



INFECTION PREVENTION AND CONTROL (IPC) | Volume 12 | 27 August 2024

#### **IPC Sameeksha\***

#### **Highlights**

- Need for precise terminology in field of disinfection
- IPC research priorities for Ebola and Marburg disease outbreaks
- Modelling cholera disease dynamics with delay differential equation
- Compendium of WHO and other UN guidance in health and environment
- Ebola and Marburg disease outbreaks: IPC research priorities in health care settings
- WHO global research priorities for sexually transmitted infections
- Infection prevention and control workbook for eLearning modules

### **Publications from scientific journals**

### Resistance or tolerance? Highlighting the need for precise terminology in the field of disinfection

- Argues that disinfectant research requires accurate definitions of terms (e.g. tolerance, resistance, adaptation) not simply transferred from antibiotic research.
- Compares disinfectants and antibiotics in clinical contexts and describes modes of actions of disinfectants.

Journal of Hospital Infection | Review | 21 May 2024 | Online link

### Cholera disease dynamics with vaccination control using delay differential equation

- Mathematical model introduces two delays (i) latent period of disease and (ii) adding disinfectant to water,
  while considering the needs of vulnerable populations.
- Underscores treating aquatic environment for cholera eradication, especially among susceptible populations.

Scientific Reports | Article | 29 July 2024 | Online link

# Comparing automated surveillance systems for detection of pathogen-related clusters in healthcare settings

- Retrospective cohort study compares 3 methods of cluster detection, WHONET SaTScan, CLuster AleRt System (CLAR) and a percentile-based system, using case studies.
- Methods were comparable for endemic pathogens, but WHONET and CLAR had fewer results for sporadic pathogens.

Antimicrobial Resistance & Infection Control | Research | 26 June 2024 | Online link

#### WHO global research priorities for sexually transmitted infections

- Provides details of methodology and results of the WHO's research prioritization process for sexually transmitted infections (STIs).
- Advocates researchers focus on WHO's agenda to advance progress on STIs globally.

Lancet Global Health | Health policy | 20 July 2024 | Online link

# Medical device-associated infections caused by biofilm-forming microbial pathogens and controlling strategies

- Describes how biofilms form on medical devices and contribute to healthcare acquired infections (HAIs).
- Reviews smart antiadhesive coatings for medical devices that can help manage HAIs.

Antibiotics | Review | 4 July 2024 | Online link

## Innovative teaching in infection prevention and control and infectious diseases education: testing and investigation of student perceptions

- Evaluates medical students views on 3 methods of teaching for IPC, games-based learning, peer teaching and misinformation detection.
- Methods were generally viewed positively by students, although the value of peer teaching depends on the knowledge and skills of peers.

Infection | Research | 9 July 2024 | Online link

# A historical study on the scientific attribution of biosafety risk assessment in real cases of laboratory-acquired infections

- Reviews laboratory-acquired infections (LAIs) which arose in the context of biological experiments.
- Presents case studies of LAIs and the evolution of biosafety standards and assessments.

**Laboratories** | Review | 30 June 2024 | Online link

### Knowledge and awareness about biomedical waste segregation and disposal among medical and paramedical students at a tertiary care hospital in Chennai

- Cross-sectional study finds gaps in knowledge related to biomedical waste segregation and disposal.
- Calls for comprehensive biomedical waste management education into medical curriculum that includes both technical aspects and broader health implications.

*Indian Journal of Community and Family Medicine* | Original article | 26 June 2024 | Online link

# Measuring the efficacy of standard and novel disinfection methods on frequently used physical therapy equipment: a 2-phase prospective randomized controlled trial

- Finds high bioburden on physical therapy equipment following standardized disinfectant practices, likely due to material and shape of equipment.
- Disinfectant cabinet using Ultraviolet C and 6% nebulized hydrogen led to lower bioburden.

Infection Control & Hospital Epidemiology | Original article | 26 July 2024 | Online link

#### **Guidelines**

# **Ebola and Marburg disease outbreaks: infection prevention and control research priorities in health care settings**

- Addresses research questions related to IPC in the context of Ebola and Marburg disease outbreaks.
- Identifies short- to medium-term priority research questions for IPC in health care settings based on the gaps identified during the guideline development process.

WHO | Publication | 27 August 2024 | Online link

#### Compendium of WHO and other UN guidance in health and environment, 2024 update

- Database of relevant guidelines that includes new updates on One Health, waste management and healthcare facilities.
- Aims to support policymakers and key stakeholders in countries.

WHO | Guidance | 3 July 2024 | Online link

# Global Infection Prevention and Control Network (GIPCN) Infection Prevention and Control in Public Health Emergencies Working Group (IPC PHE WG) progress report 2022 – 2024

- Presents main activities and workplan of network.
- Identifies ability to convene experts quickly during an emergency is a key challenge.

WHO | Meeting report | 15 July 2024 | Online link

# Recommended package of enabling and health interventions for HIV, viral hepatitis and STI prevention, diagnosis, treatment and care for trans and gender diverse people

- Identifies package of interventions specific for trans and gender diverse people who are particularly vulnerable to HIV and STIs.
- Recommends 3 categories of interventions (i) enabling interventions, (ii) health interventions that directly impacts HIV and STIs and (iii) broader health interventions.

WHO | Policy brief | 1 July 2024 | Online link

### WHO global research priorities for sexually transmitted infections

- Outlines 5 phases of STI research prioritisation process for diagnosing, preventing, managing and epidemiology of STIs.
- Summarizes the research priorities and provides a call to action for focus, investment and innovation to reduce the global toll of STIs.
- Prioritizes 40 research areas to inform STI policies and programmes by 2030 across four key domains: diagnosis, prevention, management and epidemiology.

WHO | Brochure and flyer | 21July 2024 | Online link

#### **Training / IEC resources**

#### Infection prevention and control workbook 2024

- Workbook accompanies eLearning modules covering advanced IPC education.
- Contains 10 helpful modules, including microbiology of pathogens, preventing environmental exposures and reprocessing reusable medical devices.

Australian Commission on Safety and Quality in Health Care | Workbook | June 2024 | Online link

#### **Quotable quote**

The WHO global STI research prioritization process identified 40 important STI research needs to address existing gaps in STI prevention, care and control for the greatest public health impact.

- WHO global research priorities for sexually transmitted infections, 2024

<sup>\*</sup>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.