

1. Record Nr.	UNINA9910968136203321
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Titolo	Applied epidemiology and biostatistics / / Giuseppe La Torre
Pubbl/distr/stampa	Torino, : SEEd, 2010
ISBN	9788889688564 8889688564
Edizione	[1st ed.]
Descrizione fisica	1 online resource (400 p.)
Disciplina	600
Soggetti	Epidemiology Biometry
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.
Nota di contenuto	Title page; Colophon; Summary; Preface; 1.Measures of Occurrence; 1.1. Introduction; 1.2. Prevalence; 1.3. Incidence; 1.4. Practical issues; 1.5. Practical examples; References; 2.Measures of Association; 2.1. Relative risk; 2.2. Risk difference; 2.3. Other measures of attributable risk; 2.4. Practical examples; References; 3.Controlling for Confounding; 3.1. What is confounding in epidemiology?; 3.2. Controlling for confounding factors; 3.3. How to control for confounding factors; 3.4. Practical examples; References; 4.Cross-Sectional Studies; 4.1. Introduction 4.2. Performing a cross-sectional study 4.3. A practical example; References; 5.Cohort Studies; 5.1. What is a cohort study?; 5.2. Why do we need a cohort study?; 5.3. The eligibility criteria; 5.4. The structure of a cohort study; 5.5. Censoring; 5.6. The statistical analysis in a cohort study; 5.7. Practical examples; References; 6.Experimental Studies; 6.1. What is a sample experimental study?; 6.2. Why do we need an experimental study?; 6.3. The eligibility criteria; 6.4. The randomisation process; 6.5. The blinding; 6.6. The structure of an experimental study 6.7. The statistical analysis in an experimental study 6.8. Practical examples; References; 7.Temporal Trend Analysis; 7.1. Introduction; 7.2. Basic principles of temporal trend analysis; 7.3. Practical examples; References; 8. The Surveillance of Sexually Transmitted Infections: the Theory and the Practice; 8.1. Introduction; 8.2. Surveillance of sexually

transmitted infections in the third millennium; 8.3. Attributes of a STI surveillance system; 8.4. Universal versus sentinel surveillance systems; 8.5. How to perform STI surveillance; 8.6. Data management and analysis
8.7. Practical exercises for analysing a dataset of STIs References; 9. Systematic Reviews and Meta-Analysis of Clinical Trials; 9.1. What is a systematic review? What is a meta-analysis?; 9.2. Why do we need systematic reviews and meta-analyses?; 9.3. Practical steps of a meta-analysis; 9.4. A practical example of a meta-analysis of RCTs; References; 10. Meta-Analysis of Observational Studies; 10.1. Introduction; 10.2. Practical example; 10.3. Worked examples; References; 11. Genetic Epidemiology; 11.1. Key concepts of genetic epidemiology
11.2. A practical example: the "candidate gene approach" References; 12. Analysis of Cost Data Using Bootstrap Technique; 12.1. Introduction; 12.2. Basic principles of the bootstrap method; 12.3. Bootstrap standard normal confidence interval; 12.4. Percentile method confidence interval; 12.5. Bias corrected and accelerated (BCa) confidence interval; 12.6. Application to example; References; 13. Sensitivity, Specificity, and ROC Curves; 13.1. Study introduction; 13.2. Sensitivity, specificity, and predictive value; 13.3. Basic principles of ROC curves; 13.4. Use of ROC analysis for comparison
References

Sommario/riassunto

This book provides not only the theory of biostatistics, but also the opportunity of applying it in practice. In fact, each chapter presents one or more specific examples on how to perform an epidemiological or statistical data analysis and includes download access to the software and databases, giving the reader the possibility of replicating the analyses described.
