WORLD ORGANISATION FOR ANIMAL HEALTH
Protecting animals, preserving our future

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RAWS-NEWS EQUINE EDITION
REGIONAL ANIMAL WELFARE STRATEGY NEWSLETTER

In this edition...


Credit: Department of Livestock Development, Thailand

Introduction

The introduction of African horse sickness (AHS) in Thailand earlier this year drew attention to the importance and relevance of equine species in Asia and the Pacific. The OIE has listed several diseases affecting horses, and developed international recommendations in the format of chapters of the OIE Terrestrial Animal Health Code, including a specific chapter dedicated to the welfare of working equids. However, in Asia and the Pacific they are not often the focus for transboundary and contagious diseases. With a disease like AHS that is so devastating to horses causing severe illness and with a high mortality rate, the welfare of these animals is a major concern and can be distressing for owners and veterinarians alike caring for and trying to save sick animals as well as prevent further spread. The main control measures include movement control and protection against vectors by keeping animals indoors. The dedication and tireless efforts of veterinarians, animal health workers and other stakeholders involved in veterinary public health emergency responses often under immense pressure should be acknowledged.

In this special edition of the regional animal welfare newsletter dedicated to equines we hear from Thailand's Department of Livestock Development on their experiences in dealing with the AHS outbreak, highlighting the importance of welfare considerations in emergency disease outbreaks.

We also have stories from across Asia and the Pacific highlighting the varied role and importance of equine species in the region.

There are also some partners from equine sectors working with the OIE giving input into the development of international standards. These include the international coalition for working equids (ICWE) and the International Horse Sports Confederation (IHSC), who have also provided content for this newsletter.

STORIES FROM MEMBERS

FEATURE STORY

Thailand's experience with AHS and impact on the welfare of animals

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Animal welfare is not considered a new issue in Thailand. The Department of Livestock Development (DLD), Ministry of Agriculture and Cooperative, has set a priority on animal welfare and adopted several legislations regarding animal welfare since 2001. Then, the Cruelty Prevention and Welfare of Animal Act was enacted in 2014 [1].

The Cruelty Prevention and Welfare of Animal Act B.E. 2557 (2014) provides a general provision on animal welfare which is concerning "Five Freedoms for animals." Horses are also included in the list of species in the Act mentioned above. According to the discussion between the DLD and the Secretary-General of the Thailand Equestrian Federation (TEF), the TEF also follows the Fédération Équestre Internationale (FEI) code for the horse welfare [2].

Regarding the first outbreak of African Horse Sickness in Thailand (March 2020), the DLD incorporation with the private sectors implementing prevention and control measures in compliance with the international guideline and principle of animal welfare. One of the five freedoms that were taken into the consideration is animals should have freedom from pain, injury, and disease [3] which refers that African horse sickness must be rapidly contained, horses are protected from biological vector and kept in vector-protected facilities.

Though, private sectors share their concerns regarding keeping horses in netting stables because of the humidity, high temperature, poor ventilation, and living in limited space for a long period may cause serious stress to their horses. The DLD does take these concerns into account to ensure the freedom of horses to have normal behavior by allowing horses in the designated disease control zone, to grassing and paddocked during daytime. Horse keepers and owners are also recommended by the DLD to apply repellent to prevent horses from biting midges. These actions apply in the designated disease control zone while in the free zone, horses can have their usual routine.

As explained above, the DLD is confident to assure that the effort is spent to raise the total five freedoms of animal welfare in the African Horse Sickness control in Thailand.

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2. FEI code of conduct for the welfare of the horse Available at: https://inside.fei.org/sites/default/files/Code_of_Conduct_Welfare_Horse_1Jan2013.pdf (accessed on 16 July 2020).

3. World Organization for Animal Health (OIE) – Animal welfare. Available at: https://www.oie.int/en/animal-welfare/animal-welfare-at-a-glance/ (accessed on 20 July 2020).

Acknowledgement

Thanks to Mr.Nara Ketusingha, Secretary-General of Thailand Equestrian Federation (TEF) for your valuable time to discuss and share information regarding the welfare of horses. Thanks to Dr.Metha Chanda (Veterinarians of TEF) and Dr.Nuttawut Nuchprayoon (Teaching assistant, Faculty of Veterinary Sciences, Mahidol University) for your contribution to this article.








Credit: Thai Polo & Equestrina Club, Pattaya

Equine influenza outbreak response 2007/2008 in Australia

The equine influenza outbreak in New South Wales (NSW) and Queensland, Australia in 2007 was the most serious emergency animal disease Australia has experienced in recent history. The virus is suspected to have entered the country through a quarantine breakdown via the importation of at least one infected horse. It is believed that the disease was transmitted to the general horse population via a contaminated person or equipment. Prior to the outbreak in 2007, the disease had never been detected in Australia. At the outbreaks peak more than 10,000 properties were infected, with major economic and social impacts on the equine industry. Equine influenza was eradicated within 6 months of first entering the country. Australia formally met the OIE requirements for declaration of country freedom in December 2008 and has remained free.

Although equine influenza can be regarded as a having fewer animal welfare consequences than some other diseases with serious morbidity and high mortality, analysis of the response has allowed Australia to ensure it is prepared for any future biosecurity incidents.

The 2007/08 equine influenza response was guided by the Australian Veterinary Emergency Plan (AUSVETPLAN) which is a nationally agreed standard operating procedure developed for use by jurisdictions during responses to emergency animal disease (EAD) incidents and emergencies. Having agreed strategies in place to guide quarantine measures, movement controls (including an initial widespread standstill and subsequent risk-based zoning or compartmentalisation) and strategic use of vaccination (to limit the rate of spread, increase the level of herd immunity and facilitate business continuity) helped Australia to eradicate EI in the shortest possible time.

Clear decision making structures and consultative committees such as the Consultative Committee on Emergency Animal Disease that had been tested through simulation exercises ensured all participants in the response understood their roles and responsibilities.

Another strength highlighted from the response was the collaboration between industry, and state and federal governments, as well as the immense work from private veterinarians, police, fire services and many others. Over 2000 people were deployed in the NSW alone to the control program, working at state and local disease centres, command posts, and in the field testing and vaccinating horses. During the outbreak, over 140,000 horses were vaccinated nationwide.

However, there were also many challenges. Prior to the equine influenza outbreak the horse industry was not a signatory to the Emergency Animal Response Agreement (EADRA). EADRA is a cost sharing agreement between industry and governments outlining the breakdown of shared responsibility for the costs of an emergency response. EADRA allows Australia to respond quickly and effectively to an EAD incident while minimising uncertainty over management and funding arrangements. In 2011 the horse industry became a signatory to EADRA.

Emergency response and eradication costs in 2007–08 were approximately $100 million however the indirect and flow-on costs were estimated to have been more than $1 billion. There was also direct impacts on the breeding, racing and equestrian events due to control measures. Nevertheless, the cost (both monetary and animal health related) would have been far greater if the disease had become established in the country. Horse owners would have had to manage and treat sick horse as well as regularly vaccinate before they are able to compete in events. In countries where EI is endemic, periodical outbreaks are expected. In addition to animal health and welfare impacts, these outbreaks lead to a disruptions in events, loss of income and other flow on effects.

The 2007 outbreak revealed weakness in Australia's equine biosecurity system that lead to the strengthening of practices nationwide. Since the 2007 incursion, Australia has improved quarantine requirements for importation of live horses as well as enhancing biosecurity practices at quarantine facilities. These changes aim to reduce the risk of re-introduction of EI virus to a very low level, within

Australia's agreed 'appropriate level of protection'. Another major lesson learnt from the 2007 outbreak was in extent of the social impacts of animal disease outbreaks, including those that do not have high mortality rates. The AUSVETPLAN was updated after the outbreak and includes changes to help minimise the social impact on horse owners, while still achieving the goal of disease control and eradication.

Australia's response to equine influenza was successful in both eradicating the virus, as well as supporting the country's preparedness for future animal disease incidents. The response highlighted the importance of partnerships with stakeholders, pre-established arrangements, and managing risks across the biosecurity continuum (that is, off-shore, at the border, and within the country). It also demonstrated the need for biosecurity activities to continue to evolve to be able to respond to changing and emerging risks.

Introduction to Chinese horse industry

China has a long history of raising horses. For a long time, as a critical animal power and means of transportation, horses made essential contributions to the agricultural economy and national defence. In recent years, the traditional horse industry has been transforming into the modern horse industry, with horse sports, leisure riding, culture, and horse culture tourism have thrived.

According to the National Bureau of Statistics, the number of horses in stock was 3.473 million in 2018, with a total of 29 indigenous horse breeds among them.

At the same time, more and more equestrian clubs and horse farms adopt standardized horse feeding management in line with the West. Equestrian and horse racing developed fast in China. More than 100 national-level events are held every year, including equestrian events, racing, and ethnic horse events. The Chinese Equestrian Team successfully qualified for the Show Jumping and Eventing of 2020 Tokyo Olympics.

The China Horse Industry Association (CHIA) established the National Equine Safety and Welfare Center in 2002. It cooperates closely with the World Horse Welfare, the Donkey Sanctuary, and the World Equine Veterinary Association to promote the equine health and welfare of in China. CHIA has organized numerous equine veterinarians training and Continuing Professional Development courses, including the 15th World Equine Veterinary Conference, aiming to improve horse vets' skills of diagnosis and treatment. In 2017, CHIA launched the Yuanshangdu Horse Welfare Convention, calling on the Chinese horse industry to abide by OIE animal welfare regulations and strive to improve the welfare of equine animals.

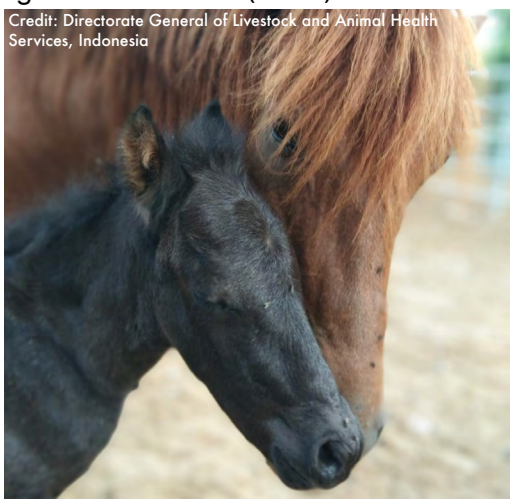
On April 22, 2020, the Ministry of Agricultural and Rural Affairs(MARA) issued the Circular on the Prevention of African Horse Sickness (AHS), requiring local authorities to attach great importance to the prevention of AHS, carry out emergency surveillance in a timely manner, conduct research on AHSV, strengthen technical research reserves such as rapid diagnosis, and enhance the ability of early warning, early detection and early disposal at all levels.

Local horses in Indonesia and animal welfare

ImplementationIn Indonesia, horses have been domesticated since the Hindu and Buddhist kingdoms (around the 7th century AD). Several types of local horses in Indonesian are Sumbawa horse, Flores horse, Sabu horse, Sandel horse, Timor horse, Lombok horse, and Bali horse. Most of Indonesian horses come from the eastern part of Indonesia, this is due to the availability of grazing land in the region, suitable temperature and climate for horses to growth.

Indonesian local horses are named based on their origin/locations such as the Gayo, Batak, Priangan,

Javanese, and Sulawesi horse's. One of the well-known local horse is the Sumbawa horse (from Sumbawa Island) with specific characteristics, weight ± 213.40 kg (male) and ± 281.75 kg (female), shoulder height (± 120.80 cm) male and ± 113.25 cm (female), body length ± 120.40 cm (male) and ± 111.25 cm (female).


Credit: Directorate General of Livestock and Animal Health Services, Indonesia

Historically, horses were used as a mode of transportation, and owning one is a symbol of wealth and high social strata. Presently, it is also used for other purposes such as ceremonial events, food, recreation, security patrols, transportation, load transport, maintain plantation land, sports, and others usage.

The implementation of animal welfare in Indonesia refers to Law Number 18 of 2009 in conjunction with Law Number 41 of 2014 concerning Livestock and Animal Health. Implementation of animal welfare is also regulated in detail in Government Regulation Number 95 of 2014 concerning Veterinary Public Health and Animal Welfare.

Animal welfare is a shared responsibility carried out by the Government, Local Government and the community. Therefore, the implementation of animal welfare is prioritized in efforts to increase public awareness and participation through education, training, and extension activities.

Based on the current laws and regulations, animal welfare applied to livestock, pet animals, poultry, laboratory animals, aquatic and wild / exotic animals. Animal welfare shall be considered in all activities related to animal, such as catching, handling, rearing, treatment, transport, slaughter etc.

Specific to working horse's welfare in Indonesia, it's stipulated under the criminal law (KUHP) articles 540 and 541 along with its sanctions. In principle, based on that law, it is not permitted for working horse to carry excessive loads and uses of sick/disabled horse. The law also regulated the sanction for violation of horse's welfare in the utilization, such as torture, usage without sufficient feed and water, and usage of a nursing mare. Although the law is stipulated, the implementation of working horses' welfare is still insufficient due to the limited understanding, knowledge and resources required to care for the horse.

Mongolian horse

One of big part of Mongolian culture and life is horse and horse racing. Mongolian horses are semi-wild patient and suitable for very harsh weather condition and nomadic culture of people.

Mongol horses look stocky build and small, have relatively short strong legs and large head, they weigh about 280-400 kg (male horse is about 315-400 kg, female 280-380 kg), and range size is from 12-14 hands, cannon bone external circumference is about 8 inches.


Credit: General Authority for Veterinary Services, Mongolia

The Mongolian horse is theorized to be the founding stock for many other horse breeds in Asia, including the Tuvinian, Akhaltekin, Yunan, Japanese and Cheju. A comparison of Mongol horses, Japanese horses, and Arab Anglo/Thoroughbred horses found that Mongol horses had the highest genetic diversity, with a heterozygosity ranging from 0.75 to 0.77. Compared to low heterozygosity values for Thoroughbreds (0.461), Arabians (0.478) and the bottlenecked Przewalski's horse (0.474), the genetic diversity of the Mongol horses is exceptional. Mongolian horses have slight resemblance to Przewalski horse and were once believed originated from that subspecies, but it was not

proven by genetic testing in 2011.

Mongol horses are patient in harsh weather condition dealing with temperatures from 30 °C (86 °F) in summer down to -40 °C (-40 °F) in winter time, and they graze and search for food on their own.

Mongolian people have loved horses since immemorial time and use them for daily life, transportation, festival and battle for expansion of empire. Mongol horses are best known for their role as war steeds of Great Mongol Empire of Chinggis Khaan. Mongolian horses can gallop about 60-80 km on average in a day but well trained can go much more than this distance in a day.

There are about 4.2 million horses counted in Mongolia in the end 2019 by livestock census, as reported by national statistics.


Credit: General Authority for Veterinary Services, Mongolia

The biggest traditional festival of Mongolia, called Naadam (three games of men) composed of Mongolian wrestling, horse racing and archery is held throughout the country from 9 to 12 July every year. It has its origin in the activities, such as military parades and sport competitions. For the opening ceremony of the Naadam, white tug of the Mongolia brought by Mongolian state honor guard from Parliament house to the central stadium.


Credit: General Authority for Veterinary Services, Mongolia

There is Mongol horse racing takes places during the Naadam festival which is test of speed, stamina and strength. Jockeys of horse racing are children both boys and girls. Mongolian Government has made decision on age of jockeys have to be seven years old and should have protective clothes for horse racing. There are six categories in horse racing. Practically, when kids are over than 14 years they get rid of horse racing jockey due to their body weight.

1. Two-year old horse is called a Daaga and they race roughly 10-12km
2. Three-year-old horse is called a Shudlen and they race 14-16km
3. Four-year-old horse is called a Khyazaalan – racing 18km
4. Five-year-old horse is called a Soyolon – racing 22-24km
5. Stallion more than five years old is an Azarga and they race 22-24km
6. Castrated horses more than six years old are known as Ikh Nas and they cover roughly 25-27km

The top five horses in each Mongolian horse racing class are awarded the title of winners and get medals. Having winner horse means lot of dignity for owner and trainer of the horse in the public

Horse health is under control of veterinarians and horses are vaccinated against different diseases such as strangles, equine influenza and other health problem.

Horse welfare, taking care and using horse properly and well are very important dignity issue of herders and owners of horses in the public in Mongolia.

Animal welfare in New Zealand - Thoroughbreds

New Zealand Thoroughbred Racing Inc released the Thoroughbred Welfare Guidelines in October 2019. The Guidelines are created around the Five Domains model of animal welfare (see Mellor 2017; doi: 10.3390/ani7080060). The aim of the guidelines are that Thoroughbred horses enjoy a life worth

living through positive experiences and a reduction in avoidable negative experiences.

The guidelines can be viewed online via this link.

As part of its welfare strategy New Zealand Thoroughbred Racing will in August 2019 release amendments to the Rules of Racing to ensure comprehensive traceability of Thoroughbreds from birth to death or deregistration from racing and breeding. This involves requirement for information relating to foaling, changes of ownership, location, and death or retirement to be promptly submitted. There will be also be explicit duties of care on each racehorse's owner, or "accountable person", including that they sell or rehome their horse to someone who is both appropriately skilled and with an appropriate property for horses.

Substantive progress has also been made on welfare priorities that lie ahead, including focus and support for the retraining and rehoming of ex-racehorses.

For more information about New Zealand Thoroughbred Racing's welfare policies, please contact Martin Burns, GM Welfare & Sustainability, martin.burns@nztr.co.nz. New Zealand Thoroughbred Racing Inc is the governing body of the thoroughbred racing code in New Zealand: www.loveracing.nz.

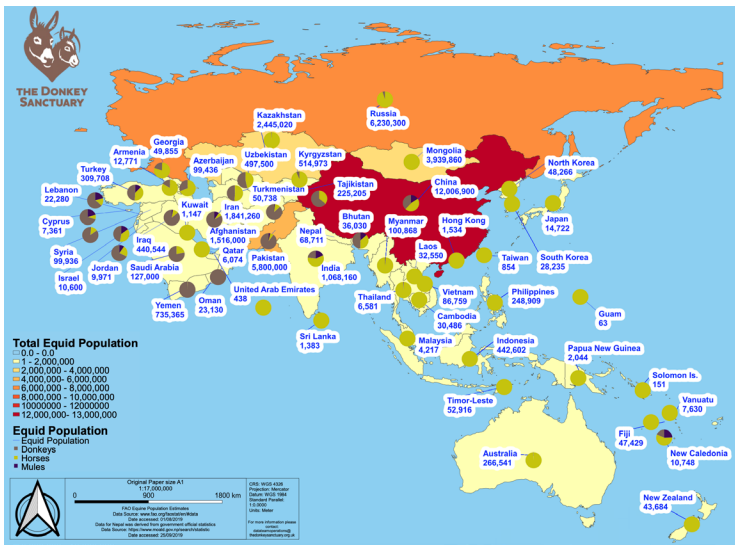
STORIES FROM PARTNERS

International Coalition for Working Equids –

ICWE and the OIE

ICWE is a coalition of four NGOs: Brooke; The Donkey Sanctuary; SPANA and World Horse Welfare. The aim of the coalition is to provide a united voice for our work with the OIE and in particular to help their member states to implement the OIE Terrestrial Code Chapter 7.12 on the welfare of working equids.

ICWE were delighted to be invited to run a session on working equids at the OIE regional animal welfare focal point seminar in 2019. Working equids make up a significant population across the region, yet tend to be 'silent' workers, essential for livelihoods of many and therefore important to the economy of the country, but not always recognised as 'livestock' with a need for good welfare practices.



Equid population in Asia Pacific region

Equids across the region work in agriculture, tourism and transport of commodities, but the welfare of this group of animals is often interconnected with factors such as human health and welfare within communities; which may result in challenges in following the guidelines and regulating for best practice.

Delegates were positive, enthusiastic and engaged in discussions during the equid session, providing valuable insights into constraints and issues in the different countries.

Lack of data and knowledge of population densities and locations are a concern and this is highlighted as working equids are an important consideration in surveillance for the outbreak of AHS.

Feedback showed high levels of interest and that the sessions were successful in raising awareness.

Now we look forward to providing support for implementation of the OIE chapter for the welfare of working equids across the region.


Credit: International Coalition for Working Equids

Community led tetanus toxoid vaccination of working equids - Brooke India

Working equids have a high occurrence of wounds and are therefore susceptible to tetanus. Brooke India promotes community-led tetanus toxoid vaccination campaigns for sustainable improvement in animal health.

Participatory epidemiological tools, such as 'disease mapping', 'if I were a horse' are used to collate information on incidence, morbidity and mortality of the disease from the target community. Etiology, predisposing factors, symptoms, challenges of treatment, welfare issues and consequences of the equid death are discussed. Awareness on tetanus is raised through communication tools like flipbooks, audio visual aids, posters, case studies etc. These help owners to understand why equids are prone to tetanus and how vaccination provides effective protection. To motivate a community to vaccinate animals, a cost benefit analysis is undertaken wherein the costs of treatment or a replacement animal vs. vaccination are compared. Equine Welfare Groups (EWGs) play a key role in advocating for implementation of vaccination protocols, ensuring the community shares the cost and takes responsibility. A record of each vaccinated animal is maintained in a community register to remember booster dates and ensure complete vaccination of their animals.

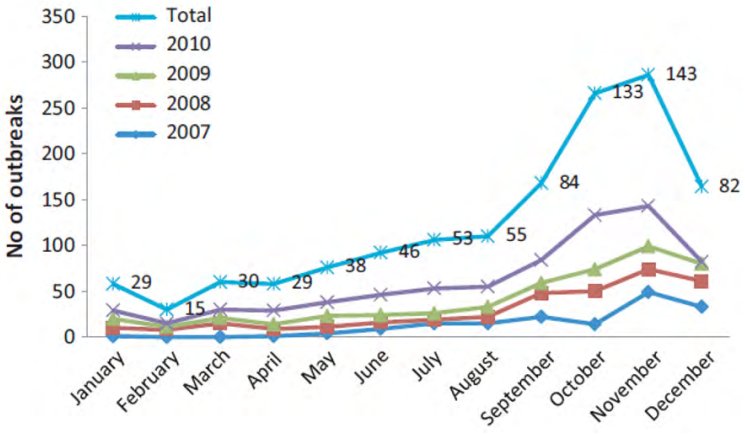
Working equid owners are motivated to vaccinate their animals, when they understand the cost vs. benefits of vaccination in comparison to cost of loss of animal due to tetanus.

African horse sickness in Ethiopia: a short update

Ethiopian equid populations have long been affected by AHS. The OIE reported for example, 15 outbreaks, killing 2185 equids in 2008 (Sabirovic et al., 2008; Gebreegziabhe, 2008) with numerous other outbreaks occurring annually (Aklilu et al., 2012). Furthermore, epidemiological studies have confirmed widespread seroprevalence in donkeys (51.1%), mules (30.2%) and in horses (32.5%) in one region (Bitew et al., 2011).

The disease however, occurs in all regions of the country; at low (<1800 m above sea level) and medium (<2400 m) altitudes (Leforban et al., 1983), with Kassa (2006) reporting highest seroprevalences in low-land areas, followed by mid- and high-land areas reflective of likely vector populations (adult Culicoides spp.)

The outbreaks tend to occur mainly after the rainy seasons in October to December, also reflecting the seasonal abundance of vector insects, (figure). The cardiac form of the disease is generally the most frequently detected followed by horse sickness fever, pulmonary and mixed forms respectively.



Occurrence and seasonality of AHS outbreaks 2007-2010 in Ethiopia

Importantly six different AHSV serotypes have been identified including AHSV-2, 4, 6, 7,8 and 9; with AHSV-9 being the most dominant serotype. However, the recent finding of serotypes 4, 6, and 8 in 2012 (Aklilu et al., 2012) represented the first reported virus lineages and suggests a complex and changing epidemiological situation.

Under government guidance horses receive a polyvalent vaccine (serotypes 2,4 9), produced by the National Veterinary Institute, prior to the beginning of the rainy season, traditionally from May 1st. Animals attend clinics to receive vaccinations, many travelling significant distances. In 2019, due to difficulties in availability, vaccination was delayed. An increase in perceived reported deaths was subsequently reported(personal communication: Dr Hanna Zewdu, Addis Ababa University & SPANA).

Little or no control is undertaken regarding vector breeding sites and prevention of vector feeding (i.e. fly netting) in long term control or in response to outbreaks.

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International Horse Sports Confederation - IHSC

Overview of the movement of competition horses in the Asia-Pacific region

Great numbers of horses are regularly temporarily imported between OIE Members to participate in international equestrian events and races in the Asia Pacific region in places such as Australia, China, Hong Kong SAR, Indonesia, Japan, RO Korea, Malaysia, Singapore and New Zealand.

The workshop in support of Temporary International Movement of Competition Horses co-organized by the International Horse Sports Confederation (IHSC) and the OIE through their Public-Private Partnership in February 2019 in Hong Kong, has brought together National Veterinary Authorities and representatives of National Equestrian Federations, National Racing Authorities, and representatives of Customs Administrations, to support further development of their necessary capacities for temporary (sub-)regional movement of competition horses. This will create solid basis in the sub-region to, ultimately, enable safe temporary international movement of such horses within the sub-region and from the sub-region to the rest of the world.

Credit: Hong Kong Jockey Club

Reliable certification of horses according to OIE Standards on equine diseases and diagnostic tests, including the "high health, high performance" horse (HHP) and Equine Disease Free Zone (EDFZ) frameworks, as well as the good quality of the Veterinary Services in charge of certification are most important to facilitate safe temporary international movement of competition horses. Public-Private cooperation between the National Veterinary Services, the National Equestrian Federations and the National Racing Authorities is also a key factor to achieve safe movement of these competition horses.

This newsletter has been edited and published by the OIE Regional Representation for Asia and the Pacific in the capacity as secretariat for the Regional Animal Welfare Strategy (RAWS). Thank you very much to the RAWS advisory group and all the OIE focal points for animal welfare and communication who kindly contributed to the OIE member stories on Equines and to the members of ICWE and IHSC for providing the stories from partners.

For more information about the RAWS and other OIE animal welfare activities in Asia and the Pacific, follow the link: https://rr-asia.oie.int/en/projects/animal-welfare/.

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