



WORLD ORGANISATION FOR ANIMAL HEALTH
Protecting animals, preserving our future

**PRINCIPLES
FOR THE TEMPORARY ESTABLISHMENT OF**

Equine Disease Free Zones

**A paper for the information of
OIE Member Countries**

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1. Introduction

This paper explains the OIE concept of the Equine Disease Free Zone (EDFZ) and sets out general requirements for the temporary establishment of such zones. It should be read in conjunction with the Technical Item presented by Dr J.G. Murray at the 81st OIE General Session, 2013: Benefits and challenges posed by the worldwide expansion of equestrian events – new standards for the population of competition horses and equine disease free zones in countries¹.

2. Background

The OIE has established procedures for official recognition of freedom from certain diseases (see *Terrestrial Code* Chapter 1.6). In 2012, the World Assembly of OIE Delegates agreed to make provision, for the first time, for recognition of official freedom from an equine disease, i.e. African horse sickness. In addition to official freedom, Chapter 1.6 also sets out the conditions for countries wishing to make a self- declaration as to the freedom of a country, or a defined zone or compartment, from other diseases. Such a self- declaration should be based on compliance with the conditions in the *Terrestrial Animal Health Code* (the *Terrestrial Code*).

Recognising the difficulty of eradicating infectious diseases from entire countries, the *Terrestrial Code* sets out general requirements for the establishment of zones or compartments containing animal subpopulations of a ‘higher health’ status - i.e. subpopulations that are free from a particular disease. Official recognition by the OIE of disease free zones or countries currently only applies to FMD, CBPP, BSE, AHS, PPR and CSF and is based on the official recognition by the OIE of freedom from a single disease per zone or country. The same principle is applied for the self-declaration by Member Countries of freedom from particular diseases. Zoning and compartmentalisation are tools that can be used for the purpose of disease control within a country or region and to facilitate safe international trade. The credibility of the national Veterinary Services and the reliability of its veterinary health certification are of critical importance in convincing trading partners that health claims are valid, whether these relate to the entire national territory or any part thereof.

The concept of an Equine Disease Free Zone (EDFZ) is an extension of the concepts of *zoning* and *compartmentalisation* already defined and described in the *Terrestrial Code* and applied by Member Countries. An EDFZ can for all practical purposes be regarded as either applying the application of a disease free zone as described in Chapter 4.3 with the difference that it is done for multiple equine diseases, or applying the principles of *compartmentalisation* as described in Chapters 4.3 and 4.4 depending on the size of the EDFZ or a combination of both. The concept of zonal freedom is thus taken a step further, by defining a zone with respect to freedom from several diseases (as provided for in the establishment of a *compartment*) and for a defined limited time period determined by the time period of the particular equestrian event..

This concept has been used with success in the planning and implementation of international equestrian events, the most recent example being the Asian Games hosted by the People’s Republic of China in 2010.

¹ See the Report of the 81st General Session, paras 150-164 at http://www.oie.int/fileadmin/Home/eng/About_us/docs/pdf/A_FR_2013_public.pdf

The establishment of an EDFZ for an international equine event is a complex and costly undertaking and all details relevant to running a successful event, and to effective biosecurity, must be carefully considered and addressed. High level business and logistical planning, coordination and communication in full collaboration between the equestrian competition organisers, those responsible for the resident horse population and the government are essential to achieve a successful outcome.

3. Credibility of Veterinary Services and veterinary health certification

Countries proposing to establish an EDFZ should engage in the OIE global programme for strengthening the Performance of Veterinary Services (OIE PVS Pathway). This helps to give trading partners confidence in the competence and good governance of the national Veterinary Services, which is essential for international acceptance of any claim to disease freedom, whether this concerns a free country, zone, compartment, or establishment or EDFZ.

4. Principles in establishing an equine disease free zone

4.1. *The diseases for which a zone may be defined*

A zone may normally be defined with reference to diseases that are listed by the OIE, for equines and, as appropriate, for multiple species as shown in Figure 1

(see <http://www.oie.int/en/animal-health-in-the-world/oie-listed-diseases-2013/>).

Figure 1 - OIE listed diseases relevant to equines in 2013

African horse sickness
Anthrax
Contagious equine metritis
Dourine (*T. equiperdum*)
Equine encephalomyelitis (Eastern and Western)
Equine infectious anaemia
Equine influenza
Equine piroplasmiasis
Equine rhinopneumonitis
Equine viral arteritis
Glanders (*B. mallei*)
Japanese encephalitis
Rabies
Vesicular stomatitis
Venezuelan equine encephalomyelitis
West Nile fever

Consideration should also be given to diseases that are not on the OIE list but are important in the context of horse movements and equine health. One such disease is strangles (infection with *Streptococcus equi*). This pathogen does not meet the OIE criteria for disease listing, as set out in *Terrestrial Code* Chapter 1.2. However, strangles is an important disease and to prevent the exposure of competing horses and domestic horse populations, it may be warranted to include *S. equi* in the definition of an EDFZ.

New diseases, such as infection with Hendra virus or Nipah virus, may also be relevant for inclusion in the definition of an EDFZ.

Routes of disease transmission should also be taken into account. Diseases that are spread solely via horse breeding (including artificial breeding), such as contagious equine metritis, equine coital exanthema (infection with equine herpesvirus 3) and dourine, should be disregarded when establishing an EDFZ for the purpose of the temporary introduction of horses for the sole purpose of participation in a competition.

4.2. *Baseline knowledge of the health status of horses and other animals in the local population*

OIE Member countries have general obligations to conduct surveillance for OIE listed diseases and to report their findings to the OIE in accordance with *Terrestrial Code* Chapter 1.1. In addition to this, countries should conduct specific surveillance to establish the health status of equines and, as appropriate, other species that are susceptible to the diseases of horses, in an area where it is proposed to establish an EDFZ.

The *Terrestrial Code* contains general provisions on disease surveillance in Chapter 1.4 and, in Volume 2, specific provisions for some listed diseases. The *Manual of Diagnostic Tests and Vaccines for Terrestrial Animals* (the *Manual*) provides detailed information on diagnostic protocols and other matters relevant to surveillance (see <http://www.oie.int/en/international-standard-setting/terrestrial-manual/access-online/>).

For diseases of multiple species, such as anthrax, rabies and vesicular stomatitis (horses, ruminants and pigs); Japanese encephalitis and Nipah virus (horses and pigs), specific surveillance should be carried out in other susceptible species, as well as in equines.

For diseases that are known to have a wildlife reservoir (e.g. rabies, Hendra virus, Nipah virus, Venezuelan equine encephalitis, Eastern and Western equine encephalitis), surveillance of wildlife may be required to support a claim of country or zone freedom from the disease or agent. The *Terrestrial Code* Chapter 1.5 contains recommendations on surveillance for arthropod vectors, which should be followed in the case of diseases that can be transmitted by such vectors (e.g. African horse sickness, vesicular stomatitis, equine piroplasmiasis, West Nile fever).

The recommendations on surveillance in the OIE *Terrestrial Code* and *Manual* should be followed in defining the health status of populations in the area where the EDFZ will be established.

4.3. *Establishing the boundaries of the EDFZ*

Separation of the 'high health' sub population (i.e., the horses inside the EDFZ) from the general population (i.e. equines and other species outside the EDFZ) is achieved by implementing the requirements of Chapter 4, that will apply during the entire period of the zone's operation. The timing for the establishment of the EDFZ in relation to the scheduled event should be based on relevant *Terrestrial Code* provisions i.e. providing for sufficient time before the event to be able to give the required sanitary guarantees for freedom from the specified diseases such as testing intervals, surveillance requirements, etc.

The movement of animals across geographical barriers and the application of measures required under the biosecurity plan must be supported by effective systems for supervision and control to maintain the status of the EDFZ. This is best achieved using a collaborative approach, whereby the private sector (event organisers, horse owners, veterinarians) take responsibility for compliance with the rules and, as appropriate, legislation established by the *Veterinary Authority*. The private sector may take responsibility for carrying out the various checks and controls that ensure the integrity of the EDFZ. However, the *Veterinary Authority* has sole authority for the legal definition of the EDFZ and for ensuring compliance with all legal requirements, including veterinary certification that will be issued in relation to the zone.

The physical parameters of the EDFZ (including the radius of the free zone and of any protection zone depend on physical and climatic characteristics, the type and density of animal populations (including wildlife) and vectors present in and around the zone, and the diseases for which the zone is established should be clearly described. The physical layout of the EDFZ must be appropriate to the risk factors of each disease, to enable effective implementation of the biosecurity plan and maintenance of the health status of horses inside the zone.

4.4. *Establishing the biosecurity plan for an EDFZ*

In planning and implementing the biosecurity plan for an EDFZ the recommendations contained in this paper and other relevant OIE recommendations, such as the OIE Biosecurity Guidelines should be followed. Some additional aspects require specific considerations, such as:

- In the course of an international equestrian event, horses and associated goods (e.g. equipment, feed, bedding, veterinary treatments), as well as people, vehicles and many types of commercial goods will enter and leave the EDFZ. The introduction of disease agents via these movements must be specifically addressed in the biosecurity plan, with respect to the risk pathways relevant to the diseases of concern. The entry into the EDFZ of equines and other domestic animals, biological materials, feed, bedding and all goods that can act as vectors for infectious diseases must be strictly controlled.
- The standard approach is to allow inward movement subject to official authorisation, e.g. by issuance of a permit. The entry points into the EDFZ should be limited in number and organised to facilitate the conduct of official control. Entry through an official checkpoint should be required for all equines (and other animals, if permitted to enter the EDFZ), consignments of

feed and biological materials intended for use with horses. The checkpoints should be equipped with facilities to enable verification of documentation and physical checks, as appropriate. Entry points should be equipped with signs advising of biosecurity requirements and facilities for washing and sanitising the wheels of vehicles that have come from any agricultural holding.

- Maintenance of the EDFZ requires compliance by all persons with the requirements of the biosecurity plan. The plan should be supported by national legislation, to the extent necessary. As a minimum, the legislation should clarify who is responsible for official controls and enforcement and establish penalties for failure to comply with biosecurity requirements. All persons entering the zone who work or come into direct contact with equines in the zone should be informed of the biosecurity requirements and the penalties.
- It may not be practicable to establish control over the entry of the general public and other persons who will enter and leave the zone without coming into direct contact with horses. However, information about biosecurity requirements and penalties for non-compliance with these requirements should be provided to all those entering and resident in the zone.

4.5. Contingency planning

Contingency planning for a suspected or confirmed outbreak of an infectious disease affecting members of the family equidae should be undertaken as set out in the OIE Biosecurity Guidelines.

In addition to disease prevention and control measures, the contingency plan should also address animal welfare. In this context the contingency plan should identify arrangements for veterinary emergency care within the zone and establish standard operating procedures for the situation where a horse participating in the event requires veterinary assistance and must leave the zone to obtain it.

Example: Successful use of an EDFZ at the Asian Games 2010

In the Asian Games 2010, hosted by the People's Republic of China, the EDFZ comprised a core zone of 5 km radius, including the Conghua competition site and a surveillance zone of 2,009 km², which included all administrative divisions of Conghua City outside the core zone. The Equestrian Centre was fully fenced or enclosed to prevent unauthorised introduction of domestic animals and the entry of wildlife. No equines were allowed in the EDFZ prior to the Asian Games.

The EDFZ was inside a protection zone that included the 18 districts of Guangzhou City. This zone included a limited number of horses and some holdings with pigs and ruminants, which were in a designated surveillance zone. The location of all these animals was registered by the Veterinary Authority.

Biosecurity in the movement of international horses between the airport and the EDFZ was addressed by establishing an official Corridor with an Equine Exclusion Zone of 1 km on each side, to enable a biosecure connection between the main airports at Guangzhou and Shenzhen, as well as the border with the Hong Kong SAR.