

Cambridge University Press 0521481317 - Modeling Disease Transmission and its Prevention by Disinfection Edited by Christon J. Hurst Table of Contents More information

Contents

	List of contributors	xi
	Preface	xv
Part 1	Health and disease	1
1	The transmission and prevention of infectious disease Christon J. Hurst and Patricia A. Murphy	3
2	Strategies for modeling microbial colonization of the human body in health and disease Robin A. Ross and Mei-Ling T. Lee	55
Part 2	Preventing disease transmission by water and food	73
3	The role of pathogen monitoring in microbial risk assessment Joan B. Rose, John T. Lisle and Charles N. Haas	75
4	Estimating the risk of acquiring infectious disease from ingestion of water Christon J. Hurst, Robert M. Clark and Stig E. Regli	99
5	Bacterial resistance to potable water disinfectants Mic H. Stewart and Betty H. Olson	140
6	Preventing foodborne infectious disease Christon J. Hurst	193

ix



Cambridge University Press 0521481317 - Modeling Disease Transmission and its Prevention by Disinfection Edited by Christon J. Hurst Table of Contents More information

x Contents

Part 3	Preventing disease transmission by aerosols, surfaces and medical devices	213
7	Disinfection of microbial aerosols Scott Clark and Pasquale Scarpino	215
8	Transmission of viral infections through animate and inanimate surfaces and infection control through chemical disinfection	
	Syed A. Sattar and V. Susan Springthorpe	224
9	The role of chemical disinfectants in controlling bacterial contaminants on environmental surfaces	
	Donna J. Gaber, Timothy M. Cusack and Elizabeth Scott	258
10	Sterilization and disinfection of medical devices Aaron B. Margolin and Virginia C. Chamberlain	285
Part 4	General mechanisms of disinfection	311
11	Ultraviolet light disinfection of water and wastewater Peter F. Roessler and Blaine F. Severin	313
12	Thermal inactivation of microorganisms Guy Le Jean and Gérard Abraham	369
	Index	397