



INFECTION PREVENTION AND CONTROL | Volume 5 | 30 November 2023

Sameeksha* – Infection Prevention and Control (IPC)

Key highlights

- Gender-sensitive interventions needed for improving hand hygiene among physicians
- Commentary on the forthcoming WHO and UNICEF guidelines on hand hygiene in community settings
- Sixth version of WHO's updated IPC living guidelines for COVID-19
- Lessons from Japan on building an effective IPC system
- WHO training package on sanitation and hygiene in the health sector
- OpenWHO course for WASH and prevention of neglected tropical diseases

Publications from scientific journals

Gender differences in psychosocial determinants of hand hygiene among physicians

• Male physicians from South Korea reported a lower rate of hand hygiene compliance compared to female physicians highlighting the need for gender-sensitive interventions, diversifying the types of hand sanitizers, providing reminders, and hand washing facilities in each hospital room.

Infection Control & Hospital Epidemiology | Research article | 4 October 2023 | Online link

Health science students' perceptions of hand hygiene education and practice in a South African university: introducing the university hand hygiene improvement model

- Online cross-sectional survey of health science students shows variation in hand hygiene practices.
- Proposes the *University Hand Hygiene Improvement Model* as a tool to guide targeted interventions to improve hand hygiene.

Healthcare | Research article | 15 September 2023 | Online link

Coronavirus disease 2019 (COVID-19) impact on central-line-associated bloodstream infections (CLABSI): a systematic review

- Shows global rise in CLABSI caused by Enterococcus faecalis and Candida sp. during the COVID-19 pandemic.
- Highlight overburdened health care systems led to reduced IPC compliance, notably hand hygiene and line care bundles.

Infection Prevention in Practice | Systematic review | 23 October 2023 | Online link

How can global guidelines support sustainable hygiene systems?

- Describes forthcoming WHO and UNICEF guidelines on hand hygiene in community settings.
- Outlines evidence-based recommendations to guide action to strengthen pandemic prevention and preparedness by sustaining acceleration towards hand hygiene in community settings.

BMJ Global Health | Commentary | 24 October 2023 | Online link

Identification of essential contents and a standard framework for the development of an infection prevention and control manual for health care facilities: a scoping review

 Reviews key elements that should be included in an IPC manual for healthcare facilities based on the WHO's core components of IPC.

American Journal of Infection Control | Review article | 7 September 2023 | Online link

Reduction of airborne and surface-borne bacteria in a medical center burn intensive care unit using active, upper-room, germicidal ultraviolet (GUV) disinfection

- Implementation of germicidal ultraviolet (GUV) devices leads to significant reductions in air and surface contamination.
- Recommends multilayer approach to IPC that integrates GUV to reduce bioburden, especially in high-risk areas.

Infection Control & Hospital Epidemiology | Research article | 25 October 2023 | Online link

Longitudinal genomic surveillance of carriage and transmission of *Clostridioides* difficile in an intensive care unit

- Admission and prospective culture-based screening, with whole genome sequencing (WGS) finds high burden of carriage of *C. difficile* with low transmission among ICU patients.
- Current IPC procedures appear effective in limiting cross-transmission of *C. difficile* but further research needed to develop strategies to limit the infection.

Nature Medicine | Research article | 18 September 2023 | Online link

Infection prevention control strategies of NDM-producing Klebsiella pneumoniae

- Describes hospital IPC procedures for patients with NDM-producing Klebsiella pneumoniae colonization in Italy.
- Recommends screening of patients travelling back from countries with high prevalence of multi-drug resistant organisms, along with IPC measures.

Healthcare | Case report | 20 September 2023 | Online link

Human Salmonellosis outbreak linked to *Salmonella typhimurium* epidemic in wild songbirds, United States, 2020-2021

- Salmonella outbreak in humans across multiple states linked to spillover from songbirds.
- Recommends routine cleaning and disinfection of birdfeeders, avoiding contact with wild birds and raising public awareness of the potential to acquire Salmonella infection from wild animals such as songbirds.

Emerging Infectious Diseases | Research article | 18 October 2023 | Online link

SARS-CoV-2 reinfection risk in persons with HIV, Chicago, Illinois, USA, 2020–2022

 Population analysis using matched health records demonstrates higher rates of SARS-CoV-2 reinfection among people living with HIV compared to people without HIV.

Emerging Infectious Diseases | Research article | 18 October 2023 | Online link

Naturally acquired transmission-blocking immunity against different strains of *Plasmodium vivax* in a malaria endemic area in Thailand

- Uses the direct membrane-feeding assay to investigate transmission-blocking immunity and the role of antibodies with blood samples of patients with *P. vivax*. in the endemic areas.
- Findings hold important implications for malaria vaccine development.

The Journal of Infectious Diseases | Research article | 7 November 2023 | Online link

Three clusters of *Salmonella enteritidis* **ST11** infections linked to chicken meat and chicken meat products

- Using genomic analysis techniques and patient interviews, food safety authorities across multiple European countries identified the probable cause of Salmonella outbreak.
- Root cause analysis is recommended to ensure implementation of appropriate infection control measures.

ECDC | Risk assessment | 26 October 2023 | Online link

Guidelines

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

- Sixth version of updated IPC guidelines recommends integrating IPC into routine care.
- Includes IPC recommendations in healthcare settings and the community.

WHO | Guidelines | 7 October 2023 | Online link

Prevention and control of microbiological hazards in fresh fruits and vegetables

- Report based on Joint FAO-WHO expert meetings on microbiological risk assessment on prevention and control
 of microbiological hazards in fresh fruits and vegetables.
- Emphasizes identification and evaluation of interventions to reduce the risk of foodborne illnesses.

FAO and WHO | Report | 10 October 2023 | Online link

Prevention and control of infectious diseases among people who inject drugs - 2023 update

 Updates 2011 guidelines, integrating recent evidence and advancements in harm reduction and infectious disease prevention and control, with a focus on hepatitis B, hepatitis C, HIV & tuberculosis.

ECDC | Guidelines | 7 November 2023 | Online link

Building an effective infection prevention and control system in Japan: a historical review

- Provides a historical review of how Japan established its IPC system, including what helped and hindered the process, and how the IPC system became well-rooted in the health system.
- Highlights the importance of identifying appropriate steps to respond to the demands of the healthcare system
 and to understand need for human resource development in the short term, stakeholder collaboration in the
 medium term, and system infrastructure development in the long term.

WHO | Publication | 30 November 2023 | Online link

Training / IEC resources

Sanitation and hygiene: training for health care providers

- WHO training package on WASH to improve children's health and the environment.
- Internationally harmonized modules on key issues for paediatricians and paediatric nurses, family and public health professionals.

WHO | Training material | 5 October 2023 | Online link

Water, sanitation and hygiene for the prevention and care of neglected tropical diseases

- This free, online course of approximately 2 hours aims to examine the role of WASH in preventing, managing and caring for neglected tropical diseases.
- Targets governments, development agencies and civil society organizations.

OpenWHO | Online course | October 2023 | Online link

Quotable quote

Implement and prioritise tackling AMR following the One Health approach, including through R&D, infection prevention and control (IPC) ...

- G20 New Delhi Leaders' Declaration, Sep 2023

^{*} Sameeksha is a Hindi word, meaning review. This compilation of recent IPC resources includes a brief summary of relevant publications from scientific journals, guidelines, and training/IEC resources. 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 does not imply an endorsement by WHO.