

*Rabies in Bats: Natural History and Public Health Implications*. DANNY A. BRASS.  
Pp. 335. 1994: US\$49.95 + US\$20.00 postage. ISBN 0 9637045 1 6.

The layman is rightly fearful of rabies and unjustifiably afraid of bats. At first sight Dr Danny Brass has brought together two topics which few except specialists would find appealing. But to overlook this book would be to miss a great opportunity to delve into the world of bats, the only mammals that can fly: to read about the habits, versatility and prowess of these fascinating but much maligned creatures. Of course, as with terrestrial mammals, bats are capable of carrying diseases such as rabies, but in rabies endemic areas one is far, far more likely to be bitten by a rabid dog than by a rabid bat.

*Rabies in Bats: Natural History and Public Health Implications* is a 335 page volume packed with well written and exciting to read facts. It is a scientific book – there are 47 clear and relevant tables, 69 well drawn or photographed figures, and over 1500 references but, where the reader may be unfamiliar with certain biological concepts required for appreciation of a particular discussion, explanatory notes have been provided to bridge the gap.

The 25 chapters are divided into five sections – Rabies: Disease and Nature of the Infective Process, Vampire Bats and Rabies in Latin America, Insectivorous Bats and Rabies in North America, Rabies Infection in Old World Bats, and Public Health Concerns. The author correctly describes the distillation of the available literature on rabies in bats as a Herculean task – his references range from the sixteenth century to 1994.

As a scientist with some 20 years experience in the rabies field, I looked for legitimate adverse criticism of the book but could find none. Although it is aimed to attract physicians, veterinarians and public health authorities, I recommend it to everyone who has an interest in bats and particularly to those who handle bats. Bat rabies is recognized in Africa, the Americas and Europe and by reading this book one can learn of the risks and how to reduce them. It is a handsome book, reasonably priced and right up to date.

ARTHUR KING  
Central Veterinary Laboratory  
Weybridge, Surrey, UK

*Principles of Exposure Measurement in Epidemiology*. B. K. ARMSTRONG, E. WHITE, R. SARACCI. Pp. 351. Oxford: Oxford University Press, 1994 (paperback). ISBN 0 19 262070 7.

Books with titles such as this can sound off-puttingly technical and specialized. This one, however, is mostly not those things. Indeed, it is pitched nicely, and is nicely timed. Its re-release two years after initial publication, this time in paperback, suggests that it has found a responsive market.

The book covers a wide sweep of issues that are important in modern non-infectious disease epidemiology, but treats none of them in excessive detail. Its overall balance reflects the catholic research experience of its three authors – senior academic and research epidemiologists, all. Two questions arise, though. First, why is a book oriented to non-infectious disease epidemiology being reviewed in this journal? Secondly, how important is the topic anyway?

In answer to the first question, it should interest infectious disease epidemiologists to reflect on the historical strengths of their line of research. Each infectious disease has a necessary but usually not sufficient causal agent, the infecting agent. As the authors point out on the first page, nineteenth century epidemiology was grounded in microbiology and its practitioners generally had substantial training or experience in that discipline. The measurement of microbiological 'exposures' in relation to disease was, in principle, relatively straightforward: specific organisms could be isolated and cultured, there was usually little time lag between being infected and being clinically affected, serological testing afforded a retrospective measure of earlier exposure, and (they might also have said) vaccination provided a ready basis for controlled trials of the effect of exposure avoidance.

The answer to the second question extends that storyline. Modern non-infectious disease epidemiology, with its ever-expanding interest in a profusion of risk factors (i.e. 'exposures'), has proliferated rapidly over the past three decades. Yet it has never really paused to examine systematically the particular difficulties posed by exposure measurement. Indeed, its pioneering