



INTERNATIONAL BREEDERS' MEETING
INTERNATIONAL COLLATING CENTRE

Animal Health Trust

Information Exchange on Infectious Equine Disease

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Please note that due to changes in reporting from Australia, their reports are being reported one quarter in arrears behind the quarter being reported. Here we provide reports for the FIRST QUARTER of 2010 for Australia. Please note that data IS for the quarter being reported. Second quarter reports for other countries are provided after this in the usual way

REPORT FOR FIRST QUARTER 2010 FROM AUSTRALIA

Animal Health Surveillance Quarterly (AHSQ) Compiled by Animal Health Australia (AHA)
(<http://www.animalhealthaustralia.com.au/status/ahsq.cfm>)

STATE AND TERRITORY REPORTS

In Australia, the states and territories are responsible for animal disease control within their borders. National animal health programs are developed through consultation with the Animal Health Committee and are managed by Animal Health Australia.

QUEENSLAND

Contributed by Greg Williamson, Department of Employment, Economic Development and Innovation



Hendra virus

Hendra virus exclusions continued to occur regularly in the quarter, especially in coastal areas of the state and where fruit bats are in close contact with horses. Typical cases for exclusion of Hendra virus infection are horses that display neurological or severe respiratory signs, combined with a fever. There were 60 such cases during the quarter. Blood samples and nasal swabs were tested by PCR; there were no positive results.

Some veterinary clinics and teaching institutions routinely screen horses admitted to their stables or teaching programs for Hendra virus. During the quarter, 46 horses were screened in this manner; all returned negative PCR tests.

VICTORIA

Contributed by Cameron Bell, Department of Primary Industries



Strangles from interstate horse movements in southwest Gippsland

Two horse farms in south-west Gippsland experienced an outbreak of strangles (*Streptococcus equi*) in February 2010. Both cases were traced back to infected horse studs in the Hunter Valley, New South Wales, via movement of horses. The disease spread rapidly on the first property. Six out of eight horses were infected within three weeks of the index case. The second farm, a horse stud, operated under strict biosecurity protocols and managed to contain the outbreak to the one unvaccinated horse on the property and successfully went on to present yearlings for sale.

Bacteriology confirmed the presence of *S. equi* in the nasal swab collected from one of the infected horses. Affected horses were treated with penicillin and none developed bastard strangles, which is the development of *S. equi* abscesses in unusual sites. Although bastard strangles is commonly believed to result from treatment of infected horses with penicillin, evidence does not support this. Similarly, *purpura haemorrhagica*, which is an immune mediated inflammation of peripheral blood vessels, was seen less frequently than expected. This is believed to be due to the Thoroughbred and pleasure horse populations generally receiving strangles vaccination, thus reducing the vasculitis that can occur early in an infection.

The property owners were advised to restrict stock movement until six weeks after the full recovery of the last clinical case on the property. They were also told that infected animals left untreated with penicillin

can shed the bacteria for two months and that viable bacteria can remain in the environment for up to 200 days. Sub clinically infected horses and humans in contact with infected horses can also act as carriers.

NEW SOUTH WALES

Nothing to report

SOUTH AUSTRALIA

Nothing to report

TASMANIA

Nothing to report

WESTERN AUSTRALIA

Nothing to report

NORTHERN TERRITORY

Nothing to report

SUSPECT EXOTIC OR EMERGENCY DISEASE INVESTIGATIONS

Exotic or emergency disease investigations reported, 1 January 2010 to 31 March 2010.

Disease	Species	State	Month	Response Code	Finding
Equine Influenza					
	Equine	NSW	Feb	2	Negative
	Equine	NSW	Mar	2	Negative
	Equine	QLD	Jan	2	Negative
	Equine	VIC	Mar	3	Negative
	Equine	WA	Jan	2	Negative
	Equine	WA	Mar	2	Negative
Hendra Virus					
	Equine	ACT	Mar	3	Negative
	Equine	NSW	Jan	3	Negative
	Equine	NSW	Feb	2	Negative
	Equine	NSW	Feb	3	Negative
	Equine	NSW	Mar	2	Negative
	Equine	NSW	Mar	3	Negative
	Equine	QLD	Jan	2	Negative
	Equine	QLD	Feb	2	Negative
	Equine	QLD	Feb	2	Negative
	Equine	QLD	Mar	2	Negative
	Equine	VIC	Mar	3	Negative
	Equine	WA	Feb	3	Negative
Vesicular stomatitis					
	Equine	NSW	Mar	3	Negative

Key to response codes

- 1: Field investigation by government officer
- 2: Investigation by state or territory government veterinary laboratory
- 3: Specimens sent to the Australian Animal Health Laboratory (or CSIRO Entomology)
- 4: Specimens sent to reference laboratories overseas
- 5: Regulatory action taken (quarantine or police)
- 6: Alert or standby
- 7: Eradication

REPORT FOR THE SECOND QUARTER 2010**ARGENTINA****Equine Infectious Anaemia (EIA)**

EIA is endemic in the north region of Argentina. The south of the country is free of infection, and EIA only has a very low prevalence in the central area of Argentina. It is this region which is most important in producing high value horses (Thoroughbred, polo ponies and jumping horses).

In February 2010 a horse showing clinical signs of EIA was detected in a Thoroughbred horse breeding farm located in the north region of Buenos Aires province. The affected horse was EIA positive by Coggins test (agar gel immune diffusion assay) and the farm was kept in quarantine. After this index case, all the horses on the premise were sampled and tested on multiple occasions. During the following two months new clinical and subclinical cases of EIA were detected. In line with existing regulations, all positive horses were humanely destroyed. The premise is still under restriction and epidemiological investigations are on-going.

This outbreak of EIA in Argentina's main thoroughbred-breeding region is of great concern for the industry in general. Lately, a surveillance program was instituted on several horse breeding farms. Approximately 9000 horses were tested, and 12 additional cases (only two in Thoroughbred farms) were detected and euthanized.

Equine Viral Arteritis (EVA)

An outbreak of abortions associated with infection with equine arteritis virus (EAV) occurred on a Thoroughbred horse farm in San Antonio de Areco during March 2010. On March 23rd samples of an aborted equine fetus and placenta were submitted to the INTA Equine Viral Disease Laboratory and EVA virus was detected by RT-PCR and virus isolation. On 31st March the finding was reported to the National Health Authorities (SENASA) and movement restrictions were imposed on the affected premise. Five additional abortions which occurred on the same farm were also associated with EAV infection. The Thoroughbred mares mixed with jumping mares in the same paddock after the jumping mares had been inseminated with semen from 13 stallions. Semen was then suspected to be the source of EAV infection in the jumping mares from which infection was disseminated to the pregnant Thoroughbred mares by the respiratory route. RT-PCR and virus isolation was attempted on frozen semen of six of the 13 stallions which were still available. EAV was detected and isolated from one sample; this semen had been imported from Holland and control testing imposed by the Animal Health Authorities at the time of entry had given virus negative results.

Horse movement restrictions were imposed on the affected premise and also on other horse breeding farms in the area. All other premises that had used the infectious semen were identified and the premises quarantined.

An extensive seroepidemiological study was carried out. The prevalence of infection was high only in jumping horses that had contact with mares inseminated with the infectious semen. A seroepidemiological survey was also performed on horses in training at San Isidro, Palermo, and La Plata racetracks and all samples tested negative. The Argentinian Horse industry is concerned about the risk of further dissemination of EAV infection.

Quarantine measures have been rigorously applied and investigations are still ongoing.

Argentina's Department of Agriculture notified the OIE in Paris on 7th May of confirmation of the disease in the country and the status of ongoing investigations into this outbreak of EVA.

EHV-4 Respiratory Disease

In April 2010, an outbreak of respiratory disease due to EHV-4 infection was identified in two-year-old horses stabled in San Isidro's training centre. The affected horses showed fever and slight nasal discharge and coughing. Nasal swabs were obtained from four affected horses and EHV-4 was isolated from three of them. All the horses recovered in a few days without any specific treatment other than antipyretic drugs and rest.

AUSTRALIA

As reported above, the first quarter 2010 report for Australia is provided above.

CANADA

Regret no report received.

CHILE

Confirmed nothing to report.

DENMARK

Confirmed nothing to report.

FRANCE

(Information supplied via the RESPE, the French network for epidemiosurveillance of equine diseases)

Strangles (*Streptococcus equi*)

Cases of strangles have been reported on six non-Thoroughbred premises and one Thoroughbred premises in the departments of Loire-Atlantique, Eure, Calvados, Landes and Essonne. The animals showed signs that included lymphadenopathy, nasal discharge, fever (in 4 cases) coughing (in 5 cases). abscess (in 3 cases) and dysphagia (in 2 cases). None were vaccinated. The diagnosis was made by laboratory testing using PCR.

Piroplasmosis

Remains endemic in France.

EHV Abortions

Cases have been reported on two non-Thoroughbred premises. These premises were in Manche and Oise. Mares were fully vaccinated.

Equine Influenza

Four premises confirmed EI on non-Thoroughbred horses. All premises were riding schools. The animals were not vaccinated. The premises were in Hérault (two horses), Landes (six horses), Loire-Atlantique (eleven horses) and Seine-et-Marne (ten horses). Clinical signs included fever, coughing and nasal discharge. Nasal swabs were confirmed at a laboratory using PCR. We are waiting for first results of strain typing.

Equine Infectious Anaemia (EIA)

As reported last quarter, two outbreaks of Equine Infectious Anaemia were reported respectively in March 2010 in the provinces of Montcaret and Prigonrieux, France.

EIA outbreak in Montcaret:

Update on the management of the outbreak: This outbreak was reported in an animal refuge which was dedicated to animal rescue. Upon confirmation by the National Reference Laboratory of the ANSES (French Agency for Food, Environmental and Occupational Health Safety) in Dozulé, restrictions were placed on the premises as of 8th March 2010. The positive horse was euthanased on 12th March 2010 and the remaining 28 horses in the premises were isolated and screened monthly on the 8/3/2010, 06/04/2010, 12/05/2010 and 12/06/2010. All the animals were tested by the Agar Gel Immunodiffusion Assay (AGID) and were negative. Restrictions were lifted on the 6th July 2010 after cleaning and disinfection/disinfection operations were carried out on weeks 26th and 27th respectively.

Update on the epidemiological investigation: An absence of an epidemiological link was reported except for the outbreak in Prigonrieux and the equides kept in an area of 2 km. The group of horses in this area of 2 km were subject to isolation and screening measures. A total of 29 equides with 12 different owners were therefore listed and placed under restriction; these equides were screened twice and samples were tested by the AGID test. They were all negative and therefore the 12 restrictions were lifted on 12th and 13th July 2010.

The outbreak in Montcaret has been considered resolved as well as the epidemiological investigations related to this outbreak. Overall the management of this outbreak and of the equides with an epidemiological link has led to place 58 equides under surveillance and to carry out 228 screenings.

EIA outbreak in Prigonrieux:

Update on the management of the outbreak: Cleaning and disinfection operations are ongoing.

Update on the epidemiological investigation: The epidemiological investigations which aim to list and screen the equides linked to the infected horses are ongoing.

GERMANY**Equine Infectious Anaemia (EIA)**

Further to the previously reported EIA case (Interim Report 3 - April 2010) on a premises in Mindelheim, administrative district of Unterallgäu (Federal State of Bavaria), notice has been given that the investigations had been completed. The competent authorities considered the event resolved. All

implemented quarantine measures on the affected premises and within the established protection zones were removed.

One premises with 15 resident horses was affected. Two horses, in which EIA was officially confirmed, were euthanized. One came to the affected premises some weeks previously and was assumed to be a Warmblood horse of Hungarian origin. The other one, a horse from Russia of unknown breed, came to the premises 18 years ago and remained there since that time. The screenings of 59 in-contact horses on other premises within the administrative district of Unterallgäu remained negative for EIA. About 20 horses, resident outside the named district, were also tested negative for EIA. According to the final report from June 25th 2010 the source of the outbreak remained inconclusive.

Results received from Labor Dr Boese GmbH – an HBLB CEMO registered laboratory

Equine Viral Arteritis (EVA)

Two horses affected, with diagnosis by PCR and agent isolation.

Leptospirosis

Five horses affected, with diagnosis by PCR.

EHV-1-1

Fourteen horses affected, with diagnosis by PCR.

EHV-4

Six horses affected, with diagnosis by PCR.

Strangles (*Streptococcus equi*)

Four horses affected, with diagnosis by PCR.

Contagious Equine Metritis (CEM)

One horse affected, with diagnosis by agent isolation. There were 1,183 horses tested for CEM by culture.

HONG KONG

Confirmed nothing to report.

IRELAND (Republic of)

Strangles (*Streptococcus equi*)

Nine cases were reported with four cases in Kildare, two in Northern Ireland, one in Meath, one in Cork and one in Wicklow.

EHV-1 neurological disease

There was a limited outbreak of EHV-1 neurological disease in a training yard.

EHV-3

There was a single case of coital exanthema

EHV-4 Abortion

One case of EHV-4 abortion was identified.

EHV-1 Abortion

Three cases were reported on three separate premises.

Salmonella

Two cases were reported, one in Meath and one in Tipperary.

ITALY**Contagious Equine Metritis (CEM)**

Nine cases were reported in total: six cases of *T. asinigenitalis* in donkey stallions, two cases of *T. equigenitalis* in two non-Thoroughbred stallions and one case of *T. equigenitalis* in a non-Thoroughbred mare.

Equine Infectious Anaemia (EIA)

There were 184 positive cases of EIA reported among 26,150 samples taken. No cases were found in horses intended for breeding activity or race/sport horses.

Strangles (*Streptococcus equi*)

Sporadic cases of strangles were reported in the north of Italy, however, no official data are available.

JAPAN**EHV-1 Abortion**

An outbreak was reported on 24th February 2010, with the last case reported on 26th April 2010. The diagnosis was confirmed by Hokkaido Hidaka Livestock Hygiene Service Centre and Rakuno Gakuen University using serology. The outbreak was limited, affecting seven Thoroughbreds and non-Thoroughbreds on five premises. Six of the horses had been vaccinated. Of the five premises affected, one premise is continuing an outbreak from February.

A further case in one vaccinated Thoroughbred at Aomori Prefecture was reported on 15th April 2010. The name of the confirming laboratory and method of diagnosis are unknown.

EHV-1 Neurological Disease

An outbreak was reported on 25th May 2010. The confirming laboratory was Rakuno Gakuen University using serology. The outbreak was limited affecting two horses on one premises. All horses had been vaccinated.

NEW ZEALAND

Confirmed nothing to report.

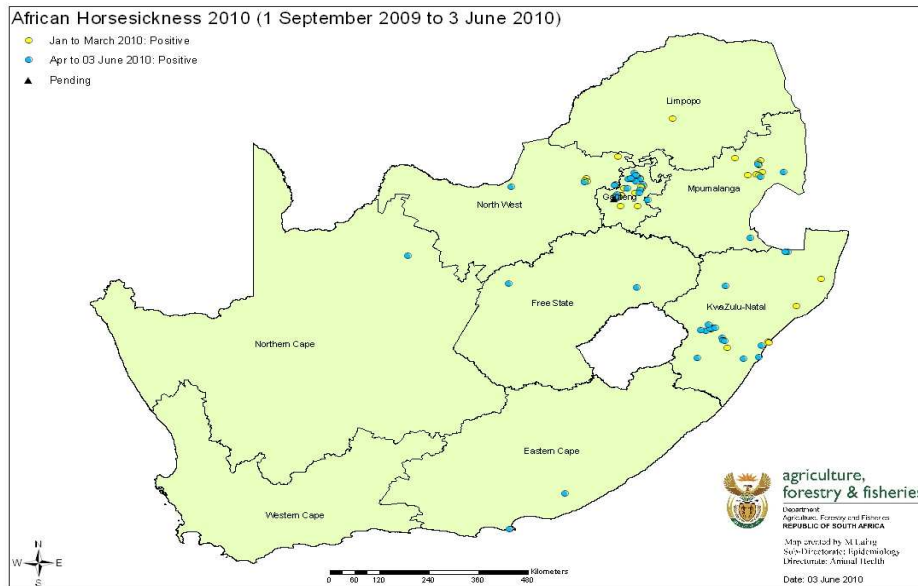
SINGAPORE

Confirmed nothing to report.

SOUTH AFRICA**African Horse Sickness (AHS)**

An outbreak occurred during the third quarter of 2009 with the last case reported in June 2010. The confirming laboratories were Onderstepoort Veterinary Institute and Equine Research Centre, Faculty of

Veterinary Science, University of Pretoria. Method of diagnosis was by serology, agent isolation, clinical signs and RT-qPCR. The outbreak was limited affecting mainly young unvaccinated Thoroughbreds and non-Thoroughbreds (with some vaccinated animals also affected). North-eastern parts of South Africa are endemic for AHS and cases are recorded annually (see map below from Department of Agriculture, South Africa).



EHV-1 Abortion

A case affecting one Thoroughbred on a Thoroughbred stud was reported in June. The confirming laboratory was the Equine Research Centre, University of Pretoria by qPCR. No vaccination history is available.

Piroplasmosis (*Theileria equi* and *Babesia equi*)

An outbreak was reported in September 2009 with the last case reported in June 2010. The diagnosis was confirmed by a private practitioner using serology and microscopic examination of blood smear. The outbreak was limited and clinically mild affecting Thoroughbred and non-Thoroughbred performance horses. *Theileria equi* and *Babesia caballi* are endemic in South Africa and clinical cases are reported during spring, summer and autumn.

Strangles (*Streptococcus equi*)

There is an ongoing outbreak affecting both Thoroughbreds and non-Thoroughbreds in South Africa. The outbreak is limited and clinically mild and confirmed by agent isolation. Clinical signs of disease were reported on various properties in South Africa.

SOUTH KOREA

Confirmed nothing to report.

SPAIN

Regret no report received.

SWEDEN

Regret no report received.

SWITZERLAND

EHV-1 Neurological Disease

As already reported for the first quarter of 2010, at the end of February in the central part of Switzerland, an outbreak of EHV-1/-4 was suspected on a livery yard with 21 horses (12 Warmbloods, four Franches-Montagnes, three Irish Tinkers, one Friesian, one PRE, three ponies and one donkey aged five to 31 years, average of 14 years). All equids had contact with each other in adjacent boxes with small paddocks, of which four were shared by two horses each. Moreover, they were schooled in the same indoor arena which is used also for horses from outside.

On the 21st of February, one horse showed apathy, mild anorexia and fever and was treated with antibiotics and homeopathy (Vincetoxicum). Within a week, five horses had fever, one of them also had diarrhoea for three days and colic, dyspnoea and petechial haemorrhages developed and this horse died despite symptomatic treatment.

On the 1st of March, six more horses had fever, one with nasal discharge and coughing, and three animals (two geldings and a mare) showed neurological signs after two, four and six days, respectively. Signs included ataxia in the hindlimbs, dragging of the toes and inability to lift the legs over a doorstep; the mare also had problems urinating and defecating.

On the next day, three more horse fell ill, one of them with similar neurological signs as reported above after two days.

All horses with elevated temperatures were treated with antibiotics and NSAIDs, those with neurological signs were also treated with corticosteroids for two weeks, the mare also received infusions, mineral-oil and Vitamin B.

One week later (9th of March), the donkey also had fever, and in the following few days five more animals showed an elevated temperature and neurological signs. These were more severe than in the first horses, with a distinct ataxia of the hindlimbs, recumbency and paralysis of the bladder. Two recumbent horses had to be euthanized.

One mare (13-year old Franches-Montagnes) tolerated being lifted with a tractor for several days. Afterwards she was able to get up herself, but was incoordinated while turning and trotting for weeks.

A 6-year old warmblood gelding with a mild ataxia, high temperature and paralysed bladder succumbed to acute colic after two weeks and was humanely destroyed.

After 16th March, no further cases occurred and six animals remained unaffected throughout.

In summary, 19 horses and one donkey became ill and of these nine horses showed neurological signs. Four paralysed horses were euthanized and one horse died, however, the latter most probably succumbed to another condition (diarrhoea, colic, hemorrhages).

These 20 animals had temperatures up to 41.3°C for 1 to 6 days. However there was no difference in the average-temperature of horses with or without neurological problems (both groups had an average of 40.0°C).

Only a single horse underwent a *post mortem* examination where a mild malacia with acute haematomyelia, dilated axons and a multifocal non-purulent polyomyelitis in the lumbar region of the spinal cord and multifocal non-purulent ganglioneuritis and lipofuscinosis in the trigeminal-ganglion were diagnosed.

The examination of four horses with serology, PCR and qPCR showed only modest titers and were inconclusive, even in severely neurologically affected animals.

With the exception of two horses, all animals were vaccinated against influenza and tetanus; one horse was only vaccinated against tetanus and another one hadn't received any vaccinations at all. Three horses only had been irregularly vaccinated against EHV-1/-4 previously, from once to several times. Among these sporadically vaccinated horses, one had to be euthanized (last vaccination 10 years ago), one showed mild ataxia (last vaccination seven years ago) and one recovered completely (no reliable information on vaccination schedule).

The unaffected animals and horses without neurological signs had never been vaccinated against EHV-1/-4.

The source of this outbreak is unknown and its course also remains obscure. In mid-June, three horses were still slightly ataxic and one of them occasionally still needs support getting up. The other surviving horses recovered well.

Strangles (*Streptococcus equi*)

A case was reported in June in a four year old gelding (Holstein) which presented with fever and a swelling in the shoulder region, that was due to an abscessated superficial cervical lymph node. Diagnosis was by agent isolation.

Equine Grass Sickness (EGS)

An outbreak was reported in June affecting a four year old American Quarter Horse gelding and a four year old Franches-Montagnes gelding on two different premises. The outbreak was limited but clinically severe and both horses were euthanased.

TURKEY

Confirmed nothing to report.

UNITED ARAB EMIRATES

Piroplasmiasis (*Babesia caballi* and *Theileria equi*)

Piroplasmiasis is endemic in the UAE with cases reported periodically. The confirming laboratory is Central Veterinary Research Laboratory Dubai by serology and agent isolation.

UNITED KINGDOM

Equine Infectious Anaemia (EIA)

With regards to the outbreak that started on 19th January 2010 in the UK which involved two positive horses in Wiltshire, England, following importation from Belgium having previously originated from Romania, as of 30th April 2010 all remaining horses on the infected premises were tested with negative results, and no further cases were reported. The OIE declared this event resolved.

EHV-1 Abortion

An outbreak of EHV-1 causing two abortions and a neonatal death was reported on 6th of April in a Thoroughbred Stud. EHV-1 was confirmed by PCR and virus isolation on placenta and fetal tissues in two aborted fetuses and a dead newborn foal. Restrictions were put in place in accordance with the recommendations of the HBLB Codes of Practice and serological screening of the whole population in the stud by means of paired serology showed no evidence of viral activity within the in-contacts. There were no further cases reported and restrictions were lifted a month after the first incident.

Seven single cases of EHV-1 abortions have been reported in this quarter. Two of these mares were Thoroughbred whereas one mare was a Warmblood and another mare was a Lusitano. The breed wasn't disclosed for the rest of the cases. EHV-1 was diagnosed by PCR and Virus Isolation in placenta and/or fetal tissues.

EHV-1 Paralytic disease

In a private yard with two horses, a horse with ataxia showed a seroconversion to EHV-1; however EHV-1 could not be isolated from a nasopharyngeal swab in either the affected horse or the in-contact. The in-contact, which did not show any clinical signs, showed stable low titres when tested by serology.

EHV-1 was isolated from a nasopharyngeal swab in a horse showing hindlimb and forelimb ataxia, flacid penis, and bladder paralysis with urine overflow. The horse was resident in a private yard with other 4 in-contact horses, none of them showing clinical signs. All the in-contacts in the yard tested negative for virus isolation on both nasopharyngeal swab and heparinised blood. Paired serology in the affected horse showed stable high titres for both EHV-1 and EHV-4 whereas two in-contacts showed seroconversions to both EHV-1 and EHV-4 and the remaining two in-contacts showed stable low titres. The affected horse was taken to a vet practice before being diagnosed where it was in contact with a horse that tested negative on both nasopharyngeal swab and serology. No further cases were reported and restrictions were lifted after the affected horse tested negative for virus isolation on a nasopharyngeal swab.

EHV-2

EHV-2 infection was diagnosed by virus isolation from nasopharyngeal swabs in three horses; one of them was reported to show respiratory signs.

EHV-2 was also diagnosed by virus isolation from heparinised blood in a foal and in two mares following an EHV-1 confirmed abortion.

In addition, EHV-2 was diagnosed by virus isolation from heparinised blood and PCR on a nasopharyngeal swab in a horse.

EHV-3

One horse showed a seroconversion to EHV-3 on the virus neutralization (VN) test. No further information could be obtained regarding this case.

Two mares were diagnosed of Equine Coital Exantema (EHV-3 infection) by virus isolation on genital swabs. Both mares had clinical signs and tested positive on the VN test.

EHV-4 Respiratory infection

EHV-4 was isolated from a nasopharyngeal swab in a 4 year-old gelding which showed respiratory signs.

EHV-4 Abortion

EHV-4 was confirmed by PCR on placenta in a mare following abortion. No further information could be obtained regarding this case.

Equine Influenza

Four outbreaks of equine influenza were reported in this quarter.

Outbreak descriptions

On 11th May 2010 equine influenza (EI) was confirmed as the cause of a large outbreak of respiratory disease on a single premises in Lincolnshire, England. The outbreak affected more than 180 non-vaccinated horses, ponies and donkeys of different breeds among 274 animals on the premises. Clinical signs were typical and very rapidly spreading and included pyrexia, nasal discharge and characteristic harsh, dry cough. Diagnosis was confirmed by the Animal Health Trust on the basis of positive nucleoprotein (NP) ELISA on multiple nasopharyngeal swabs. There was no policy for influenza vaccination on the premises and serology by haemagglutination inhibition (HI) in the positive cases showed that these horses were not vaccinated.

On 21st May 2010 equine influenza was diagnosed in a 13 year-old un-vaccinated horse in Shropshire, UK. Diagnosis was confirmed by the Animal Health Trust on the basis of positive nucleoprotein (NP) ELISA on a nasopharyngeal swab. The affected horse was resident in a private yard with 4 horses in total. Three horses were reported as affected; clinical signs included pyrexia, nasal discharge and cough. None of the horses in the yard had been vaccinated for EI in the past 4 years. The source of infection is still unknown; however there were no recent arrivals in the yard.

On 7th June 2010 equine influenza was diagnosed in three horses in a yard in Surrey, UK. Diagnosis was confirmed by the Animal Health Trust on the basis of positive nucleoprotein (NP) ELISA on a nasopharyngeal swab. There were 8 horses in the premises and most of them were affected; clinical signs included pyrexia, nasal discharge and cough. One of the positive cases was vaccinated for EI in February 2010 whereas the other two positives had never been vaccinated. The source of infection was believed to have been a horse that arrived to the yard a week before the onset of the outbreak; this horse was showing signs when it first arrived on the premises but the NP ELISA was negative when tested along with the other three positives.

On 15th July 2010 equine influenza has been diagnosed in a non-vaccinated pony in Nottinghamshire, UK. Diagnosis was confirmed by the Animal Health Trust on the basis of positive nucleoprotein (NP) ELISA on a nasopharyngeal swab. The affected pony showed classical clinical signs (typical harsh, dry cough and nasal discharge) and at the moment it is the only affected animal among a small group of horses. The rest of the horses, which are not affected at the moment, were vaccinated for equine influenza. The affected pony was a recent arrival on the yard from the north east of England having been imported from Ireland shortly before that. Genetic characterisation of the virus is pending.

Equine influenza virus characterisation

Genetic characterisation of the isolates obtained from the outbreaks in Lincolnshire, Shropshire and Surrey belonged to Florida sublineage clade 2 of the American lineage of H3N8 equine influenza virus.

Strangles

Strangles remains endemic in the UK, especially among parts of the non-Thoroughbred horse population. Diagnoses are confirmed in the UK based on traditional culture of *S.equi* and qPCR on respiratory samples and/or seroconversion using a blood-based ELISA test.

UNITED STATES OF AMERICA

Contagious Equine Metritis (*Taylorella equigenitalis*)

The overall totals of carrier stallions and mares directly associated with the 2008/09 CEM event remains at 23 stallions and five mares. Of the 977 additional horses determined to have been potentially exposed to *T. equigenitalis*, 958 (98.1%) have been confirmed free of the bacterium. Twenty-two of the carrier stallions have successfully completed their treatment and subsequent testing protocol and are clear of *T. equigenitalis*. All five carrier mares have been effectively treated and are free of infection. Although not confirmed, the source of *T. equigenitalis* for the 2008/09 CEM event is suspected to have been a Warmblood stallion imported into the USA in 2000.

Totally unrelated to the 2008/09 CEM event, in May 2010, an Arabian stallion was confirmed a carrier of *T. equigenitalis* in California. The stallion was identified in the course of routine testing prior to shipping his semen to Europe. The stallion had been imported into the USA in March 2010 from a country not known to have been affected with CEM. Accordingly, the stallion was not required to undergo a post-entry period of quarantine and testing for *T. equigenitalis*. An additional 22 horses, comprising five stallions and 17 mares, have been identified as potentially exposed to this stallion; these are located in 7 states. Interim test results have failed to turn up any further carrier animals.

Eastern Equine Encephalomyelitis (EEE)

The first confirmed cases of EEE. Significant activity of EEE virus was reported, primarily in Florida and to a lesser extent in Georgia. The total number of confirmed equine cases so far is 33 for Florida and two for Georgia. The geographic distribution of cases in Florida is more widespread than in previous years.

West Nile Encephalitis (WNE)

There has been very little confirmed WN virus activity during the second quarter of 2010, with only one equine case reported from central California.

Vesicular Stomatitis (VS)

On 26th May, the USDA's National Veterinary Services Laboratory confirmed VS infection, New Jersey serotype, in three clinically affected horses on a premises in Cochise County, Arizona. A second outbreak of the disease was identified on another premises in the same country; this involved one equine. The source of infection has not been determined to this point. There is no evidence of virus spread within Arizona or to adjacent states. Both affected premises have recently been released from quarantine.

Piroplasmosis (EP)

Extensive follow-up tracing and testing of horses for evidence of EP infection continues in a number of states as a consequence of the finding of widespread *Theileria (Babesia) equi* infection on a large ranch in Southern Texas in 2009. Apart from the 292 positive horses originally detected on the index premises, trace-back positive horses from that ranch were identified in some 16 states including Texas. There is evidence to indicate that infection may have existed on the index premises prior to 1990. Interstate movement testing and voluntary testing for entry to racetracks has turned up an additional 28 *T. equi* seropositive horses in Texas unrelated to the index ranch, some imported from EP endemic countries whereas 19 were former QH racehorses. Furthermore, 10 *T. equi* seropositive QH racehorses have been confirmed on a premises in Georgia, with extensive connections with Mexico. New Mexico has reported finding 19 *T. equi* QH racehorses and two *B. caballi* QH as part of a racetrack pre-entry testing program. A significant number of the seropositive horses (16) have been euthanized. Limited numbers of *T. equi* seropositive horses have also been detected in California, Florida, Colorado, Oklahoma, Ohio and Massachusetts, some with histories of having been imported from known EP endemic countries.

Strangles (*Streptococcus equi*)

Outbreaks of strangles were confirmed in a number of states but the frequency of reported occurrences in Kentucky and elsewhere is less than recorded for the corresponding period in previous years.

EHV-1 Abortion

Three cases of EHV-1 abortion were confirmed in Thoroughbreds and one in a Tennessee Walking Horse mare, all in Kentucky.

Clostridial enteritis (*C. perfringens* and *C. difficile*)

The prevalence of foal enteritis associated with *C. perfringens* was higher than in 2009, with 64 cases confirmed, the majority in Kentucky. There were additional reports of outbreaks of *C. difficile* enteritis in foals.

***Lawsonia intracellularis* enteropathy**

Only one case of *Lawsonia* infection was confirmed by PCR.

Venezuela

Regret no report received.

REGARDS
INTERNATIONAL COLLATING CENTRE

(Total pages = 11)