

# International Collating Centre: Summary Report

(1 January to 31 March 2023)

The International Collating Centre (ICC), is overseen by Equine Infectious Disease Surveillance (EIDS) and is generously supported by contributions from Fédération Equestre Internationale (FEI), International Thoroughbred Breeders' Federation (ITBF) members, Japanese Racing Association and Lanwades Stud.



National and international equine disease outbreaks are reported on a daily basis by the ICC, through email alerts. Please contact [equinesurveillance@gmail.com](mailto:equinesurveillance@gmail.com) to receive these. There is also a website available that provides an interactive interface of these infectious disease reports and can be used to view current outbreak reports, <https://equinesurveillance.org/iccview/>.

This article provides a summary of international disease outbreaks during the first quarter of 2023. It should also be noted that additional summary reports were kindly received that included further information on disease occurrence for that country, but which had not been reported in previous real-time ICC reports. This additional information is identified by \*or # in the tables and text, where relevant, throughout this report.

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	CEM	EHV-1	EHV-4	<i>Strep. zooepidemicus</i>
Belgium	-	4	2	1
France	-	9	-	1
Germany	3	1	-	-
Japan	-	#6	-	-
Netherlands	-	2	-	-
Switzerland	-	1	-	-
UK	-	7	-	-
USA	-	1	-	-

#some cases reported by ICC after the quarter end

### Contagious Equine Metritis (CEM)

#### Germany



Three outbreaks of CEM were reported. Two outbreaks involved single cases on premises in Bavaria and Lower Saxony, and one outbreak involved three cases on a premises in Schleswig Holstein. Positive diagnoses were confirmed by PCR on genital swabs.

### Equine Herpes Virus-1 (EHV-1) Abortion

#### Belgium



Four separate outbreaks of EHV-1 abortion, each involving single cases, were reported on premises in Antwerp and West Flanders. Two of the affected mares were vaccinated and one case additionally

had a co-infection of EHV-4. Positive diagnoses were confirmed by PCR on fetal tissues.

## France



Nine separate outbreaks of EHV-1 abortion, each involving single cases, were reported on premises in; Calvados, Loire-Atlantique, Manche, Oise and Orne. Five of the affected mares were vaccinated. Positive diagnoses were confirmed by PCR on fetal tissues in eight outbreaks, and by PCR on a uterine swab in one case.

## Germany



One case of EHV-1 abortion was reported in a vaccinated Thoroughbred mare on a premises in Saxony. Positive diagnosis was confirmed by PCR on fetal tissues and by a lochia swab from the mare.

## Japan



#Six outbreaks of EHV-1 abortion in vaccinated Thoroughbreds were reported after the quarter end. Each outbreak involved a single case on six separate premises. Positive diagnoses were confirmed by LAMP.

## Netherlands



Two outbreaks of EHV-1 abortion were reported. One outbreak involved three cases in mares with a lapsed vaccination status on premises in Gelderland. The other outbreak involved a single case in an unvaccinated animal on a premises in Limburg. Positive diagnoses were confirmed by PCR on fetal lung biopsies and vaginal swabs.

## Switzerland



One outbreak of EHV-1 abortion was reported on a premises in the Canton of Bern. Positive diagnosis was confirmed by PCR.

## UK



Seven outbreaks of EHV-1 abortion were reported. Five of the outbreaks involved single cases on premises in East Sussex, Lancashire, Lincolnshire and North Yorkshire. One outbreak in Norfolk involved two cases. and an outbreak in Suffolk involved four cases. Five of the affected mares were vaccinated. Positive diagnoses were confirmed by PCR on fetal tissues.

## USA



One case of EHV-1 abortion was reported in a vaccinated mare on a premises in Idaho. It was additionally noted that several other mares on the affected premises had recently given birth to weak foals or experienced an unexpected pregnancy loss, but with no definitive diagnosis.

## Equine Herpes Virus-4 (EHV-4) Abortion

### Belgium



Two outbreaks of EHV-4 abortion, each involving single cases, were reported. One outbreak on a premises in Antwerp involved a single case in an unvaccinated mare with a co-infection of EHV-1 (higher EHV-4 viral load detected than EHV-1) and the other involved a case in a vaccinated mare on a premises in West Flanders. Positive diagnoses were confirmed by PCR on fetal tissues.

## Streptococcus zooepidemicus abortion

### Belgium



One case of *Strep.zooepidemicus* abortion was reported on a premises in Luxembourg. Positive diagnosis was confirmed by PCR on fetal tissues.

## France



One case of *Strep.zooepidemicus* abortion was reported in a four-year-old Thoroughbred mare on premises in Orne. Positive diagnosis was confirmed by PCR on fetal tissues.

## Respiratory Conditions

Country	EHV	EHV-1	EHV-1/-4	EHV-2/-5	EHV-4	EHV-4/ Strangles	Flu	<i>R. equi</i>	Strangles
Argentina	-	-	-	-	#1	-	-	-	-
Austria	-	1	-	-	-	-	-	-	-
Belgium	-	2	-	2	3	-	#3	-	4
Canada	-	-	-	-	-	-	-	-	5
France	-	8	2	-	9	1	20	-	20
Germany	-	1	-	-	-	-	-	-	-
Netherlands	-	3	-	-	4	-	1	-	8
South Africa	-	#3	-	-	#1	-	-	-	-
Switzerland	-	2	-	-	3	-	-	1	5
UK	-	2	-	-	5	-	3	-	-
USA	1	-	-	-	-	-	1	-	30

#some cases reported to ICC after the quarter end

### Equine Herpes Virus Respiratory Disease

#### USA



One case of EHV respiratory disease was reported on a premises in Pennsylvania.

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

#### Austria



One outbreak of EHV-1 respiratory infection was reported affecting a single animal, in a group of eight, returning to Austria from a showjumping event in Oliva, Spain. The other seven animals in the group were not displaying any clinical signs and tested negative for EHV infection.

#### Belgium



Two outbreaks of EHV-1 respiratory infection were reported. One outbreak involved a single case with a co-infection of EHV-2 on a premises in East Flanders, and the other involved a single case on a premises in Flemish Brabant. Positive diagnoses were confirmed by PCR on nasal swabs.

#### France



Eight outbreaks of EHV-1 respiratory infection were reported. Seven of the outbreaks involved single cases on premises in; Bouches-du-Rhone, Calvados, Manche, Rhone, Somme and Yvelines. One outbreak involved two cases on a premises in Manche. Positive diagnoses were confirmed by PCR on nasopharyngeal swabs.

#### Germany



One case of EHV-1 respiratory infection was reported in a two-year-old mare on a premises in Lower Saxony. Clinical signs included pyrexia and nasal discharge. Positive diagnosis was confirmed by PCR on a nasal swab.

#### Netherlands



Three outbreaks of EHV-1 respiratory infection were reported. One outbreak consisted of six cases on a premises in North Brabant, one outbreak on a premises in Limburg involved two cases in unvaccinated animals returning from a competition in Spain, and one further outbreak involved a single case on a premises in North Brabant. Clinical signs included: pyrexia, nasal discharge and coughing. Positive diagnoses were confirmed by PCR on nasopharyngeal swabs.

## South Africa



#Three outbreaks of EHV-1 respiratory infection were reported after the quarter end. Two outbreaks involved single cases on premises in Northern Cape and Mpumalanga, and one outbreak involved two cases on a premises in Gauteng.

## Switzerland



Two outbreaks of EHV-1 respiratory infection were reported, each involving single cases on separate premises in the Canton of Zurich. Clinical signs included pyrexia. Positive diagnoses were confirmed by PCR.

## UK



Two outbreaks of EHV-1 respiratory infection were reported, each involving single cases on premises in Devon and Gloucestershire. In one outbreak (Gloucestershire), the affected animal was a donkey gelding with a co-infection of *Streptococcus zooepidemicus* and that was additionally suffering from severe liver disease. The neurological signs of ataxia and hindlimb paresis noted in this case were attributed to hepatic encephalopathy, rather than being a result of the EHV-1 infection.

## Equine Herpes Virus-1/-4 (EHV-1/-4) Respiratory Infection

### France



Two outbreaks of EHV-1/-4 respiratory infection, each consisting of single cases, were reported on premises in Bouches-du-Rhone and Cote-d'Or. Clinical signs included: coughing, exhaustion, nasal discharge and pyrexia. Positive diagnoses were confirmed by PCR on nasopharyngeal swabs.

## Equine Herpes Virus-2/-5 (EHV-2/-5) Respiratory Infection

### Belgium



Two outbreaks of EHV-2 and EHV-5 respiratory co-infection were reported, each involving single cases on premises in East Flanders and Hainaut. Clinical signs included: coughing, nasal discharge, and lymphadenopathy. Positive diagnoses were confirmed by PCR on nasal swabs.

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

### Argentina



#One outbreak of EHV-4 respiratory infection was reported on a premises in Santa Fe Province after the quarter end. The outbreak involved 25 animals which were a combination of vaccinated breeding stock and Thoroughbred foals. Positive diagnoses were confirmed by serology, agent isolation and PCR.

### Belgium



Three outbreaks of EHV-4 respiratory infection were reported, each involving single cases, on premises in: Antwerp, East Flanders and Flemish Brabant. Clinical signs included anorexia and pyrexia. Positive diagnoses were confirmed by PCR on nasal swabs.

### France



Nine outbreaks of EHV-4 respiratory infection were reported. Eight of the outbreaks involved single cases on premises in; Calvados, Cote-d'Or, Ille-et-Vilaine, Manche and Morbihan. One outbreak consisted of two cases on a premises in Cote-d'Or. One case had a co-infection of *Streptococcus equi* and Rhinovirus B. Clinical signs included: coughing, nasal discharge, pyrexia and lymphadenopathy. Positive diagnoses were confirmed by PCR on nasopharyngeal swabs.

### Netherlands



Four outbreaks of EHV-4 respiratory infection were reported, each involving single cases on premises in; Drenthe, Gelderland, Groningen and Limburg. Clinical signs included: coughing, lethargy, pyrexia, nasal discharge and weight loss. Positive diagnoses were confirmed by PCR on nasopharyngeal swabs.

## South Africa



#One case of EHV-4 respiratory infection was reported on a premises in Mpumalanga after the quarter end.

## Switzerland



Three outbreaks of EHV-4 respiratory infection were reported, each involving single cases, on premises in the Cantons of Aargau and Vaud. Clinical signs included pyrexia and respiratory tract signs. Positive diagnoses were confirmed by PCR.

## UK



Five outbreaks of EHV-4 respiratory infection were reported. Four of the outbreaks involved single cases on premises in; Buckinghamshire, Falkirk, West Yorkshire and the Scottish Borders. One further outbreak consisted of two cases on a separate premises in the Scottish Borders. One case had a co-infection of *Streptococcus zooepidemicus*. Clinical signs included: a dry/harsh cough, inappetence, lethargy, lymphadenopathy, mucoid nasal discharge, pyrexia and ocular discharge. Positive diagnoses were confirmed on nasal/nasopharyngeal swabs.

## Equine Herpes Virus-4 with Strangles co-infection

### France



One case of EHV-4, with a co-infection of *Streptococcus equi subsp. equi*, was reported on a premises in Haute-Saone. Clinical signs included: coughing, lymphadenopathy, nasal discharge and pyrexia. Positive diagnosis was confirmed by PCR on nasopharyngeal swabs.

## Equine Influenza (EI)

### Belgium



Three outbreaks of EI were reported, each involving single cases, on premises in Hainaut, East Flanders and Luxembourg. Clinical signs included: coughing, nasal discharge and pyrexia. Positive diagnoses were confirmed by PCR on nasal swabs.

### France



Twenty outbreaks of EI were reported. Sixteen outbreaks consisted of single cases on premises in; Ain, Calvados, Loiret, Manche, Orne, Pyrenees Orientales, Sarthe, Seine-et-Marne and Yvelines. One outbreak consisted of two cases on a premises in Herault, one outbreak involved four cases on a premises in Maine-et-Loire, and two outbreaks consisted of five cases on premises in Calvados and Val-de-Marne. Clinical signs included: coughing, lymphadenopathy, nasal discharge and pyrexia. Positive diagnoses were confirmed by PCR on nasopharyngeal swabs.

### Netherlands



One outbreak of EI was reported, consisting of a single case, on a premises Overijssel. Clinical signs included: coughing, lymphadenopathy, nasal discharge and pyrexia. Positive diagnosis was confirmed by PCR on a nasopharyngeal swab.

### UK



Three outbreaks of EI, each consisting of single cases in unvaccinated animals, were reported on premises in; Falkirk, Kent and Lancashire. Clinical signs included: coughing, inappetence, nasal discharge, pyrexia and increased respiratory rate. Positive diagnoses were confirmed by PCR on nasopharyngeal swabs.

### USA



One case of EI was reported on a premises in Washington.

## ***Rhodococcus equi***

### **Switzerland**



One case of *Rhodococcus equi* was reported on a premises in the Canton of Zurich. Clinical signs included pyrexia and respiratory tract signs.

### **Strangles**

#### **Belgium**



Four outbreaks of strangles, each consisting of single cases, were reported on premises in; Flemish Brabant, Liege and Limburg. Clinical signs included: coughing, lymph node abscessation, nasal discharge and pyrexia. Positive diagnoses were confirmed by PCR on nasal/nasopharyngeal swabs.

#### **Canada**



Five outbreaks of strangles, each consisting of single cases, were reported on separate premises in Ontario. Clinical signs included: nasal discharge, pyrexia and submandibular lymphadenopathy. Positive diagnoses were confirmed by PCR in three of the outbreaks.

#### **France**



Twenty outbreaks of strangles were reported. Sixteen outbreaks involved single cases on premises in; Ain, Calvados, Cote-d'Or, Dordogne, Hautes-Alps, Haute-Saone, Indre-et-Loire, Isere, Pyrenees-Atlantiques, Rhone and Puy-de-Dome. Two outbreaks consisted of two cases on premises in Var and Morbihan, one outbreak involved four cases on a premises in Finistere, and one outbreak involved five cases on a premises in Rhone. Clinical signs included: abscessation, coughing, exhaustion, lymphadenopathy, nasal discharge and pyrexia. Positive diagnoses were confirmed by PCR on nasopharyngeal swabs.

#### **Netherlands**



Eight outbreaks of strangles were reported, all involving single cases in mainly unvaccinated animals, on premises in: Drenthe, Gelderland, Limburg, North Brabant, North Holland, Overijssel and Zeeland. Clinical signs included: coughing, nasal discharge, pyrexia, respiratory stridor, ruptured abscesses and submandibular lymphadenopathy. Positive diagnoses were confirmed by PCR on nasopharyngeal swabs and swabs of abscess material.

#### **Switzerland**



Five outbreaks of strangles were reported, four of which involved single cases on premises in the Cantons of: Bern, Fribourg, Neuchâtel and Valais. In one outbreak several animals were affected on a premises in the Canton of Aargau. Clinical signs included: pyrexia, respiratory tract signs and submandibular abscessation. Positive diagnoses were confirmed by PCR in the majority of the outbreaks.

#### **USA**



Thirty outbreaks of strangles were reported, 26 of which involved single cases on premises in; Florida, Kentucky, Michigan, Washington and Wisconsin. Three outbreaks involved two cases on premises in Florida and Wisconsin, and one outbreak involved three cases on a premises in Colorado. Clinical signs included: bilateral guttural pouch empyema, colic, depression, dyspnoea, inappetence, lethargy, lymphadenopathy, lymph node abscessation and rupture, pyrexia, nasal discharge, respiratory signs, respiratory stridor, sensitivity to palpation of the throat area and weight loss.

## **Gastrointestinal Diseases**

<b>Country</b>	<b>Clostridial Enterocolitis</b>	<b>Coronavirus</b>
France	-	1
Switzerland	1	2

#some cases reported by ICC after the quarter end

## **Clostridial enterocolitis**

### **Switzerland**



One case of *Clostridial* enterocolitis was reported on a premises in the Canton of Solothurn. Clinical signs included diarrhoea. Positive diagnosis was confirmed by culture of *Clostridium perfringens* and the sample was also alpha toxin detection positive on PCR.

## **Coronavirus**

### **France**



One outbreak of coronavirus was reported on a premises in Haute-Garonne. Clinical signs included: diarrhoea, weakness and anaemia. Positive diagnosis was confirmed by PCR on a rectal swab.

### **Switzerland**



Two outbreaks of coronavirus were reported on premises in the Cantons of Aargau and Bern. Clinical signs included diarrhoea and pyrexia. Positive diagnosis was confirmed by pathogen detection (method unspecified) in one outbreak and PCR in the other.

## **Neurological Diseases**

<b>Country</b>	<b>EEE</b>	<b>EEV</b>	<b>EHV-1</b>	<b>Tetanus</b>	<b>WNV</b>
Belgium	-		3	-	-
Canada	-		2	-	-
France	-		1	-	-
Germany	-		1	-	1
Japan	-		-	#1	-
Libya	-		-	-	1
South Africa	-	#1	-	-	#2
Spain	-		1	-	-
UK	-		1	-	-
USA	3		19	-	1

#some cases reported by ICC after the quarter end

## **Eastern Equine Encephalitis (EEE)**

### **USA**



Three outbreaks of EEE, each involving single cases, were reported on separate premises in Florida and South Carolina. Clinical signs included: acute onset neurological signs, dysphagia, hindlimb weakness, inappetence, incoordination and lethargy.

## **Equine Encephalosis Virus (EEV)**

### **South Africa**



#Equine Encephalosis Virus is regarded as endemic in South Africa and the following cases were reported after the quarter end: Eastern Cape (2 cases), Gauteng (40 cases), Kwa-Zulu Natal (15 cases), Mpumalanga (8 cases), Northern Cape (5 cases), North West Province (3 cases), Western Cape (1 case) and Limpopo (9 cases).

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

### **Belgium**



Three outbreaks of EHV-1 neurological disease were reported. Two outbreaks in Liege and Lier consisted of single cases in animals that had recently returned from events in Opglabbeek and Lier. The third outbreak involved several animals on premises in Flemish Brabant. Clinical signs included: ataxia, paralysis, bladder paralysis, pyrexia, neurological signs and a stiff gait. Positive diagnoses were confirmed by PCR on nasopharyngeal swabs and serology.

## Canada



Two outbreaks of EHV-1 neurological disease, each involving single cases, were reported on separate premises in Ontario. Clinical signs included ataxia and incoordination.

## France



One outbreak of EHV-1 neurological disease involving four cases was reported on a premises in Drome. Clinical signs included ataxia and skin ulceration. Positive diagnoses were confirmed by PCR on nasopharyngeal swabs.

## Germany



One outbreak of EHV-1 neurological disease affecting several animals, was reported at a premises on the German/Swiss border. Clinical signs included pyrexia and central nervous system signs. Positive diagnoses were confirmed by PCR on nasal swabs and serological testing.

## Spain



One outbreak of EHV-1 neurological disease was reported at the Spring Mediterranean showjumping tour in Oliva, Spain. Seven horses, all stabled within the same area, developed pyrexia and were immediately isolated, together with three close in-contact horses. Nasopharyngeal swab samples were taken from all horses and four tested positive for EHV-1 on PCR analysis. An update reported that nine further animals from the affected stabling area at the event, had been referred to a veterinary hospital following several days of pyrexia. Eight of these animals subsequently developed neurological signs and six tested positive for EHV-1.

## UK



One case of EHV-1 neurological disease was reported in an unvaccinated animal on a premises in Suffolk. Clinical signs included: pyrexia, mild nasal discharge, hindlimb ataxia with falling on turning and mild facial nerve paralysis. Positive diagnosis was confirmed by CFT on a blood sample.

## USA



Nineteen outbreaks of EHV-1 neurological disease were reported. Sixteen outbreaks consisted of single cases on premises in: Arizona, California, Colorado, Florida, Massachusetts, Minnesota, Texas and Virginia. Two outbreaks involved two cases on premises in Colorado and California, and one outbreak involved three cases on a premises in Virginia. Clinical signs included: ataxia, inappetence, difficulty standing, recumbency, pyrexia, reactivity on palpation of the cervical spine, urinary incontinence and weakness.

## Tetanus

### Japan



#One case of Tetanus was reported in an unvaccinated Thoroughbred after the quarter end. Clinical signs included limb stiffness and severe sweating. The animal was euthanased.

## West Nile Virus (WNV)

### Germany



One case of WNV was reported on a premises in Saxony. The affected animal was euthanased.

### Libya



One outbreak of WNV, consisting of two cases, was reported on a premises in Janzour.

## South Africa



#Two outbreaks of WNV were reported, with single cases in each on premises in Gauteng and Eastern Cape Province after the quarter end.

## United States of America



One case of WNV was reported on a premises in Florida. Clinical signs included: pyrexia, inappetence and lethargy.

### Miscellaneous Diseases

Country	AHS	EIA	Glanders	Piroplasmosis
Canada	-	1	-	-
Hungary	-	1	-	-
Italy	-	1	-	-
Russia	-	-	1	-
South Africa	#9	-	-	#1
Switzerland	-	-	-	1
USA	-	15	-	-
Uruguay	-	1	-	-

#some cases reported by ICC after the quarter end

## African Horse Sickness (AHS)

### South Africa



#AHS is regarded as endemic in South Africa except in the AHS control area in the Western Cape Province. Cases were reported from all nine provinces after the quarter end with a single case occurring on the south-eastern border of the Western Cape Province outside of the AHS controlled area. Cases were reported in the other provinces as follows: Eastern Cape (6 cases), Free State (6 cases), Gauteng (66 cases), Kwa-Zulu Natal (16 cases), Mpumalanga (5 cases), Northern Cape (2 cases), North West Province (12 cases), and Limpopo (11 cases).

## Equine Infectious Anaemia (EIA)

### Canada



One case of EIA was reported on a premises in Alberta. Positive diagnosis was made on routine pre-export testing.

### Hungary



One case of EIA was reported on a premises in Fejer County. Positive diagnosis was confirmed by ELISA.

### Italy



One case of EIA was reported on a premises in the Province of Turin.

### USA



Fifteen outbreaks of EIA were reported. Eleven outbreaks involved single cases on premises in; Arizona, California, North Carolina, Texas and Oklahoma. One outbreak involved two cases on a premises in North Carolina, one outbreak consisted of five cases on premises in North Carolina, and two outbreaks involved seven cases on premises in North Carolina and Texas.

### Uruguay



One outbreak of EIA involving two animals was reported on a premises in Salto. Positive diagnosis was confirmed by Agar Gel Immunodiffusion (Coggins Test).

## Glanders

### Russia



One outbreak of Glanders was reported, affecting six unvaccinated animals, on a premises in Zabaykalsky. All affected animals either died or were euthanased. Positive diagnoses were confirmed by bacterial culture.

## **Piroplasmosis**

### **South Africa**



#Piroplasmosis is regarded as endemic in South Africa and cases were reported from 8 of the 9 provinces after the quarter end. Cases for *B. caballi* were reported as follows: Gauteng (5 cases), Kwa-Zulu (1 case), Mpumalanga (2 cases) and Northern Cape (2 cases). Cases for *T. equi* were reported as follows: Eastern Cape (8 cases), Gauteng (58 cases), Kwa-Zulu Natal (9 cases), Mpumalanga (14 cases), Northern Cape (9 cases), North West Province (6 cases), Western Cape (12 cases) and Limpopo (4 cases)

### **Switzerland**



One case of piroplasmosis was reported on a premises in the Canton of Zurich. Positive diagnosis was confirmed by antibody detection.

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