In finance, health policy and infectious disease epidemiology mathematical modelling has been in vogue over the past decade. Although some of the outcomes, notable the UK response to the influenza A:H1N1 ‘swine flu’ pandemic, may not have been entirely desirable it is important that public health professionals involved in communicable disease control have an understanding of infectious disease modelling.

The book is well written and structured as a step-by-step guide. It is written for individuals without specialist mathematical skills, although I suspect a good A level in maths is a necessary minimum prerequisite. Working through it takes time and an environment without any external distractions. With perseverance this complex field becomes comprehensible. It would be impossible to write a book of this nature without mathematical formula, symbols and Greek notation. The authors carefully introduce relevant symbols and notations with clear descriptions. When alternative terms are used by other in the field this is explicitly identified. The summary of commonly used symbols and notation at the start of the book is invaluable as it provides an easily accessible reference to check on their meaning as the reader becomes familiar with them.

The book will have two main audiences in public health. Firstly, the limited number of individuals who aspire to actually construct and run infectious disease models. The exercises and additional material that have obvious been carefully developed over many years as part of a taught course will be invaluable to them. The book will also be of relevance to a second larger group who will apply the findings of models to practice or policy. At the simplest level the book helps the reader to understand why we observe the particular patterns, in time place and person, of specific infectious disease in a population. In addition the introduction of a common language and concepts will assist those developing policy to more critically understand the strengths and limitations of models. At the very least it will enable them to ask pertinent questions to modellers when considering the contribution a model might make to policy or the applied implications of a model’s findings.

My only minor criticism of the book is that it starts with an excellent introduction by Professor Fine but finish very abruptly. A final chapter returning to the broad purpose of infectious disease modelling by considering the opportunities and pitfalls of applying models to practice and policy would have rounded the book off. Overall, the book makes a good attempt to introduce what is a far from straightforward topic.

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