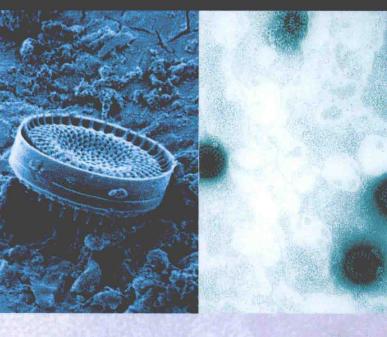
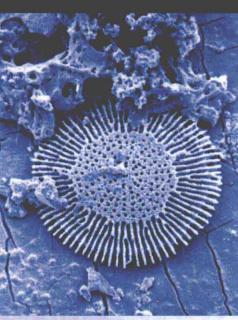
# Microbiology of Waterborne Diseases

Microbiological Aspects and Risks





Steven L. Percival, Marylynn V. Yates, David W. Williams, Rachel M. Chalmers and Nicholas F. Gray



# MICROBIOLOGY OF WATERBORNE DISEASES

## Microbiological Aspects and Risks

Second Edition

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## MICROBIOLOGY OF WATERBORNE DISEASES

Second Edition

#### **PRFFACE**

Waterborne diseases, specifically those caused by unsafe drinking water, present a serious global health threat. Understanding the pathogens that cause these diseases can help us to develop better preventative and control methods globally. The 2nd edition of *The Microbiology of Waterborne Diseases* is a comprehensive text that provides an in-depth account of all aspects of waterborne pathogens of public health significance.

Section one of the book discusses waterborne pathogens and the role biofilms play in their survival and dissemination. Sections two, three and four highlight the major bacterial, viral and protozoa associated with water. Each pathogen-specific chapter covers the fundamentals of microbiology of each pathogen including their survival and control in biofilms, and a new section highlighting methods that have been used for control. In addition, each chapter highlights methods that have been employed for detecting each waterborne pathogen and the risks each pathogen presents to water users is also discussed. Section four of the book provides an overview of the methods employed for microbial control with the final section of the book highlighting the implications of global warming and climate on waterborne diseases.

This updated reference will continue to serve as an indispensable reference for microbiologists, public health officials, water and wastewater treatment professionals, engineers, environmental health officers and students in the infectious disease fields.

Professor Steven L. Percival The University of Liverpool

#### **DEDICATION**

Steven Percival would like to dedicate this book to Carol, Alex, Tom, Mum and Dad. Thank you!

Rachel Chalmers would like to dedicate this book to the memory of Joan Shields whose work contributed much to our understanding of protozoan parasites in drinking and recreational waters.

David Williams would like to dedicate this book to Lorna, Daniel, Ailish Calum, Sioned and Anne. In memory of Eirwyn.

Nick Gray would like to dedicate this book to Lucy, Catriona and Rebecca.

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