

Book review

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This special issue of the *Scientific and Technical Review* of the Office International des Epizooties is devoted entirely to zoonoses.

The most serious zoonoses are often viral in origin, and the viruses concerned are evolving constantly. While such viruses are generally in a state of equilibrium with respect to their hosts, be they individual animals or animal populations, this finding does not hold true for humans, who as a rule are accidental hosts. In the absence of broad-spectrum antivirals, medical science is often unable to counter this type of infection; in such an event, saving human lives may require preventive vaccination.

The problem is further compounded by the fact that wildlife, especially in the tropical areas where biodiversity is greatest, seems to constitute an inexhaustible reservoir for new zoonoses, as evidenced by recent episodes of infection by the Hendra and Nipah viruses.

Specific farming practices are also conducive to the emergence of new diseases, as shown by the occurrence of bovine spongiform encephalopathy in Europe and the simultaneous appearance of a hitherto unknown disease in humans, the variant of Creutzfeldt-Jakob disease. Other practices may also be

responsible for accidents, for example, the co-existence of swine and poultry in the same agrosystem, which has the potential of resulting in the generation of new influenza virus reassortants.

Public attitudes towards animals are sometimes contradictory. In developed countries where the problem of food security has been solved to a large degree, public concern is focused on food safety and animal welfare, along with a debate on the social status of both domestic and wild animals. Zoonoses are often the focal point of these concerns. In developing countries, the emphasis is still placed on food security.

The globalization of trade, the expansion of animal production and global warming are all factors that, by disrupting the existing balance, increase risks. Finally, the advent of new medical practices, such as xenotransplantation, requires a preliminary assessment of the associated risks; this is indispensable to rational management.

Zoonoses are a vital component of all these considerations. A new dimension has thus been added to the work of animal and public health authorities and consequently all development programmes should not only take these diseases into account, but also include them in the relevant risk assessments.