1. Record Nr. UNINA9910903796903321

Autore	Kampf Gunter
Titolo	Antiseptic Stewardship : Biocide Resistance and Clinical Implications / / by Günter Kampf
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2024
ISBN	3-031-66074-9
Edizione	[2nd ed. 2024.]
Descrizione fisica	1 online resource (1056 pages)
Disciplina	614.48
Soggetti	Medical microbiology Public health Medicine - Research Biology - Research Bacteria Environmental health Medical Microbiology Public Health Biomedical Research Environmental Health
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction -- Definitions -- Biofilm and Biocides -- Ethanol -- Propan-1-ol -- Propan-2-ol -- Peracetic Acid -- Hydrogen Peroxide -- Glutaraldehyde -- Sodium Hypochlorite -- Triclosan -- Benzalkonium Chloride -- Didecyldimethylammonium Chloride -- Polihexanide -- Chlorhexidine Digluconate -- Octenidine Dihydrochloride -- Silver -- Povidone Iodine -- Antiseptic Stewardship for Alcohol-based Hand Rubs -- Antiseptic Stewardship for Skin Antiseptics -- Antiseptic Stewardship for Surface Disinfectants -- Antiseptic Stewardship for Instrument Disinfectants -- Antiseptic Stewardship for Antimicrobial Soaps -- Antiseptic Stewardship for Wound and Mucosal Antiseptics.
Sommario/riassunto	This updated and expanded second edition of Antiseptic Stewardship serves as a comprehensive reference guide to common biocidal active substances and antiseptic agents, examining their antimicrobial

efficacy and potential to induce cell tolerance, including cross-tolerance to other biocidal agents, as well as cross-resistance to antibiotics. In addition, the book discusses the appropriate and targeted use of biocidal active substances by balancing their expected health benefits against the likelihood of clinically relevant resistance, including misuse and overuse of some products during the COVID-19 pandemic. This guide, which focuses on human, veterinary and household products, helps readers make informed decisions about disinfectants and antiseptic products based on their composition. Various biocidal active substances and antiseptic agents are used for disinfection and antisepsis in healthcare, veterinary medicine, animal production and household products. However, not all of them provide significant health benefits, especially for some products used in human medicine. Antimicrobial soaps, surface disinfectants, instrument disinfectants and wound antiseptics may contain one or more biocidal active ingredients with comparable antimicrobial efficacy, but with large differences in their potential for microbial adaptation and tolerance. Increased bacterial tolerance has been described for several biocidal active substances and antiseptics, sometimes including cross-resistance to antibiotics. The book is therefore intended to help reduce unnecessary selection pressure on emerging pathogens, including by describing non-biocidal alternatives for specific antimicrobial applications, with the aim of retaining the powerful biocidal agents and antiseptics for those applications where there is a clear health benefit (e.g. reduction of healthcare-associated infections). The book addresses healthcare, industrial and veterinary professionals as well as educated laypersons interested in efficient and controlled disinfection strategies.