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Virus reduction by removal during water treatment; Virus inactivation during water treatment; Risk to humans from viruses in drinking water; Concluding remarks; References; Chapter 7. Global Supply of Virus-Safe Drinking Water; WHO guidelines for drinking water quality; Water safety plans; Concluding remarks and recommendations; References; Chapter 8. Waterborne Viruses: Assessing the Risks; Introduction; Quantitative microbial risk assessment (QMRA); Building models: a regulatory tool?; Conclusion; References
Chapter 9. The Detection of Waterborne VirusesConcentration methods; Detection and enumeration of waterborne viruses; References; Chapter 10. Viruses in Shellfish; Background; Enteric viruses causing shellfish-associated disease; Economic importance of shellfish and impact of viral disease; Biology of shellfish and interactions with ingested enteric viruses; Virus detection methods; Detection of viral contamination in shellfish; Evaluation of outbreaks: lessons learned and remaining questions; References; Chapter 11. Indicators of Waterborne Enteric Viruses; Introduction; Indicator concept
Conventional bacterial indicatorsAlternative indicators for viruses; Characteristics of potential indicator bacteriophages; Detection and enumeration methods; Bacteriophages in faeces; Bacteriophages in faecal wastes; Bacteriophages as indexes of human viruses; Bacteriophages as indicators; Which group of bacteriophages better surrogates human viruses?; References; Chapter 12. Quality Control, Environmental Monitoring and Regulations; Quality control; Monitoring; Regulations; Conclusions; Acknowledgement; References; Chapter 13. Recent Advances and Future Needs in Environmental Virology
The global water quality inventory and environmental virology: status and implications

Sommario/riassunto

This book provides overviews and updates on basic research, diagnosis, epidemiology, and public health on enteric viruses, as well as on treatment and intervention to prevent their waterborne transmission. Data are presented and interpreted by leading researchers in the field in 13 chapters. An essential resource for virologists, epidemiologists, medical and public health professionals, graduate students and postdoctoral scientists at various levels of their careers.Key Topics Include:* Ecology of enteric viruses * Intervention measures from risk assessment to virus disinfectio