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Sommario/riassunto	To prevent bacterial adherence, invasion and infection, antimicrobials such as antibiotics are being used and vastly researched nowdays. Several factors such as natural selection, mutations in genes, the presence of efflux pumps, impermeability of the cell wall, structural changes in enzymes and receptors, biofilm formation, and quorum sensing cause microorganisms to develop resistance against antimicrobials. Isolates that synthesize extended spectrum--lactamases (ESBL), induced -lactamases (IBL), carbapenamases, metallo--lactamases (MBLs), and New Delhi metallo--lactamases (NDM) have emerged. Determining virulence factors such as biofilms and the level of antimicrobial activities of antimicrobial agents alone and in combination with appropriate doses against microorganisms is very important for the diagnosis, inhibition, and prevention of microbial infection. The goal of this book is to provide information on all these topics.