INTERNATIONAL COLLATING CENTRE
Information Exchange on Infectious Equine Disease
Generously supported by contributions from
International Thoroughbred Breeders Federation members
E-mail equinesurveillance@aht.org.uk to submit reporting information

Fourth Quarter Additional Requested Information

October – December 2018

Data obtained from end of quarter request for information

This report does not include data from interim ICC reports. For a comprehensive overview, see the summary report and the supplementary information document.

ARGENTINA

Rotavirus

Rotavirus was diagnosed in ten foals aged two to four months on one premises commencing on 7 December 2018. The foals were a mixture of breeding stock and Thoroughbreds and all had been vaccinated. The confirming laboratory was INTA.

AUSTRALIA

Regret no report received.

CANADA

Please note that all Canadian cases and outbreaks have already been notified via interim reports during the quarter and since.

CHILE

Regret no report received.

DENMARK

Regret no report received.

FRANCE

Information supplied via the Réseau d'Epidémio-Surveillance en Pathologie Equine (RESPE), the French network for epidemiosurveillance of equine diseases. Please note that all France cases and outbreaks have already been notified via interim reports during the quarter and since.

GERMANY

Additional results received from Labor Dr. Böse GmbH– an HBLB CEMO registered laboratory

Contagious Equine Metritis (CEM)

CEM was confirmed in two stallions (One Icelandic and one Warmblood) on two separate premises during the fourth quarter 2018. Positive diagnoses were confirmed by PCR on genital swabs.

Equine Herpes Virus-1 (EHV-1) Respiratory Disease

EHV-1 respiratory disease was confirmed in five horses on one premises during the fourth quarter 2018. The animals presented with clinical signs of pyrexia. Positive diagnoses were confirmed by nasopharyngeal swabs.

Equine Herpes Virus-1 (EHV-1) Abortion

EHV-1 abortion was confirmed in two mares on two separate premises during the fourth quarter 2018. Positive diagnoses was confirmed on placenta and lung puncture aspirate of fetus.

Equine Herpes Virus-4 (EHV-4) Respiratory Disease
EHV-4 respiratory disease was confirmed in four horses on one premises during the fourth quarter 2018. Clinical signs included pyrexia. Positive diagnoses were confirmed by PCR on a nasopharyngeal swabs.

Equine Viral Arteritis (EVA)
EVA was confirmed in one Warmblood stallion during the fourth quarter 2018. Positive diagnosis was confirmed on semen sample by PCR.

Salmonelloisis
Salmonellosis was confirmed in one adult horse during fourth quarter 2018. Clinical signs included diarrhoea, the horse died within 48 hours. Positive diagnosis was confirmed by bacterial culture and PCR on fecal sample.

Strangles *(Streptococcus equi)*
Strangles was confirmed in four horses on four separate premises during the fourth quarter 2018. One case had an intra-abdominal abscess and one case had submandibular lymph node abscess formation. For both cases, positive diagnoses were made by PCR on abscess material. The two other cases reported had unconfirmed clinical signs with positive diagnoses made by PCR on a nasopharyngeal swab for one case and on a guttural pouch lavage for the other.

HONG KONG
Confirmed nothing to report.

IRELAND (Republic of)
Equine Herpes Virus-1 (EHV-1) Abortion
Four cases of EHV-1 abortion were confirmed during the fourth quarter of 2018, with the last case reported on 17 December 2018. Of the four reported cases two were reported in County Kildare and two in County Tipperary. Positive diagnoses were confirmed by PCR. The confirming laboratory was The Irish Equine Centre.

Strangles *(Streptococcus equi)*
During the fourth quarter of 2018, a total of five cases of strangles were reported. Positive diagnosis was confirmed by PCR and/or conventional culture. The confirming laboratory was The Irish Equine Centre.

ITALY
Regret no report received.

JAPAN
Equine Herpes Virus-1 (EHV-1) Abortion
EHV-1 abortion was reported in two Thoroughbreds on two separate premises on 18 October 2018. Only one of the two animals was vaccinated. The confirming laboratory was Hokkaido Hidaka Livestock Hygiene Service Center.

MALAYSIA
Regret no report received.

NEW ZEALAND
Confirmed nothing to report.

SINGAPORE

Old World Screw Worm *(Chrysomya bezziana)*

One case of Old World Screw Worm was confirmed in one horse on 2 January 2019. The animal had sheared heels and a wound in his frog. Larvae was detected when wound was flushed with iodine. Wound was treated topically and hoof covered in a dressing and problem resolved fairly quickly.

SOUTH AFRICA

Reporting is based on laboratory reports as well as reports by private veterinarians using a reporting system developed in conjunction with the South African Equine Veterinary Association. The numbers are a reflection of this reporting and do not necessarily reflect the official totals as reported through official channels. Please also note that Piroplamosis, EHV-1 and Gastrodiscus infestation in horses are not officially reportable in South Africa.

African Horse Sickness (AHS)

Isolated cases of AHS were reported from the AHS infected area with individual cases in the Eastern Cape, Gauteng and Kwa-Zulu Natal Provinces. This is as expected for this time of the year.

Piroplasmosis

Piroplasmosis was reported in Gauteng (15 cases), Kwa-Zulu Natal Province (one case), Western Cape Province (one case), Mpumalanga (one case) and the Free State Province (twp cases).

Equine Herpes Virus-1 (EHV-1)

One case of neurological EHV-1 was confirmed in the Western Cape Province and one laboratory confirmation of EHV-1 was reported in Kwa-Zulu Natal.

Internal parasites

Gastrodiscus infestation was reported in 10 horses in the Cape Peninsula of the Western Cape Province in October 2018. These were the last of a total of 49 cases that were detected between August and October 2018.

SOUTH KOREA

A serology and qPCR survey was conducted in Korea in 2018, with the results as follows:
A serological survey was performed for African Horse Sickness (AHS), Vesicular Stomatitis (VS), Equine Infectious Anemia (EIA), Equine Viral Arteritis (EVA), Japanese Encephalitis (JE), West Nile Fever (WNF) and Equine Influenza (EI) to investigate the serological evidence for the possible presence of the diseases listed above in horses raised in South Korea.

Serum samples of 1,402 horses including Thoroughbred stallions, broodmares, racehorses, ponies, riding horses, etc. were subjected to this study. Sample collections were performed by the Korea Racing Authority (KRA) and the tests were conducted by the Animal & Plant Quarantine Agency (APQA) of South Korea. The results were as follows:

African Horse Sickness

All samples tested negative with commercially available ELISA test kits.

Vesicular Stomatitis (VS)

All samples tested negative with commercially available ELISA test kits and VN test.

Equine Infectious Anemia (EIA)

All samples tested negative with commercially available ELISA test kits and AGID test.

West Nile Fever

All samples tested negative with commercially available IgM Antibody Capture ELISA test kits and VN test.

Equine Viral Arteritis (EVA)

Four of 1,402 samples tested positive (0.29%) for Antibody detection with commercially available ELISA (VMRD:USA) and VN test (due to vaccination).

Japanese Encephalitis (JE)
Viral neutralization tests were performed and 1,198 samples of 1,402 (65.4%) tested positive for antibody detection (due to vaccination).

Equine Influenza
Haemagglutination Inhibition tests were performed and 1,295 samples of 1,402 (92.4%) tested positive for antibody detection (due to vaccination).

A serological survey for Piroplasmosis and Surra in 2018
A serological survey for piroplasmosis and surra was conducted from the total 1,369 serum samples of various Thoroughbred stallions, broodmares, racehorses, ponies, riding horses, etc. stabled in KRA racetracks and both KRA and private farms in the first and second half of year. The test was performed by KRA of Republic of Korea. The results were as follows:

Piroplasmosis (*B. Caballi T. equi*)
All samples tested negative (0%) with commercially available cELISA (Antibody test kit: VMRD: OIE authorised method).

Surra *(T. evansi)*
All samples tested negative (0%) with commercially available CATT/*T. evansi* kit: AT & PU, Belgium

A survey for Contagious Equine Metritis (CEM) in 2018
KRA condutced the examination for CEM from 2,236 samples of Thoroughbred stallions and broodmares registered in the http://studback.kra.co.kr. The results were as follows:

Contagious Equine Metritis
Thirteen samples of 2,236 tested positive (0.58%) by qPCR on venereal swabs. [2017Y: 22/2,171: 1.01%(+)]. Positive horses have been in no service and under movement restrictions. They have been in treatment and tested by APQA until three negative results are obtained.

SPAIN
Regret no report received.

SWEDEN
Regret no report received.

SWITZERLAND
Atypical Myopathy
More than four cases of Atypical Myopathy were reported in Switzerland during October 2018. No further information is currently available.

Piroplasmosis *(Theileria equi)*
One case of piroplasmosis was reported on 22 November 2018. Diagnosis was confirmed by PCR.

Strangles *(Streptococcus equi)*
A number of strangles outbreaks were reported during the fourth quarter 2018, as follows:

- 15 October 2018, one outbreak had six affected horses, with diagnoses confirmed by PCR
- 27 October 2018, one outbreak was reported with an unreported number of cases, diagnosis was confirmed by PCR
- 5 November 2018, one case was reported with diagnosis confirmed by PCR
- 2 December 2018, one outbreak had three affected horses, with diagnoses confirmed by PCR

TURKEY

West Nile Virus (WNV)

One case of WNV was confirmed in an unvaccinated Thoroughbred on 3 October 2018. Turkey is located on the route of migrating wild birds and according to recent notifications there are some WNV outbreaks in Balkan countries, close to the Turkish border. The source of the disease is considered to be related to the migration of wild birds. The confirming laboratory was Etlik Veterinary Control Central Research Institute with confirmation by RT PCR RRT-PCR.

UNITED ARAB EMIRATES (UAE)

Regret no report received.

UNITED KINGDOM

Please note that all UK cases and outbreaks have already been notified via interim reports during the fourth quarter and since. Strangles (*Streptococcus equi)* remains endemic in UK horses.

UNITED STATES OF AMERICA

Eastern Equine Encephalomyelitis (EEE)

The number of cases of the disease tailed off considerably during the fourth quarter 2018, with only three cases diagnosed, all in New York State.

Equine Herpes Virus Disease Syndromes

Infection with EHV-1 or EHV-4 continue to occur in many states, especially associated with respiratory illness in foals. Five cases of abortion due to EHV-1 and one due to EHV-4 were recorded. Two outbreaks of EHV-1 neurological disease were confirmed, one in Arizona and one in California, each involving a single case of the disease.

Equine Herpes Virus-2 & -5 (EHV-2&-5)

Multiple cases of EHV-2 and/or EHV-5 were reported, in several instances associated with evidence of respiratory disease.

Equine Infectious Anemia (EIA)

Equine infectious anemia was confirmed in Colorado (three cases) and Texas (two cases).

Equine Influenza (EI)

Equine influenza is endemic in the USA. The disease was confirmed in seven states during the period under review. Three outbreaks involved multiple cases of the disease.

Equine Neorickettsiosis (Potomac Horse Fever)

Two cases of equine neorickettsiosis abortion were diagnosed in Kentucky.

Leptospirosis

Four cases of leptospiral abortion were recorded in Kentucky.

Proliferative Enteropathy

A total of eight cases of proliferative enteropathy due to *Lawsonia intracellularis* were diagnosed in Kentucky.

Rhodococcal Related Disease

Rhodococcus equi infection is endemic in the USA. Although only three outbreaks were reported during the fourth quarter, it is highly likely many more went unreported.

Strangles *(Streptococcus equi)*

Strangles is endemic in the USA with a total of 34 outbreaks reported in 18 states. At least 68 horses were diagnosed with the disease; two states were associated with multiple outbreaks of the disease.

West Nile Encephalitis (WNE)

The frequency of outbreaks of West Nile encephalitis continued unabated in this quarter with 80 being recorded. The distribution of the disease was widespread in the country.