MINIMUM REQUIREMENTS for infection prevention and control programmes



The starting point for implementing the World Health Organization core components of infection prevention and control programmes at the national and health care facility level

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ABBREVIATIONS AND ACRONYMS

ABHR	alcohol-based handrub
AMR	antimicrobial resistance
CDC	Centers for Disease Control and Prevention (USA)
СР	carbapenemase-producing
CPE	carbapenemase-producing Enterobacteriaceae
EQAS	external quality assurance system
HAI	health care-associated infection
HCW	health care worker
IPC	infection prevention and control
IPCAF	infection prevention and control assessment framework
IPCAT	infection prevention and control assessment tool
PPE	personal protective equipment
SOP	standard operating protocols
UNICEF	United Nations Children's Fund
USA	United States of America
WASH	water, sanitation and hygiene
WASH FIT	water, sanitation and hygiene facility improvement tool
WHO	World Health Organization

GLOSSARY OF KEY TERMS AND DEFINITIONS

Alcohol-based handrub: An alcohol-based preparation designed for application to the hands to inactivate microorganisms and/or temporarily suppress their growth. Such preparations may contain one or more types of alcohol and other active ingredients with excipients and humectants.

Source: WHO Guidelines on hand hygiene in health care. 2009 (https://www.who.int/gpsc/5may/tools/9789241597906/en/, accessed 29 October 2019).

Antimicrobial stewardship: A coherent set of actions which promote the responsible use of antimicrobials. This definition can be applied to actions at the individual level, as well as the national and global level, and across human health, animal health and the environment.

Source: Dyar OJ, Huttner B, Schouten J, Pulcini C. What is antimicrobial stewardship? Clin Microbiol Infect. 2017;23(11):793–8.

OR

The primary goal of antimicrobial stewardship is to optimize clinical outcomes while minimizing unintended consequences of antimicrobial use, including toxicity, the selection of pathogenic organisms (such as *Clostridium difficile*) and the emergence of resistance.

Source: Dellit TH, Owens RC, McGowan JE Jr, Gerding DN, Weinstein RA, Burke JP, et al. Infectious Diseases Society of America and the Society for Healthcare Epidemiology of America guidelines for developing an institutional program to enhance antimicrobial stewardship. Clin Infect Dis. 2007;44(2):159–77.

Cleaners (also known as environmental cleaning staff or

environmental services' technicians): individuals responsible for performing environmental cleaning in health care facilities who play a key role in maintaining a clean and/or hygienic environment that facilitates practices related to the prevention and control of HAI. **Cohorting:** Grouping of patients who are colonized or infected with the same resistant organism with the aim to confine their care to one area and prevent contact with other susceptible patients (for example, all patients infected or colonized with a carbapenem-resistant Enterobacteriaceae in a specific cohort and all patients colonized with methicillin-resistant *Staphylococcus aureus* in a different cohort). Cohorts are created based on clinical diagnosis, microbiological confirmation with available epidemiology, and the mode of transmission of the infectious agent.

Cohorting is reserved for situations where there are insufficient single rooms or where the cohorting of patients colonized or infected with the same pathogen is a more efficient use of hospital rooms and resources. Dedicated equipment, toilets and staff should be used for patients within the cohorted area for the required time duration.

Sources: Siegel JD, Rhinehart E, Jackson M, Chiarello L, and the Healthcare Infection Control Practices Advisory Committee. 2007 Guideline for isolation precautions: preventing transmission of infectious agents in healthcare settings (<u>http:// www.cdc.gov/ncidod/dhqp/pdf/isolation2007.pdf</u>, accessed 29 October 2019).

WHO. Guidelines for the prevention and control of carbapenemresistant Enterobacteriaceae, *Acinetobacter baumannii* and *Pseudomonas aeruginosa* in health care facilities. 2017 (https:// www.who.int/infection-prevention/publications/guidelines-cre/ en/, accessed 29 October 2019).

Carbapenem resistance (including carbapenemase-producing

[CP]): Carbapenem resistance among Enterobacteriaceae, *Acinetobacter baumannii* and *Pseudomonas aeruginosa* may be due to a number of mechanisms. Some strains may be innately resistant to carbapenems, while others contain mobile genetic elements (for example, plasmids, transposons) that result in the production of carbapenemase enzymes (carbapenemases), which break down most beta-lactam antibiotics, including carbapenems. Frequently, CP genes are co-located with other resistance genes, which can result in cross-resistance to many other antibiotic drug classes (1-3). Thus, while carbapenemresistant strains of these pathogens are frequently CP (CP-Enterobacteriaceae [CPE], CP-A. *baumannii*, CP-P. *aeruginosa*), they may have other carbapenem resistance mechanisms that make them equally difficult to treat and manage clinically. Thus, the term "carbapenem-resistant Enterobacteriaceae" includes all strains that are carbapenem-resistant, including CPE. For this reason, infection prevention and control actions should focus on all strains of carbapenem-resistant Enterobacteriaceae, *A. baumannii* and *P. aeruginosa*, regardless of their resistance mechanism. Adequate infection prevention and control measures are essential in both outbreak and endemic settings. Source: WHO. Guidelines for the prevention and control of carbapenem-resistant Enterobacteriaceae, *Acinetobacter baumannii* and *Pseudomonas aeruginosa* in health care facilities. 2017 (https://www.who.int/infection-prevention/publications/guidelines-cre/en/, accessed 29 October 2019).

Decontamination of medical devices: Removes soil and pathogenic microorganisms from objects so they are safe to handle, subject to further processing, use or discard (see also **Reprocessing**).

Source: United States Centers for Disease Control and Prevention. Guidelines for disinfection and sterilization in healthcare facilities. 2008 (<u>https://www.cdc.gov/</u> <u>infectioncontrol/pdf/guidelines/disinfection-guidelines-H.pdf</u>, accessed 29 October 2019).

Hand hygiene: A general term referring to any action of hand cleansing, that is, the action of performing hand hygiene for the purpose of physically or mechanically removing dirt, organic material, and/or microorganisms.

Source: WHO guidelines on hand hygiene in health care. 2009 (https://www.who.int/gpsc/5may/tools/9789241597906/en/, accessed 29 October 2019).

HEALTH CARE FACILITIES' CLASSIFICATION

PRIMARY, SECONDARY AND TERTIARY HOSPITALS

Primary-level hospital: Few specialties—mainly internal medicine, obstetrics and gynaecology, paediatrics and general surgery, or just general practice; limited laboratory services available for general, but not specialized, pathological analysis.

Secondary-level hospital: Highly differentiated by its function with 5 to 10 clinical specialties; size ranges from 200 to 800 beds; often referred to as a *provincial or district hospital*.

Tertiary-level hospital: Highly specialized staff and technical equipment, for example, cardiology, intensive care unit and specialized imaging units; clinical services highly differentiated by function; may have teaching activities; size ranges from 300 to 1500 beds; often referred to as a *teaching or university or regional hospital*.

Source: WHO. Disease control priorities in developing countries. 2008 (https://www.who.int/management/facility/ ReferralDefinitions.pdf, accessed 29 October 2019).

Improved sanitation facilities: Toilet facilities that hygienically separate human excreta from human contact. Examples include flush/pour flush to a piped sewer system, septic tank or pit latrine,

ventilated pit latrine, pit latrine with slab or composting toilet. Source: WHO/UNICEF. Core questions and indicators for monitoring WASH in health care facilities in the Sustainable Development Goals. 2018 (<u>https://apps.who.int/iris/bitstream/ handle/10665/275783/9789241514545-eng.pdf?ua=1</u>, accessed 29 October 2019).

Improved water source: Defined by the WHO/UNICEF Fund Joint Monitoring Programme as a water source that by its

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