

# Good governance of national Veterinary Services

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## Summary

The beginning of the 21st Century has been characterised by changed political and economic realities affecting the prevention, control and eradication of animal diseases and zoonoses and presenting new challenges to the veterinary profession. Veterinary Services (VS) need to have the capacity and capabilities to face these challenges and be able to detect, prevent, control and eradicate disease threats. Animal health and VS, being a public good, require global initiatives and collective international action to be able to implement global animal disease eradication. The application of the 'One World, One Health' strategy at the animal-human interface will strengthen veterinary capacity to meet this challenge. Good governance of VS at the national, regional and global level is at the heart of such a strategy.

In this paper, the author lists the key elements comprising good veterinary governance and discusses the World Organisation for Animal Health (OIE) standards for the quality of VS. The OIE Tool for the Evaluation of the Performance of Veterinary Services (OIE PVS Tool) is introduced and its relevance in assessing compliance with OIE standards to prevent the spread of pathogens through trade is highlighted. A firm political commitment at the national, regional and international level, with provision of the necessary funding at all levels, is an absolute necessity in establishing good governance of VS to meet the ever-increasing threats posed by animal and human pathogens.

## Keywords

Emerging and re-emerging infectious animal diseases – Global public good – Good veterinary governance – International standard – OIE PVS Tool – One World, One Health strategy – Veterinary governance – Veterinary Services.

## Introduction

The emergence and re-emergence of transboundary animal diseases (e.g. A/H1N1 influenza virus in humans and swine, African swine fever in Russia and bluetongue in Europe), and new risks arising from climate change and globalisation, with pathogens being able to move around the world in a time less than the average incubation period, clearly demonstrate the need for good veterinary governance on a global, regional and national scale.

Increases in human population, the drift of populations from the countryside to cities and the expansion of human activity into previously uninhabited areas all contribute to the emergence or re-emergence of infectious diseases.

International air travel, changes in the traditional livestock sector and the establishment of highly industrialised farming operations, in addition to the loss of agricultural land due to natural causes or industrialisation, also contribute to the problem. Wars, civil unrest resulting in displacement of humans and animals and climatic and environmental changes further facilitate pathogen emergence and spread.

The key element in mitigating the risk of spreading pathogens through international trade is a functional national Veterinary Service (VS). In both the public and private sectors, such VS should have the capacity and capability to prevent, detect and control animal diseases in accordance with the international standards

published in the OIE *Terrestrial Animal Health Code* (the *Terrestrial Code*). The *Terrestrial Code* defines VS as:

‘... the governmental and non-governmental organisations that implement animal health and welfare measures and other standards and recommendations in the *Terrestrial Code* and the OIE *Aquatic Animal Health Code* (*Aquatic Code*) in the territory. The Veterinary Services are under the overall control and direction of the Veterinary Authority. Private sector organisations, veterinarians, veterinary paraprofessionals or aquatic animal health professionals are normally accredited or approved by the Veterinary Authority to deliver the delegated functions’ (8).

Good veterinary governance policies, and their implementation by national VS, which are the very essence of a global public good, must be supported by appropriate veterinary legislation and sufficient human, administrative, managerial, technical and financial resources. In the context of this paper, good veterinary governance is considered to be a global public good.

### **Animal health and Veterinary Services are a global public good**

A global public good is defined as (4) a public good with benefits that are strongly universal, in terms of:

- countries (covering more than one group of countries)
- people (accruing to several, preferably all, population groups)
- generations (extending to both current and future generations, or at least meeting the needs of current generations without foreclosing development options for future generations).

Furthermore, a global public good is:

- non-competitive, in that the consumption of this good by anyone does not reduce the quantity available to others
- non-exclusive, in that it is impossible to prevent anyone from consuming that good
- available worldwide.

The animal health situation in one country is potentially dependent on that in other countries. An inadequate response to disease in one country may jeopardise others. Global animal disease eradication benefits all countries, with none being excluded from this benefit. The benefits of animal disease eradication are conferred on both the present and future generations (6). Animal health in its broadest terms has thus been recognised as a global public good.

With more than one billion people estimated to be living in rural areas in the developing world, and dependent in

one way or another on livestock, the role of VS in animal health, specifically in the prevention, control and eradication of animal diseases, clearly also constitutes a global public good.

### **One World, One Health**

Four international agencies, the Food and Agriculture Organization of the United Nations (FAO), the World Organisation for Animal Health (OIE), the World Health Organization (WHO) and the United Nations Children’s Fund, have developed what is known as ‘One World, One Health’ as a strategy towards a better understanding of the causes of the emergence and spread of infectious diseases of animal origin. This strategy relates to the prevention and control of emerging infectious diseases at the animal/human interface. Its focus is those animal diseases that have the potential to cause epidemics and pandemics, but it also considers those which have an impact on food security and poverty, since these are also public health problems (6).

The implementation and success of the One World, One Health strategy depend on good veterinary governance at all levels of activity and service delivery in VS.

### **Veterinary public and private partnerships**

At the May 2004 General Session of the OIE (5), the International Committee adopted the recommendation of the OIE *Ad hoc* Group on VS to strengthen animal health and veterinary public health services through improved involvement of private veterinarians and veterinary paraprofessionals. It was also considered important that VS build formal links with individual veterinarians and veterinary para-professionals. Such links could take the form of contracts for the provision of specific services, such as disease monitoring and surveillance, animal vaccination, food inspection and disease prevention and control.

It was also recommended that veterinary associations and/or organisations be established to organise public and private sector veterinary professionals into a representative and consultative forum. Among the responsibilities of such associations should be a focus on the quality of professional veterinary services being delivered and the provision of facilities and platforms for continuous professional development.

In the private sector, the concept of applying quality norms to veterinary practices and clinics has been introduced in recent years. Quality assurance is a modern instrument of the free-market system, reflecting the needs of clients/consumers for transparency and the desire to build, maintain and promote confidence in the services

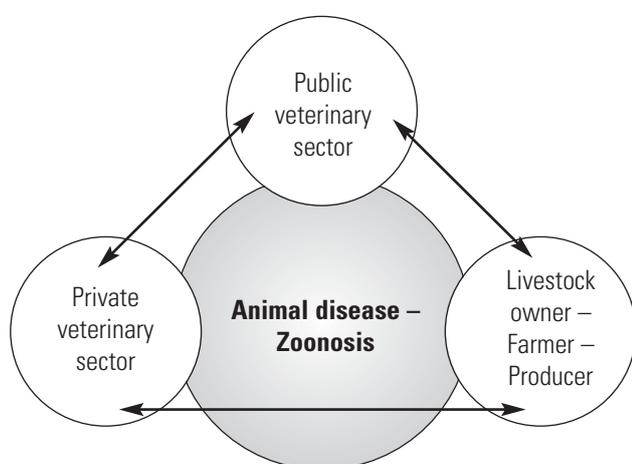
provided. Such quality assurance is an essential element of Good Veterinary Practice. Codes of Good Veterinary Practice have been introduced on a voluntary basis by some national veterinary organisations (e.g. the Association of Swiss Veterinarians) or at a regional level (e.g. the Federation of Veterinarians in Europe). The introduction of Good Veterinary Practice has contributed substantially to good veterinary governance in the private veterinary sector.

As Gonzalez *et al.* noted in the report: *Sustaining global surveillance and response to emerging zoonotic diseases* (3):

‘... privatized human health and veterinary services also change the context in which a country’s governance takes place, particularly with respect to managing private economic incentives that may be in competition with the production of public goods. The demands that global disease threats generate make decentralization and privatization in national human and animal health governance even more challenging.’

As field reports of disease outbreaks are a key component of disease surveillance, livestock owners and their representative organisations, private sector veterinarians and veterinary para-professionals all have a crucial role to play in the effective surveillance of animal diseases and zoonoses and early and rapid response activities (Fig. 1).

The establishment of a close working relationship or partnership between the public and private veterinary sectors, as well as with stakeholders such as livestock owners, food producers and processors, is a vital aspect of good veterinary governance of the national VS.



**Fig. 1**  
**Animal disease and zoonosis surveillance:**  
**the public-private partnership**

## Interdisciplinary collaboration

Interdisciplinary communication and coordination, in accordance with OIE standards, including public health, aquatic and wildlife health and disease surveillance, are crucial for preventing the introduction of pathogens and their control or eradication.

However, in many countries, there is little, if any, collaboration between the government departments charged with the delivery of animal health services and those responsible for human health. Veterinary public health, with its emphasis on the inspection of animal products destined for human consumption and food safety in general, is often the responsibility of the Ministry or Department of Health rather than the VS.

In addition, in many instances, wildlife health is the responsibility of government departments charged with managing environmental issues and/or natural resources, often with very limited collaboration with the VS.

In countries where fisheries are an important part of the economy, it is the exception for linkages to have been established between the VS and institutions active in aquaculture, marine fisheries and aquatic animal health. One of the consequences of this lack of linkages has been the spread of the fungal pathogen *Batrachochytrium dendrobatidis* around the globe in less than ten years. This pathogen, the cause of chytridiomycosis in amphibians, has resulted in devastating global declines in frog populations and great losses in biodiversity through the extinction of frog species. Chytridiomycosis has been called, ‘the worst infectious disease ever recorded among vertebrates in terms of the number of species impacted, and its propensity to drive them to extinction’ (1), and illustrates the absolute necessity for interdisciplinary collaboration to address major, global disease occurrences. It is believed that global trade in amphibians for food, or for use as laboratory animals, companion animals or display animals, has been the facilitating factor for spread. Chytridiomycosis is now addressed in Chapter 8.1. of the *Aquatic Code*, which recommends a number of control measures to prevent further spread and certification procedures for disease-free declarations for countries, zones or compartments (7).

## The Terrestrial Animal Health Code and quality standards

Good veterinary governance by VS is an absolute necessity to be able to meet the ever-increasing challenges of prevention, early detection, rapid response and control or eradication of emerging infectious diseases which may be spread through international trade.

To address these demands effectively, the VS of all countries need to achieve compliance with OIE standards by strengthening their professional capacities and establishing managerial, operational and financial structures and procedures based on the introduction and maintenance of good veterinary governance.

The quality of VS, and thus good veterinary governance, depends on the international standards of the OIE, since these are the standards to which the World Trade Organization Agreement on the Application of Sanitary and Phytosanitary Measures refers (11). These quality standards, adopted by consensus by all OIE Members, are published in the *Terrestrial Code* and the *Aquatic Code*. These *Codes* aim to assure the sanitary safety of international trade in terrestrial animals (mammals, birds and bees) and aquatic animals (amphibians, fish, crustaceans and molluscs) and their products.

Those OIE quality standards that specifically address the quality of VS to achieve good veterinary governance are published in Chapters 3.1. and 3.2. of the *Terrestrial Code* (8).

Article 3.1.1. lays out the following principles.

- The quality of VS depends on a set of factors, which include fundamental principles of an ethical, organisational and technical nature. The VS shall conform to these fundamental principles, regardless of the political, economic or social situation of their country.
- Compliance with these fundamental principles by the VS of a Member is important to the establishment and maintenance of confidence in its international veterinary certificates by the VS of other Members.
- The quality of VS can be measured through an evaluation, whose general principles are described in Article 3.1.3. and in Article 3.1.4.

The standards relating to the fundamental principles of quality are published in Article 3.1.2. and are reproduced below in Appendix I.

Article 3.2.2. covers the evaluation of VS and states, *inter alia*, the following.

- a) In the evaluation of VS the following items may be considered, depending on the purpose of the evaluation:
- organisation, structure and authority of the VS
  - human resources
  - material (including financial) resources
  - functional capabilities and legislative support
  - animal health and veterinary public health controls
  - formal quality systems including quality policy

- performance assessment and audit programmes
- participation in OIE activities and compliance with OIE Members' obligations.

b) To complement the evaluation of VS the organisational structure and functioning of the veterinary statutory body should also be considered.

The establishment and maintenance of a veterinary statutory body is considered to be a key element for good veterinary governance. The powers and functions of such a veterinary statutory body are detailed in Article 3.2.12. and include:

- the regulation of veterinarians and veterinary para-professionals through licensing and/or registration
- the determination of minimum standards of education (initial and continuing) required for degrees, diplomas and certificates entitling the holders thereof to be registered as veterinarians and veterinary para-professionals
- the determination of standards of professional conduct for veterinarians and veterinary para-professionals, and ensuring that these standards are met.

## Discussion

### Key elements for good governance of Veterinary Services

#### At the national level

In recent years, emerging and re-emerging diseases of humans and animals have highlighted the need for action against pathogens through early detection and rapid response mechanisms. Owing to the increasing international trade in animals and animal products, and the rapid movement of humans around the globe in times shorter than the incubation period of most infectious diseases, the challenges to VS have risen dramatically, placing ever-increasing demands on available human, physical and financial resources. These challenges have been exacerbated by environmental and climatic changes which have resulted in the spread of pathogens and their vectors to new hosts and geographical zones/areas.

Disease surveillance, early detection and a rapid professional response, supported by transparent and timely reporting, are essential elements of good veterinary governance.

The key elements of good veterinary governance in addressing national, regional and global occurrences of human and animal diseases are, therefore, capacity building in surveillance, diagnosis (laboratory capacity),

reporting and disease control and eradication programmes, all in accordance with OIE standards.

Public-private veterinary partnerships have the potential to significantly increase the success rate of these endeavours by strengthening national capacity and promoting sustainability in the long term. Such partnerships are also essential to facilitate the development of new vaccines, medicines and diagnostic tests.

Good veterinary governance at the national level requires VS with a functional and effective chain of command to be able to prevent, control and eradicate animal diseases. Likewise, timely and accurate disease notifications to the OIE are an integral part of national good veterinary governance.

### At the regional level

National VS are neither isolated from the rest of the world's animal and human diseases nor can they function in isolation to prevent the introduction of disease. Effective surveillance of transboundary animal diseases and zoonoses requires functioning and efficient information exchange systems between neighbouring countries, as well as globally. Early warning and response systems are the backbone of any preventive or control action against the spread of animal pathogens.

Regular and structured information exchanges between VS, including laboratory collaboration protocols and logistics for intra-regional pathogen identification, are essential instruments in promoting good veterinary governance. 'Twinning' arrangements between regional (and international) veterinary laboratories can significantly contribute to this process.

### At the international level

Active participation in the OIE, regular and up-to-date reporting of animal disease outbreaks and effective functioning of national OIE Focal Points are important for all VS in achieving international credibility and acceptance of their international veterinary health certificates. The failure of countries to report outbreaks undermines international good veterinary governance.

The One World, One Health initiative addresses global good veterinary governance through the incorporation of the following five elements (2):

- building robust and well-governed public and animal health systems compliant with WHO international health regulations and OIE international standards, through the pursuit of long-term interventions
- preventing regional and international crises by controlling disease outbreaks through improved national and international emergency response capabilities

- better addressing the concerns of the poor by shifting the focus from developed to developing economies, from potential to actual disease problems, and through a focus on the drivers of a broader range of locally important diseases
- promoting wide-ranging collaboration across sectors and disciplines
- developing rational and targeted disease control programmes through the conduct of strategic research.

In recent years the concept of good veterinary governance has been firmly established at the international level for the control and eradication of transboundary infectious diseases of animals. At the 2009 OIE/FAO Global Conference on Foot and Mouth Disease (FMD), the following was included in the resolution aimed at ways to achieve global FMD control (10):

'... good veterinary governance is an essential prerequisite to ensure the efficient implementation of national programmes and to encourage the establishment of sustainable public-private partnerships and international support for the control of FMD on a national, regional and global level.'

### The OIE Tool for the Evaluation of Performance of Veterinary Services

To evaluate compliance of VS with OIE standards, and to assist in achieving good veterinary governance and monitoring progress, the OIE has established procedures for evaluating VS, based on the provisions in the *Terrestrial Code* (8) and using the OIE Tool for the Evaluation of Performance of Veterinary Services (OIE PVS Tool). The OIE PVS Tool comprises four fundamental components (9):

- human, physical and financial resources to attract further resources and retain professionals with technical and leadership skills
- technical authority and capability to address current and new issues, including prevention and control of biological disasters, based on scientific principles
- interaction with stakeholders to assist in 'staying on course' and carrying out relevant joint programmes and services
- access to markets through compliance with existing standards and the implementation of new disciplines, such as the harmonisation of standards, equivalence and zoning.

For each of these components, 6 to 14 critical competencies, each with 5 levels of quantitative advancement, have been described in detail. Based on such

an evaluation, VS are able to identify strengths and weaknesses in their structures, systems and operating procedures, as well as their success in meeting OIE standards, and are thus able to put into place the necessary measures for good veterinary governance.

In this way, an OIE PVS evaluation may:

a) assist a national authority in the decision-making process about priorities to be given to its own VS (self-evaluation) or to prepare information for national or international purposes;

b) be used for the purpose of risk analysis in international trade in animals and animal-derived products to which official sanitary and/or zoosanitary controls apply, such as:

- evaluation by a prospective or actual importing country of the VS of a prospective or actual exporting country
- verification or re-verification of an evaluation in the course of a visit to the exporting country by the importing country;

c) facilitate an evaluation by third parties, such as OIE experts or regional organisations.

### Critical competencies addressing the spread of pathogens through international trade

Compliance of VS with good veterinary governance, in terms of their capability, capacity and performance in responding rapidly to the introduction and spread of pathogens through international trade, supported by

epidemiological and sanitary intelligence capacity, is addressed by a number of OIE PVS critical competencies. Examples of such critical competencies are summarised in Appendix II.

An OIE PVS evaluation provides a preliminary diagnosis of governance, which can then be followed up by support in the form of a gap analysis mission to establish what 'treatment' will be needed, according to the country's own priorities, to remedy weaknesses detected during the diagnosis (Fig. 2).

## Conclusion

The opening decade of the 21st Century has been characterised by rapidly changing political, social and economic realities affecting the prevention, control and eradication of animal diseases and zoonoses and presenting new challenges to the veterinary profession globally.

Public awareness of disease risks, animal welfare, wildlife and environmental health issues has increased due to the worldwide dissemination and accessibility of information through media such as the internet. This abundant and freely available information has resulted in increased demands on, and expectations of, the veterinary profession to be involved in a broadened spectrum of responsibilities. These range from animal health (terrestrial and aquatic), zoonoses, veterinary public health, food safety, animal welfare and issues affecting environmental health to

<b>Early detection and emergency response</b>				
II.6 The authority and capability of the Veterinary Services (VS) to detect and respond rapidly to a sanitary emergency (such as a significant disease outbreak or food safety emergency)				
<b>Activity per Level</b>				
<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Level 4</b>	<b>Level 5</b>
The VS have no field network or established procedure to determine whether a sanitary emergency exists or the authority to declare such an emergency and respond appropriately	The VS have a field network and an established procedure to determine whether or not a sanitary emergency exists, but lack the necessary legal and financial support to respond appropriately	The VS have the legal framework and financial support to respond rapidly to sanitary emergencies, but the response is not coordinated through a chain of command	The VS have an established procedure to make timely decisions on whether or not a sanitary emergency exists. The VS have the legal framework and financial support to respond rapidly to sanitary emergencies through a chain of command. They have national contingency plans for some exotic diseases	The VS have national contingency plans for all diseases of concern through coordinated actions with all stakeholders through a chain of command

**Fig. 2**

**Use of the World Organisation for Animal Health Tool for the Evaluation of Performance of Veterinary Services to examine the critical competencies of Veterinary Services in early detection and emergency response**

addressing and safeguarding national, regional and global trade in animals and animal products.

These responsibilities and expectations can only be met by the application of good veterinary governance at all levels of professional activity, be it public or private. The application of, and adherence to, the international standards for animal health (including zoonoses) developed and adopted by the OIE is essential when undertaking animal disease prevention and control measures, with particular emphasis on surveillance, early detection and rapid response to pathogen threats, whether these are emerging or re-emerging diseases.

Any system failures in VS delivery at a national level will not only have negative (often drastic) political, economic and social consequences, but could also endanger the rest of the world, due to the ease with which pathogens may be dispersed through international air traffic.

Animal health and VS, being a global public good, require global initiatives and collective international action to be able to implement animal disease prevention, control and eradication on a global scale. The application of the One World, One Health strategy at the animal–human interface will strengthen veterinary capacity to meet this challenge. ■

Good veterinary governance is dependent on the application of, and adherence to, the OIE's standards (as published in the *Code*), with particular reference to the fundamental principles of quality of the VS, which can be measured through an evaluation of their performance, using the OIE PVS Tool.

Of cardinal importance, however, is the firm commitment by political stakeholders, whether at the national, regional or international level, to pursue and reach, through provision of the necessary funding, the goal of establishing good veterinary governance at all levels to meet the ever-increasing threats posed by pathogens to human and animal health.

## La bonne gouvernance des Services vétérinaires nationaux

H. Schneider

### Résumé

Le début du 21<sup>e</sup> siècle se caractérise par de nouvelles configurations politiques et économiques qui affectent les capacités de prévention, de prophylaxie et d'éradication des maladies animales et des zoonoses et posent de nouveaux défis à la profession vétérinaire. Les Services vétérinaires doivent se doter des capacités et des moyens de faire face à ces défis pour être en mesure de détecter, de prévenir, de combattre et d'éradiquer toute menace sanitaire. Biens publics mondiaux, la santé animale et les Services vétérinaires nécessitent des initiatives mondiales et des actions concertées au plan international pour que les objectifs d'éradication des maladies animales à l'échelle mondiale puissent être atteints. L'application de la stratégie « Un monde, une seule santé » à l'interface entre l'homme et l'animal va permettre à la communauté vétérinaire de répondre plus efficacement à ces défis. La bonne gouvernance des Services vétérinaires aux niveaux national, régional et mondial est un élément central de cette stratégie.

Après avoir énuméré les aspects essentiels d'une bonne gouvernance vétérinaire, l'auteur examine les normes de l'Organisation mondiale de la santé animale (OIE) relatives à la qualité des Services vétérinaires. Il décrit, en particulier, l'Outil de l'OIE pour l'évaluation des performances des Services vétérinaires (Outil PVS) et souligne sa pertinence pour évaluer la conformité de ces derniers avec les normes de l'OIE visant à prévenir la propagation des

agents pathogènes lors des échanges internationaux. Pour assurer la bonne gouvernance des Services vétérinaires et leur permettre de répondre aux problèmes croissants que posent les pathogènes d'origine animale et humaine, il est indispensable que les décideurs politiques à l'échelle nationale, régionale et internationale s'engagent résolument dans ce domaine et facilitent les financements nécessaires, à chacun de ces niveaux.

#### **Mots-clés**

Bien public mondial – Bonne gouvernance vétérinaire – Gouvernance vétérinaire – Maladie animale infectieuse émergente et ré-émergente – Norme internationale – Outil PVS de l'OIE – Services vétérinaires – Stratégie « Un monde, une seule santé ».



## **Buena gobernanza de los Servicios Veterinarios nacionales**

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#### **Resumen**

Los inicios del siglo XXI se han caracterizado por una serie de realidades políticas y económicas distintas, que han influido en la prevención, el control y la erradicación de enfermedades animales y zoonosis y han colocado a la profesión veterinaria ante problemas mundiales inéditos. Los Servicios Veterinarios deben tener los medios y conocimientos necesarios para afrontar esos problemas y ser capaces de detectar, prevenir, controlar y erradicar amenazas sanitarias. Dado que constituyen un bien público mundial, la sanidad animal y los Servicios Veterinarios requieren iniciativas mundiales y acciones colectivas a escala internacional para llevar a la práctica eficazmente la erradicación de enfermedades animales en todo el mundo. La aplicación de la estrategia 'Un mundo, una salud' en la interfaz entre los animales y el ser humano reforzará la capacidad veterinaria para responder a este desafío. La buena gobernanza de los Servicios Veterinarios a escala nacional, regional y mundial es un aspecto capital de esa estrategia.

El autor enumera los principales elementos que configuran una buena gobernanza veterinaria y examina las normas de la Organización Mundial de Sanidad Animal (OIE) en materia de calidad de los Servicios Veterinarios. Asimismo, presenta la herramienta de la OIE para evaluar la eficacia de los Servicios Veterinarios (Herramienta PVS de la OIE) y subraya el interés que reviste a la hora de evaluar la observancia de las normas de la OIE para prevenir la diseminación de patógenos a resultas del comercio. Para hacer realidad la buena gobernanza de los Servicios Veterinarios y afrontar así con garantías la creciente amenaza que plantean patógenos animales y humanos es indispensable que exista voluntad política, tanto en los países como a nivel regional e internacional, acompañada de los fondos necesarios en todos esos niveles.

#### **Palabras clave**

Administración veterinaria – Bien público mundial – Buena gobernanza veterinaria – Enfermedades animales infecciosas emergentes y reemergentes – Estrategia "Un mundo, una salud" – Herramienta PVS de la OIE – Norma internacional – Servicios Veterinarios.



## References

1. Amphibian Ark (2010). – Chytrid fungus: the amphibian chytrid fungus and chytridiomycosis. Available at: [www.amphibianark.org/chytrid.htm](http://www.amphibianark.org/chytrid.htm) (accessed on 20 July 2010).
2. Food and Agriculture Organization of the United Nations (FAO)/World Organisation for Animal Health (OIE)/World Health Organization (WHO) (2009). – Global Early Warning and Response System for major animal diseases, including zoonoses (GLEWS). One World, One Health. Available at: [www.glews.net/index.php?option=com\\_content&view=article&id=6:one-world-one-health&catid=57:in-the-spotlight&Itemid=50](http://www.glews.net/index.php?option=com_content&view=article&id=6:one-world-one-health&catid=57:in-the-spotlight&Itemid=50) (accessed on 20 July 2010).
3. Gonzalez M.C., Keusch G.T., Papaioanou M., Scott K.A. & Tsai P. (2009). – Sustaining global surveillance and response to emerging zoonotic diseases. National Academies Press, Washington, DC, 207 pp. Available at: [www.nap.edu/catalog/12625.html](http://www.nap.edu/catalog/12625.html) (accessed on 20 July 2010).
4. United Nations Development Programme (UNDP) (2003). – Providing global public goods – glossary. Oxford University Press, Oxford. Available at: [www.undp.org/globalpublicgoods/globalization/glossary.html](http://www.undp.org/globalpublicgoods/globalization/glossary.html) (accessed on 15 July 2010).
5. World Organisation for Animal Health (OIE) (2004). – The role of private veterinarians and veterinary para-professionals in the provision of animal health services. Editorial (B. Vallat). OIE, Paris. Available at: [www.oie.int/en/for-the-media/editorials/detail/article/the-role-of-private-veterinarians-and-veterinary-para-professionals-in-the-provision-of-animal-health/](http://www.oie.int/en/for-the-media/editorials/detail/article/the-role-of-private-veterinarians-and-veterinary-para-professionals-in-the-provision-of-animal-health/) (accessed on 15 July 2010).
6. World Organisation for Animal Health (OIE) (2009). – Fact sheet. Good veterinary governance. OIE, Paris. Available at: [www.oie.int/fileadmin/Home/eng/Media\\_Center/docs/pdf/Fact\\_sheets/GOUV\\_EN\\_FS.pdf](http://www.oie.int/fileadmin/Home/eng/Media_Center/docs/pdf/Fact_sheets/GOUV_EN_FS.pdf) (accessed on 15 July 2010).
7. World Organisation for Animal Health (OIE) (2010). – Aquatic Animal Health Code. OIE, Paris. Available at: [www.oie.int/en/international-standard-setting/aquatic-code/](http://www.oie.int/en/international-standard-setting/aquatic-code/) (accessed on 22 July 2010).
8. World Organisation for Animal Health (OIE) (2010). – Terrestrial Animal Health Code. OIE, Paris. Available at: [www.oie.int/en/international-standard-setting/terrestrial-code/access-online/](http://www.oie.int/en/international-standard-setting/terrestrial-code/access-online/) (accessed on 15 July 2010).
9. World Organisation for Animal Health (OIE) (2010). – The new tool for the evaluation of performance of Veterinary Services (PVS Tool) using OIE international standards of quality and evaluation. OIE, Paris. Available at: [www.oie.int/eng/oie/organisation/en\\_vet\\_eval\\_tool.htm?e1d2](http://www.oie.int/eng/oie/organisation/en_vet_eval_tool.htm?e1d2) (accessed on 15 July 2010).
10. World Organisation for Animal Health (OIE)/Food and Agriculture Organization of the United Nations (FAO) (2009). – Global Conference on Foot and Mouth Disease – final recommendations, 24-26 June, Asunción, Paraguay. OIE/FAO, Paris/Rome. Available at: [www.oie.int/en/for-the-media/press-releases/detail/article/oiefao-global-conference-on-foot-and-mouth-disease-final-recommendations/](http://www.oie.int/en/for-the-media/press-releases/detail/article/oiefao-global-conference-on-foot-and-mouth-disease-final-recommendations/) (accessed on 20 July 2010).
11. World Trade Organization (WTO) (2010). – The Agreement on the Application of Sanitary and Phytosanitary Measures. WTO, Geneva. Available at: [www.wto.org/english/tratop\\_e/sps\\_e/spsagr\\_e.htm](http://www.wto.org/english/tratop_e/sps_e/spsagr_e.htm) (accessed on 14 February 2011).

# Appendix I

## *Terrestrial Animal Health Code*

### Chapter 3.1. Veterinary Services

#### **Article 3.1.2. Fundamental principles of quality**

##### **1. Professional judgement**

The personnel of Veterinary Services should have the relevant qualifications, scientific expertise and experience to give them the competence to make sound professional judgements.

##### **2. Independence**

Care should be taken to ensure that Veterinary Services personnel are free from any commercial, financial, hierarchical, political or other pressures which might affect their judgement or decisions.

##### **3. Impartiality**

The Veterinary Services should be impartial. In particular, all the parties affected by their activities have a right to expect their services to be delivered under reasonable and non-discriminatory conditions.

##### **4. Integrity**

The Veterinary Services should guarantee that the work of each of their personnel is of a consistently high level of integrity. Any fraud, corruption or falsification should be identified and corrected.

##### **5. Objectivity**

The Veterinary Services should at all times act in an objective, transparent and non-discriminatory manner.

##### **6. Veterinary legislation**

Veterinary legislation is prerequisite to support good governance and provide the legal framework for all key activities of the Veterinary Services.

Legislation should be suitably flexible to allow for judgements of equivalence and efficient responses to changing situations. In particular, it should define and document the responsibilities and structure of the organisations in charge of the animal identification system, control of animal movements, animal disease control and reporting systems, epidemiological surveillance and communication of epidemiological information.

A similar demonstration should be made by Veterinary Services when they are in charge of veterinary public health activities.

##### **7. General organisation**

The Veterinary Services should be able to demonstrate by means of appropriate legislation, sufficient financial resources and effective organisation that they are in a position to have control of the establishment and application of animal health and animal welfare measures, and of international veterinary certification activities.

The Veterinary Services should have at their disposal effective systems for animal disease surveillance and for notification of disease problems wherever they occur, in accordance with the provisions of the *Terrestrial Code*. Adequate coverage of animal populations should also be demonstrated. They should at all times endeavour to improve their performance in terms of animal health information systems and animal disease control.

The Veterinary Services should define and document the responsibilities and structure of the organisation (in particular the chain of command) in charge of issuing international veterinary certificates.

Each position within the Veterinary Services which has an impact on their quality should be described. These job descriptions should include the requirements for education, training, technical knowledge and experience.

## 8. Quality policy

The Veterinary Services should define and document their policy and objectives for, and commitment to, quality, and should ensure that this policy is understood, implemented and maintained at all levels in the organisation. Where conditions allow, they may implement a quality system corresponding to their areas of activity and appropriate for the type, range and volume of work that they have to perform. The recommendations for the quality and evaluation of Veterinary Services propose a suitable reference system, which should be used if a Member chooses to adopt a quality system.

## 9. Procedures and standards

The Veterinary Services should develop and document appropriate procedures and standards for all providers of relevant activities and associated facilities. These procedures and standards may for example relate to:

- a) programming and management of activities, including international veterinary certification activities;
- b) prevention, control and notification of disease outbreaks;
- c) risk analysis, epidemiological surveillance and zoning;
- d) inspection and sampling techniques;
- e) diagnostic tests for animal diseases;
- f) preparation, production, registration and control of biological products for use in the diagnosis or prevention of diseases;
- g) border controls and import regulations;
- h) disinfection and disinfestation;
- i) treatments intended to destroy, if appropriate, pathogens in animal products.

Inasmuch as the OIE has adopted standards on these matters, the Veterinary Services should comply with these standards when applying animal health measures and when issuing international veterinary certificates.

## 10. Information, complaints and appeals

The Veterinary Authority should undertake to reply to legitimate requests from Veterinary Authorities of other Members or any other authority, in particular ensuring that any requests for information, complaints or appeals that they may present are dealt with in a timely manner.

A record should be maintained of all complaints and appeals and of the relevant action taken by the Veterinary Services.

## 11. Documentation

The Veterinary Services should have at their disposal a reliable and up-to-date documentation system suited to their activities.

## 12. Self-evaluation

The Veterinary Services should undertake periodical self-evaluation especially by documenting achievements against goals, and demonstrating the efficiency of their organisational components and resource adequacy.

A procedure for evaluating Veterinary Services by OIE experts, on a voluntary basis, is described in Article 3.1.5.

## 13. Communication

Veterinary Services should have effective internal and external systems of communication covering administrative and technical staff and parties affected by their activities.

## 14. Human and financial resources

Responsible authorities should ensure that adequate resources are made available to implement effectively the above activities.



# Appendix II

## World Organisation for Animal Health Tool for the Evaluation of Performance of Veterinary Services

The PVS Tool assesses critical competencies in 39 different categories. The categories related to the spread of pathogens by international trade are listed here, together with a summary of what is assessed in each category.

### Chapter I: Human, physical and financial resources

#### **Section I-1: Professional and technical staffing of the Veterinary Services**

The appropriate staffing of the Veterinary Services (VS) to allow for veterinary and technical functions to be undertaken efficiently and effectively

#### **Section I-2: Competencies of veterinarians and veterinary para-professionals**

The capability of the VS to efficiently carry out their veterinary and technical functions; measured by the qualifications of their personnel in veterinary and technical positions

#### **Section I-7: Physical resources**

The access of the VS to relevant physical resources including buildings, transport, telecommunications, cold chain, and other relevant equipment (e.g. computers)

**Section I-8: Operational funding**

The ability of the VS to access financial resources adequate for their continued operations, independent of political pressure

**Section I-11: Management of resources and operations**

The capability of the VS to document and manage their resources and operations in order to analyse, plan and improve both efficiency and effectiveness

## Chapter II: Technical authority and capability

**Section II-1: Veterinary laboratory diagnosis**

The authority and capability of the VS to identify and record pathogenic agents, including those relevant for public health, that can adversely affect animals and animal products

**Section II-3: Risk analysis**

The authority and capability of the VS to base its risk management decisions on a scientific assessment of the risks

**Section II-4: Quarantine and border security**

The authority and capability of the VS to prevent the entry and spread of diseases and other hazards of animals and animal products

**Section II-5: Epidemiological surveillance**

The authority and capability of the VS to determine, verify and report on the sanitary status of the animal populations under their mandate

**Section II-6: Early detection and emergency response**

The authority and capability of the VS to detect and respond rapidly to a sanitary emergency (such as a significant disease outbreak or food safety emergency)

**Section II-7: Disease prevention, control and eradication**

The authority and capability of the VS to actively perform actions to prevent, control or eradicate OIE-listed diseases and/or to demonstrate that the country or a zone are free of relevant diseases

**Section II-13: Identification and traceability****A. Animal identification and movement control**

The authority and capability of the VS, normally in coordination with stakeholders, to identify animals under their mandate and trace their history, location and distribution for the purpose of animal disease control, food safety, or trade or any other legal requirements under the VS/OIE mandate

**B. Identification and traceability of products of animal origin**

The authority and capability of the VS, normally in coordination with stakeholders, to identify and trace products of animal origin for the purpose of food safety, animal health or trade

## Chapter III: Interaction with stakeholders

### **Section III-1: Communications**

The capability of the VS to keep stakeholders informed, in a transparent, effective and timely manner, of VS activities and programmes, and of developments in animal health and food safety

### **Section III-2: Communication with stakeholders**

The capability of the VS to consult effectively with stakeholders on VS activities and programmes, and on developments in animal health and food safety

### **Section III-6: Participation of producers and other stakeholders in joint programmes**

The capability of the VS and stakeholders to formulate and implement joint programmes in regard to animal health and food safety

## Chapter IV: Access to markets

### **Section IV-1: Preparation of legislation and regulations**

The authority and capability of the VS to actively participate in the preparation of national legislation and regulations in domains that are under their mandate, in order to [guarantee] its quality with respect to principles of legal drafting and legal issues (internal quality) and its accessibility, acceptability, and technical, social and economical applicability (external quality)

### **Section IV-2: Implementation of legislation, regulations and stakeholder compliance**

The authority and capability of the VS to ensure that stakeholders are in compliance with legislation and regulations under the VS mandate

### **Section IV-3: International harmonisation**

The authority and capability of the VS to be active in the international harmonisation of regulations and sanitary measures and to ensure that the national legislation and regulations under their mandate take account of relevant international standards, as appropriate

