

## **NATIONAL WILDLIFE DISEASE SURVEILLANCE SYSTEMS**

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Interest in wildlife health surveillance is growing in the veterinary public health sector. It is a primary tool for the management and mitigation of zoonotic diseases as well as for the control of disease of livestock and poultry. Moreover, as the involvement of veterinary services in the field of wildlife conservation is also growing, more and more efforts are now being invested in the surveillance of pathogens that can affect the health of wild animal populations.

The primary stage of surveillance is the collection of samples for diagnostic testing. This important aspect will not be addressed in this communication, which will focus on data collection, management of information and communication. In a national surveillance scheme, these steps are most frequently under the responsibility of veterinary services, at least for the listed and regulated diseases.

The challenge surveillance frequently poses is that of making good decisions with poor data. Wildlife populations are usually remote, difficult to assess, and their pathogens are not always similar to those of domestic species. Consequently surveillance data are frequently sparse, biased or inaccurate. However, when properly stored and analysed they have the capacity to detect relevant health events in natural animal populations. Rabies in Europe and the North America is a good example of the appropriate use of surveillance data to monitor the spread of a disease and evaluate the efficiency of control measures. A range of epidemiological approaches, such as targeted surveillance in sentinel species, risk-based surveillance or syndromic surveillance shall, in the future, improve the usefulness and efficiency of wildlife health surveillance. For veterinary officers the challenges of improving their capacities in this field are numerous. One is the need to collaborate with organisations and government departments that have access to wildlife, and to know the distribution and ecology of the wildlife populations. For the purpose of transparency, the need to regularly report on important pathogens detected in wildlife is crucial. To encourage veterinary services to do so, the international trade rules have to take in account that infection in wild animals is not usually a threat for domestic species, provided that appropriate biosecurity measures are applied.

