

## **Veterinary education for global animal and public health**

Coordinated by D A Walsh

*2009. Scientific and Technical Review of the World Organisation for Animal Health 28(2): 439–872, OIE, Paris, France.  
Price €60. ISBN 978-92-9044-761-0*

This 28th annual volume published by the World Organisation for Animal Health (OIE), addresses the need for a global shift in the way veterinary students are taught veterinary public health (VPH). As well as taking the lead in prevention and control of animal diseases, the OIE develops health and welfare standards to promote food security and equitable international trade in animals and animal products. It considers veterinary education to be a key component in the quality of veterinary services globally. Professor R E W Halliwell, from the University of Edinburgh, suggests that curricula in most veterinary colleges are conservative and traditional and slow to respond to societal demands. Thus it has taken two decades to recognise that there is a lack of expertise in VPH and training in this area has remained a low priority. Change is also impeded by overcrowded curricula. Another major challenge highlighted by Professor P G Wall, from the University of Dublin, which echoes what is happening in South Africa, is how to stimulate interest and make VPH relevant to undergraduate students, who may see their future only in clinical medicine and surgery. He includes the whole of EU regulation number 854/2004 as an appendix to his paper. This document lists the professional qualifications required for an official (state) veterinarian. As the EU is an important trade partner these competencies are relevant to South African graduates.

In line with the direction that has been taken by the OIE, this compendium of 49 papers aims at encouraging and facilitating curricular change in VPH, so as to include food safety and security, livestock welfare, wildlife and aquatic animal health,

ecosystem health, zoonotic diseases, global trade and risk analysis, epidemiology and veterinary management of disasters and emergencies. Donald Walsh, the coordinator of the *Review*, suggests that there is good evidence that a successful curriculum should be based on a defined set of competencies in knowledge, understanding, skills and professional attributes that all veterinary students should have attained and demonstrated by the time they graduate. A 2nd level of competency, is seen as that level required by those who devote their careers to global veterinary public health issues and would be considered specialists. The interdependence of humans, animals and the environment has prompted a view of VPH that is more holistic and collaborative, with an action-based approach to solutions for global problems. These include the rapid spread of animal disease due to global transport, emerging zoonoses and climate change, which is linked both to intensification of production systems and also causes habitat changes for livestock and wildlife. One of the great challenges facing those veterinarians qualifying today will be to produce safe food for the nine billion people who will inhabit the planet by 2050, without compromising the environment. This *Review* would be of considerable interest as a guide and reference, not only to academics but also to veterinarians working for the state veterinary services.

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## Book review — Boekresensie

### OIE Scientific and Technical Review: Avian influenza

Coordinated by T C Mettenleiter

2009. Vol. 28(1), World Organisation for Animal Health (OIE) Paris. 419 pp., paperback. Price €55. ISBN 978-92-9044-760-3

The *Scientific and Technical Review* of the OIE (World Organisation for Animal Health) is published every 4 months for the use of the veterinary and medical professions, and especially for veterinary services. A vast body of literature appeared as a result of intensified interest in avian influenza since the emergence and subsequent spread of highly pathogenic notifiable (HPNAI) H5N1, boosted by massive increases in funding for research. This publication is a compilation of recent findings and represents a comprehensive overview of the present understanding of avian influenza, with contributions from the foremost experts in the field. The reader is led through the history of the disease into aspects of epidemiology, pathogenesis and host specificity, diagnosis, vaccination and concludes with outbreak prevention and management. Generally the coverage of the topic is excellent, but what is perhaps lacking is a review of basic influenza A virus biology, detailing the mechanisms of replication and infection.

Readers should also note that in contrast to what is presented in the first paper on the history of the disease, there have in fact been 2 recent outbreaks of HPNAI in South Africa: the 2004 Eastern Cape HPNAI H5N2 outbreak in ostriches and a second outbreak of HPNAI H5N2 in ostriches in the Western Cape in 2006. Although sound molecular evidence has been published to support the notion that the 2 outbreaks were completely unrelated, it remains a long-standing point of contention between the author of this review and the authors of the paper on the history of highly pathogenic avian influenza. Nevertheless, this book would be a valuable resource to veterinary practitioners, scientists and students either as an introduction or to those wishing to deepen their knowledge in particular aspects of the disease and its agent.

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