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# BENEFITS AND CHALLENGES POSED BY THE WORLDWIDE EXPANSION OF EQUESTRIAN EVENTS – NEW STANDARDS FOR THE POPULATION OF COMPETITION HORSES AND EQUINE DISEASE FREE ZONES (EDFZ) IN COUNTRIES

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Summary: There is significant worldwide expansion of the competition horse industry bringing with it measurable and significant socio-economic benefits. However there are a number of challenges that impede the free and safe international movements of competition horses as well as the expansion of the equine industry including inconsistent approaches to the application of standards, regulations and biosecurity which have seen a number of major quarantine breakdowns. The World Organisation for Animal Health (OIE), in collaboration with the Fédération Équestre Internationale (FEI) the International Federation of Horse Racing Authorities (IFHA) and other experts are developing international biosecurity standards and conditions that will apply to the sub-population of high health, high performance (HHP) horses that move temporarily to compete in international equestrian events and racing. The critical importance of veterinary services and competent authorities in supporting international horse movements in accordance with OIE Standards need to be emphasized, as well as the importance of establishing constructive working arrangements with equine industry and other relevant groups. The OIE World Assembly of Delegates is asked to endorse action to address the clear and urgent need to develop OIE standards relating to the temporary international movement of HHP horses, and re-affirm the critical importance of veterinary regulatory authorities and equine industries working together to implement agreed OIE standards and biosecurity arrangements.

## 1. Introduction

Horses have been utilized by mankind for thousands of years for a variety of purposes such as the provision of food, leather, milk and therapeutics; beasts of burden to support farm production, transportation and military purposes; and for recreation. In more recent times and with changing human population dynamics, economic circumstance and selective horse breeding, horses are found throughout the world. The global horse population is estimated at 58 Million (1) with 60% of this population being working horses found mainly in developing countries (2), with a significant proportion of the remainder used in the growing racing, equestrian and recreation industries.

Horse diseases have been studied over many years with recommendations made on a range of prophylactic measures. These measures had varying success in large part because the aetiology and true nature of disease was unknown. For example, although Aristotle (384-323 BC) is believed to be the first person to describe glanders, there were varying views on the contagiousness of the disease, zoonotic impacts and the importance of quarantine measures. Recognition of causal agents of equine diseases such as glanders, African Horse Sickness (AHS) and tetanus in the 19<sup>th</sup> Century have paved the way for improved understanding of the epidemiology of disease and the application of measures to prevent or control disease spread.(3)

Recognition of the importance of horses, particularly for military purposes, as well as of farm animal production led the Director of the Lyon Academy of Equitation and the French Royal Equine Stud, Claude Bourgelat, to found the first Veterinary School in Lyon, France, in 1761, establishing among others equine disease as a scientific discipline. Equine diseases have since been studied extensively

## 2. Background Issues

Notwithstanding the knowledge and tools we have at our disposal since then, infectious diseases have been introduced into countries or regions through a variety of pathways such as by illegal means, the importation of horse meat and products, animal movements and vectors (4). Migratory birds have been suspected of transferring West Nile virus to various parts of the world (5). Equine influenza outbreaks in Australia (2007), Japan (2007), South Africa (1986 and 2003), UK (2003) and Hong Kong (1992) resulted in disruption to racing, equestrian and recreation activities and trade (6). Outbreaks of glanders have posed major problems in the Middle East (7).

These events demonstrate the risk of spread of disease agents if sound and effective health regulations and biosecurity systems to support safe horse movements are not in place or are neglected. Lessons from the various equine influenza experiences are described in the OIE 2011 Scientific Review (8). However there are many ongoing and good examples of safe and successful international horse movements. These include successful equestrian events at Olympics, Paralympics and Asian Games as well as horses competing in Group/ Grade Thoroughbred international races.

The World Organisation for Animal Health (OIE) (9) through its various strategies, standards, reporting obligations and science underpinnings provides mechanisms to support the safe international movements of horses under a range of conditions if OIE Member Countries have sound veterinary services in place, follow the internationally and transparently agreed international standards, and work in close consultation with industry to ensure best practice in biosecurity. Under the OIE approach which permits flexibility in the development of standards and conditions, provided they are science based and merited, consideration is being given to developing standards for the international movements of a sub-population of HHP horses.

The concept of HHP horses is that as they are an elite sub-population that compete in international graded events under continuous veterinary supervision and specified conditions and are not used for breeding, they represent a low health risk. Such standards can be developed and defined for this high health status sub-population, permitting the international movement of HHP horses through the application of minimum health measures consistent with safe trade.

The HHP horse concept has been discussed at a number of key meetings in recent times. These include: a FEI – OIE Conference in Guadalajara, Mexico, October, 2011 at the time of the Pan American Equestrian Games on international horse movements; OIE participation in the FEI General Assembly in November 2011; a 'brainstorming group' meeting of international experts at OIE Headquarters in March, 2012, Paris; a Regional Conference on Glanders in Dubai, April, 2012; a special session on international movements of competition horses at the Equine Infectious Disease Conference held in October, 2012, Kentucky, USA; at a Regional Conference in Panama City, Panama, December, 2012, and more recently at the FEI Sport Forum in Lausanne in April, 2013.

These meetings were well attended and included the participation of OIE, governments, FEI, IFHA, industry, veterinary practitioners and academia demonstrating a keen international interest in the subject. The HHP horse concept was well received. However although regulatory practices consistent with OIE Standards are implemented in a number of countries and the European Union (EU), a range of challenges faced by other countries have emerged from these meetings including differing approaches to quarantine and testing, lack of knowledge and/or interest of some government authorities, excessive or inadequate health requirements, non-adherence to OIE standards and poor relationships between regulatory authorities and the horse industries. Importantly some countries may not have conditions that permit the temporary importation of horses or have the necessary knowledge or skills to ensure protection of high level horses.

These challenges can be overcome, particularly as clear benefits can accrue from developing standards for the sub-population of HHP horses that move internationally for competition purposes. The advantages effective public private partnership arrangements can offer in supporting standards development and biosecurity should be recognized.

# 3. The Value of the Horse Industry – FEI Events and Thoroughbred Racing

Ten countries in the world have a horse population of more than a million, such as the USA with 9,500,000, China (7,402,450); Mexico (6,260,000); Brazil (5,787,249); Argentina (3,655,000); Columbia (2,533,621); Mongolia (2,029,100); Ethiopia (1,655,383); the Russian Federation (1,319,358); and Kazakhstan (1,163,500). The EU has an estimated horse population of 6 million (1).

Over 3500 international competitions have been organised in 2012 worldwide under FEI rules. The overall growth rate in total FEI events has been significant with over 30% growth in Jumping, Dressage and Endurance events between 2007 and 2010 (Figure 1). The number of flat and jump Thoroughbred races globally in 2011 were reported to be 162,000 with total prize money at 2.94 billion Euros (9) (Figure 2).

Growth in Asia is important with the share of prize money and total turnover showed significant increases and representing almost 55% and 60% of the world total figures respectively (10).

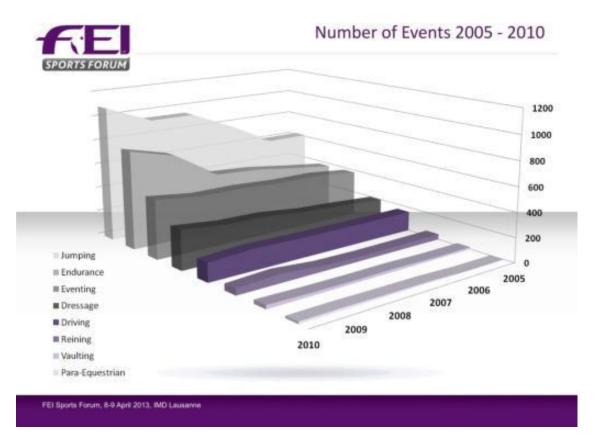
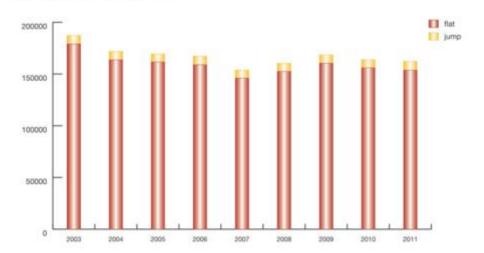


Figure 1: Distribution of Number of FEI Events between 2005 and 2010.

#### Number of races 2003-2011



Racing by Region 2011

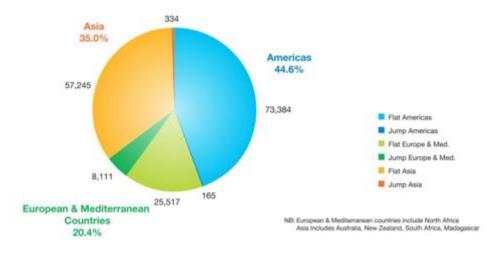


Figure 2: IFHA Annual Report (2011) – Annual distribution of Flat and Jump Thoroughbred races between 2003 and 2011 and regional distribution of racing in 2011

FEI compiles economic data from a range of sources. Some highlights are quoted here to demonstrate size and impacts of the industry:

- The EU Equine Industry in 2010: economic impact 100 billion Euros a year; 400,000 full time job equivalents provided by the sector; horse riders growing by 5% per annum. (11)
- The US in 2004: US \$39.3 billion direct economic impact to the US economy; US\$102 billion indirect impact; 460,000 full time jobs in the industry; 1.4 million jobs associated with the industry. (12)
- Australia in 2007: AUD \$6.3 billion to the Australian economy; almost compares in size with the livestock industry with approximately AUD \$7 billion contributed to the Gross Domestic Product. (13).
- United Kingdom in 2009: direct and indirect employment between 220,000 and 270,000 people; employment equals or may exceed those employed in farming; economic impact of £7 billion, over half of which is derived from racing (14).

Worldwide movements of competition animals are growing with the major directions of moves excluding Australia and New Zealand shown in Figures 3 (4).

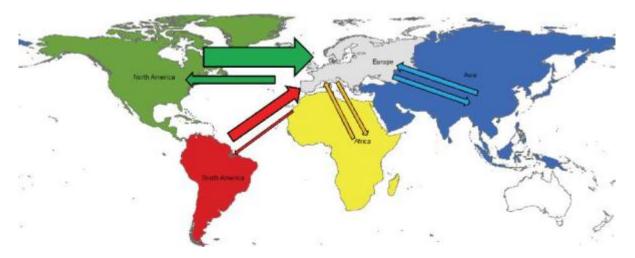


Figure 3. Worldwide movements of horses from and to Europe in 2008 (TRACES data)

International competition is critical to the ongoing development of the equestrian and horseracing industries providing not only significant economic benefits to countries but also pleasure and enjoyment to those in the wider population who watch or participate in equine competitions.

However international competition cannot proceed without sound biosecurity measures in place in accordance with OIE Standards. Even minor disease or administration problems can result in prohibited access, delayed movements, and loss of reputation. Major disease events can have significant impacts. For example the 2007 equine influenza outbreak in Australia had severe socio-economic consequences as the disease spread to large geographic areas infecting over 70,000 horses on approximately 9000 premises. This caused considerable loss and hardship to the horse racing and breeding industries including cancellation of racing events, movement restrictions and loss of jobs (8).

The Australian Government spent more than AUD\$263 million providing financial assistance to affected industries and groups. The eligible costs for government-industry cost sharing for the control of the outbreak were estimated at AUD\$97.7 million (8). The horse industries estimate that the total cost of the outbreak resulted "in a loss to the horse industry and community of approximately AUD\$1 billion'. (8). A class action lawsuit is under consideration but has not as yet been brought against the Commonwealth of Australia.

The development and application of definitions, standards and biosecurity protocols, for the HHP horses of good and known health status with the active involvement of government veterinary authorities and industry will sustain and enhance the socio-economic benefits the horse industries provide.

## 4. Facilitation of international competition horse movement

The need to facilitate the movement of such horses across national borders has been recognised for many years by a number of countries. The EU initiative to establish a "sub-population" of an "EU registered horse" to harmonise import regulations amongst Member States enabling free movement within the EU territory and to permit re-entry of horses into the EU upon return from accredited "third countries" after competition, provides a good model that can usefully be examined in the context of the HHP horse.

The OIE *Terrestrial Animal Health Code* (the *Code*) lists 11 equine diseases and 5 diseases that affect multiple species, including horses. OIE Member Countries have an obligation to report these diseases to the OIE. Amongst those notifiable diseases, the OIE can officially endorse freedom of a country or parts of countries for African Horse Sickness (AHS) (15). OIE Members can provide a self-declaration of freedom for

six diseases of relevance for horses - Dourine, Equine Influenza, Glanders, Venezuelan Encephalomyelitis, Rabies, and West Nile Fever – provided the conditions of the *Code* are met and other relevant OIE requirements are met. For other conditions affecting equines, control measures including vaccination, treatment, quarantine and testing should be put in place in order to support veterinary health certification.

The practice of zoning can be important when freedom from disease is either officially recognised by the OIE as it is the case for AHS, or self-declared by the country for other diseases. Zoning allows countries to put in place animal health measures guaranteeing disease freedom in a designated part or parts of a country (16). A zone is generally defined on the basis of geographic boundaries supported by effective biosecurity measures. In some other parts of the world, OIE zoning may be known as regionalisation.

Based on the experiences of events such as the Sydney Olympic Games and Paralympics (17) and the Beijing Olympic and Paralympics Games that were held in Hong Kong in 2008, the OIE, the People's Republic of China and FEI agreed to explore a novel approach and to examine zoning for a suite of diseases, an Equine Disease Free Zone (EDFZ), to permit the safe temporary entry and exit of horses that would compete in the 16<sup>th</sup> Asian Equestrian Games, Conghua, Guangzhou, PRC, in November, 2010. (18)

Starting with an OIE Mission in late 2008 including discussions with a wide range of governmental and nongovernmental officials, it was agreed that an EDFZ was feasible and should be constructed in preparation for the Games. Sound preparation and planning were essential and covered a range of critical issues including: equine diseases of interest; zoning and animal and product movements; surveillance and contingency disease planning; laboratory diagnostic competencies; veterinary infrastructure, legislation and certification; standard operating procedures; training; stabling, exercise facilities and transportation; coordination, and effective working arrangements. A European Commission Mission subsequently visited China in February 2010 to review the acceptability of arrangements including health certification. (19)

The 16<sup>th</sup> Asian Games were successful with 95 horses from 16 countries of equivalent health status participating and demonstrated that, with proper planning, commitment and resources, EDFZ approaches can work very well and provide a high level of biosecurity for the temporary movements of high health status completion horses.

In the context of global facilitation of competition horse movements, the compartmentalisation framework as defined in the *Code* is also of interest. A compartment is similar to a zone in that it enables the establishment and maintenance of a sub population of animals with a specified disease free status, but it is based on sound management and biosecurity practices.

Conceptually compartmentalisation could be applied to premises of HHP horses provided criteria such as sound health, identification, traceability, performance, management and biosecurity were in place. Once an animal was clearly identified as member of the sub-population, it could move from one compartment (stable/premises) to another compartment (equestrian event or an EDFZ) and so on. Under this approach, importing and exporting countries would consider the HHP horse as having a defined high health status thus improving the level of certainty associated with health certification, import, and biosecurity requirements.

To help work through and progress these issues, the OIE has established an *ad hoc* Group on the International Movement for Equestrian Sport (AHG). The AHG comprises government and non-government members, and is examining issues such as standards, definitions, biosecurity arrangements and EDFZ, with a view to submitting these to the OIE Scientific Commission for Animal Diseases and the OIE Terrestrial Animal Health Standards Commission for consideration.

# 5. Conclusions

The increasing levels of international equestrian sport and the clear socio-economic benefits that accrue, provide a compelling reason to develop standards and conditions for a distinct elite sub-population of competition horses. This sub-population is limited to high health; high performance horses engaged in temporary movements to engage in FEI organized international competitions and IFHA Group/Graded international races.

The health status and management of such horses are well understood with record keeping, identification and certification systems in place. This high health status must be maintained and enhanced to permit the safe temporary export to competitions and safe return arrangements across the world with a level of certainty that countries will not apply unnecessary and inconsistent regulatory conditions. The development of this industry will be hampered if agreed standards and processes are not developed and applied in a consistent manner.

In this regard the importance of Veterinary Services in equine health and certification must be recognized, particularly as these matters are not uncommonly afforded low priority. It is clear that emphases need to be given to equine health issues in terms of knowledge, regulatory interest, and the application of OIE Standards. Regulatory services cannot manage nor would be expected to manage these on their own; others such as the horse industries have key roles in implementing agreed biosecurity arrangements under official control and providing scientific advice. Effective public-private partnership arrangements provide a mechanism to improve coordination and share resources.

As standards and guidelines such as zoning and compartmentalization, model passports for the international movement of horses and general principles of identification, traceability, trade, certification, zoning and compartmentalisation are already defined in the *Terrestrial Code*, the elaboration of a specific standard for the temporary international movement of the HHP horse and EDFZ is a logical progression of existing standards. OIE mechanisms allow for the elaboration of standards with expedition provided they are based on science and are merited and democratically adopted.

There is a clear and urgent need to implement practical and consistent approaches to permit the safe movement of competition horses. It is to the credit of the OIE, FEI, IFHA and others that they are prepared to recognize the many benefits that flow from the industries described, and to address the complex array of challenges that exist in a constructive way.

## 6. Recommendations

It is recommended that the 81th Meeting of the OIE World Assembly:

- 1. Support the elaboration of OIE standards relating to the temporary international movements of high health, high performance competition horses.
- 2. Agree that Veterinary Services need to play a critical role in supporting safe horse movements through the application of internationally agreed and scientifically based OIE standards.
- 3. Agree that OIE continue to work constructively with FEI, IFHA and other additional relevant experts on standards development including biosecurity arrangements and EDFZ.

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