

Contents

1. Introduction to Legionellosis Diagnosis and Control in the Genomic Era 1
Rachel E. Gibbs and Jacob Moran-Gilad
2. Freshwater Ecology of *Legionella pneumophila*.
Rafael A. Garduño 7
3. A 'Secreted Army' for the Invasion and Survival of *Legionella pneumophila* Within Host Cells 77
Elisabeth Kay, Virginie Lelogeais, Sophie Jarraud and Christophe Gilbert and Patricia Doublet
4. Epidemiology of Legionellosis and a Historical Perspective on *Legionella pneumophila* Strains for the Genomic Era 139
Natalia A. Kozak-Muiznieks, Jeffrey W. Mercante and Brian H. Raphael
5. Clinical Symptoms and Treatment of Legionellosis 173
Giancarlo Ceccarelli, Mario Venditti, Maria Scaturro and Maria Luisa Ricci
6. Laboratory Diagnosis of Legionellosis 187
Giancarlo Ceccarelli, Mario Venditti, Maria Scaturro and Maria Luisa Ricci
7. Clinical Significance of (non-*Legionella pneumophila*) *Legionella* Species 211
Diane S.J. Lindsay
8. Regulatory and Risk Management Strategies for Control of *Legionella* 249
Susanne Surman-Lee and James T. Walker
9. European Surveillance of Legionnaires' Disease 285
Birgitta de Jong and Lara Payne Hallström
10. Epidemiological Genotyping of *Legionella pneumophila*: from Plasmids to Sequence-Based Typing 301
Norman K. Fry and Sophie Jarraud
11. Typing of *Legionella* Isolates in the Genomic Era 321
Daniel Wüthrich, Helena M.B. Seth-Smith and Adrian Egli