
- WHO guidelines for care, cleaning and disinfection of respiratory and patient monitoring devices
- MoHFW guidelines for management of COVID-19 in children and adolescents
- MoHFW illustrated guidelines for home isolation of mild/asymptomatic COVID-19 cases
- Use of antibiotics in the community during the COVID-19 pandemic in Bangladesh

## Publications from scientific journals

### Public concerns and burdens associated with face mask-wearing: Lessons learned from the COVID-19 pandemic

- Results from an online survey show that mask-wearing concerns can be classified into three categories:
  - Discomfort barriers (physical discomfort and communication discomfort)
  - External factors (overstated news of COVID threat, political beliefs and absence of mask-wearing culture)
  - Usability issues (lack of effectiveness, unnecessariness of masks in certain cases and mask maintenance)

*Progress in Disaster Science* | Article | 12 January 2022 | [Online link](#)

### Optimal strategies to screen health care workers for COVID-19 in the US: a cost-effectiveness analysis

- PCR and antigen testing are useful to identify infected HCWs and reduce transmission in health care settings.
- Provides insight to policy makers to keep health care workforce safe and reduce transmission of infection.

*Cost Effectiveness and Resource Allocation* | Research | 15 January 2022 | [Online link](#)

### Particle-size-dependent filtration efficiency, breathability, and flow resistance of face coverings and common household fabrics used for face masks

- Fabric characteristics and finishing are important to finalise the suitable fabric sample for face coverings.

*International Journal of Environmental Research* | Research Paper | 10 January 2022 | [Online link](#)

## What matters: non-pharmaceutical interventions for COVID-19 in Europe

- Population prevention and control measures implemented by the government had an impact on the change in the time-dependent reproduction number ( $R_t$ ) value.
- Personal prevention primarily included wearing of masks, hand hygiene, social distancing and reducing participation in outdoor activities, and group prevention included travel restrictions, home isolation, closure of educational facilities, prohibition of public gatherings and non-essential commercial activities.

*Antimicrobial Resistance & Infection Control* | Research | 9 January 2022 | [Online link](#)

## Fighting the COVID pandemic: national policy choices in non-pharmaceutical interventions

- Empirically models the adoption of NPIs during the first wave of COVID-19 in 14 European countries with more than 10 million inhabitants.
- Help to understand differences and similarities among European countries during the first wave of the COVID-19 outbreak; and shows that different countries adopted very similar policy strategies, with minor exceptions.

*Journal of Policy Modeling* | Review | 11 January 2022 | [Online link](#)

## WHO and other guidelines

### Care, cleaning, and disinfection of BiPAP/CPAP devices, oxygen concentrators and high flow nasal canula, pulse oximeters and patient monitor devices, and invasive mechanical ventilators

- Oxygen bubble humidifier must be washed, rinsed, and disinfected regularly when used for the same patient and after use between patients.
- 0.1% sodium hypochlorite (1000 ppm) should only be used according to the manufacturer's instructions if device is known to withstand use of chlorine-based agents and no ammonia-based cleaning agents or acidic body fluids are present on the device.

*WHO* | Checklists | 27 January 2022 | [BiPAP/CPAP](#) [Oxygen concentrators](#) [HF nasal canula](#) [Pulse oximeters and patient monitor devices](#) [invasive mechanical ventilators](#)

### Enhancing readiness for Omicron (B.1.1.529): technical brief and priority actions for member states

- Priority actions include infection prevention and control (IPC), as well as effective surveillance, laboratory testing, vaccinations, public health and social measures, contact tracing and quarantine, travel-related measures, health system readiness and responsiveness, and risk communication and community engagement.
- IPC recommendations include all health facilities to have an effective IPC programme, use of masks or respirators, dedicated and trained IPC focal point, engineering and environmental controls, administrative controls, standard and transmission-based precautions, screening and triage, surveillance and vaccination.

*WHO* | Technical document | 21 January 2022 | [Online link](#)

### Epi-Win update 72 – SARS-CoV-2 variant of concern Omicron

- IPC measures continue to be effective and reduce the risk of infection – stay at home (if unwell), maintain physical distance, improve ventilation, hand hygiene, cough etiquette and wearing well-fitting masks.
- Also recommends avoiding closed spaces with poor ventilation, crowded areas and close contact with others.

*WHO* | Technical update | 14 January 2022 | [Online link](#)

## **Guidance on quarantine of close contacts to COVID-19 cases and isolation of COVID-19 cases, in the current epidemiological situation**

- Provides options for adapting quarantine and isolation, particularly when countries face high or extreme pressure on healthcare systems and other functions in society, including essential services.
- Decisions to adapt quarantine and isolation guidance requires consideration of additional risk of transmission, local epidemiological situation, testing and contact tracing capacity and socio-economic effects.

*ECDC* | Guidance | 7 January 2022 | [Online link](#)

## **Harmonized health facility assessment (HHFA): Core and additional questions**

- Comprehensive, standardized health facility survey that provides objective information on availability of health facility services and systems to ensure standards of quality.
- Includes four modules: service availability, service readiness, quality of care, and management and finance.

*WHO* | Questionnaire | 27 December 2021 | [Online link](#)

## **An implementation guide for the management of COVID-19 on board cargo ships and fishing vessels**

- COVID-19 contingency management plans recommend IPC measures – proper use of PPE, physical distancing, and administrative controls, including appropriate ventilation and room occupancy limits.
- Recommends enhanced cleaning and disinfection procedures for suspected, probable or confirmed cases, and providing them medical masks and alcohol-based hand rub.

*WHO* | Interim guidance | 23 December 2021 | [Online link](#)

## **MoHFW guidelines**

### **Revised comprehensive guidelines for management of COVID-19 in children and adolescents (below 18 years)**

- Recommends IPC and public health measures for COVID appropriate behaviour – 3Ws (watch your distance, wash your hands, wear a mask) and 2Vs (ventilation and vaccination).
- Provides guidance on infection prevention and control (IPC), using masks and home isolation.

*MoHFW* | Guidelines | 20 January 2022 | [Online link](#)

### **Guidelines for international arrivals**

- Provides protocol for international travellers as well as those to be followed by airlines at points of entry (airports, seaports, and land border).
- Recommends preventive measures for in-flight crew to ensure universal application of COVID appropriate behaviour.

*MoHFW* | Guidelines | 10 February 2022 | [Online link](#)

### **Clinical guidance for management of adult COVID-19 patients**

- Guides management of mild, moderate and severe disease in adults diagnosed with COVID-19.
- Preventive measures like physical distancing, indoor mask use and strict hand hygiene are strongly recommended.

*MoHFW* | Guidance | 14 January 2022 | [Online link](#)

## **Revised advisory for managing health care workers working in COVID and Non-COVID areas of the health care facilities**

- Provides guidance on preventive measures to be observed at the institution/facility level as well as testing and isolation measures for health care workers.
- Advises health care facilities on activating hospital infection control committees for implementing IPC activities, and regular IPC trainings for HCWs.

*MoHFW* | Advisory | 9 January 2022 | [Online link](#)

## **Training / IEC resources**

### **Revised guidelines for home isolation of mild/asymptomatic COVID-19 cases**

- Illustrated guide on home isolation of mild/asymptomatic COVID-19 cases, for patients and caregivers.
- Preventive measures, as well as effective and safe disposal of waste are strongly recommended.

*MoHFW* | Illustrated guidance | 5 January 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 and global health practitioners and researchers supporting COVID-19 efforts.

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

### **ECDC updates its guidance regarding quarantine and isolation considering the rapid spread of Omicron in the EU/EEA**

- Vaccination remains key to address the ongoing circulation of the virus and to reduce the impact of the Delta and Omicron VoCs.
- Preventive measures such as avoiding large public or private gatherings, extended use of face masks, reduced contacts between groups of individuals in social or work settings, working from home and reduced inter-household mixing are recommended to be strengthened and sustained.

*ECDC* | News story | 7 January 2022 | [Online link](#)

## **COVID-19 and Antimicrobial Resistance**

### **Antibiotics in the community during the COVID-19 pandemic: a qualitative study to understand users' perspectives of antibiotic seeking and consumption behaviors in Bangladesh**

- Antibiotic-seeking behaviour was found to be related to previous experience of use, perceived severity of illness, perceived vulnerability, risk of infection, management of an "unknown" illness and anxiety, and distrust of expert advice.
- Highly recommends increasing community engagement in antimicrobial stewardship interventions to target antibiotic use during the COVID-19 health crisis and beyond.

*Patient Preference and Adherence* | Original Research | 28 January 2022 | [Online link](#)

### **Over-the-counter sale of antibiotics during COVID-19 outbreak by community pharmacies in Saudi Arabia: a simulated client study**

- Nonprescribed sale of antibiotics is still prevalent and may have increased during the COVID-19 outbreak, thereby increasing the risk of accelerated bacterial resistance.
- The ability of community pharmacists to triage, educate and counsel the patients was found to be below par.

*BMC Health Services Research* | Research | 29 January 2022 | [Online link](#)

### **COVID-19 pandemic disruption on the management of tuberculosis treatment in Indonesia**

- Financial and other resources have been reallocated from TB to COVID-19 response leading to disruption of case detection, rapid diagnostic and other TB services.
- There is a possibility of increase in multi-drug resistant TB as patients were unable to avail TB services because of social distancing measures.

*Journal of Multidisciplinary Healthcare* | Review | 26 January 2022 | [Online link](#)

### **Impact of coronavirus disease 2019 on infectious disease treatment and infection control at a tertiary hospital in Japan**

- Investigated the effects of COVID-19 on daily medical practices, including the increased use of hand sanitizers.
- The prevalence of drug-resistant bacteria and trends of antibacterial drug use remained unchanged despite the increased use of hand sanitizers during the pandemic.

*Journal of Infection and Chemotherapy* | Original Article | 25 January 2022 | [Online link](#)

### **The challenge of preventing and containing outbreaks of multidrug-resistant organisms and *Candida auris* during the coronavirus disease 2019 pandemic**

- Reported multi drug resistant organism (MDRO) outbreaks during the COVID-19 pandemic were most often caused by carbapenem-resistant *Acinetobacter baumannii* and *Candida auris*.
- Potentially modifiable factors contributing to the outbreaks included inadequate PPE/hand hygiene adherence, PPE shortage and high antibiotic use.

*Antimicrobial Resistance and Infection Control* | Review | 21 January 2022 | [Online link](#)