



INFECTION PREVENTION AND CONTROL (IPC) | Volume 18 | April 2025

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Highlights

- Risk factors for health care-associated bloodstream infections in NICUs
- Spreading of hand hygiene change package across an acute hospital
- Prevalence of fungi and their antifungal and disinfectant resistance in hospital environments
- Review of HAIs: the role of microbial and environmental factors in infection control
- Water and sanitation technologies for health-care facilities
- IPC pre-service education and training curriculum

Publications from scientific journals

Risk factors for health care-associated bloodstream infections in NICUs

- Prospective cohort study on epidemiology of neonatal healthcare-associated BSIs in 3 neonatal intensive care units in Pune (India) finds that use of indwelling devices and prior antibiotic exposure are associated with increased risk of health care—associated BSIs.
- Recommends BSI prevention through improved compliance with IPC practices, with a focus on mitigating the risks associated the devices.

JAMA | Original Investigation | 25 March 2025 | Online link

A scoping review of published reports of the infection prevention and control assessment framework: a comparison to the findings of the global report on infection prevention and control

- Reviews the use of IPCAF tool across different settings and compares it with WHO's Global Report on IPC.
- Emphasizes need for tailored interventions to enhance IPC practices, particularly in resource-limited settings.

International Journal of Infection Control | Review Article | 27 March 2025 | Online link

Spreading of hand hygiene change package across an acute hospital

- Demonstrates implementation and outcome of hand hygiene compliance strategies in a tertiary care hospital.
- Highlights significant improvement recorded in the hospital-wide hand hygiene compliance rate during pilot,
 scaleup and sustenance phase by 66%, 73% and 82% respectively.

BMJ | Research Article | 5 April 2025 | Online link

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Religious influences on infection prevention and control practices in healthcare settings: a scoping review

- Reviews religious and cultural factors that may act as barriers and enablers of IPC interventions in healthcare settings.
- Highlights the complex interplay between religion and IPC practices and recommends need for culturally sensitive IPC strategies.

Infection, Disease & Health | Review Article | 12 March 2025 | Online link

Prevalence of fungi and their antifungal and disinfectant resistance in hospital environments: insights into combating nosocomial mycoses

- Explores the potential role of the hospital environment in the spread of invasive fungal infections (IFDs).
- Hospital environment, particularly exhaust vents, may act as a significant reservoir for causative agents of invasive fungal diseases, highlighting the importance of environmental surveillance to prevent IFDs.

Antimicrobial Resistance and Infection Control | Research article | 23 April 2025 | Online link

Adverse effects of the long-term use of an N95 respirator in healthcare workers

- Analyses the effect of the use of surgical and N95 respirators for long hours on the performance of healthcare workers.
- Finds that up to 4 hours continuous use of N95 respirator did not affect work efficiency, although longer use may cause discomfort and should be avoided.

Juntendo Medical Journal | Original Article | 18 April 2025 | Online link

Educational needs for infection prevention and control during outbreaks: A qualitative study with health workers in Sri Lanka

- Qualitative descriptive study captures perceptions of HCWs towards IPC guidelines and training needs with the aim to create role specific IPC guidelines.
- Recommends a tailored approach to IPC education based on identified overall and key specific needs, such as training of support staff.

Infection, Disease & Health | Research | 29 March 2025 | Online link

Associations between hospital structure, infection control and incidence of hospital-acquired viral respiratory infections: a 10-year surveillance study

- Retrospective cohort study in a French teaching hospital found high incidence of community acquired VRIs, as
 well as high percentage of double occupancy rooms independently increased the risk of hospital-acquired VRIs
- Also recommends use of hospital laboratory data as a tool to implement interventions i.e., universal masking, systematic screening at admission, etc. during the winter epidemic seasons.

Antimicrobial Resistance & Infection Control | Research | 11 April 2025 | Online link

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Healthcare-associated infections: the role of microbial and environmental factors in infection control — a narrative review

- Reviews the prevalence, risk factors, advanced diagnostic approaches, including data-driven methodologies like artificial intelligence and machine learning approaches in combating HAIs.
- Highlights that combination of molecular diagnostic techniques, microbiome-based solutions, and artificial intelligence-powered systems has significantly improved management of HAIs.

Infectious Diseases & Therapy | Review | 10 April 2025 | Online link

Economic evaluation of enhanced cleaning and disinfection of shared medical equipment

- Investigates the cost efficacy of environmental cleaning and disinfection of shared medical equipment.
- Findings suggest that enhanced cleaning and disinfection of shared medical equipment could save money for hospitals while improving patient safety by preventing HAIs.

JAMA | Original Investigation | 11 April 2025 | Online link

Deployment of real-time particle detection monitoring system in operating theatres for airborne contamination assessments

- Evaluates monitoring of airborne contamination in order to improve infection control in surgical procedures involving the insertion of orthopaedic implants.
- Real-time monitoring of air particles during implant surgeries can help identify deviations in airborne particle levels thereby enhancing the surgical environment and reducing the risk of surgical site infections.

Bone & Joint | Research Article | 24 April 2025 | Online link

Guidelines

Water and sanitation technologies for health-care facilities: a literature review of current and emerging water and sanitation technologies for health-care facilities

- Describes a wide range of water supply treatment and wastewater and faecal sludge management technologies for healthcare facilities, including existing and emerging technologies.
- A reference document for stakeholders and professionals to strengthen their understanding of water and sanitation technologies for healthcare facilities.

WHO | Guidance (normative) | 8 May 2025 | Online link

Steps to achieve universal access to safely managed sanitation

 Provides stepwise guidance to support country-level implementation of sanitation initiatives aimed at promoting access to climate-resilient safely managed sanitation services.

WHO and UNICEF | Technical Document | 5 May 2025 | Online link

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Infection prevention and control pre-service education and training curriculum: foundational content for all health and care workers

- Outlines the IPC curriculum for pre-service students in health programmes with essential knowledge, skills and behavioural competencies.
- It may be used to develop learning resources and oversee trainings of pre-service health science students, such as nursing, medicine, midwifery, dentistry, public health and allied healthcare professionals.

WHO | Handbook | 4 May 2025 | Online link

Strengthening hand hygiene practices in community settings and health-care facilities in the context of mpox

 A call to action for countries to prioritize hand hygiene across communities and healthcare facilities, to protect public health and break the chain of mpox transmission.

WHO | Advocacy brief | 1 May 2025 | Online link

Compendium of best practices and case studies in quality of care, patient safety, infection prevention and control in lower- and middle-income countries

 Compendium of best practices and case studies providing benchmarks to promote continuous improvement and innovation, disseminate knowledge, facilitate learning, and drive improvement.

WHO | Technical document | 21 March 2025 | Online link

Infection prevention and control and water, sanitation and hygiene in health facilities during Ebola or Marburg disease outbreaks

- IPC and WASH rapid assessment tool helps to assess health facilities during Ebola disease or Marburg disease outbreaks.
- It describes parameters, data collection and follow up action based on the assessment.

WHO | Rapid Assessment Tool & User Guide | 19 March 2025 | Online link

Infection prevention and control and water sanitation and hygiene in health facilities during mpox disease outbreaks: rapid assessment tool, user guide

IPC and WASH rapid assessment tool helps assess health facilities within mpox-affected areas.

WHO | Publication | 14 April 2025 | Online link

Protocol for the surveillance of surgical site infections and prevention indicators in European hospitals

 Reference guide on standardization of definitions, data collection and reporting procedures for hospitals on surveillance of surgical site infections.

ECDC | Protocol | 25 March 2025 | Online link

Protocol for the surveillance of healthcare-associated infections and prevention indicators in European intensive care units

Protocols for ICUs participating in surveillance of healthcare-associated infections (HAIs).

ECDC | Protocol | 18 March 2025 | Online link

Training / IEC resources

General instructions for surface cleaning and disinfecting in patient care areas

Information sheet with key steps for effective surface cleaning and disinfection in healthcare settings, ensuring
a safe environment for patients and staff.

WHO | Publication | 6 March 2025 | Online link

WHO Academy Charter for the meaningful engagement of patients and communities

 The Charter defines engagement of patients and communities to deliver patient and community-centred learning programmes, build patient and community-centred competencies.

WHO | Standards | 28 April 2025 | Online link

Ventilation in healthcare settings factsheet

Outlines basics of good ventilation in healthcare settings.

CDC | Factsheet | 26 March 2025 | Online link

Respiratory viruses factsheet

Summarize actions to be taken by HCWs to stop the spread of respiratory viruses

CDC | Factsheet | 30 January 2025 | Online link

Quotable quote

There is strong evidence that a large proportion of infections could be prevented with IPC measures and basic WASH services, with a high return on investment.

Dr Tedros Adhanom Ghebreyesus, WHO-DG
 (Global report on infection prevention and control, 2024)

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^{*} 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.