



International
Collating Centre

INTERNATIONAL COLLATING CENTRE Information Exchange on Infectious Equine Disease

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Fourth Quarter Summary Report: October – December 2018

This article provides a summary of international infectious disease outbreaks reported during the fourth quarter of 2018. For further details, please see the supplied supplementary documents. The ICC interim (real-time) reports can be found at www.aht.org.uk/disease-surveillance/icc-reports

The data presented in this report *must be interpreted with caution*, as there is likely to be some bias in the way that samples are submitted for laboratory testing and subsequently reported. Consequently these data do not necessarily reflect true infectious disease frequency within the international equine population. A country with no reported outbreaks of disease does not necessarily equate to the disease not being present in that country. Each table below summarises the number of disease outbreaks reported by a country. Each reported outbreak may involve more than one animal.

Reproductive Diseases

Country	EHV-1 Abortion	EHV-4 Abortion	EVA	CEM
France	2	-	3	-
Germany	2	-	1	2
Ireland	4	-	-	-
Japan	2	-	-	-
USA	5	1	-	-

CEM

Labor Dr. Böse GmbH confirmed two separate cases of CEM by PCR on genital swabs. Both cases were stallions.

EHV-1/-4 Abortion



RESPE reported two separate cases of EHV-1 abortion in vaccinated TB's on stud premises in Calvados.



Hokkaido Hidaka Livestock Hygiene Service Centre reported two separate cases of EHV-1 abortion. Both cases were TB's, one was vaccinated, one was unvaccinated.



Five cases of abortion due to EHV-1 and one due to EHV-4 were reported.

EVA



RESPE reported two separate cases of EVA abortion in Orne. Positive diagnoses were made by PCR on fetal tissues by LABEO Frank Duncombe. Affected horses were isolated, with further epidemiological investigations carried out, including screening of in contacts. A subclinical case of EVA was confirmed in a 10-year-old Holsteiner stallion in Calvados. Positive diagnosis was confirmed by PCR on a semen sample.



Labor Dr. Böse GmbH confirmed a stallion was positive for EVA by PCR testing on a semen sample.

Respiratory Diseases

Country	EHV-1 Respiratory Infection	EHV-4 Respiratory Infection	Equine Influenza	Strangles
Canada	-	-	-	2
Ecuador	-	-	1	-
France	8	26	3	28
Germany	1	1	-	-
South Africa	1	-	-	-
Switzerland	-	-	-	4
UK	1	7	Endemic	Endemic
USA	-	1	Endemic	10 (endemic)

EHV-1/-4 Respiratory Infection

International

EHV remains endemic in most countries. Of those cases that were reported, clinical signs included; coughing, lethargy, lymphadenopathy, nasal discharge and pyrexia. Positive diagnoses were made by PCR on nasopharyngeal swabs. EHV-1 outbreak reports involved between one and five affected horses, EHV-4 outbreaks reports involved between one and ten affected horses.



Infection with EHV-1 or EHV-4 continue to occur in many states and is especially associated with respiratory illness in foals.

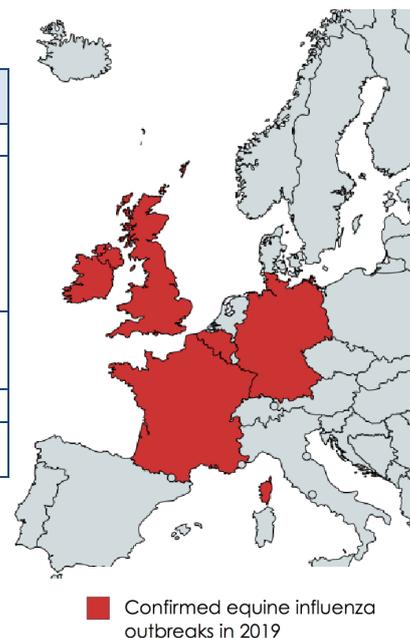


Equine Influenza outbreak summary - Q4 2018 and Q1 2019

Europe

There has been an increase in the number of influenza outbreak reports from end of Q4 and into Q1. Except in the UK, cases have included vaccinated horses. Investigations are underway to explore a possible epidemiological link between outbreaks. Analysis so far in Ireland, France and UK confirms that the virus isolated from outbreaks belongs to clade 1 of the Florida sub-lineage of H3N8 equine influenza.

Country	No. of confirmed outbreaks	Vaccination status	Numbers involved in each outbreak
<i>Belgium</i>	2	Vaccinated and unvaccinated	Unknown
<i>France</i>	10	6 involve vaccinated horses 1 involves an unvaccinated horse 3 have an unknown vaccination status	Six outbreaks = 1 to 3 cases One outbreak = 6 cases One outbreak = 9 cases One outbreak = 14 cases
<i>Germany</i>	3	1 involves vaccinated horses 2 have an unknown vaccination status	Outbreaks = 1, 2 and 4 cases
<i>Ireland</i>	2	Vaccinated and unvaccinated	Unknown
<i>UK</i>	4	Unvaccinated	Three outbreaks = 1 case One outbreak = 5 cases



Strangles

International

Strangles remains endemic in most countries, with further details on outbreaks reported by Canada, France and USA. Outbreaks were reported to involve between one and 13 horses with clinical signs including; coughing, lymphadenopathy, nasal discharge and pyrexia. Positive diagnoses were made by either culture or PCR of purulent material from abscesses, guttural pouch lavage samples, nasopharyngeal or nasal swabs.

Neurological Diseases

Country	EEE	EHV-1 Neurological Disease	WNV
<i>Canada</i>	-	-	3
<i>France</i>	-	-	3
<i>Portugal</i>	-	-	1
<i>Tunisia</i>	-	-	7
<i>Turkey</i>	-	-	1
<i>South Africa</i>	-	1	-
<i>UK</i>	-	1	-
<i>USA</i>	3	4	65

Eastern Equine Encephalitis (EEE)

 The number of cases of the disease expectedly tailed off during Q4, with only three cases reported.

EHV-1 Neurological Disease

 An unvaccinated 11-year-old presented with transient serous nasal discharge 10 days prior to developing ataxia and recumbency and was euthanased. Positive diagnosis was confirmed by post-mortem examination, PCR on tissue and serology. There were a total of seven in contacts, two of these had transient respiratory signs and high titres to EHV on serology.

 All EHV-1 neurological cases presented with neurological signs including ataxia and recumbency. One outbreak involved three horses and all were reported as improving. One outbreak involved two cases and both were euthanased. The other two outbreaks reports were of single cases.

West Nile Virus (WNV)



-  All three cases at separate premises presented with neurological signs. Two recovered and one was euthanased.
-  Positive cases were reported in October in Gard, Haute-Corse and Bouches-du-Rhône. Two cases had reported clinical signs which included ataxia and paralysis. Diagnoses were confirmed by serology.
-  There was one confirmed case, with positive diagnosis confirmed by IgM capture ELISA.
-  Seven cases were diagnosed as part of an active investigation in the area, following human cases in the region.
-  There was one clinical case reported that died. Source of infection for vectors in the region is thought to be related to the migration of wild birds.
-  There were 65 reports of WNV in USA during Q4 and the last reported case was in mid December. Seven cases were vaccinated, 37 were not vaccinated and 21 had an unknown vaccination history. Cases presented with a range of neurological signs including; ataxia, depression, hyperaesthesia, muscle fasciculations, paresis/weakness, pyrexia and recumbency. When diagnostic testing information was reported, positive diagnoses were made by IgM capture ELISA. Of the vaccinated cases; one was reported as euthanased, three were recovering and three had no further information reported. For the unvaccinated, two died, ten were euthanased, 16 were recovering and nine had no information reported. For the unknown vaccination status, three were euthanased, two were recovering and 16 had no further information reported.

Miscellaneous Diseases

Country	AHS	EIA
<i>Canada</i>	-	3
<i>France</i>	-	1
<i>South Africa</i>	>1	-
<i>USA</i>	-	6

African Horse Sickness

 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.

Equine Infectious Anaemia (EIA)

 Positive cases were confirmed during routine serological screening of asymptomatic animals.

 In December, RESPE reported a subclinical case of EIA in Vaucluse. The affected horse was a six-year-old and positive diagnosis was made by serology on a blood sample. There was another horse on the premises displaying clinical signs of EIA.

 EIA was reported in two states. Of the total of six cases reported, one had clinical signs of anaemia and weightloss, the other positives were subclinical.