



First Quarter Summary Report: January – March 2020

This article provides a summary of international infectious disease outbreaks reported during Q1 2020. The ICC interim (real-time) reports, on an interactive website, can be found at <http://jdata.co.za/iccvviewer/>

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 a 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	Leptospirosis	Nocardiosis
Belgium	4	2	-
Canada	1	-	-
Netherlands	5	-	-
UK	4	-	-
USA	8	-	256 (cases)

Equine Herpes Virus-1 (EHV-1) Abortion

Three outbreaks involved single cases of abortion and one outbreak involved one laboratory confirmed positive case, with a further five abortions on the premises. Positive diagnoses were confirmed by PCR on fetal tissue. Two cases were reported as vaccinated

A single outbreak involved two cases of abortion.

Four outbreaks involved single cases of abortion, one involved two cases of abortion.

All outbreaks involved unvaccinated single cases of abortion.

One outbreak involved four cases of abortion and seven involved single cases.

Leptospiral Abortion

Two separate outbreaks were reported. One involved a single case of abortion and one involved a single confirmed case with another suspect case reported.

Nocardiosis Abortion

The vast majority were in Kentucky, with a small number also in Pennsylvania and Delaware.

Respiratory Diseases

Country	EHV-1	EHV-4	Influenza	Strangles
Argentina	-	1	-	-
Belgium	2	1	-	2
France	3	18	4	20
Netherlands	1	2	2	24
Spain	-	1	-	-
Switzerland	-	2	-	4
UK	-	5	-	-
USA	6	-	9	16

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

-  Both outbreaks involved reports of single cases. One of the cases had an EHV-4 co-infection.
-  Two outbreaks involved single cases and one involved two cases.
-  Six horses were reported with clinical signs including pyrexia and nasal discharge.
-  Three outbreaks involved reports of single cases. Two outbreaks involved two cases. One outbreak involved five horses with clinical signs.

Equine Herpes Virus-4 (EHV-4) Respiratory Infection

-  Clinically mild signs in five to seven-month-old foals.
-  There was a single laboratory confirmed positive and a further three horses with clinical signs.
-  Most reports involved single cases, one involved two cases, one involved three cases and one outbreak involved 15 horses with clinical signs.
-  One outbreak involved a single case and one involved three cases. For both outbreaks, all cases were new arrivals.
-  A single case was reported.
-  One case had a co-infection with strangles. One outbreak involved four cases.
-  Four outbreaks involved reports of single cases and one outbreak involved reports of four horses with clinical signs. Two of the outbreaks were linked to new arrivals.

Equine Influenza

-  Four outbreaks were reported; two in January and two in February. One involved a single case, one involved two horses with clinical signs, one involved 15 horses with clinical signs and one involved 20 horses with clinical signs. Clinical signs included; coughing, nasal discharge and pyrexia.
-  One outbreak involved three horses with clinical signs and one involved five horses
-  Two outbreaks involved reports of single cases, one involved two cases, one involved three cases, one involved five cases, three involved around 10 cases and one involved 30 cases. When reported, cases were unvaccinated

Strangles

International: Strangles remains endemic in most countries.

Gastrointestinal Diseases

Country	<i>Clostridium difficile</i>	<i>Clostridium perfringens</i>	Rotavirus
France	-	-	2
Spain	-	-	1
USA	16 (cases)	24 (cases)	1

Clostridium difficile

 Detected in samples from 16 foals in Kentucky ; these included two toxin Type A strains and two toxin Type B strains.

Clostridium perfringens

 Detected in samples from 24 foals from Kentucky or Indiana.

Rotaviral Enteritis

 Reports involved single cases confirmed positive by PCR on fecal material. Clinical signs included diarrhoea.

 A single case was reported and the positive diagnosis was confirmed by PCR on fecal material.

 A single case was reported in Kentucky.

Neurological Diseases

Country	EEV	EHV-1	Venezuelan Equine Encephalomyelitis
Belize	-	-	1
Canada	-	1	-
Netherlands	-	2	-
South Africa	159 (cases)	-	-
Switzerland	-	1	-
UK	-	3	-
USA	-	7	-

Equine Encephalosis Virus (EEV)

 Cases of EEV were reported from seven of South Africa's nine Provinces, with Gauteng recording over 100 cases of the disease in the quarter.

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

 A single case was reported and it required euthanasia.

 One outbreak involved two horses with clinical signs including ataxia and pyrexia. One outbreak involved seven cases with clinical signs including; hindlimb paralysis, reduced tail tone and bladder distention. Positive diagnoses were confirmed by PCR on nasopharyngeal swabs and EDTA blood samples.

 A single case was reported.

 One outbreak was reported in January and two in February. One outbreak involved nine horses with neurological signs and three required euthanasia. One outbreak involved a 15-year-old that presented with ataxia and went on to develop urine retention and required euthanasia. The final outbreak involved a single case that presented with ataxia which resolved over a week. For all, positive diagnoses was confirmed by PCR on a nasopharyngeal swab or positive titres on a complement fixation test.

 All outbreaks involved reports of single cases. Where reported, affected cases were aged; six, 14, 19, 21 and 26-years-old. Three horses required euthanasia.

Venezuelan Equine Encephalomyelitis

 Five unvaccinated horses were reported as affected and four of these died.

Miscellaneous Diseases

Country	AHS	Equine Coronavirus	EIA	EVA	Piroplasmosis
Canada	-	-	1	-	-
France	-	-	-	1	-
South Africa	Endemic	-	-	-	93 (cases)
Thailand	3	-	-	-	-
United States	-	1	3	-	-

African Horse Sickness (AHS)

 This is the first occurrence of this listed disease in this country. So far, three outbreaks have been reported involving 78 cases, of which 57 have died.

 Cases occurred at expected levels within the endemic area, in 8 of the 9 Provinces, with the highest number of cases in Gauteng. There were no cases of AHS in the Western Cape Province, either in the infected part of the province or in the AHS controlled area.

Equine Coronavirus

 A single case was reported. Clinical signs included anorexia, pyrexia and recumbency.

Equine Infectious Anaemia (EIA)

 A single subclinical case was confirmed.

 One report involved a horse testing positive prior to export. One report involved a single case. One outbreak involved three positive horses.

Equine Viral Arteritis (EVA)

 Three stallions were confirmed positive through semen testing.

Piroplasmosis

 Piroplasmosis is regarded as endemic in South Africa and sporadic cases were reported throughout the country.