



## **Equine Viral Arteritis: Outbreak in UK (April 2019)**

### **Key points**

- On the 4<sup>th</sup> of April the United Kingdom confirmed an outbreak of Equine Viral Arteritis on a premises in Dorset.
- The outbreak involves three non-thoroughbred stallions.
- Semen taken from two of the stallions has tested positive for EVA on PCR, results from the third are inconclusive.
- None of the stallions exhibited clinical signs of EVA at the time of investigation.
- UK authorities have implemented restrictions to prevent the affected stallions or their semen being used for breeding and a full investigation is underway.
- This is the first outbreak of EVA in the UK since December 2012.

### **Equine Viral Arteritis outbreak in the UK**

On the 4<sup>th</sup> of April 2019 the authorities in the United Kingdom confirmed an outbreak of Equine Viral Arteritis (EVA) in a non-thoroughbred equine premises in Dorset. The outbreak was detected following a suspicion raised as a result of non negative laboratory results for three stallions without a valid EVA vaccination history. The stallions did not display any clinical signs of EVA but restrictions were implemented by the authorities in the UK to prevent their use for breeding purposes on the 22<sup>nd</sup> of February 2019. Semen samples taken from two of the stallions were positive for the EVA virus following PCR testing. Tests carried out on the third stallion were inconclusive.

A full investigation by the authorities in the UK as to the source and to determine the extent of disease spread is currently underway and the restrictions will remain in place until the EVA risk is eliminated. The Irish Department of Agriculture, Food and the Marine (DAFM) will continue to liaise with colleagues in the UK regarding the investigation.

### **EVA overview**

EVA is a contagious viral disease that affects all equine animals. It is caused by equine arteritis virus. A map showing the distribution of EVA outbreaks worldwide in recent years is included at Annex 1.

The incubation period for EVA is between 2 and 14 days and the main clinical signs include:

- Fever
- Depression & loss of appetite
- Nasal discharge & conjunctivitis (“pink eye”)
- Limb oedema (especially hind limbs), oedema of the prepuce, scrotum or mammary gland or around the eye socket
- “Nettle rash” lesions on the skin
- Abortion can occur in 10 – 60% of cases (not always preceded by clinical signs).

The two most important modes of transmission of EAV are via the respiratory route, involving infective aerosolized respiratory tract secretions of an acutely infected horse, and venereally, by an infected stallion, either by natural cover, or by artificial insemination with fresh, chilled or frozen semen. Infection can also be transmitted through contact with aborted fetuses or other products of parturition, and indirect contact with virus-contaminated fomites (e.g. breeding shed equipment, shanks, or twitches) or on the hands or clothes of animal handlers. Mares infected in late pregnancy can also infect foals *in utero*.

EVA is complicated by the fact that infected animals may exhibit few or no clinical signs, and a high proportion (up to 60%) of stallions will continue to shed the virus in their semen without showing clinical signs. These stallions are known as ‘shedders’ and they function as the virus’s natural reservoir. They pose a significant risk of disease transmission if undetected.

There are no known public health issues associated with EVA.

## Control measures for EVA

### **Background and legal basis**

The last outbreak of EVA in Ireland was in 2010. EVA is a controlled disease in Ireland in that it is a legal requirement to notify any suspicion of EVA to DAFM (see legislation below). A suspicion of EVA includes where animals are exhibiting clinical signs consistent with the disease or where there is a positive laboratory result that is not explained by vaccination for example. In the event of a confirmed outbreak of EVA in Ireland DAFM would implement various measures to control and eliminate the disease. In the event of a case of EVA in a stallion, where shedding of the virus in the semen is confirmed, the animal may have to be castrated or permanently excluded from breeding in order prevent further disease spread.

### **Controls on semen**

Council Directive 92/65/EEC of 13 July 1992 as amended requires that all semen used for artificial insemination must be sourced either from an approved equine semen collection centre or an

approved semen storage centre. The stallions in these centres, and any in contact equines, must fulfil health criteria and undergo rigorous testing to mitigate the risks of transmission of disease.

A list of these Irish centres may be found on the DAFM website at the following link:

<https://www.agriculture.gov.ie/farmingsectors/animalbreeding/approvedestablishmentsintheveterinaryandzootechnicalfieldapprovedlaboratories/>

All semen sourced outside of Ireland must be similarly sourced from approved establishments. In order to verify the provenance of such semen the aforementioned EU legislation requires semen to be accompanied by a health certificate (which is generated online) and thereby accessible to DAFM officials and certified by veterinarians in other jurisdictions to ensure the safety and provenance of this semen.

### **Vaccination and screening for EVA in Ireland**

Vaccination and screening of breeding stallions and teasers against EVA and is recommended by equine industry experts – see relevant industry codes of practice for further details:

ITBA Codes of Practice: <https://www.itba.info/wp-content/uploads/2018/12/Codes-of-Practice-2019.pdf>

Horse Sport Ireland Voluntary Code: <https://www.horsesportireland.ie/breeding/voluntary-code-for-stallion-and-mare-owners/>

It is also recommended that mares are tested for EVA 28 days before visiting a stallion to ensure they are not incubating the disease.

### **Advice to the equine industry**

#### **Horse owners should:**

- Be aware of the clinical signs of EVA and consult their private veterinary practitioner if they have any concerns.
- Practice good biosecurity particularly around the management of newly introduced horses, visiting mares (particularly if imported) and pregnant mares for example.
- Only use/import semen that meets the full legislative requirements set out above.
- Adhere to relevant industry guidelines regarding screening of equines for EVA prior to breeding and vaccination of breeding stallions and teasers in accordance with vaccine manufacturer's guidelines.

## **Notification of suspect cases to DAFM**

All suspected cases of EVA, including any positive laboratory results, must be notified to DAFM. This can be done by e mailing [ndcc@agriculture.gov.ie](mailto:ndcc@agriculture.gov.ie), contacting the relevant Regional Veterinary office at <http://www.agriculture.gov.ie/contact/>, or calling DAFM's out of hours hotline on 1850 200 456.

## **Further information on EVA:**

DAFM website

<https://www.agriculture.gov.ie/animalhealthwelfare/diseasecontrol/equineviralarteritis/>

EVA information summary

<https://www.agriculture.gov.ie/media/migration/animalhealthwelfare/diseasecontrols/equineviralarteritis/EquineViralArteritisFactSheet140518.pdf>

Relevant legislation

<http://www.irishstatutebook.ie/eli/2016/si/130> (Notification and control of Animal Diseases).

<https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:01992L0065-20171122&qid=1554803868086&from=EN> (Trade in semen).

DAERA:

<https://www.daera-ni.gov.uk/articles/equine-viral-arteritis>

DEFRA:

<https://www.gov.uk/guidance/equine-viral-arteritis>

OIE:

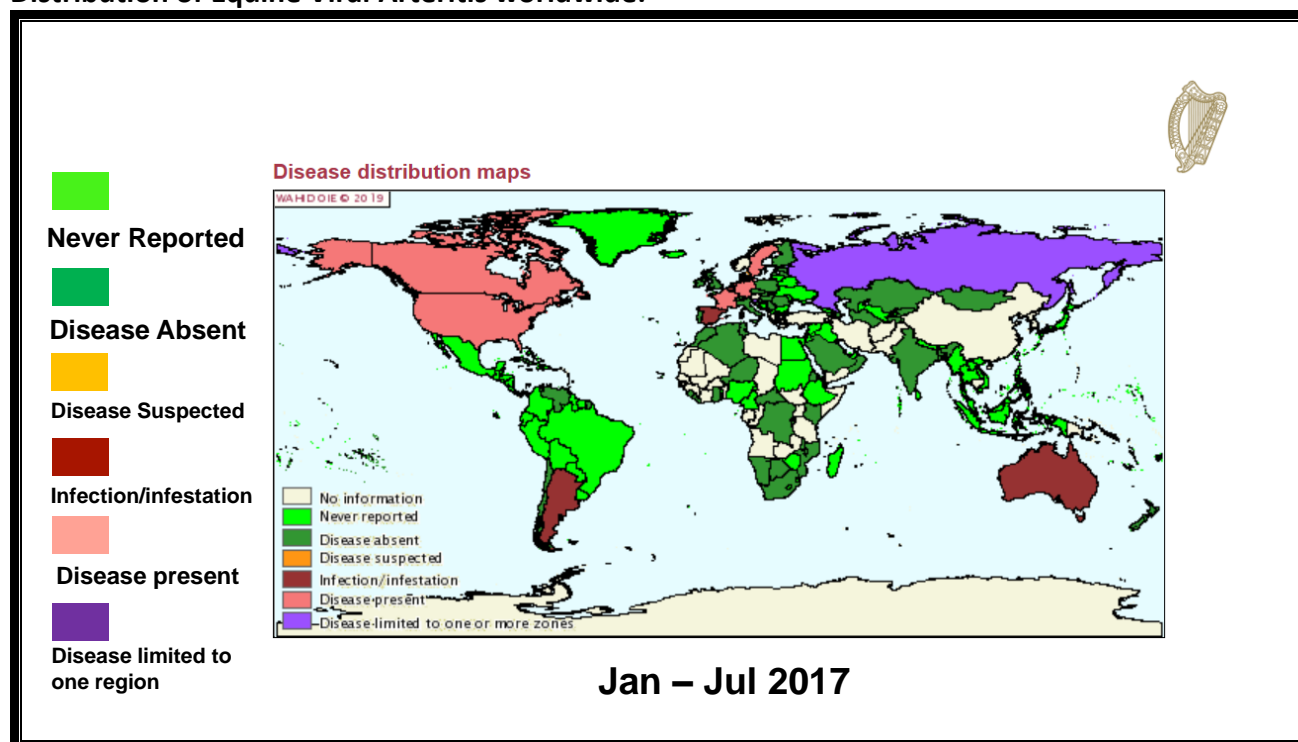
[http://www.oie.int/fileadmin/Home/eng/Health\\_standards/tahc/current/chapitre\\_eav.pdf](http://www.oie.int/fileadmin/Home/eng/Health_standards/tahc/current/chapitre_eav.pdf)

**NDCC**

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## Annex

### Distribution of Equine Viral Arteritis worldwide:



Map courtesy of OIE