

## Infectious diseases of livestock, 2nd edition

Editors: J A W Coetzer and R C Tustin

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Animal diseases have always been one of the main constraints on animal production, especially in Africa with its plethora of tropical and subtropical diseases. Tough climatic conditions, the presence of wildlife carriers and the prevalence of arthropod vectors transmitting diseases exacerbate the problem on our continent. Knowledge of these diseases and ways to combat them is therefore highly relevant to the socioeconomic development of Africa and its fight against poverty. Furthermore, global developments are increasing the importance of animal diseases for the developed world. Globalisation, accompanied by the relaxing of trade barriers, results in increased trade in animals and animal products which in turn increases the risk of spreading diseases across international borders and establishing emerging or re-emerging diseases in developed countries. In addition, climatic changes, especially global warming, has led to the geographic expansion of the distribution of certain vectors and the diseases they transmit. Two recent examples of this phenomenon are the outbreaks of bluetongue in southern European countries and of Rift Valley fever in the Middle East. The knowledge contained in the volumes under review is therefore of value for, and will benefit, both the developing and developed world.

It is indeed a monumental piece of work. Published in a 3-volume format by the prestigious publishers Oxford University Press (SA), no less than 197 specialists from 24 countries have contributed 214 chapters covering most, if not all, of the infectious diseases of livestock. It constitutes a thoroughly revised and considerably expanded second edition of the groundbreaking text published in 1994, which was received with acclamation. Two areas of expansion are the inclusion of the majority of infectious livestock diseases occurring outside sub-Saharan Africa and also those of wildlife, where relevant. These additions transform the book into the most comprehensive text on infectious animal diseases presently available. It is primarily aimed at the needs of veterinarians, undergraduate and postgraduate veterinary students and veterinary libraries. It will, however, also be very useful as a reference work for animal scientists, regulatory authorities and anyone involved in animal production.

Eleven introductory chapters deal with factors influencing the occurrence of infectious diseases, including vectors, climate and husbandry practices. Beautifully illustrated reviews, in full colour, are presented of the ticks, tsetse flies, tabanids, midges and mosquitoes responsible for the transmission of so many of these diseases. This is followed by chapters on arthropod-borne viruses, the control of infectious diseases in different epidemiological and socioeconomic situations and on the wildlife/livestock interface. The rest of Volume 1 deals with protozoal diseases, babesioses, theilerioses, rickettsial and clamydial

diseases and with anaplasmoses. A total of 37 chapters, most of them written by internationally recognised experts, cover these diseases.

Volume 2 is dedicated to viral diseases. Starting off with rinderpest, the socioeconomically most important disease in the history of Africa and perhaps the world, a total of 83 chapters deal with as many disease entities. It is of interest that the pandemic of rinderpest during the late 19th century was directly responsible for the establishment of both the OIE and the Onderstepoort Veterinary Institute. The viral diseases are dealt with according to the internationally accepted classification of viruses into families such as the paramyxoviridae, retroviridae, herpesviridae, etc. It may be argued that, while scientifically sound, this approach requires some virological expertise to find a disease. Not so. The comprehensive 'Contents', which covers all 3 volumes and is included in each of them, serves well to address this potential problem. Diseases with virus-like aetiological agents, such as scrapie and bovine spongiform encephalopathy ('mad cow disease'), are dealt with in the last four chapters of this volume. Volume 3 deals with bacterial diseases in 69 and mycoplasmal diseases in 6 chapters. In addition there are 3 chapters on mycotic and algal diseases, 2 on unclassified bacteria and 3 on disease complexes of unknown aetiology.

As can be expected from a compendium containing such a variety of subjects treated by so many authors, there is some variation in the quality of the contributions. The depth to which the various diseases are discussed is obviously also influenced by their economic importance. The editors have managed admirably, however, to ensure a consistent style and adherence to a set of high standards by requiring each contribution to deal with the aetiology, epidemiology, pathogenesis, clinical signs, pathology, diagnosis, differential diagnosis and control of each disease. A comprehensive list of references is also provided for each chapter and ample illustrations, many in full colour, as well as top-quality printing will ensure that the present edition will follow in the footsteps of its predecessor. It can be expected to remain the standard reference work in its field for many years and is highly recommended for everyone interested in the health of our livestock.

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