Record Nr. UNINA9910144707703321 Statistical framework for recreational water quality criteria and **Titolo** monitoring [[electronic resource] /] / edited by Larry J. Wymer Pubbl/distr/stampa Chichester, : John Wiley & Sons, 2007 **ISBN** 1-281-13532-1 9786611135324 0-470-51832-4 0-470-51831-6 Descrizione fisica 1 online resource (249 p.) Collana Statistics in practice Altri autori (Persone) WymerLarry J Disciplina 628.161015195 Water quality - Measurement - Statistical methods Soggetti Lingua di pubblicazione Inglese Formato Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Statistical Framework for Recreational Water Quality Criteria and Monitoring; Contents; Contributors; Preface; 1 The evolution of water quality criteria in the United States, 1922-2003; 2 A management context for the statistical design of recreational contact water quality monitoring programs; 3 Conceptual bases for relating illness risk to indicator concentrations; 4 On selecting the statistical rationale for revised EPA recreational water quality criteria for bacteria; 5 Sampling recreational waters 6 The lognormal distribution and use of the geometric mean and the arithmetic mean in recreational water quality measurement7 The EMPACT beaches: a case study in recreational water sampling; 8 Microbial risk assessment modeling; 9 A plausible model to explain concentration - response relationships in randomized controlled trials assessing infectious disease risks from exposure to recreational waters: 10 Nowcasting recreational water quality: 11 Statistical sensitivity analysis and water quality; Index Sommario/riassunto With increasing rates of pollution to both land and aquatic environments, regulations for the quality of our waters are necessarily becoming more stringent. In the light of recent epidemiological studies

new criteria are being established for the safety of our recreational

waters. In order for such criteria to be developed an established statistical framework needs to be in place. Statistical Framework for Recreational Water Quality Criteria and Monitoring offers a practical guide to the statistical methods used for assessing health effects and monitoring and modelling water quality Both tra