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| Autore | Yi Grace Y. |
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| Soggetti | Statistics<br>Biometry<br>Epidemiology<br>Statistical Theory and Methods<br>Biostatistics |
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| Livello bibliografico | Monografia |
| Nota di bibliografia | Includes bibliographical references at the end of each chapters and index. |
| Nota di contenuto | Inference Framework and Method -- Measurement Error and Misclassification: Introduction -- Survival Data with Measurement Error -- Recurrent Event Data with Measurement Error -- Longitudinal Data with Covariate Measurement Error -- Multi-State Models with Error-Prone Data -- Case-Control Studies with Measurement Error or Misclassification -- Analysis with Error in Responses -- Miscellaneous Topics -- Appendix -- References. . |
| Sommario/riassunto | This monograph on measurement error and misclassification covers a broad range of problems and emphasizes unique features in modeling and analyzing problems arising from medical research and epidemiological studies. Many measurement error and misclassification problems have been addressed in various fields over the years as well as with a wide spectrum of data, including event history data (such as survival data and recurrent event data), correlated data (such as longitudinal data and clustered data), multi-state event data, and data arising from case-control studies. Statistical Analysis with Measurement Error or Misclassification: Strategy, Method and Application brings together assorted methods in a single text and |

provides an update of recent developments for a variety of settings. Measurement error effects and strategies of handling mismeasurement for different models are closely examined in combination with applications to specific problems. Readers with diverse backgrounds and objectives can utilize this text. Familiarity with inference methods—such as likelihood and estimating function theory—or modeling schemes in varying settings—such as survival analysis and longitudinal data analysis—can result in a full appreciation of the material, but it is not essential since each chapter provides basic inference frameworks and background information on an individual topic to ease the access of the material. The text is presented in a coherent and self-contained manner and highlights the essence of commonly used modeling and inference methods. This text can serve as a reference book for researchers interested in statistical methodology for handling data with measurement error or misclassification; as a textbook for graduate students, especially for those majoring in statistics and biostatistics; or as a book for applied statisticians whose interest focuses on analysis of error-contaminated data. Grace Y. Yi is Professor of Statistics and University Research Chair at the University of Waterloo. She is the 2010 winner of the CRM-SSC Prize, an honor awarded in recognition of a statistical scientist's professional accomplishments in research during the first 15 years after having received a doctorate. She is a Fellow of the American Statistical Association and an Elected Member of the International Statistical Institute. .