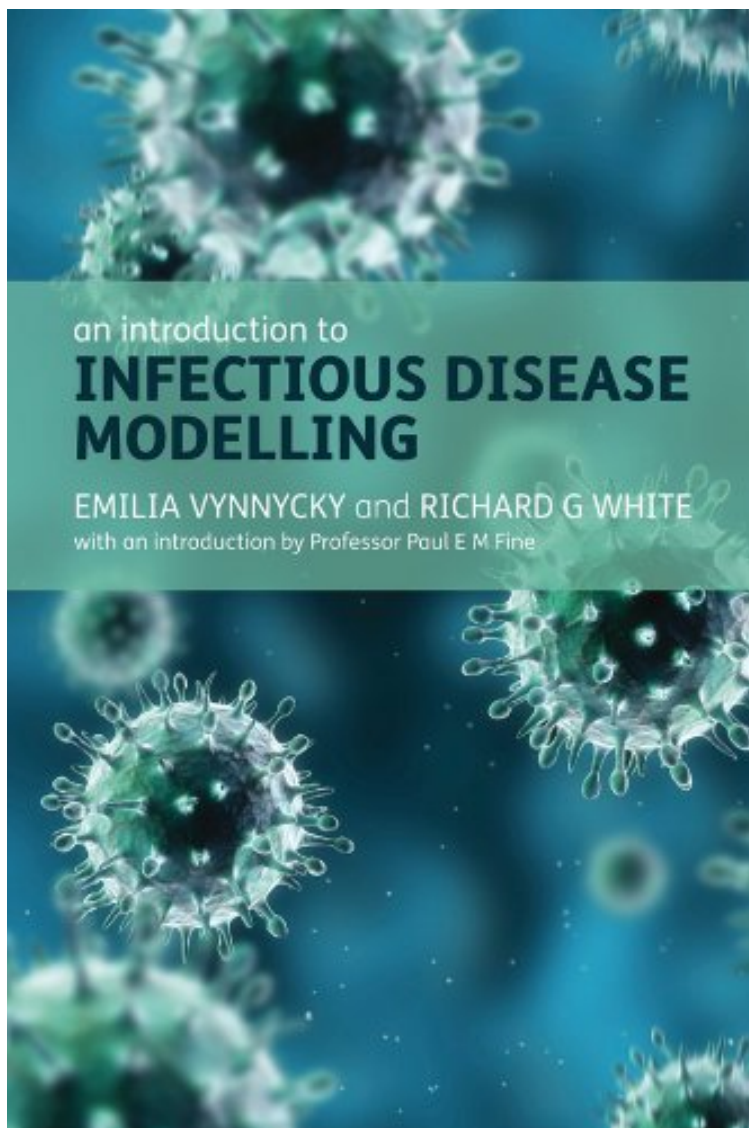


(Free and download) File size: 45.Mb

An Introduction to Infectious Disease Modelling



*Par Emilia Vynnycky, Richard White
ePub | *DOC | audiobook | ebooks |
Download PDF*

Dtails sur le produit Rang parmi les ventes : #630728 dans eBooksPubli le: 2010-05-13Sorti le: 2010-05-13Format: Ebook Kindle

(Free and download) An Introduction to Infectious Disease Modelling

Par Emilia Vynnycky, Richard White : An Introduction to Infectious Disease Modelling before purchasing it in order to gage whether or not it would be worth my time, and all praised An Introduction to Infectious Disease Modelling:

Download

Read Online

Description :

Prsentation de l'diteurMathematical models are increasingly being used to examine questions in infectious disease control. Applications include predicting the impact of vaccination strategies against common infections and determining optimal control strategies against HIV and pandemic influenza.This book introduces individuals interested in infectious diseases to this exciting and expanding area. The mathematical level of the book is kept as simple as possible, which makes the book accessible to those who have not studied mathematics to university level. Understanding is further enhanced by models that can be accessed online, which will allow readers to explore the impact of different factors and control strategies, and further

adapt and develop the models themselves. The book is based on successful courses developed by the authors at the London School of Hygiene and Tropical Medicine. It will be of interest to epidemiologists, public health researchers, policy makers, veterinary scientists, medical statisticians and infectious disease researchers. *Revue de presse* This is a book that really introduces non-specialists to the growing field of Mathematical Epidemiology. I am sure that public health specialists, epidemiologists, clinicians, veterinarians, statisticians, mathematicians, economists, and even professional modellers will profit from this book. I recommend it to all my students and now to the readers of *Epidemiology and Infection* This is an excellent text book and readers can be assured that 'it does exactly what it says on the tin': provide a thorough introduction to infectious disease modelling. I will be turning to [it] for reference frequently for its clear explanations and topical worked examples. (Sexually Transmitted Infections) This book has grown out of the experience of the authors teaching such a course for several years at the London School of Tropical Medicine and Hygiene. The Contents are very comprehensive, with chapters on basic terminology concerning infections and transmission, models based on difference equations, models based on differential equations, basic output from models, age patterns, stochastic modelling, contact patterns, models for sexually transmitted infections, some special topics (varicella vaccination and boosting, serotype replacement, tuberculosis control, HIV/STI co-infection) and an appendix on mathematical matters. The basic ideas are illustrated by many examples and case studies, among which several related to very up to date research and references. All relevant keywords and modern catchwords related to infectious disease modelling are mentioned and explained. (*European Journal of Public Health*) *Présentation de l'éditeur* Mathematical models are increasingly being used to examine questions in infectious disease control. Applications include predicting the impact of vaccination strategies against common infections and determining optimal control strategies against HIV and pandemic influenza. This book introduces individuals interested in infectious diseases to this exciting and expanding area. The mathematical level of the book is kept as simple as possible, which makes the book accessible to those who have not studied mathematics to university level. Understanding is further enhanced by models that can be accessed online, which will allow readers to explore the impact of different factors and control strategies, and further adapt and develop the models themselves. The book is based on successful courses developed by the authors at the London School of Hygiene and Tropical Medicine. It will be of interest to epidemiologists, public health researchers, policy makers, veterinary scientists, medical statisticians and infectious disease researchers.