The governance of Veterinary Services and their role in the control of avian influenza

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Summary
Veterinary Services play a key role in controlling avian influenza by means of surveillance of animal diseases (including zoonoses), early detection and rapid response.
To improve animal health worldwide, and in particular to control emerging and re-emerging diseases, it is necessary to build the capacity of Veterinary Services and improve their governance, in accordance with the quality standards in the Terrestrial Animal Health Code, which were adopted by all Member Countries and Territories of the World Organisation for Animal Health (OIE).
An OIE evaluation will enable those countries who have requested the evaluation to conduct a gap analysis and, subsequently, to implement national projects for improving the governance of Veterinary Services, possibly with donor aid.

Key words

Introduction
As with any other animal disease, in the case of avian influenza Veterinary Services (the term is being used in its broadest sense here to mean official Veterinary Services, veterinary practitioners and assistants, livestock producer organisations, etc.) from every country in the world play a key role in early detection and rapid response, not only to control an outbreak but also to prevent it.

The World Organisation for Animal Health (OIE) fulfils its mandate to improve animal health worldwide by fighting animal diseases (including zoonoses) at source and ensuring good governance in the management of these diseases.

Early detection and rapid response: the keys to disease control
Early detection relies on an effective network for the surveillance of wild and domestic animals based on:
– appropriate training for livestock producers
– a nationwide network of well-trained veterinarians and paraveterinarians
– an efficient national chain of command
– a national rapid-feedback mechanism
– operational and effective laboratories
– a rapid-response mechanism based on appropriate legislation, which is implemented whenever animal disease outbreaks are identified
– compensation funds for any stamping-out measures
– vaccine banks
– effective collaboration among livestock producers and private and public veterinarians.

Rapid response is based on the introduction and implementation of all the basic rules of animal disease control, under the aegis of the official veterinary authority. This may involve:

– offensive or defensive control measures (slaughter and elimination or isolation of infected and/or contaminated animals, disinfection, control of movements)
– medical prophylaxis measures (vaccination, treatment)
– a combination of medical and sanitary prophylaxis measures (vaccination and slaughter).

The cost of eradicating an emerging disease is sharply reduced if it is stamped out immediately.

Defensive sanitary prophylaxis may involve compartmentalisation and zoning, as defined in the Terrestrial Animal Health Code (3) (hereafter referred to as the Terrestrial Code). The term ‘compartment’ is defined in the Terrestrial Code as ‘an animal subpopulation contained in one or more establishments under a common biosecurity management system with a distinct health status with respect to a specific disease or specific diseases for which required surveillance, control and biosecurity measures have been applied for the purpose of international trade’. The term ‘zone/region’ means ‘a clearly defined part of a territory containing an animal subpopulation with a distinct health status with respect to a specific disease for which required surveillance, control and biosecurity measures have been applied for the purpose of international trade’. Zoning or compartmentalisation are applicable mainly to poultry and pig establishments. In general, establishments must introduce biosecurity measures.

In the case of medical prophylaxis, legislation and marketing authorisation procedures must be harmonised, including for veterinary medicine prescription and distribution. Access should be provided to antigen and vaccine banks for a list of priority animal diseases. The OIE has set up a virtual avian influenza vaccine bank with the financial support of the European Commission. Eight countries have already benefited from the virtual bank. Whenever a vaccination campaign is introduced it must be systematically accompanied by a vaccination exit strategy.

A close partnership for a single goal: to improve animal health

Any network for the epidemiological surveillance of animal diseases must be based on a close partnership between the public and private sectors and involve three key stakeholders: livestock producers, private veterinarians and official veterinarians. Livestock producers must be organised and trained. Private veterinarians must also be organised and trained and must ensure tightly meshed health coverage of the territory. Official veterinarians must be provided with appropriate legislation and adequate resources to enable them to discharge their duties effectively.

Livestock producers act as sentinels in the prevention and control of emerging and re-emerging animal diseases. To guarantee early detection, when livestock producers implement compulsory animal health measures they must be compensated via appropriate public and private mechanisms.

A national animal health system must be based on comprehensive, modern, regularly updated and scientifically-based legislation.

This legislation must be implemented and complied with, which requires appropriate human, technical and financial resources to enable Veterinary Services to operate optimally.

The scientific and diagnostic capacity of laboratories should be increased, by means of training and accreditation programmes and twinning schemes between official laboratories in developed countries and those in developing countries. The OIE is currently developing an ambitious twinning programme. In the area of avian influenza, the OIE and the Food and Agriculture Organization of the United Nations (FAO) have set up a special network called OFFLU (Joint OIE/FAO worldwide scientific network for the control of avian influenza).

Veterinary Services play a key animal health role, not only on account of their early detection and rapid response responsibilities in the event of an emerging or re-emerging animal disease occurrence, but also because they have an official mandate for the sanitary certification of animals and animal products. OIE Members must ensure that their animal health status is fully transparent by notifying diseases via the OIE’s new World Animal Health Information System (WAHIS).
Evaluating and improving the quality of Veterinary Services


A special instrument was developed to enable OIE Members to conduct an internal evaluation of their Veterinary Services to verify their compliance with standards. This instrument, the OIE Tool for the Evaluation of Performance of Veterinary Services (PVS) (2), is the world reference for such evaluations.

The OIE has trained auditors to conduct PVS evaluations at the request of Member Countries and Territories. Close to 70 countries have been evaluated to date.

In the case of avian influenza and other animal diseases, short-term actions must be undertaken in risk countries, in the following priority areas:

- capacity to draw up and implement contingency plans
- confirmation of clinical and laboratory diagnoses
- capacity of Veterinary Services to prevent the release and spread of diseases in the country being evaluated
- capacity of Veterinary Services to harness funding to pay compensation to livestock producers
- capacity to conduct national vaccination campaigns where necessary (especially in cases where a disease has become endemic)
- capacity to update national legislation, emergency plans and systems for controlling their implementation and to involve the private sector in any prevention actions.

In other countries, exhaustive evaluations of Veterinary Services must be conducted using the PVS Tool. These include a gap analysis to determine any departures from standards and the implementation of national projects for improving Veterinary Services, using donor funding where necessary.

The PVS Tool includes four fundamental components:

a) the human, physical and financial resources to attract and retain professionals with technical and leadership skills

b) the capacity and the technical authority to address existing and new issues, including prevention and control of biological disasters based on scientific principles

c) sustained interaction with stakeholders in order to stay on course and carry out relevant joint programmes and services

d) the ability to access markets through compliance with existing standards and the implementation of new disciplines such as the harmonisation of standards, equivalence and zoning.

The first fundamental component (human, physical and financial resources) includes 10 critical competencies:

- professional and technical staffing of the Veterinary Services
- competencies of veterinarians and veterinary paraprofessionals
- continuing education
- technical independence
- stability of structures and sustainability of policies
- coordination capability of the sectors and institutions of the Veterinary Services
- physical resources
- funding
- contingency and compensatory funding
- capability to invest and develop.

The second component (technical authority and capability) includes twelve critical competencies:

- veterinary laboratory diagnosis
- laboratory quality assurance
- risk analysis
- quarantine and border security
- epidemiological surveillance
- early detection and emergency response
- disease prevention, control and eradication
- veterinary public health and food safety
- veterinary medicines and veterinary biologicals
- residue testing
- emerging issues
- technical innovation.

The third component (interaction with stakeholders) includes six critical competencies:

- communications
- consultation with stakeholders
- official representation
- accreditation / authorisation / delegation
- veterinary statutory body
- participation of producers and other stakeholders in joint programmes.

The fourth component (access to markets) includes nine critical competencies:
- preparation of legislation and regulations, and implementation of regulations
- stakeholder compliance with legislation and regulations
- international harmonisation
- international certification
- equivalence and other types of sanitary agreement
- traceability
- transparency
- zoning
- compartmentalisation.

A PVS evaluation therefore covers a total of 37 critical competencies, based on the provisions of the Terrestrial Code.

Each critical competency includes five qualitative levels of advancement (5 being the highest). The assessors use a list of suggested indicators for each critical competency. The OIE has published a Manual for Assessors.

Veterinary Service governance can be improved in all countries by conducting PVS evaluations, performing a gap analysis and subsequently investing with the aid of donors. This is a key requirement in a context where the number of emerging diseases is increasing as a result of globalisation and climate change. The experts estimate that 75% of emerging and re-emerging diseases are zoonoses.

**Conclusion**

The mandate of the OIE makes it the reference organisation for avian influenza control. Since the start of the epizootic, the OIE has always maintained that the best way to avert a pandemic is to reduce the amount of virus circulating worldwide by containing the disease at source in animals.

The OIE, with FAO support, has convinced the international community of the need to control and eradicate animal diseases. By holding a series of world conferences the OIE has also raised donor awareness of the importance of conducting a sustainable animal health policy by helping to build the capacity of Veterinary Services worldwide. A single country with a deficient Veterinary Service poses a serious threat to every other country in the world.

Recent economic studies by the OIE have shown that it is much less costly to invest during 'peacetime' than it is to wait until a crisis occurs.

The World Bank recognises Veterinary Services as a 'global public good'. Building their capacity is the best way to guard against not only avian influenza, but also any other emerging or re-emerging disease of animal origin.

**References**

