



INFECTION PREVENTION AND CONTROL (IPC) | Volume 14 | 29 November 2024

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Highlights

- Global report on infection prevention and control 2024
- WHO minimum requirements for IPC in 106 countries
- Research priorities to strengthen environmental cleaning in healthcare facilities
- WHO research agenda on the role of institutional safety climate for hand hygiene
- Practical handbook on surveillance of healthcare associated infections at national and facility levels
- WASH for Health Facility Improvement Tool (WASH FIT)

Publications from scientific journals

Global report on infection prevention and control 2024

- Updated global analysis of implementation of IPC programmes at the national and health care facility levels including the impact of healthcare associated infections (HAIs) and antimicrobial resistance (AMR).
- While global progress on IPC has been slow, there has been a rise in the proportion of countries implementing national IPC policies and a notably increase in IPC capacity in WHO South-East Asia Region.

WHO | Global report | 29 November 2024 | Online link

Evaluating national infection prevention and control minimum requirements: evidence from global cross-sectional surveys, 2017–22

- Finds variability across 106 countries in meeting WHO minimum requirements for IPC, with only four countries meeting all minimum requirements of IPC. The highest scoring IPC core component was multimodal improvement strategies and the lowest was IPC education and training.
- Calls for heightened investment and policy to addressing HAIs and IPC programs at all levels.

Lancet Global Health | Articles | October 2024 | Online link

Research priorities to strengthen environmental cleaning in healthcare facilities: the CLEAN Group Consensus

- Summarises the CLEAN recommendations in environmental cleaning, and estimates that 20% of HAIs may have an environmental contribution.
- Calls on funders, policymakers and researchers to advance cleanliness in healthcare facilities.

Antimicrobial Resistance & Infection Control | Comment | 27 September 2024 | Online link

WHO research agenda on the role of the institutional safety climate for hand hygiene improvement: a Delphi consensus-building study

- Investigates how to improve hand hygiene in the context of institutional safety climate, which refers to environment and perceptions of patient safety issues in health facilities.
- Builds a global research agenda for researchers, clinicians, policymakers and funders.

BMJ Quality & Safety | Original research | 4 October 2024 | Online link

Expanding the use of mathematical modeling in healthcare epidemiology and infection prevention and control

- Compares mathematical modelling and conventional healthcare epidemiology for IPC.
- Identifies priority areas for modelling, such as evaluating the impact of IPC interventions.

Infection Control & Hospital Epidemiology | Review | 4 September 2024 | Online link

Harnessing computational tools of the digital era for enhanced infection control

- Shares an overview of artificial intelligence, machine learning and big data for IPC.
- Identifies key challenges to digital tools, such as lack of generalizability in clinical settings.

BMC Medical Informatics and Decision Making | Editorial | 12 September 2024 | Online link

Integration of IPC/WASH critical conditions into quality of care and quality improvement tools and processes: Bangladesh case study

- Case study finds inadequate human resources and environmental hygiene infrastructure are key barriers to adhering to multiple IPC and WASH guidelines.
- Recommends standardizing guidelines and tools into a single toolkit.

Antimicrobial Resistance & Infection Control | Brief report | 11 September 2024 | Online link

Hand and environmental hygiene: respective roles for MRSA, multi-resistant gram negatives, *Clostridioides difficile*, and *Candida* spp.

- Reviews roles of hand hygiene and environmental disinfection on prevention of infections caused by multidrug resistant organisms (MDROs).
- Recommends use of IPC bundles to comprehensively address MDROs.

Antimicrobial Resistance & Infection Control | Review | 27 September 2024 | Online link

Occurrence of chlorine-resistant *Pseudomonas aeruginosa* in hospital water systems: threat of waterborne infections for patients

- Finds hospital water systems as potential hotspots for β-lactam resistant P. aeruginosa with risks for patients.
- Calls for advanced IPC measures and targeted disinfection for hospital water systems.

Antimicrobial Resistance & Infection Control | Research | 27 September 2024 | Online link

Effectiveness of water system chemical disinfection against *Pseudomonas aeruginosa* infections, despite a not-so-obvious connection

- Study of ICU finds decrease in *P. aeruginosa* after implementing a new maintenance system with mechanical and chemical methods for treating water system.
- Recommends surveillance of hospital water systems, which play a role in pathogen transmission to patients.

American Journal of Infection Control | Major article | 16 September 2024 | Online link

To see, or not to see... pathogens in virtual reality hand hygiene training

- Assesses ViRTUE, a virtual reality (VR) hand hygiene trainer that enables visualization of pathogens in virtual patients in real time, among 173 medical students.
- Finds negative impact on user training/performance and recommends pilot testing and compliance assessment.

Infection Control & Hospital Epidemiology | Original article | 15 October 2024 | Online link

Guidelines

Surveillance of health care-associated infections at national and facility levels

- Provides an overview of the objectives, concepts, principles, methods and best practices of HAI surveillance.
- Includes new HAI surveillance definitions more suitable for use in low-resource settings.

WHO | Practical handbook | 16 October 2024 | Online link

Recommended research priorities for environmental cleaning in health care facilities

- Recommendations of CLEAN, a group of global experts in IPC and WASH in resource-limited settings with indirect representation of cleaning staff.
- Aims to improve best practices in surface and non-critical equipment cleaning in healthcare facilities.

CLEAN | Briefing paper | April 2023 | Online link

Manual for plague surveillance, diagnosis, prevention and control

- Updates guidelines from 2021, including updated protocols for PPE when handling plague infected corpses.
- Targets decision-makers, emergency preparedness and response teams and HCWs working in plague-endemic areas.

WHO | Manual | 25 September 2024 | Online link

How to sample surfaces in health-care settings for Middle East respiratory syndrome coronavirus protocol, tools and implementation guidance

- Guidance on how to investigate environmental surface contamination of MERS in health facilities, including implementation tips.
- Applies to both surface contamination in facilities treating a patient with MERS and surfaces that may lead to onward transmission.

WHO | Technical document | 4 October 2024 | Online link

Food safety aspects of cell-based food: report of the publication launch webinar, 7 April 2023

- Based on a webinar, this document provides an overview of cell-based food, which involves culturing animal cells in a controlled environment to produce food products.
- Describes how countries can set up regulatory frameworks to assess food safety.

FAO and WHO | Technical document | 30 September 2024 | Online link

Implications of the Marburg virus disease outbreak in Rwanda for the EU/EEA, 2024

Assesses risks and provides guidance on IPC measures for travelers and HCW workers.

ECDC | Risk assessment | 10 October 2024 | Online link

Training / IEC resources

Water and Sanitation for Health Facility Improvement Tool (WASH FIT) for improved quality of care

- This free comprehensive course of approximately three to four hours contains 13 modules to describe the WASH FIT tool and how it can strengthen health programmes.
- Guides learners to implement the tool in their own country context.

OpenWHO | Course | 2024 | Online link

Infection prevention and control measures in health-care settings for Ebola or Marburg disease outbreaks

- This free online course of approximately two hours aims to provide an overview of human-to-human transmission of Ebola and Marburg viruses.
- Lists the PPE requirements for HCWs and describes IPC measures for health facilities.

OpenWHO | Course | 2024 | Online link

Quotable quote

Health care-associated infections (HAIs) are often difficult to treat, are the major driver of antimicrobial resistance (AMR) and cause premature deaths and disability.

Dr Tedros Adhanom Ghebreyesus
Director General WHO

^{*} 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, along with a link to the online resource. The primary target audience includes clinical and public health IPC professionals from both public and private sector in India. Kindly note: inclusion of publications/resources in this review does not imply an endorsement by WHO.