

International standards: the World Organisation for Animal Health *Terrestrial Animal Health Code*

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Summary

This paper provides a description of the international standards contained in the *Terrestrial Animal Health Code* of the World Organisation for Animal Health (OIE) that relate to the prevention and control of vector-borne diseases. It identifies the rights and obligations of OIE Member Countries regarding the notification of animal disease occurrences, as well as the recommendations to be followed for a safe and efficient international trade of animals and their products.

Keywords

Animal health standard – Disease notification – International trade – Risk analysis – Surveillance – Terrestrial Animal Health Code – Veterinary certificate.

Vector-borne diseases and their vectors continue to evolve and, at times, at higher rates than usual due to phenomena such as climate change, modifications in ecosystems, globalisation, and the accompanying increases in travel and international trade.

The World Organisation for Animal Health (OIE) *Terrestrial Animal Health Code (Terrestrial Code)* (1) provides essential recommendations on the prevention and control of animal diseases, including zoonotic diseases. It provides recommendations applicable to vector-borne diseases, whether emerging or re-emerging. The recommendations contained in the various chapters are not limited to prevention of transmission and spread of diseases as a result of international trade, but also focus on situations occurring at national level. While not all important vector-borne diseases are covered in detail in the *Terrestrial Code*, the so called 'horizontal' chapters, such as those on surveillance, identification, traceability and certification (as opposed to 'vertical' chapters dealing with specific diseases), have relevance to the control and prevention of any animal disease.

The *Terrestrial Code* sets out standards for the improvement of terrestrial animal health and welfare and veterinary public health worldwide. Veterinary and other relevant authorities should use these standards to implement legitimate measures providing for early detection, reporting, notification and control of pathogenic agents, including zoonotic ones, in terrestrial animals and preventing their spread via international trade of animals and their products, while avoiding unjustified sanitary barriers to trade.

The standards are based on the latest scientific information and have been reviewed and adopted by the World Assembly of OIE Delegates. For the proper application of these standards, the entire *Terrestrial Code* needs to be taken into consideration and not just isolated sets of recommendations.

The standards are arranged and presented in different sections. Section 1 is devoted to implementation of measures for the diagnosis, surveillance and notification of diseases. They include procedures for the official notification of disease occurrence to the OIE, tests for international trade, and procedures for the assessment of the health status of a country or a zone.

This section also contains a detailed description of OIE Member Country obligations and the rights of OIE headquarters to communicate directly with the Veterinary Authorities in each Member Country, as provided for in the OIE Organic Statutes. To maintain an efficient and transparent animal health notification system worldwide, Members must make available to other Members, through the OIE, all relevant information necessary to minimise the spread of animal diseases and their aetiologic agents.

The detection of an aetiologic agent of a listed disease should be reported, even in the absence of clinical signs, as should the detection of an emerging disease situation with zoonotic potential or a significant impact on livestock or wildlife. Section 1 describes the obligation to notify the first occurrence of a listed disease, infection or infestation, as

well as the re-occurrence of such. Weekly reports must be provided until such time as a final report can be submitted declaring the end of the outbreak or affirming that the disease has become endemic and sufficiently stable. To be listed by the OIE, a disease must have met a detailed set of criteria related to infectivity, spread and epidemiologic significance, all of which are described in the *Terrestrial Code*.

In addition to these notification obligations, Member Countries are encouraged to inform the OIE of the occurrence of other important non-listed disease events in their territory.

Maximum efficiency and harmonisation in the detection and reporting of disease events is obtained by adhering to the specified diagnostic tests referred to in the *Terrestrial Code* and prescribed in the relevant sections of the OIE *Manual of Diagnostic Tests and Vaccines for Terrestrial Animals* (2).

Proper animal health surveillance is essential to determine the absence of disease or to determine its presence and its distribution throughout a territory. The early detection and notification of an exotic disease or an emerging disease is essential in order to prevent its spread and transmission as a result of international trade. Section 1 contains chapters describing the type of surveillance to be applied, depending on the situation. There are different types of surveillance, such as structured population-based surveys and structured non-random surveillance. These are described in detail, as are the critical elements for each and their analytical methodologies. There are also different surveillance methods aimed at determining the distribution and occurrence of infections. One of these surveillance chapters is dedicated specifically to surveillance for arthropod vectors of animal diseases. The intent is to gather information on the spatial and temporal distribution and abundance of these vectors. This chapter contains a decision tree for vector surveillance and details of specific sampling methodologies.

Section 2 contains chapters to guide importing countries in conducting import risk analysis, even in the absence of OIE disease-specific standards. Importing countries may also use these import risk analysis recommendations to justify their import requirements when applying conditions which are more trade restrictive than those recommended by the OIE.

This section describes the components of a risk analysis and the importance of identifying the hazards before initiating a risk evaluation. It also describes in detail the principles of a risk assessment and its steps. This is then followed by the principles and the components of risk management. Last, but not least, are the principles of risk communication.

For the purposes of international trade, Member Countries are compelled under the Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement) of the World Trade Organization (WTO) (3) to adhere to these recommendations when applying import sanitary measures to protect the health of animals and people.

Section 3 is dedicated to chapters relevant to Veterinary Services. It provides recommendations on the establishment, maintenance and evaluation of these Services, including elements on veterinary legislation and communication. These standards assist Veterinary Authorities to meet their obligations and the objectives of improving animal health and welfare, as well as to establish and maintain credibility, which fosters confidence among trading partners in regard to veterinary certification (see below).

One of the chapters in Section 3 is dedicated to the quality of Veterinary Services, describing the key ethical, organisational, technical and regulatory principles that are essential to a well-functioning Service. Veterinary Services must conform to these fundamental principles, regardless of the political, economic or social situations in their country.

This chapter also describes how Member Countries can evaluate the quality of their own Veterinary Services and those of their trading partners. Countries have the right to undertake an objective evaluation of the Veterinary Services of another country as part of a risk analysis process to be used when reviewing sanitary measures relevant to an intended import. A description is provided as to how this evaluation is to be conducted, taking into account the fundamental principles and other factors of quality. The outcomes of such an evaluation should be provided in writing and expeditiously to the evaluated country, detailing any findings which could affect trade prospects. Due to the importance of the credibility and efficiency of Veterinary Services as an element of the risk analysis process, which countries can legitimately use in the formulation of import policies, the *Terrestrial Code* devotes an entire chapter to this evaluation process.

The purpose of any evaluation, whether it be a self-evaluation or an evaluation of the Veterinary Services of another country, is to demonstrate that the country has the capability to maintain its sanitary status. Among the elements to be evaluated are the adequacy of resources, the management capabilities, the legislative and administrative infrastructures and the critically important independence to exercise its official functions. An examination of the history of the Service's performance and of its official disease reporting to the OIE will contribute to this evaluation.

The OIE has developed an official evaluation process for Veterinary Services. This is conducted by certified OIE

experts, applying established procedures to examine the performance of a Veterinary Service against 146 critical elements described in the *Terrestrial Code*. The OIE Veterinary Services (PVS) Evaluation is part of a process known as the PVS Pathway. This Pathway offers a series of other elements which assist the Veterinary Authority in addressing the weaknesses identified in the initial evaluation.

The benefits of this PVS Pathway are provided by the OIE to all Member Countries that request an evaluation. Over 110 Member Countries have already requested this service and have benefited from the various follow-up missions targeted at specific areas (e.g. veterinary legislation, veterinary education).

Due to the importance of a legal infrastructure as the basis on which Veterinary Services perform their obligations, the *Terrestrial Code* devotes an entire chapter to veterinary legislation. It describes the general principles and provides guidance on the drafting of legislation. It also describes the importance of having legislation covering the roles of Competent Authorities, veterinarians, veterinary para-professionals and veterinary laboratories, as well as legislation that covers the human food production chain and veterinary medicines and biologicals.

Section 4 is dedicated to prevention and control methods. It contains chapters on standards for the implementation of measures that will assist in the prevention and control of pathogenic agents. These include measures on animal identification, traceability of animals and products, zoning and compartmentalisation, proper disposal of dead animals, disinfection and general hygienic precautions. There are also several chapters on the collection and processing of semen, embryos and oocytes of different animal species.

Section 5 is dedicated to chapters on the implementation of general sanitary measures for trade, import/export procedures and veterinary certification. This section also provides a range of model veterinary certificates to be used in order to harmonise international trade worldwide.

To achieve safe and fair international trade in animals and animal products, countries should use international veterinary certificates as described in the *Terrestrial Code*. The international veterinary certificate is an official document issued by the importing Veterinary Authority. These certificates list the animal health requirements and, where appropriate, the public health requirements that must be met for the exported commodity. Once the requirements have been met, the document is signed by a certifying veterinarian to confirm that the commodity is safe to trade. These international animal health certificates underpin international trade and provide assurances to the importing country regarding the health status of the animals

and animal products being imported. The requirements set should take into account the health status of both the importing and exporting country and be based on the standards of the *Terrestrial Code*.

In addition to the international veterinary certificates, Veterinary Authorities are encouraged to prepare 'guidance notes' to assist importing and exporting parties to comply with the specific trade requirements. These guidance notes should identify and explain the trade conditions, including the measures to be applied before/after export and during transport and loading, as well as the relevant legal obligations and operational procedures. The guidance notes should provide advice on all details to be included in the health certificate accompanying the consignment to its destination.

Section 6 is dedicated to veterinary public health. This section contains recommendations to assist Member Countries in meeting their veterinary public health objectives. These include recommendations on ante- and post-mortem inspections, control of hazards in feed, biosecurity measures at the animal production level, the prudent use of antimicrobial agents and the control of antimicrobial resistance.

Sections 8 to 15 contain disease-specific chapters providing recommendations on listed diseases. The chapters describe the aetiologic agents of those diseases, providing a description of a case and of the susceptible hosts of epidemiologic significance. They also contain recommendations on the determination of health status and the conditions for the safe trade of animals and their products.

As specific requirements aimed at ensuring safe and efficient trade, animal health measures should be based on the OIE standards described in the *Terrestrial Code*. According to the SPS Agreement, a country has the right to require a higher level of protection than that provided in the *Terrestrial Code* for the importation of animals and animal products. However, this right is accompanied by an obligation to scientifically justify these risk-based sanitary measures on the basis of a scientific risk analysis conducted in accordance with the relevant OIE standards.

An exporting country has the right to challenge an importing country when encountering measures that are more trade restrictive than those recommended in the OIE standards. It is then the obligation of the importing country to demonstrate that these stricter measures are justified on the basis of a scientific risk analysis, that they are not discriminatory and that they do not act as a trade barrier.

In the absence of an OIE standard for a particular disease or commodity, a country should also conduct such a scientific

risk analysis to demonstrate that the import measures applied are no more restrictive than necessary to address the sanitary risks of concern.

In addition to specific recommendations on how to safely trade animals and animal products in relation to a specific aetiologic agent, each disease-specific chapter in the *Terrestrial Code* includes a list of commodities that are safe to trade, without the imposition of sanitary measures, regardless of the sanitary status of the country or zone for the agent in question. ■

In conclusion, the international standards in the *Terrestrial Code* are not limited to providing recommendations on international trade. They also provide recommendations on prevention and control of animal diseases, including zoonoses and vector-borne diseases, whether or not they are listed by the OIE.

Normes internationales : le *Code sanitaire pour les animaux terrestres* de l'Organisation mondiale de la santé animale

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Résumé

L'auteur décrit les normes internationales relatives à la prévention et au contrôle des maladies à transmission vectorielle contenues dans le *Code sanitaire pour les animaux terrestres* de l'Organisation mondiale de la santé animale (OIE). Il expose les droits et les obligations des Pays Membres de l'OIE concernant la notification des cas de maladies animales, ainsi que les recommandations à suivre en vue de garantir l'innocuité et l'efficacité des échanges internationaux d'animaux et de produits d'origine animale.

Mots-clés

Analyse du risque – Certificat vétérinaire – Code sanitaire pour les animaux terrestres – Échanges internationaux – Norme de santé animale – Notification d'une maladie – Surveillance. ■

Normas internacionales: el *Código sanitario para los animales terrestres* de la Organización Mundial de Sanidad Animal

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Resumen

El autor describe las normas internacionales contenidas en el *Código sanitario para los animales terrestres* de la Organización Mundial de Sanidad Animal (OIE) que guardan relación con la prevención y el control de enfermedades transmitidas por vectores. Asimismo, expone los derechos y obligaciones de los Países Miembros de la OIE en cuanto a notificación de casos de enfermedades animales, así como las recomendaciones que conviene seguir para mayor seguridad y eficacia del comercio internacional de animales y productos de origen animal.

Palabras clave

Análisis del riesgo – Certificado veterinario – Código sanitario para los animales terrestres – Comercio internacional – Norma zoonosanitaria – Notificación de enfermedades – Vigilancia. ■

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