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图书基本信息

书名: <<Statistical Methods in Spatial Epidemiology 空间流行病学统计方法 第2版>>

13位ISBN编号:9780470014844

10位ISBN编号: 0470014849

出版时间:2006-7

出版时间:Wiley

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页数:398

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内容概要

Spatial epidemiology is the description and analysis of the geographical distribution of disease.

It is more important now than ever , with modern threats such as bio-terrorism making such analysis even more complex.

This second edition of Statistical Methods in Spatial Epidemiology is updated and expanded to offer a complete coverage of the analysis and application of spatial statistical methods.

The book is divided into two main sections: Part 1 introduces basic definitions and terminology, along with map construction and some basic models.

This is expanded upon in Part II by applying this knowledge to the fundamental problems within spatial epidemiology, such as disease mapping, ecological analysis, disease clustering, bio-terrorism, space-time analysis, surveillance and infectious disease modelling.

Provides a comprehensive overview of the main statistical methods used in spatial epidemiology.

Updated to include a new emphasis on bio-terrorism and disease surveillance.

Emphasizes the importance of space-time modelling and outlines the practical application of the method.

Discusses the wide range of software available for analyzing spatial data , including WinBUGS , SaTScan and R , and features an accompanying website hosting related software.

Contains numerous data sets , each representing a different approach to the analysis , and provides an insight into various modelling techniques.

This text is primarily aimed at medical statisticians, researchers and practitioners from public health and epidemiology.

It is also suitable for postgraduate students of statistics and epidemiology, as well professionals working in government agencies.

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<<Statistical Methods >>

书籍目录

Preface and Acknowledgements to Second EditionPreface and Acknowledgements The Nature of Spatial Epidemiology 1 Definitions, Terminology and Data Sets 1.1 Map Hypotheses and Modelling Approaches 1.2 Definitions and Data Examples 1.2.1 Case event data 1.2.2 Count data 1.3.1 Control events and processes 1.3.2 Census tract information 1.3.3 Clustering definitions Definitions 1.4 Some Data Examples 1.4.1 Case event examples 1.4.2 Count data examples 2 Scales of Measurement and Data Availability 2.1 Small Scale 2.2 Large Scale 2.3 Rate Dependence 2.4 Data Quality and the Ecological Fallacy 2.5 Edge Effects 3 Geographical Representation and Mapping 3.1 Introduction and Definitions 3.2 Maps and Mapping 3.2.1 Statistical maps and mapping 3.2.2 Object process 3.2.3 Geostatistical mapping 3.4 Aggregation mapping 3.3 Statistical Accuracy 3.5 Mapping Issues Related to Aggregated Data 3.6 Conclusions 4 Basic Models 4.1 Sampling Considerations 4.2 Likelihood-Based and Bayesian Approaches 4.3 Point Event Models 4.3.1 Point process models 4.3.2 The basic Poisson process model 4.3.3 Hybrid models and regionalisation and applications Bayesian models and random effects 4.3.5 MAP estimation, empirical Bayes and full Bayesian analysis Bivariate/multivariate models 4.3.7 Hidden structure and mixture models 4.3.8 Space-time extensions 4,4.3 Random-effect extensions 4.4 Count Models 4.4.1 Standard models 4.4.2 Approximations 4,4.4 Hidden structure and mixture models 4,4.5 Space-time extensions 5 Exploratory Approaches, 5.1 Exploratory Methods 5.1.1 Cartographic issues Parametric Estimation and Inference 5.1.3 Count mapping 5.2 Parameter Estimation 5.2.1 Case event likelihood models event mapping 5.2.2 Count event likelihood models 5.2.3 Approximations 5.2.4 Bayesian models 5.3 Residual 5.5.1 Edge effects in case events Diagnostics 5.4 Hypothesis Testing 5.5 Edge Effects 5.5.2 Edge 5.5.3 Edge weighting schemes and MCMC methods 5.5.4 Discussion effects in counts 5.5.5 The Tuscany Important Problems in Spatial Epidemiology Appendix A Monte Carlo Testing example , Paranetric Bootstrap and Sinulation EnvelopesAppendix B Markov Chain Monte Carlo Methods Appendix C Algorithms and CodeAppendix D Golssary of Estimators Appendix E SoftwareBibliographyIndex

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